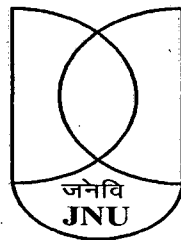# SPATIO- TEMPORAL ANALYSIS OF 'NOWHERE' CHILDREN: A CASE STUDY OF UTTAR PRADESH

*Dissertation submitted to the Jawaharlal Nehru University in
partial fulfilment of the requirements for the
award of the degree of*
## MASTER OF PHILOSOPHY

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## CERTIFICATE

I, Barnali Biswas, certify that the dissertation entitled "SPATIO-TEMPORAL ANALYSIS OF 'NOWHERE' CHILDREN : A CASE STUDY OF UTTAR PRADESH" submitted by me for the degree of MASTER OF PHILOSOPHY is my bonafide work and may be placed before the examiners for evaluation.

*Barnali Biswas*
**(BARNALI BISWAS)**

Forwarded by

*Sign*
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**(PROF. S.K. THORAT)**
**CHAIRPERSON**

*Dedicated to my father*

**Subodh Chandra Biswas**

# Acknowledgements

*Barnali Biswas*

(Barnali Biswas)

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# Chapter- 1
# Introduction

Today the importance of education is known to all. It produces the base for a person's well being in future and also that of immediate community and larger society. Education produces externalities, an instrument of social mobility. Access to basic education play instrumental roles facilitating public discussion of social needs and encouraged informed collective demands, in that they improve people's capabilities. Beyond this, it increases self-esteem and social dignity and reduces vulnerability; thus it impacts all dimentions of deprivations (physical, social, political and psychological). The process of schooling can have even aside from their explicitly aimed objective that is formal education and broadens horizon, particularly the girls and influences beyond the personal effects.[1] It increase the re-distributive effect not only between different social groups or households, but also within the family, since there are lots of evidence that access to better education particularly female education contributes to the reduction of gender based inequalities. The basic building of capabilities takes place primarily in the vulnerable years of childhood and thus imparting elementary education to children become the responsibility of both parent and State. Most of the countries view elementary education as a human right, as in India.

Unfortunately, this basic level of educational security is not yet the privilege of the children of India. The remarkable failure of achieving social security in the field of primary education, inspite of given widespread recognition world over, in sharp contrast with the higher levels of education, is of course one of the most deplorable aspects of India's contemporary development experiences.[2] The Constitution of India (as also the 83rd Constitutional Amendment) is committed to provide compulsory education to children in the 6-14 years of age

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[1] Chanana, Karuna, eds, 1998, *'Socialisation, Education and Women: Explorations in Gender Identity'*, Orient Longman, New Delhi.

[2] Sen, A., 1995, *'India: Economic Development and Social Opportunity'*, Oxford university press, p. 32.

group, irrespective of sex. In a narrow sense, the compulsory education is to be understood as a law, making it compulsory for parents to send their children to schools and allowing for the punishment of those who do not comply it. In broad sense, compulsory education can be interpreted as -a. compulsion on the state to provide adequate schooling facilities to all children and b. an obligation of parental community to send all children to school. It is important to note that the girl child will be particularly benefited from such law.[3] This would put the needed pressure on the state to expand the schooling facilities. The National Policy on Education 1986 and Program of Action (POA), 1992 have also perceived education as fundamental to all round development of children. The target of achieving universal education appears distant even in 1991 and is not likely to be achieved even in the year 2001 at the present rate of progress. There is still a massive problem of illiteracy in the younger age group (6-14 years), particularly the girls. Besides there are striking disparities in access to schooling between boys and girls, the affluent and the deprived, rural and urban. Such differences are broader phenomenon of gender-based inequality in India.

The challenge of achieving quality primary education for all children continues to elude India. Inspite of the remarkable expansion of elementary education system in the last few decades, a very high proportion of India's children continues to be 'out-of-school.' The Annual Report (1993-94) of the Department of Education states, "Despite expansion of Education, vast ground is yet to be covered for fulfilling the constitutional mandate of universalization of education".

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[3] Mahendra, D., 1999, 'An overview of social security in India', *Indian Journal of LabourEconomics*, Vol. 42, No. 3.

## Defining 'Nowhere' Children:

'Nowhere' children are defined in this study as the children in the age group 5-14 years, who are basically neither attending school nor working as per census definition of work.[4] It must be noted that since the census does not include unpaid essentially home based household responsibilities in the definition of 'work', the category of 'nowhere' children is conceptually flawed.

In Indian context, policy makers and development agencies have sought to distinguish between children who work at home, in agriculture or in assisting petty family business from those who work outside the home for wage, preferably described as child labour. At this juncture, it is important to point out that by narrowing the definition of the child labour to either wage employment or hazardous work only, the government and policy makers have overlooked the problem of the vast sections of 'nowhere' children and have also underplayed the enormous problem related to child labour. Studies conducted in the states of Bihar, Madhya Pradesh, Andhra Pradesh, Rajasthan and Uttar Pradesh also bring out that only a small proportion of children is full time labour and most of them work not as wage labour but as family helpers at home or in the fields *(Public Report on Basic Education, Oxford 1999, p. 16,* henceforth *PROBE Report).* The cost of such unpaid and unrecognized work of the children amounts to denial of education, which certainly has deleterious impact upon their capabilities. The worst sufferers are the girls where efforts to get them out of work (considered unproductive) and getting them into the schools is very much limited.

Proper definition of 'nowhere' children thus becomes very important in an effort to extend the definition of child labour. Various scholars have tried to put forward the definition of the 'nowhere' children in various ways. J. P. Naik[5] has defined 'nowhere' children or 'out- of- school' youth as those who are at present without any educational

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[4] It must be noted that since the census does not include unpaid, essentially homebased household responsibilities in the definition of 'work' the category of 'nowhere' children is conceptually flawed. For example if we include those children who are engaged in household duties as workers the percentage of 'nowhere' children decreases from 38.99 to 38.18 for boys and from 51.03 to 44.63 for girls respectively for India as a whole. The corresponding decrease for Uttar Pradesh will be 50.63 to 49.70 for boys and 69.63 to 62.07 for girls respectively in 1991.

[5] Naik, J.P., 1996, 'Non- Formal education of the out of school youth', *Journal of Education and Social Change,* No.1 &2.,p. 148-154.

facilities. Technically they are non-workers, but sharing full responsibilities of nominal work in the families. C.J. Daswani has identified 'stay outs', 'pull outs' and 'push outs' children from the formal system of education, commonly labeled as the 'drop outs' from the primary schools who make up bulk of 'nowhere' children. All these terms, he identified, on the basis of specific reasons that keep children away from access to education. Responsibility of doing domestic chores, helping parents in farms work, looking after the younger siblings are the reasons for the 'stay outs' from the formal schooling. Economic compulsion, social prejudice, low perceived status etc. are the main the contributory factors of the children being out of school. Finally 'push outs' are those who are being pushed out from the formal school system because of the school curriculum and school system related factors.

Whatever may be the reason that account for the children remaining out of schooling system, it is the right based and engendered development strategy that will include children out of the schooling system, for purpose of planning and resource allocation, thereby, advocated for a more inclusive definition of child labour. It is extremely important to understand the ground realities in the overall context of the socio-economic, political and ecological setup, so that we would not overlook the real problems.

**Approaches:**
So far as the studies on the extent and the problem of the 'out-of school' children are concerned, there has not been much work done by educationists, sociologists, social workers and administrators. Few studies which have appeared so far are limited is scope as they have concentrated on drop -outs, wastage etc. in primary education. Much of the studies pertaining to the 'nowhere' children throws some lights on the economic and social factors being the reason for their denial of the access to the education. Research on geographical patterning, so far as 'nowhere' children is concerned, is limited. Nevertheless, the recent discussions 'nowhere' children among educationists, sociologists, academicians and policy makers and their perception have provided the foundation for further discussion and exploration.

- **Objective of the study:**

The present study is primarily designed to identify the geographical patterning of the 'nowhere' children in India in general and Uttar Pradesh, in particular. Besides an attempt has also been made to bring out the spatial and temporal variation across regions and gender disparities therein. The present study aims at the following objectives:

1. To examine the spatial pattern and temporal trend of 'nowhere' children in India at state level, by status, both rural and urban as well as by sex for the period 1981 and 1991.

2. To find out the spatial pattern and temporal trend of 'nowhere' children at the district level in the state of Uttar Pradesh, across regions and sex.

3. One of the major objectives of the current study has been to understand and examine the extent of disparities for different segments of population that is boys and girls 'nowhere' children in rural and urban areas at two points of time (1981-1991).

4. To explore the reasons and examine the factors which are responsible for keeping the children in the age group (5-14 years) out of the schooling system.

5. To analyze the performance of various programs and policies in India and Uttar Pradesh in particular.

- **Research propositions:**

The present research intends to examine the following propositions:

A. i. Educational status of the parents positively influence in reducing the 'nowhere' children.

ii. Responsibility of the 'household duties' severely contributes to the phenomena of 'nowhere' children particularly the girls.

iii. Burden of the dependants and the younger siblings have greater impact deterring the children's access to schooling.

B. Schooling system i.e. the school quality, availability of the female teachers and incentive schemes that are available determine the incidence of 'nowhere' children, rather than the availability of schools.

- **Data base of the study:**

The present study is primarily based on secondary data. The main sources of data are census reports of 1981 and 1991for India and Uttar Pradesh, Fifth and Sixth All India Educational Survey etc. The district wise information on socio- economic determinants of 'nowhere' children has been taken from social and cultural tables and economic tables. Data for Scheduled Caste population, their rural urban distribution has been taken from Primary census Abstract of India, 1981 and 1991, series-1, Uttar Pradesh, series-22. Data on total population (5-14) years for the year 1981 and 1991 has been taken from socio-cultural tables. Dependency ratio, child woman ratio, educational levels, sex ratio pertaining to the age group 5-14 have been taken from the socio- cultural tables, census of India, series-1, Uttar Pradesh series-22, Vol. 1 and 2, for the period 1981 and 1991. Boys and the girls in the age group 5-14 years doing household duties, percent of agricultural labour, female main workers, non working population etc. are taken from general economic tables, census of India, series-1, Uttar Pradesh, series-22. Muslim population has been taken from Household by religion of head of household for 1981 and from Religion for 1991, census of India, series-1, Uttar Pradesh, series- 22. Infant mortality rate has been taken from article 'Infant and child mortality estimates, part' by S.Irudaya Rajan and P.Mohana Chandran, published in Economic and political weekly, 1998, Vol. XXXIII. State level data for school related variables has been taken from Fifth and Sixth All India Educational Survey. District level data of Sixth All Educational Survey has been taken from CD because of unavailability of published data. Besides various government reports have been used to identify the different programs and policies and impact of these programs in India and Uttar Pradesh in particular. Since in this study, children of the age cohort 5-14 years has been taken, variables related to school at primary and upper primary level are taken into consideration.

- **Note on Methodology:**

To fulfill the objectives of the study statistical, cartographical and analytical methods have been used.

    I. Statistical methods.

        a. To compute sex disparities pertaining to the 'nowhere' children, the Disparity Index by Sopher as modified by Kundu is used.

$$DI= LOG\ X2/X1+LOG(200-X1)/(200-X2)$$

$$Where\ X2>=X1.$$

        b. To understand the factors responsible for the incidence of 'nowhere' children, the multiple linear regression has been used. Correlation matrix has been prepared by taking dependent and independent variables. For this step wise regression has been done in order to arrive at a convincing relationship of the variables. The equation of multiple regression is likely to be

$$Y_1 = a_0 + a_1 x_1 + a_2 x_2 + \cdots \cdots$$

$where\ y_1, y_2\ and\ y_3\ are\ dependent\ variables$
$and\ x_1\ to\ x\cdots\ are\ independent\ variables.$

    II. Cartographical methods:

    To show the various aspects of 'nowhere' children (boys, girls, sex disparity, rural and urban for the years 1981 and 1991) choropleth maps have been computed.

- **Limitations of the study:**

The study of spatio-temporal analysis of 'nowhere' children is beset with many limitations. These limitations can broadly be classified into-

**i.**     Limitations regarding availability of data.

**ii.**     Limitations of available data.

Discussing the first one, we can say that Census does not provide data on reasons for not attending school, which could be extremely helpful. Although National Sample Survey provides such data, data at the district level is not available. In order to account for the determinants that contribute to the phenomenon, therefore we have taken variables based

on the literature and various other studies. District level data of poverty for rural and urban areas separately is not available, therefore, proxy variables like agricultural labour has been taken in the present study. Comparable data pertaining to children doing 'household duties' over time is not available at the state level. In 1991 children who are non- workers and doing household duties in the age group 5-14 years has been taken for the year 1981, whereas in 1981 children doing household duties in the age group 0-14 years has been considered. Moreover, we did not get district level data pertaining to children doing household duties' for the year 1981. Household duties as a severe deterrent to the schooling of the children are governed by a number of factors that are not captured by the Census data. For example the number of the hours spent in working, both in 'home' (domestic and family needs) and 'outside home' (grazing cattle, collecting water and fuel wood) is an important factor in anlysing the reasons for children not going to school. Also the distance of the availability of drinking water and forest are important factors which has not been captured by this study due to dearth of the availability of data. We did not get comparable data on infant mortality rate by residence and sex both at the state level and district level for both the points of time. Therefore district level and state level data for 1991 has been considered in this study. All India Educational Survey provides data on school related factors at the national and state level data only. Comparable data pertaining to the census year 1981 and 1991 has not been available. Therefore state level data for the year 1985-86 and 1993- 94 has been considered here. Again due to lack of published data at the district level, only state level data for the year 1985- 86 has been considered. Although district level data for the year 1993 has been taken from CDs from National Council of Education and Research Institute, comparable variables with that of state level is not available. For instance we did get data on incentives schemes at the district level. Therefore many determinants that contribute the phenomenon of 'nowhere' children at the district level remain unexplored. Moreover, the lack of comparable data over the time periods (due to the formation of 8 districts after 1991) poses a problem, for districtwise comparison we have presented the data after making adjustment for new districts.

- **Framework of Research:**

The present dissertation seeks to explore the extent and patterns of the nowhere children in India and thus underlines the socio-economic implications. Uttar Pradesh is chosen as an area of case study because of its general backwardness and in view of the present dismal condition in terms of 'nowhere' children in the socio- economic melieu of the state. The whole research work is organized as follows:

The study is spread over 6 chapters.

The first chapter (section-1) explains the introductory part, objective, hypothesis, significance of the study, data base, a brief note on methodology and limitations of the research work. The section -2 is denoted to a survey of Literature on various issues pertaining to the 'nowhere' children.

The geographical patterning and temporal variations of the 'nowhere' children at the state level in India has been attempted in the second chapter. This chapter also explores the gender disparities among rural and urban components.

The third chapter is devoted to the empirical examination of the spatial and temporal variations of 'nowhere' children in Uttar Pradesh.

The fourth chapter explores the possible determinants, which contribute, to the phenomena of 'nowhere' children.

The fifth chapter discusses various programs and policies, their success and failure that are undertaken in various states and Uttar Pradesh in particular.

The last and concluding chapter includes summary of the major findings, conclusion and a few suggestions that have policy implications.

## Section -II:

- **An overview of Literature:**

Not much has been written on the geographical aspects of 'nowhere' children in India. The studies, which have appeared recently, pertain to out- of- school children tries to highlight some of the general socio- economic problem. Nevertheless, some researchers have seriously attempted to explore the problem of primary education through empirical studies and extensive field surveys. Majorities of these studies are sociological in approach. Studies from the perspective of geographical pattern or regional points of view are really limited, where location specific problem could be explored.

The present survey of literature includes a number of studies, which are general in approach but help substantially in understanding of the problems. The survey of literature as I would like to discuss in the following pages, I think will throw enough light on the extent and the causes that contribute to the phenomenon of 'nowhere' children in the general socio-economic and political set up of our society. The discussion is theme context and tries to discuss each factor independently, however there may be some overlapping due to interplay of several factors (socio- economic, demographic and cultural).

From a number of field studies and literature survey so far prevalent, it can be drawn that a multiplicity of factors are responsible in one way or the other for the vast proportion of the children being not in school as well as gender disparity in access to schooling. The major problem of children neither working nor attending school encompasses the demand side constraint and supply side constraint. The demand side constraint include household activities, economic reasons like poverty, domestic chores, lack of interest of children themselves and that of parental motivation. The supply side constraints are mainly school related factors like dilapidated buildings and educational infrastructures and basic amenities (implicitly including its quality) that are held responsible for substantial unmet demand for Education (PROBE 1999; Dreze and Gazdar 1997).

National Family Health Survey (NFHS-2), 1998-99, has given reasons for children never attending school or not currently attending school. The reasons are school too far away, transport not available, education not consider necessary, children required

for household work, required for farm work, costs too much, no proper school facilities for girls, required for care for siblings, not interested in studies and others. Two other reasons like repeated failures and got married are taken into consideration for not currently attending school. The 40th Round NSS (National Sample Survey) classifies reasons for non- attendance in schools for 5-14 years. NCAER-HDI study (1999) categorizes factors responsible for non-participation of children in education into supply related, demand related, 'lack of interest', and customary factors.). 'Lack of interest' factors are 'parents do not feel it important' and 'child unwilling'. 'Customary' factors are generally cited in case of female children. The study found that 75 percent of the children were not in school due to lack of interest in education.

## A. Home related factors:

### Opportunity cost and 'nowhere' children:

The most common reasons for non- attendance are high opportunity cost of children's time and lack of interest in education (J.C.Caldwell, et.al. 1985; Patil 1984; Prasad 1987; Minhas 1992; P.Visaria, et. al. 1993; Sarvekshana Jan-March 1991).

Dhaneswar Harichandran [6] had focused on quality of education itself, infrastructural facilities and socio-economic-demographic indicators, in explaining the large proportion of the girls not attending school in the country. Shetal B.Patel has tried to find out the causes of non-attendance of children in schools as child related family related, school related and society related factors determining 'Education of girl child' in India. However many scholars challenged the belief that opportunity cost of time are primary constraint on demand for schooling. Although, much evidences are available to support the view that the children of the poor families often assist their parents in various activities such as care of siblings, looking after cattle and poultry, collecting water and fuel and helping in the family farm. Veena Kulkarni argued on the basis of rural surveys conducted by NCAER in six villages of Maharashtra and Madhya Pradesh that girls were main victims of some domestic crisis who had to take on responsibility for younger siblings and household work. It has been observed that burden of collecting firewood

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[6] Harichandran, D., 1992, 'Girls education in India; A situational analysis', *Journal of Educational Planning and Administration*, Vol. VI, No. 2, p. 179-192.

falls on children. This has been cited as one of the reason, which deter children's access to the school in a study of six villages in Karnataka (Reddy 1980). It has been often argued that children are not send to the schools because they look after the older persons in the family and the younger siblings' that is the dependents. Debi's (1996) study in Orissa shows that larger the dependency ratio, higher is the percentage of out of school children. She also found that number of animals and distance to forest negatively affects the male's enrollment more than female. Looking after the younger siblings is often cited as an important part of the domestic work.

Unfortunately, there is lack of conclusive evidence on the role of opportunity cost of time, cited as one of the main factor for non- attendance, argues Kiran Bhatty (1998). Anurada Pande's study (1996) in the hills of Uttar Pradesh points to the fact that receding forest cover implies that girls have to travel large distances to collect firewood. This may be believed to take much of their time. However, Kiran Bhatty[7] argues that opportunity cost of time, that seems to have a decisive role in case of girls' schooling is only reinforcing social attitudes of those who do not regard education for girls a necessity. In rural areas girls found to spend twice as much as time working on domestic duties as the boys. This evidence is found from the work of Sajitha Bashir (1993: 194), while studying on the schooling in Tamil Nadu. He found that in urban areas, the number of hours worked by girls is three times the corresponding figures for boys. B.M.Dinesh (1988) who has studied three villages in Karnataka also reports such kind of phenomena. He found on an average, 6-14 years age-old children spent 3-2 hours a day on household activities. Srivastava in the study conducted under the auspices of UNDP research programme for human development, found that in two districts of Uttar Pradesh, Ballia and Rampur, the problem of involvement in the domestic work is much more significant for older children (10-14 years) and for girls.

Contrary to these findings, Arup Mahasatna (1996:15) in his study in West Bengal found no correlation between children's time spent on domestic duties. On the other hand Jeemol Unni in her study in Gujarat found that only 10 percent of girl child reported being engaged in household activity mainly in the age group 12-14 years. Also,

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[7] Bhatty, K., 1998, 'Educational deprivation in India; Field investigation', *Economic and political Weekly* p.1732.

Ramachandran in his study of Tamil Nadu supports the hypothesis that children contribute very little time in household activities (Ramachandran 1990:135). In similar study in Kanyakumari of Tamil Nadu Majumder establishes that the opportunity cost of child's time is not a major factor deterring their school attendance (Majumder 1997: 11). Jabbi and Rajyalakshmi's study in Bihar also reveal that large number of children not going to school because they work at home is very small (Jabbi and Rajyalakshmi 1997: 5). Kiran Bhatty opines that the opportunity costs of children's time tend to be high only after the primary school age.

Much emphasis has now been given to the home environment of the children concerned. Rashmi Sharma (1997) stressed on the home environment in order to explore the gender disparities in access to education. However, socio-economic factor is to be examined parallely with school quality in order to have a deep insight in the issue concerned (Chakrabarty 1986; Jagannadhan 1986; Rashmi Sharma 1998). K.S.Chalam also found socio-economic background of the family and educational background is most important in explaining regional as well as gender disparities (Chalam 1992:174).

**Parental education and motivation of children's education:**

Now it has been assumed that parental motivation has possible influence determining educational decision within a household. The myth of social or cultural factors, like existence of a tradition in sizable section of the families not to send their children, particularly girl child has been exploded. It is the lack of interest in education that keeps the children out of the schooling system. This is conformed from the studies of J.B.Tilak.[8] His study based on National Sample Survey data, underlined the fact that it is the parents who lacks interest in education more than their children, specially in case of girls. This he found true in case of all income groups. Other investigators (Krishanji 1996 and PROBE survey1999) also probe this aspect. On the Contrary, PROBE reported that parent's attitude to the education of sons and daughters are overwhelmingly positive. Nevertheless, it also highlights the fact that parental motivation for education of girls is still lacking in a significant proportion of families. This is true among different castes, different occupations, literacy status and breakdown by gender. However, lack of interest

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[8] Tilak, J.B., 2000, 'Why do some children never go to school in rural India?' *Kurukshetra*, p.58.

cannot be treated as an independent factor, but it is due to a combination of many factors like poverty and school environment. J.B.Tilak highlighted to this fact. It has been found that parents have much greater stake in their son's education in north Indian patriarchal society than that of girls for which they have less aspirations (Veena Kulkarni 1989: 35; PROBE Report 1999: 20). This fact is also reinforced by the findings of Rukmini Banerjee in the field studies of urban poor in Mumbai and Delhi.

It is the parental attitudes towards education that makes a major effect on education. It seems that when either of the parents is literate, they are more willing to send their children, especially girls to school. In fact many authors find an exaggerated emphasis being placed on inadequate motivation among poor parents as major obstacle (Kiran Bhatty 1998; Dreze and Sen 1996; Rashmi Sharma 1998). Neera Burra[9] also pointed out that one of the major reasons for children being kept 'out-of-school' was the lack of education of the parents.

## Poverty and 'nowhere' children:

It is now believe that motivation to send children to school depend upon the parent's perception to the returns of education from the children. The benefit of the boy is directly related to the family. It is commonly accepted notion, particularly official circles, that poverty is the main determinant of parental discision deterring access to children's schooling. Against this proposition, many scholars tried to highlight ambiguities in the presumed relationship between poverty and schooling. That, poverty is a highly inadequate explanation of regional variations in educational achievement, has been established by Dreze and Gazdar (1996). They compared the poverty levels and education achievements of Kerala and Uttar Pradesh, which defies the above notion (Dreze and Gazdar 1996). Sinha (1995) has given similar evidences to prove ambiguities. Other studies also find similar results (Narayan, et.al. 1984; ILO study in Kodathuchelum in Tamil Nadu 1994). Kusum K. Premi[10] concludes that this being a reason for children not attending school cannot be supported by evidence. J.B. J.Tilak also found no

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[9] Burra, N., 2001, 'Cultural stereotypes and household behaviour: Girl child labour in India', *Economic and Political Weekly*, Vol. XXXVI, No. 5 and 6, p.483.
[10] Premi, K., 1987, 'Universalization of elementary education and child labour', *Manpower Journal*, Vol.XXII, No.2, p.23-32.

correlation between low wage rate reflected through agricultural labourer and parents not sending their children to school. Kiran Bhatty[11] stressed that cost of schooling - opportunities cost of schooling and direct cost of school attendance, needs to be explored in order to access the extent to which poverty actually act as a decisive constraint on out of school children. Jeemol Unni (1996:15) finds no positive relationship between poverty and schooling. A study in Uttar Pradesh by Giri Institute of Development Studies also found no relationship (Asraf 1989). Also many scholars have tried to bring out that poverty is not the prime reason for vast proportion of children being out of school. Nidhi Mehrotra (1995), on the basis of field investigation in Kerala, Uttar Pradesh, and Himachal Pradesh establish that the poverty is not the prime reason for non- attendance. That poverty can be a potential constraint mainly among the poorer sections of population cannot be denied.

## B. School related factors:

### Physical infrastucture:

Fifth All India Educational Survey by National Council of Educational Research and Training (NCERT) 1994, made a countrywide assessment of the efficiency of the vast network of elementary schools (Sinha, et. al., 1994). This survey along with field investigation by many scholars points to the appalling picture of the schooling infrastucture.[12] Govinda and Varghese (1993) in their analysis reveal that learner's achievement is positively correlated with the level of infrastructural facilities. Most of the schools have dilapilated buildings and lack even the basic physical facilities like toilet, drinking water.[13] Shukla (1994), Sinha and Sinha (1995) found lack of benches, chairs, blackboards etc. have influence on 'out- of-school' children. Saxena, Sinha and Gupta (1995) found that school's physical facilities were important correlates of student achievement in Karnataka and Madhya Pradesh. It is necessary to focus on actors and action involved in school functioning rather than the passive material inputs available in

[11] Bhatty, K., 1998, 'Educational deprivation in India: A field investigation', Economic and Political Weekly, July 4, p.

[12] Sharma, R., 1998, 'Universal elementary education', Economic and Political Weekly.

[13] Dreze and Gazdar 1996,:66, Jabbi and Rajyalakshmi 1997, Nidhi Mehotra 1995, Prasad 1987, Rukmini Banerjee 1995 etc.

school. Such proposition is given by Belly (1971). However, guided by the education production function perspectives, researchers and policy makers have highlighted the importance of school inputs in raising the attendance. It has been established that such an approach allows for more objective measurement of 'school quality' reflected in the learning outcomes or 'achievement scores' effected by various inputs and process provided in primary schools. However the notion of 'quality' has deep socio-cultural roots.

Recently, much of the stress has been given to the supply side constraint as factor for deterring schooling to children. The school effectiveness and actual teaching learning process (the status of teacher, institutional structure, content of education, school environment, cost differences between the rural and urban school) is now found to have considerable influence. Kiran Bhatty (1998) opines that substantial burden on families and low quality of schooling facilities reduces child's interest in education. Tilak (2000) also argued that lack of interest could be attributed to school environment mainly its availability, costs of schooling, instructional process including presence of teachers.

Many studies identify cost-effective school input as the most important factor (Fuller 1998; Gupta 1990; Sarker 1983; Varghese 1995; World Bank 1990). They highlighted the impacts of inputs such as libraries, text- book, teacher knowledge, teacher experience, family background etc. on children's access to school. Often, cost of schooling is regarded too expensive for children of poor families in the rural areas, in particular, that deter their access to school. Alain Mingat and Peng Tun highlighted on the operation of economics of scale, which is reflected in [14]relation of the unit costs of education in all schools to the size of enrollment. This has also been found as one of the principal factor by Probe Report. It explains the two major components of parent's estimates were that of cost of clothing/ uniforms and cost of text books.[15]

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[14] A.B.Chalam, 1992; 'Rural-Urban contrasts in primary education. A study of selected Mandals in Vishakhapatnam District of Andhra Pradesh', *Journal of Economic Planning and Administration*. Vol., No. 2, pp. 161-178.

[15] See Anuradha De, Claire Nronta and Neera Samsar, 1999.

**Poor functioning of schools:**

A handful number of scholars are now drawing attention towards the low rather poor functioning of the schools in most parts of the country, specially in North India states (Bordin 1993: 8; Narain 1972; Ghosh 1993 on their study in Rajasthan; Shankari 1993 on Andrah Pradesh; Middleton 1993 on Uttar Pradesh and Sainath 1993 on Bihar).

The quality of education has received quite attention in the works of Dreze and Gazdar (1996) and Bashir (1994). Govinda and Varghese (1992) have made very good attempt in defining the quality in a rather contextual manner and overview of factors influencing quality in his field studies of Madhya Pradesh. Belly (1971) defines 'school quality' in a dynamic perspective focussing on the actors and actions involved in school functioning rather than the passive material inputs available in the school. Many research studies tend to equate 'school quality' with 'school effectiveness' and bring learner achievement to the center stage as the basis for assessing school quality (Govinda and Varghese 1992; Rashmi Sharma 1998;). Such an approach should be given priority because without effective schools, the whole idea of universal elementary education is meaningless. Four dimensions related to the quality, each being distinct from each other, are infrastructural facilities, teachers, teaching-learning process and learner achievement, that need exploration in order to access the reasons for children who remain out of the schooling system. It cannot be denied that so far little thought has been given to the impact of quality of schooling. Naik (1975) pointed that the quality can be viewed from egalitarian and inegalitarian basis and have both positive and negative side. The approach has to evolve strategies that combine quality and equity to identify the factors deterring the quality of the elementary education.

Many scholars, recently, has raised the issue of management of schools pertaining to the discussion of quality of education (Verghese and Govinda 1993; Varghese 1995; Prasad 1987). The school management indicator studied in India is the classification by type: fully private, Government- aided private, or government. Govinda and Varghese in their study in primary schools in Madhya Pradesh have singled out the influence of headmasters in the organization and management of schools responsible for having

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disastrous consequences on the quality of schools, thereby to draw pupils to the schools.[16] PROBE Report highlights on the failure of administration wing of the schooling system to keep pace with the rapid increase in number of schools, teacher and pupil in last 50 years.[17] The issue of the rapid increase of the public schooling facilities, particularly in the last decade has also been pointed out as one of the reasons of poor quality of government schools (Bashir 1994; PROBE Report 1999: 84). One of the biggest handicaps for most of the government managed schools affecting the work climate as well as efficiency of functioning is the absence of an effective mechanism of internal monitoring.[18]

**Type of institution and 'nowhere' children:**

As we know that the schooling system in India is not homogeneous. In all, there are at least major forms of educational systems in India. Those are publicly managed and funded schools, referred to as government schools and private schools (aided and unaided). Many scholars argued that the quality of education provided in the government schools are inferior and that uniform type of education provided in government schools does not satisfy the diverse demands for education of different values. Research studies also pointed to the general presumptions that private schools offer better quality of education (Tilak 2000). Tilak pointed out that although government has well qualified and trained staffs, non-attendance is quite high in government schools. The question of positioning of private schools vis-a- vis government schools has also been explored by Probe survey to some extent and they found 'a somewhat heartening and at the same time frustrating scenario where a massive surge in parental demand was counter pointed with a large scale decline in the government schooling system. J.B.Tilak argued that the demand for private education may be due to lack of quality in government schools, including teacher absenteeism and lack of physical infrastructure in government schools. However, it has been argued that private schools have been favored in India on few theoretical and

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[16] Govinda and Varghese, 1992, 'Quality of primary education. An empirical study', *Journal of Educational Planning and Administration*, Vol. VI, NO. 1, P.17-35.

[17] PROBE Report , 1999; p.84

[18] Bashir (1994) in her study of Tamil Nadu, Prasad (1987) in her study of Andhra Pradesh , K.S.Chalam (1992, p.177).

empirical grounds including quality, efficiency and job market relevance. In India, there has been disequalizing forces inherent in private education and the government school system has not been adequate to counteract them. Tilak argued that the private schools in India are not found to fulfill the equity principle, rather the benefits of education accrue largely to elites, whom it attract most. These schools provide expensive and presumably quality education, on the other hand, the benefits of the public schools go to the masses and provide inexpensive and poor quality education. He put forward strong arguments against the private schools.

**Human related facilities:**

Turning to the human dimension of school infrastructure, another area of concern that draws attention recently is that of scarcity of teacher and teaching time. Teachers are the most important input into the process of schooling. This factor has been explored by a handful of studies. It is not surprising that the number of teachers varied highly by the size of school. Research studies reveal the persistence of high child-teacher ratio in the schools as one of the main problem affecting the quality of schools. Research studies reveal the persistence of high child-teacher ratio in the schools as one of the main problem affecting the quality of schools. An interesting attempt has been done by PROBE Report that differentiated pupil-teacher ratio from child-teacher ratio, the difference being the child-teacher ratio includes 'out-of-school' children. However, child-teacher ratio is often regarded as a crude measure of education interaction that occurs in the classroom. It gives the evidence of PROBE villages having high proportion of primary schools having a single teacher. [19] Clearly, the teaching- learning activity is not up to the standard, as a single teacher has to deal with disparate groups belonging to several grades in rural areas.[20] This reason is often sited as one of the important reason for parents not interested in sending children to school.[21] Teaching standard is low in single- teacher schools, which accounted for almost 1/3 rd of all primary schools in 1986

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[19] PROBE Report, 1999; p.44 and 45.

[20] NCERT, 1992, p. 895; Dreze and Sen, 1996, p.126.

[21] Govinda and Varghese, in their study of Madhya Pradesh; also Tyagi, 1993, pp.84; Dreze and Sen, 1995, p.123.

(National Council of Educational Research and Training 1992: 95).[22] However, measuring teacher quality in understanding the issue being related for children being out of school, is rather a difficult task.

The problem of teacher absenteeism also appears repeatedly in the literature, as one of the reasons of the issue under consideration. It is mentioned by Dreze and Gazder (1996), who pointed to the chronic problem of teacher absenteeism in Uttar Pradesh. They found in their studies that not only teachers regularly came late and left early, but also the extent of absenteeism has dramatically increased (1996:75). Jabbi and Rajyalakshmi in their study in Bihar and Prasad in his study of Andhra Pradesh found similar trends.[23]

In fact, interest in education is a function of quality of teaching (Dreze and Sen 1996). That the children lost interest in going to school is due to the low standard of teaching in large parts of the country, particularly in rural areas.[24] Teachers are found to be engaged in non- teaching activities, some loosely related to school duties, like filling registers, others in reading, gossiping, playing cards etc.[25]

Besides, there is problem of shortage of teachers in many areas, particularly the rural areas. Banerjee (1995) in her study of low- income area in Delhi, found that all the schools faced the problem of serious shortage of teachers. As a result, multi-grade teaching is very common in the rural areas, which lowers the teaching standards. Govinda and Varghese found similar results in their empirical research (1993: 71). As far as teacher quality is concerned, they found that the academic background of teacher and their professional training matters in achievement level of students,[26] particularly average number of years of education and number of years of pre-training education.[27] The proportion of teachers with no training is responsible to a great extent to the poor quality of teaching standard. Shukla also argued in the same manner.[28]

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[22] Also PROBE Report, 1999, p.44, 45.

[23] Jabbi and Rajyalakshmi, 1997; p.5; Prasad, 1987; Sinha and Sinha, U.P., 1995; p.16; Middleton et. al., 1993.

[24] Dreze and Sen, 'India; Economic Development and Social Opportunity' Oxford University press, p.130.

[25] PROBE Report, 1999; p.47; Dreze and Sen, 1996, p.68.

[26] Govinda and Varghese, 1993, 'Quality of primary schooling, An empirical study, Journal of Educational Planning and Administration, Vol.6, No. 1.

[27] Also Saxena, Singh and Gupta, 1995; World Bank, 1997, p.97.

[28] Shukla, 1994; World Bank, 1996;

Teacher's salaries can be examined in order to assess the quality of teacher. High absenteeism among teachers in rural schools suggests that salaries may not be adequately administered to serve as incentives.[29]Research on this part is imperative such as by linking the salaries to evidence of non- attendance. In fact, teachers are highly dissatisfied with their salaries. Also salaries are provided erratically. Interestingly, this fact is evidenced from the PROBE Report.[30]

Besides, many empirical researches and literature reviews highlights to the availability of textbooks, school libraries, teacher's education, instructional materials etc. effecting to the teaching standard (Fuller and Clark 1994). PROBE investigators found the provision of text- books and teaching aids (black boards, chalks, benches, chairs etc.) are inadequate and haphazard especially in the backward localities. Also classroom teaching in most schools is highly text- book centered. It is one of the crucial input in teaching-learning process. Teachers receive wrong text- books or get them at the end of the year or find themselves with half as many text- books as there are pupils.[31] But, Govinda and Varghese found no relation between quality of teachers and level of infrastructure. Provision of these facilities only satisfies the necessary conditions for quality improvement.[32] Even, PROBE surveyors came across instances of irresponsible teachers keeping schools closed or non- functional for months at a time, a school where teacher was drunk, a head-teacher who comes to school once a week and so on. In half of the schools there was no teaching activity at the time of investigator's visit. Surprisingly, this pattern they found even in cases where the school infrastructure (in terms of number of classroom, teaching aids and teacher- pupil ratio) was relatively good.[33]

The availability of incentive schemes are important in influencing the parental motivation in sending children to schools. While free lunch may attract students but it is not a substitute for teaching, argued Kiran Bhatty.[34]

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[29] World Bank, 1997, p.106.
[30] PROBE Report, 1999.
[31] PROBE Report, 1999, p.69.
[32] Govinda and Varghese, 1993, 'Quality of primary schooling, An empirical study, *Journal of Educational Planning and Administration*, Vol.6, No. 1
[33] PROBE report, 1999, p.63.
[34] Kiran Bhatty, Educational deprivation in India, A field investigation', *Economic and political Weekly*, pp.1738.

Also, the school curriculum which teachers are expected to cover is highly challenging for the younger children, especially the underprivileged children whose learning potential is often diminished by mal-nourishment. The subjects are often presented in an abstruse manner in text- books. Also text- books deliberately tried to use complicated language that are incomplete tensile and insensitive for a child. Pal (1993) pointed out that the text- books are not written from children's viewpoint. The language used in the text- books rather deepens the sense of 'burden' of attached to school related knowledge. This may be the cause for children lost interest in going to the school. Govinda and Varghese (1992) in their study of Madhya-Pradesh found that there is no scheme for providing free text- books even to the needy children.[35] However, it cannot be denied that infrastructure is important to keep the teacher motivated. An otherwise motivated teacher can lose her/ his enthusiasm if the school environment is depressing and the management is frustrating. The state specific studies of Dreze in Uttar Pradesh and Sunil Sengupta in West Bengal have indicated the non- functioning of the schooling system on account of poor management of teacher cadres and curriculum.

**Expenditure:**

Recently, the expansion of Government expenditure on the education, no doubt, is a welcome development. Indeed, many scholars pointed to the issue of inadequate public expenditure on primary education. [36] This problem is compounded by several imbalances in allocation. As education expenditure is state responsibility, rather than central Government, large inter- state variation in per capita expenditure in education as well as share of primary education in total educational expenditure exists in India.[37]Bashir (1992), in his study of Tamil Nadu, pointed to the inadequate expenditure for improving facilities and teacher inputs.[38] This scenario is acute in those states where the problem of lower educational attainment is found. However Tyagi pointed to the increasing share of public expenditure on primary education after the mid- eighties along with the reduction

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[35] Govinda and Varghese, 1992, 'Quality of primary education. An empirical study', *Journal of Educational Planning and Administration*, Vol. VI, NO. 1, p.17-35.

[36] Ghosh 1992; Tilak 1989, 1990, 1993, 1995.

[37] Dreze and Sen, 1995, pp.121.

[38] Also Tyagi, 1993, pp.82; Agarwal et. al., 1992, pp.234; Bose, 1999, pp.48.

of inter- state gaps, who took into consideration recurring expenditure on elementary education (Tyagi 1995).[39] Dreze and Sen note that "educational expenditure has declined in real terms in many states" since the introduction of structural adjustment measures in 1991.[40] This is reflected in the decline in absolute number of teachers, particularly female teachers who have lost jobs.[41] In fact, the share of resources devoted to primary education increased very little over considerable period. He stressed on the inefficiency of utilization of resources to be important reason for problem concerned. J.B.J.Tilak's study based on data generated by National Sample Survey Organization on household expenditure on education, clearly states that household spend large sums of money on acquiring primary education. According to him, financial and material incentives provided by Government actually available only to a small fraction of students.

**Gender and 'nowhere' children:**

The recognition of female education as a social issue is very recent in India. The problem of 'nowhere' children is crucial for gender equity and school education policies and the said issue must be confronted. While explaining the issue of gender bias, it has now being well known that the system run from backward regions to urban settlements in relatively developed regions. Accordingly, the relative deprivation of girls in field of education is particularly significant because it underlines all other attributes of deprivation. Raza and Aggarwal (Raza and Aggarwal 1983:12), also discuss this fact. This marginality of female component has been a point of concern among the scholars. Dreze and Sen (1996), Dreze and Saran (1995) discussed that low value attached to female education is linked with some deep- rooted features of gender relations. Large proportion of females being out of school in north India is attributed to the gender division of labour, patrilineal inheritance, patrilocal resilience, village exogamy, hypergamous marriage and selected patriarchal norms. An important corollary of the explanation often cited by the scholars is that the educational discision is radically different for boys and girls. While parental

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[39] Kiran Bhatty, 1998; ' Educational deprivation in India. Afield investigation.' *Economic and Political Weekly*, p.1738.

[40] Dreze and Sen, 1995. 'Basic education as political issue'. *Indian Journal of Educational Planning and Administration*, Vol. IX, No.1, p.123; Also Reddy,1995 pp.52; Gupta and Sarkar,1994; Jalan and Subbharao, 1995;

[41] Tyagi, 1993; World Bank, 1997; pp.82.

motivation for boy's education is widely accepted, the same is quite less for girls' counterpart. This has been proved by numerous empirical studies. Motivation for girls' education revolves round social constraints and parental perception of returns to female education. Economic returns, thereby parental self- interest, provide very weak incentives for girl's access to education compared to the boys' counterpart. Similarly, Saxena notes that access to education of girls is culturally defied and relevance for formal education is determined by societal - normative structure and expectations of what is feminine (Chanana 1990: 65). He found in Karnataka that 1/4th of all the girls are not attending school on attaining puberty. "Menarche is still a reason for the cessation of daughter's education among Muslims, peasant castes and artisan castes" (Caldwell,et. al. 1985: 41).

Nidhi Mehrotra (1995) in her research in Uttar Pradesh found that parents refer to the value of education in terms of personal benefit for daughters after marriage.[42] Early marriage in the case of girls is an issue to be considered, independent of child's interest that deters girls from attending school (Bashir 1992: Channana, 1990). In fact, literature reveals that 'Marriage prospects' can be understood in several scense like dowry, more prestigeous marriage, finding a better husband (Jeebhoy and Kulkarni 1989). The practice of dowry and ideology of hypergamous marriage, can turn female education into liability.[43] Caldwell,et. al.[44] found in Karnataka that schooling would make daughters unmarriagable. Contrary to this, many scholars have given evidences that parents are interested in female education to improve prospects and demand for dowry is inconclusive. Deolikar and Rao (1995) found that in central -south India bride's education lowers the dowry she has to pay, rather they found education of groom's father to be positively related to dowry. Chanana's (1990), Sharma (1980) and Minturn(1993) opine that education does not adversely affect the practice of dowry. Gerald Berreman's study in rural north India in 1950 pointed out that families consider education for girls to be useless and actually detrimental (Berreman 1972: 331). Jeemol Unni (1965) in her study in Gujarat opined that girls remain out of schooling system on reaching puberty.[45]

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[42] Also Probe Report, 1999, p.34.

[43] Ahmedia, 1978,p.264; Dreze and Sen 1996; Sutharam and Ushadevi, 1985; Tandon, 1995, p.198; Van Bastelaen, 1968, p.61.

[44] Caldwell et. al., 1985, p.39.

[45] Also Caldwell,et. al. 1985 in his study of Karnataka; Veena Kulkarni in her study of Maharashtra, Madhya Pradesh and Tamil Nadu.

Often distance factor has been cited by many parents as constraint for not sending girls to school as found in the field investigation by many scholars, espescially in rural areas (Neera Burra 2000: 486). Duraswamy (1992) found in his emperical study of Tamil Nadu that an increase in distance to primary school by 1 Km. increase the chance of girls not going to school. One of the pressing factors for keeping girls out of school, in India, is widespread fear of violence and exploitation in rural and backward areas.

Girl's lack of interest is also cited as reason for a vast section of girls out of the schooling system ( Majumder 1997: Nambissan 1997: Srivastava 1997: Veena Kulkarni 36). Another determinant that effect the parental motivation is parental education. The issue of mother's education, in particular, has a big effect on the girls' acess to schooling (Duraswamy 1992:2; Bashir 1992: 17; Vlassof 1996: 220; Dreze and Sen 1990;). However, Shah (1989), stressed on the father's education to have influence on the girl's possibility to attend school.

Further direct cost of girl's schooling are often seen as higher in terms of cloth, especially in rural areas compared to boys (Nayar 1989: 9). In patrilineal, patrilocal household, investment in girl's education is seen as infructuous as the gains, if any, would accrue to another household.[46] Girls are valued to have short-term contributions to the household, that often conflict with schooling. Direct cost of schooling, even in the government school, mpose a substantial burden on families especially if there is more than one school going children in the house. Although, NCAER (1994) showed the cost of educating girls is lower than cost of educating boys.[47] Acccordingly parents have to spent much on school uniform. This fact has also been argued by parents of the Probe states in rural areas, as teachers insist. Provisions of text- books adds to the cost. Jaluddin (1990) found relationship between the per- capita household expenditure with the school attendance of children.

School quality, teaching practices, curriculum also contribute to the gender gaps as far as girls out of school children is concerned. The failure of the government primary school in large parts of India has often highly recently. This is evident from the common response of parents from field investigations by eminent scholars and researchers. They

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[46] Nayar, 1989, p.9; Shah, 1986, p. 253; World Bank, 1997 p. 124.
[47] World Bank, 1997, p.125.

pointed to poor functioning of the government village schools, who send their sons rather than girls. This situation effects female education more than the boys counterpart.[48] Gender gap is largely attributed to the inadequacies of the schooling system like the absence of female teachers, absense of single- sex school, location of schools at a distance away from home, inadequate teaching and learning materials, lack of separate toilets for girls. Further there is considerable evidence, that in north India, in particular, daughters are kept out of schooling system due to absence of female teachers or separate schools for girls (Patil 1984). Besides indifferent teachers and teaching practices discriminate against girls and communicate lower with them that also contibute largely to prevalent gender gap so far 'nowhere' children is concerned. So do the curricula and instructional materials, that is not only difficult to understand and insensitive one but also highly gender- stereotype, which compounds the gender inequality.[49] PROBE investigators also report to the lack of insensitivity of the schooling system to the lack of female teachers and separate toilets to have severe impact. Again the stress of patriarchial norms add to the problem. Aside from occasional sexual harrasement, female teachers are widely treated as second class employees by their male colleagues. Although the PROBE investigators did found parents who are more concerned with the quality of teaching rather than the gender of the teacher, but in their investigation in probe states they found strong evidences of preferences of female teachers, especially among girls and mothers.[50] The absence of female teachers in the school reinforces the male dominated nature of school environment that compounds the problem of unequal treatment between boys and girls in the family (PROBE Report 1999: 51).

Feminists and women's group in India have found girl's need for education conflicts more often within mother's need for assistance within the household. However, Neera Burra[51], has recognised the out of school children whom she has consider as child labourer in one form or the another. She argued that girls, in particular, who assist their mothers and fathers in home- based production activities, cooking, cleaning and washing,

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[48] Dreze and Sen, 1996, p. 133; World Bank, 1997, p. 125.
[49] Nayar, 1994, Veena Kulkarni, p.36, World Bank, 1997, p. 125.
[50] Probe Report, 1999, p.55.
[51] Burra, N., 2001, 'Cultural stereotypes and household behaviour: Girl child labour in India', *Economic and Political Weekly*, Vol. XXXVI, No. 5 and 6, p.483.

tending livestock or rearing younger siblings, continues to unrecognised as labourer (since they are not paid) and their significance to education remain unaddressed by public policy. This state of affairs has always been considerd as 'natural' (Neera Burra :484 ). To put it in another way, the consequences of the capabilities of girls gets restricted by the denial of education. However when it comes to the girls' education, gender- biased environment at home is important to study. Neera Burra in her case study of Andhra Pradesh found that gender biased treatment at home deepens the problem of denial of education to girls. She pointed to the deep- rooted mindset among parents who always find several reasons for not sending girls to school. She argued these reasons as excuses because she found that girls are routinely sent out to work on cotton fields, to fetch fuel wood and water for household, even to long distances, is never an issue. Probe survey found that children are needed at home, particularly the eldest daughter and sometimes eldest sons to bear the burden of the household.

**Other issues:**

Again area type (infrastructure) has its influence on the community, school quality and availibility of government facilities . It has been found that development of the area is reelated to the teacher quality, availibility and attendance of the children. One of the reason for the low female teachers available in rural areas is the lack of proper transport facilities ranging from the inconvenience to time waste and physical insecurity .[52] The less developed areas and physical isolation compounds the problem. Teachers generally are found to avoide working in those areas and this in turn leads to high student- teacher ratio, multigrade teaching teacher absentieesm.[53] This fact is also revealed in the survey of PROBE states. School quality is a part or function of the area type, to the effect that, even with the best intentions it is difficult to ensure well functioning schools in less developed areas (Sharma :1645). Moreover, village having good connectivity with city is likely to improve higher annual income and better employment oppurtunities to towns mainly during non- agricultural season and poverty reduce with better infrastructure facilities.

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[52] Probe Report, 1999, p.62.

[53] Sharma, R., 1998, 'Universal elementary education. The question of 'How", *Economic and Political Weekly*.

**Health and 'nowhere' children:**

A number of emperical studies examines the vital link between health and schooling. Improvement in educational performance, is closely related to health and fertility behabiour, specially of women. Of course, access to better education is likely to be associated with greater utilisation of health services by women and children (Krishnan 1996). Improvement of health has a lowering effect on child mortality. The health security embraces all kinds of human rights. Despite the expansion in the physical provisioning of health facilities and high levels of spending, India is far from realising the 'Health for All' Goals. PROBE survey (1999) found that ill-health, hunger and malnutrition of children, particularly of the deprived families is often a serious constraint against schooling of children (also Anuradha De, Claire Noronha and Meera Sauson 1999). Ill health remains one of the most prevalent causes of human deprivations. Data from UNICEF (1995, 1998) shows that almost 55 percent of the children under the age of five- some 75 million of them are malnourished. It has been established without doubt that there exists differences in physical well- being between the two sexes at various levels. The studies indicate that lack of access to basic health care facilities, illness of children, responsibilty of taking care for an ailing member are often the rasons that deter children's access to school. Further girls are first to be withdrawn when family member's illness increased the work load in the house. In this regard, infant mortality rate is a measure that represents the quality of life and serve as a useful indicator of economic performance. In fact, the sex differential is a sure indicator of discrimination so far availability of health care facilities are concerned, that starts at an early age. This usually indicates the adverse situation of female children as their mortality rates are higher as compared to boys.

A telling sign of poor health care is high infant mortality rate.[54] Schooling and health facilities complement each other as better health care makes it easier for children to go to school and helps people to utilise health facilities. Acess to better health care facilities, irrespective of sex, would reduce gender disparities in school attendance (Nidhi

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[54] Probe Report, 1999, p. 33.

Mehrotra 1999). Satish B. Agnihotri[55] concentrated on the gender differentials in the infant mortality rate patterns. Many scholars explored the female disadvantage in mortality.[56] Agnihotri found that reduced male mortality rate among children than the female counterpart, indicate the acess of inequality in terms of health infrastructure and nutritional support operates against the girl child. Excess of girl child mortality over male child mortality is due to the anti- female bias in the use of health care facilities in a situation of widespread boy preference ( Agnihotri 2001; Chaterjee 1990; Dreze and Sen 1996:368; Harris 1989). It has also been argued that greater scarcity of medical facilities exarbates gender bias, as boys are given priority in use of limited resources.

The above review of literature brings in light a number of issues in order to understand the multiplicity of factors that can be held responsible for the vast proportion of the children in our society, who are denied of the access of the rights of basic education. This study therefore provides the background to explore various issues pertaining to the 'nowhere' children and helps to pick up variables for analytical framework.

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[55] A. B. Satish, 2001, ' Declining infant and child mortality in India', *Economic and political weekly*, p. 231.
[56] Goodkind, 1996; Rajan, 1999; Raju, p. 2831.

# Chapter- 2

## Spatio-Temporal Analysis of 'Nowhere' Children in India

**Introduction:**

Several surveys and research studies show that despite enormous increase in enrollment in primary education, there are still a large number of India's children in the 5-14 years age group who remain deprived of the schooling system. According to the 1991 census, out of total 203 million children in the age group 6-14 years, 'nowhere' children consist of over 90 million. However, the total number of 'out-of-school' children has increased from 1981 to1991, but their relative share has declined over the period (Chaudhry).[1] According to the Sixth All India Educational Survey and available statistics in 1993-94, nearly 160 million children in the age group 6-14 years do not enroll in the school. Nearly 1/3 rd of the children in the age group 6-14 that comprises 60 percent continues to be out of school in rural India according to the National Family Health Survey of 1992-93, the National Council of Applied Economic Research of 1994 and National Sample Survey of 1995-96.[2] About 60 per cent of these are girls (Neera Burra 2001). Vast proportion of the children are neither working nor going to school. One would assume that these children are 'out-of school' because they may be contributing to workforce, but according to the 1991 census, as many as 70.33 lakhs of these children that comprises 3.53 percent of total population in the age cohort 5-14 years are not classified as workers either.

Against this backdrop, an attempt has been made in the following section to analyze the spatio- temporal variation of 'nowhere' children and their growth rate over the decades by taking into consideration all the states into account.

## I.f. Profile of 'Nowhere' children in India:-

Table 1. Presents the percentage of 'nowhere' children in India during 1981-1991. At all India level it has been found that the total percentage of 'nowhere' children has declined from 48.36 percent in 1981 to 42.21 percent in 1991. The percentage of the 'nowhere'

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[1] Chaudhri, D.P., 1999. 'Basic human rights, core labour standards and relative educational deprivation of youth in modern Indian states', *Indian society of Labour Economics*, p.16.

[2] Also Prasad 1987, Dreze and Gazdar 1997, Tyagi 1993, Visaria et. al. P.53, Srivastava 1997, p.433.

children is much higher in the rural areas than that in the urban areas, both in 1981 and 1991. It has been noticed that although the percentage has declined in the rural areas during the period, in the urban areas it remains almost the same. By breakdown of sex, the percentage of the boys 'nowhere' children is found to increase in 1991 compared to 1981 both in rural and urban areas. On the other hand, the share of the girls 'nowhere' children has declined during the period (1981-91) both in rural and urban segments.

**Table2.1. Percentage of 'Nowhere' children in India, 1981-1991.**

|  | 1981 | | | 1991 | | |
|---|---|---|---|---|---|---|
|  | **Total** | **Boys** | **Girls** | **Total** | **Boys** | **Girls** |
| **Total** | 48.36 | 38.66 | 58.91 | 42.21 | 38.99 | 51.09 |
| **Rural** | 49.46 | 39.48 | 59.78 | 49.32 | 42.16 | 57.14 |
| **Urban** | 31.92 | 24.94 | 39.12 | 32.23 | 28.97 | 35.73 |

Source: Based on the Socio- cultural Table; census of India, 1981, 1991.

An overall look in the growth rate will help in understanding the actual picture. Table 2.2 presents the overall growth rate of the 'nowhere' children *vis-à-vis* population in the age group 5-14 years during the period 1981-1991 in India.

**Table2.2 Growth rate of the 'Nowhere' children and population in the age group 5-14 years in India, 1981-1991.**

| Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|
| Population | | Nowhere children | | Population | | Nowhere children | |
| **Boys** | **Girls** | **Boys** | **Girls** | **boys** | **girls** | **Boys** | **girls** |
| -8.15 | -7.98 | 6.78 | -4.41 | -5.73 | -7.05 | 16.15 | -8.86 |

Source: Based on the Socio- cultural table, census of India, 1981, 1991.

It may be noted from the Table that the growth rate of the boys population is negative both in rural and urban areas. Against this, the 'nowhere' boys have registered a positive growth, particularly in urban areas. In the rural areas the growth is 6.78. Thus the growth of the boys 'nowhere children' is not consistent with the growth of the population. On the other hand, the 'nowhere' girls as well as the girls population have registered negative growth rate in both rural and urban areas. However the decline in the growth

rate in urbanareas is more than the rural counterpart. Again the decline in the growth rate of the 'nowhere' girls is more than the boys counterpart in both rural and urban areas over the period.

It has also been observed from the Table2.1 that the percentage of the girls 'nowhere' children is greater than the boys counterpart and that in the rural areas the picture is alarming. Even in 1991 more than 55 percent of the girls in rural areas and 36 percent in urban areas are out of school. Thus situation of the girl children in urban India is less dismal compared to rural areas but is equally alarming for sensitive policy makers ( D.P.Chaudry 1999). Therefore we find that 3/4$^{th}$ of girls in rural areas are denied of their constitutional rights to education.

## I.2. An overview of the 'Nowhere' children of Indian states:

Table23 and Table24 show the picture of the total 'nowhere children' in the states of India in 1981 and 1991. It can be noticed from the two tables that all Indian average conceal tremendous inter- state, rural- urban and sex disparities pertaining to the incidence of 'nowhere' children. By analyzing the proportion of 'nowhere' children to total population (5-14 years) in 1981 and 1991, it has been observed that the BIMARU states have the highest incidence of 'nowhere' children, well above the all India average. Also the states like Orissa, West Bengal and Andhra Pradesh have higher incidence of 'nowhere' children. On the other hand, apart from Kerala and Himachal Pradesh, where the percentage of 'nowhere' children is low, in some of the southern states (Tamil Nadu and Karnataka), western (Gujarat and Maharashtra) and north western states (Punjab and Haryana) the share is comparatively small. One interesting feature of the study is that when all the states have maintained a declining trend of 'nowhere' children, some of the north eastern states like Manipur, Meghalaya and Tripura showed increasing trend of the 'nowhere' children. However, breakdown by rural and urban areas and by sex at the state level shows interesting patterns (see Figure 2.1 and 2.2).

It may be noticed from the Tables 2.3 and 2.4 that the BIMARU states (Bihar, Rajasthan, Madhya Pradesh Orissa) and West Bengal maintained high percentage of the both boys and girls 'nowhere' children over the period 1981-1991, all being above the national average. On the other hand, the states, which maintained low percentage of

## Table 2.3.

### Percentage of total 'Nowhere' children in India, 1981.

| States | Total | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls |
| India | 48.36 | 38.66 | 58.91 | 49.46 | 39.48 | 59.78 | 31.92 | 24.94 | 39.12 |
| Andhra Pradesh | 45.49 | 36.19 | 55.09 | 64.76 | 52.06 | 79.05 | 38.11 | 31.04 | 46.13 |
| Bihar | 61.54 | 49.51 | 75.08 | 44.88 | 35.49 | 55.19 | 31.14 | 26.42 | 36.37 |
| Gujarat | 40.92 | 32.87 | 49.79 | 52.04 | 37.29 | 69.1 | 29.96 | 25.29 | 35.22 |
| Haryana | 41.73 | 35.03 | 62.53 | 32.76 | 25.22 | 40.59 | 17.14 | 14.91 | 19.59 |
| Himachal Pradesh | 56.87 | 24.56 | 39.32 | 49.08 | 38.89 | 59.88 | 34.05 | 27.51 | 41.07 |
| Karnataka | 43.45 | 34.21 | 52.79 | 47.87 | 37.19 | 58.59 | 31.68 | 26.35 | 37.14 |
| Kerala | 15.16 | 16.76 | 18.71 | 18.46 | 17.37 | 19.57 | 14.31 | 13.93 | 14.68 |
| Madhya Pradesh | 53.17 | 42.04 | 65.17 | 57.67 | 45.4 | 70.91 | 34.09 | 27.72 | 40.92 |
| Maharashtra | 33.54 | 26.22 | 41.25 | 37.83 | 28.99 | 47.05 | 24.42 | 20.36 | 28.76 |
| Manipur | 41.69 | 37.25 | 46.27 | 45.97 | 41.22 | 50.85 | 29.45 | 25.91 | 33.12 |
| Meghalaya | 49.09 | 48.19 | 50.02 | 54.49 | 53.53 | 55.47 | 21.16 | 19.9 | 22.41 |
| Nagaland | 39.32 | 37.13 | 41.64 | 42.76 | 40.61 | 45.01 | 20.37 | 18.23 | 22.69 |
| Orissa | 48.07 | 35.89 | 60.38 | 49.82 | 36.97 | 62.71 | 34.25 | 27.46 | 41.36 |
| Punjab | 36.94 | 29.69 | 45.26 | 40.32 | 31.36 | 50.62 | 27.38 | 24.82 | 30.25 |
| Rajasthan | 58.75 | 44.29 | 74.78 | 63.11 | 47.53 | 80.45 | 41.25 | 31.15 | 52.25 |
| Sikkim | 38.52 | 33.95 | 43.29 | 40.87 | 36.08 | 45.82 | 23.98 | 21.19 | 27.06 |
| Tamil Nadu | 34.32 | 26.52 | 42.39 | 38.86 | 29.59 | 48.44 | 25.01 | 20.23 | 29.96 |
| Tripura | 44.09 | 38.22 | 50.15 | 46.56 | 40.27 | 53.07 | 20.33 | 18.19 | 22.49 |
| Uttar Pradesh | 61.68 | 49.02 | 76.75 | 64.75 | 50.77 | 81.6 | 46.8 | 40.31 | 54.14 |
| West Bengal | 51.13 | 43.39 | 59.22 | 56.48 | 47.73 | 65.52 | 32.58 | 28.72 | 36.78 |

Source: Based on Socio- cultural table, census of India, 1981, series-1, volume-2.

## Table 2. 4.

### Percentage of total 'Nowhere' children in 1991.

| States | Total | | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls |
| India | 42.21 | 38.99 | 51.097 | 49.32 | 42.16 | 57.14 | 32.33 | 28.97 | 35.73 |
| Andhra Pradesh | 40.95 | 46.56 | 47.55 | 44.73 | 37.6 | 52.25 | 30.65 | 26.81 | 34.65 |
| Arunachal Pradesh | 53.37 | 49.59 | 57.45 | 55.72 | 51.87 | 59.85 | 36.79 | 33.49 | 40.02 |
| Assam | 48.04 | 43.61 | 52.65 | 49.85 | 45.13 | 54.75 | 30.45 | 28.79 | 32.017 |
| Bihar | 61.23 | 52.44 | 71.22 | 64.39 | 55.05 | 75.03 | 39.55 | 34.39 | 45.33 |
| Goa | 17.4 | 15.74 | 17.93 | 17.96 | 16.25 | 19.71 | 16.6 | 15·00 | 18.27 |
| Gujarat | 37.06 | 31.97 | 42.58 | 38.98 | 32.94 | 45.52 | 33.24 | 30.03 | 36.72 |
| Haryana | 37.74 | 31.06 | 45.44 | 40.8 | 32.99 | 49.85 | 27.56 | 24.72 | 30.84 |
| Himachal Pradesh | 22.13 | 21·00 | 27.40 | 24.82 | 21.52 | 28.22 | 15.9 | 14.87 | 15.98 |
| Karnataka | 35.06 | 29.64 | 40.59 | 38.31 | 31.91 | 44.84 | 27.25 | 24.28 | 30.36 |
| Kerala | 13.92 | 13.88 | 13.95 | 14.42 | 14.39 | 14.84 | 12.43 | 12.38 | 12.48 |
| Madhya Pradesh | 46.54 | 39.75 | 53.87 | 50.84 | 43.22 | 59.07 | 31.68 | 27.79 | 35.89 |
| Maharashtra | 29.24 | 26.74 | 33.92 | 33.14 | 28.89 | 37.65 | 25.11 | 23.02 | 27.37 |
| Manipur | 44.78 | 43.03 | 37.44 | 47.04 | 45·00 | 49.14 | 38.72 | 37.61 | 39.81 |
| Meghalaya | 54.68 | 54.15 | 55.22 | 60.28 | 59.78 | 60.78 | 26.99 | 26.06 | 27.92 |
| Mizoram | 32.26 | 31.63 | 32.89 | 41.28 | 29.59 | 42.29 | 20.66 | 20.42 | 20.89 |
| Nagaland | 43.65 | 42.52 | 44.85 | 45.84 | 44.07 | 47.06 | 32.49 | 31.59 | 33.45 |
| Orissa | 44.48 | 48.6 | 51.51 | 45.85 | 38.19 | 53.62 | 32.55 | 28.43 | 36.94 |
| Punjab | 34.82 | 30.16 | 40.06 | 36.93 | 21.2 | 43.41 | 29.75 | 27.96 | 31.76 |
| Rajasthan | 54.43 | 43.22 | 67.04 | 56.78 | 46.37 | 72.89 | 38.32 | 31.61 | 42.99 |
| Sikkim | 35.74 | 33.11 | 38.44 | 36.91 | 34.26 | 39.62 | 22.06 | 19.99 | 24.28 |
| Tamil Nadu | 25.45 | 22.18 | 28.85 | 27.32 | 23.35 | 31.48 | 21.63 | 19.78 | 23.53 |
| Tripura | 44.15 | 40.75 | 47.67 | 46.15 | 42.42 | 50.04 | 30.4 | 28.48 | 31.54 |
| Uttar Pradesh | 59.46 | 50.63 | 69.67 | 62.29 | 52.41 | 73.82 | 47.74 | 43.12 | 57.6 |
| West Bengal | 49.84 | 44.78 | 56.22 | 53.95 | 48.31 | 59.79 | 36.38 | 33.25 | 39.69 |

Source: Based on Socio- cultural table, census of India, 1991, series-1, volume-2.

'nowhere' children, are Kerala, Himachal Pradesh, Tamil Nadu and Maharashtra, all being lower than the national average. Similar pattern has been noticed both in rural and urban areas. Also it is clear that from the Table that the percentage of the rural 'nowhere' girls is more than their boys counterpart in almost all the states.

In 1981 the percentage of the boys 'nowhere' children was highest in Bihar in rural areas, whereas in urban areas it was maximum in the state of Uttar Pradesh. The percentages are 52.06 percent in Bihar in rural areas and 40.31 percent in Uttar Pradesh in urban areas respectively. For girls the concentration was highest in the state of Uttar Pradesh, both in rural and urban areas. The corresponding figures were 81.61 percent and 54.14percent in rural and urban areas respectively. In 1991, Meghalaya has the highest

## Percentage of 'Nowhere' children in India, 1981



FIG. B.1.
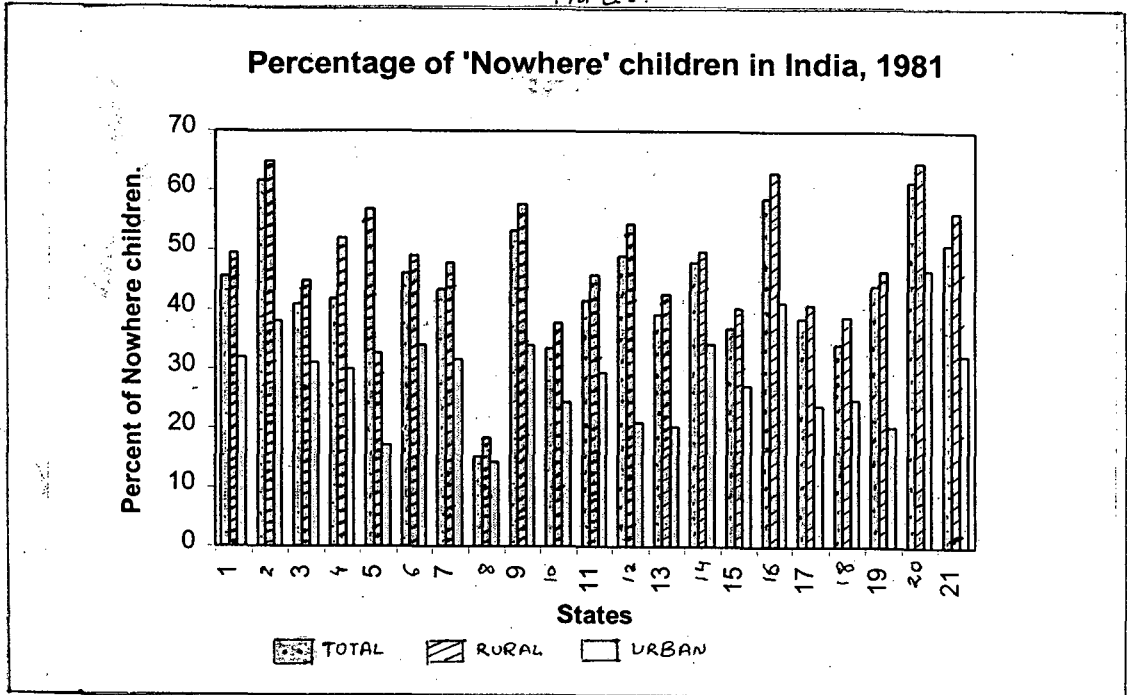
1. Andhra Pradesh 2. Bihar 3. Gujarat 4. Haryana 5. Himachal Pradesh 6. Jammu and Kashmir 7. Karnataka 8. Kerala 9. Madhya Pradesh 10. Maharashtra 11. Manipur 12. Meghalaya 13. Nagaland 14. Orissa 15. Punjab 16. Rajasthan 17. Sikkim 18. Tamil Nadu 19. Tripura 20. Uttar Pradesh 21. West Bengal

FIG. B.2.

## Percent of 'Nowhere' children in India, 1991



FIG. B.2.
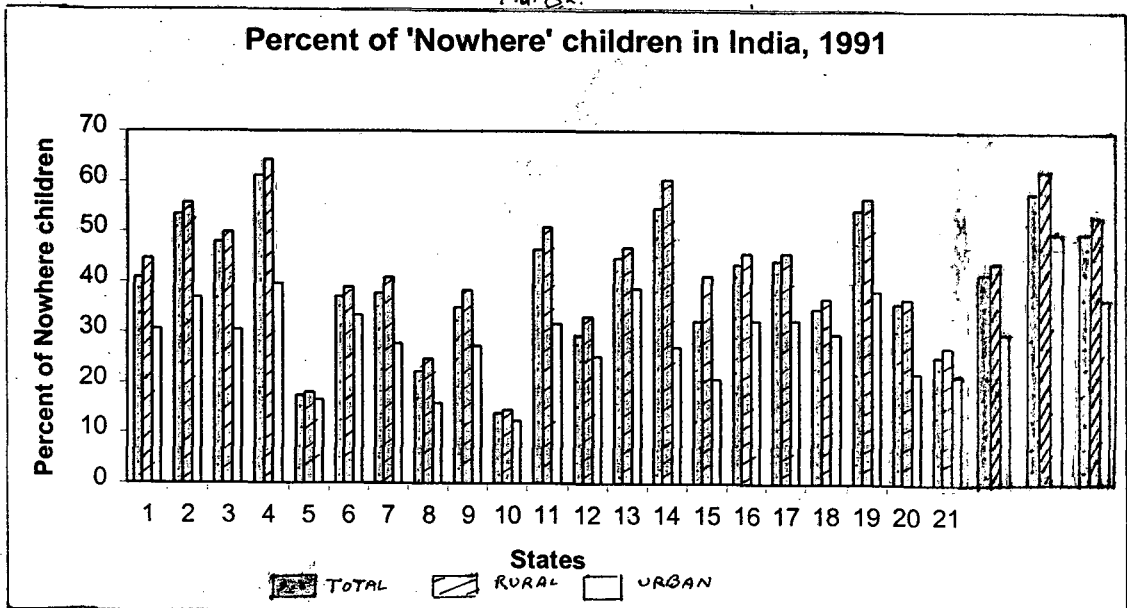
1. Andhra Pradesh 2. Arunachal Pradesh 3. Assam 4. Bihar 5. Goa 6. Gujarat 7. Haryana 8. Himachal Pradesh 9. Karnataka 10. Kerala 11. Madhya Pradesh 12. Maharashtra 13. Manipur 14. Meghalaya 15. Mizoram 16. Nagaland 17. Orissa 18. Punjab 19. Rajasthan 20. Sikkim 21. Tamil Nadu 22. Tripura 23. Uttar Pradesh 24. West Bengal

percentage of 'nowhere' boys, which stand at 59.7 percent in rural areas. This is followed by Bihar, Uttar Pradesh, Rajasthan, West Bengal and Madhya Pradesh all being above the national average whereas, Bihar maintained the position with the highest percentage of 'nowhere' girls (75.03 percent). So far as urban areas are taken into consideration, Uttar Pradesh was found to have the highest share of both 'nowhere' boys and girls. The corresponding figures for the boys and the girls were 43.12 percent and 57.6 percent respectively. On the other hand, boys in Kerala have always maintained the lowest percentage of 'nowhere' children both in rural and urban areas. It is revealed that with the exception of southern states of Kerala, Goa, Tamil Nadu, Maharashtra and Karnataka, and Himachal Pradesh in the north where percentages of 'nowhere' girl children are much lower, almost in all the other states girls' are in a relatively more deprived position, particularly in rural areas as compared to the urban areas.

By analyzing the percentage of 'nowhere' children over the decade, we find that the relative share of the boys and girls 'nowhere' children has declined in most of the states over the period both in rural and urban areas. However there are a few exceptions to this general trend. For instance, in some of the northeastern states like Manipur, Meghalaya and Nagaland, the relative share has increased for both the boys and the girls 'nowhere' children in rural as well as urban areas. While in the states of Uttar Pradesh, Orissa and West Bengal the share of the 'nowhere' boys' has increased during the period in rural areas whereas urban areas it has increased in the states of Gujarat, Madhya Pradesh, Maharashtra, Rajasthan and Tamil Nadu in urban areas. However, both the relative share of boys and girls 'nowhere' children have increased in the states of Uttar Pradesh, Punjab and West Bengal so far as urban areas are concerned.

A close look at the growth rate of the 'nowhere' children and the corresponding population in the age cohort 5-14 years shows similar pattern as that for overall India, discussed earlier. So far as the states are concerned it is noticed from the Table 5 that both the boys and the girls 'nowhere' children show a negative trend in growth, in most of the states over the period. However there are few exceptions. We find that there has been positive growth of the 'nowhere' children for both boys and girls in the north and eastern

**Table 2.5.**

**Growth rate of the 'Nowhere' children and population in the age group 5-14 years during 1981-1991 in rural and urban areas.**

| States | Rural | | | | Urban | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Nowhere children | | Population | | Nowhere children | | Population | |
| | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| Andhra Pradesh | −14.31 | -8.41 | -4.99 | -6.21 | -15.44 | -18.16 | -2.36 | -4.55 |
| Bihar | 5.74 | -5.09 | -4.91 | -1.08 | 10.79 | -1.73 | -3.74 | -3.78 |
| Gujarat | -7.19 | -17.52 | -11.28 | -8.95 | 13.66 | 0.96 | -4.98 | -3.32 |
| Haryana | -11.53 | -27.86 | -9.84 | -9.08 | -2.25 | -12.44 | -8.06 | -4.06 |
| Himachal Pradesh | -14.67 | -30.48 | -10.48 | -10.42 | -0.27 | -18.43 | -20.41 | -6.07 |
| Karnataka | -14.20 | -23.47 | -8.60 | -9.65 | -7.86 | -18.26 | -8.25 | -11.84 |
| Kerala | -17.16 | -24.17 | -14.56 | -14.50 | -11.13 | -14.99 | -15.31 | -28.39 |
| Madhya Pradesh | -4.80 | -16.70 | -9.68 | -8.47 | 0.25 | -12.29 | -5.01 | -6.80 |
| Maharashtra | -0.34 | -19.98 | -11.53 | -11.81 | 13.06 | -4.83 | -5.89 | -9.31 |
| Manipur | 9.17 | -3.36 | -0.96 | -8.54 | 45.16 | 20.20 | -10.09 | -6.28 |
| Meghalaya | 11.68 | 9.57 | -5.51 | -4.19 | 30.95 | 24.59 | -3.02 | -4.75 |
| Nagaland | 8.52 | 4.55 | 4.16 | 2.08 | 43.29 | 47.42 | 0.69 | -5.26 |
| Orissa | 3.30 | -14.50 | -12.73 | -12.65 | 3.53 | -10.69 | -9.45 | -11.75 |
| Punjab | -32.40 | -14.24 | -9.63 | -8.56 | 12.65 | 4.99 | -2.02 | -2.30 |
| Rajasthan | -2.44 | -9.40 | -3.52 | -3.57 | 1.48 | -17.72 | -3.76 | -6.07 |
| Sikkim | -5.04 | -13.53 | 3.21 | 1.18 | -5.66 | -10.27 | 5.78 | 1.13 |
| Tamil Nadu | -21.09 | -35.01 | -8.40 | -9.03 | -2.22 | -21.46 | -13.00 | -13.03 |
| Tripura | 5.34 | -5.71 | -4.69 | -5.04 | 56.57 | 40.24 | -8.20 | -10.81 |
| Uttar Pradesh | 3.23 | -9.53 | -8.07 | -3.87 | 6.97 | 6.39 | -28.75 | -31.05 |
| West Bengal | 1.22 | -8.75 | -7.73 | -7.50 | 15.77 | 7.91 | -6.38 | -8.41 |

Source: Based on the percentage of 'nowhere' boys and girls and population.

states of Bihar, Orissa, Punjab and Uttar Pradesh. Compared to this population have registered a decline in growth in all the states over the period as revealed by the negative growth rate. It may be recalled that the growth of the 'nowhere' children is not consistent with that of the population. Also decline in the growth rate of 'nowhere' children is more than the decline of the growth rate of population, a positive sign. Therefore, we find the growth rate of 'nowhere' children in the now almost proverbial BIMARU, underdeveloped and poor states are quite discerning. Although there does not seem to be any gendered or locational dimensions to it as the pattern is almost similar in case of both boys and girls as well as across rural and urban areas.

At a glance the maps reveal broad regional patterns and variations during the period. One interesting feature is that the pattern for boys and girls are similar both in rural and urban areas in 1981 (see Figure 2.1, 2.2 and 2.3). The northern region

Fig. 2.1.

Percentage of 'Nowhere' girls in rural
India, 1981.
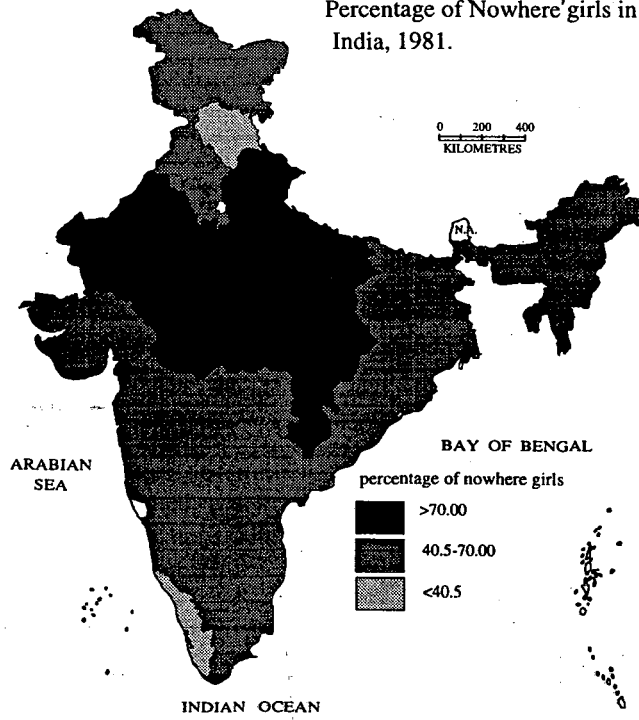
0    200    400
KILOMETRES

N.A.

ARABIAN
SEA

BAY OF BENGAL

percentage of nowhere girls

>70.00

40.5-70.00

<40.5

INDIAN OCEAN

Fig. 2.2.

Percent of 'Nowhere' boys in rural

India, 1981.

0    200    400
KILOMETRES

N.A.

ARABIAN
SEA

BAY OF BENGAL

Percent of nowhere boys

>45.00

26.00-45.00

<26.00

INDIAN OCEAN

Fig. 24.

Percentage of Nowhere boys in rural India, 1991.

0    200   400
KILOMETRES

ARABIAN
SEA

BAY OF BENGAL

Percent of nowhere boys

■  >49.8
▨  24.9- 49.8
▢  <24.9

INDIAN OCEAN

Fig. 25.

Percentage of Nowhere girls in rural India, 1991.

0    200   400
KILOMETRES

ARABIAN
SEA

BAY OF BENGAL

Percent of nowhere girls.

■  >63.5
▨  33.1-63.5
▢  <33.1

INDIAN OCEAN
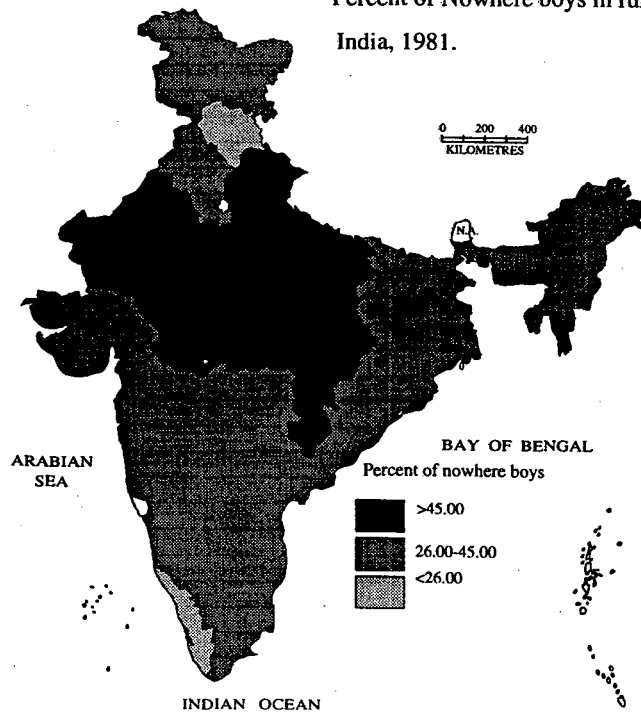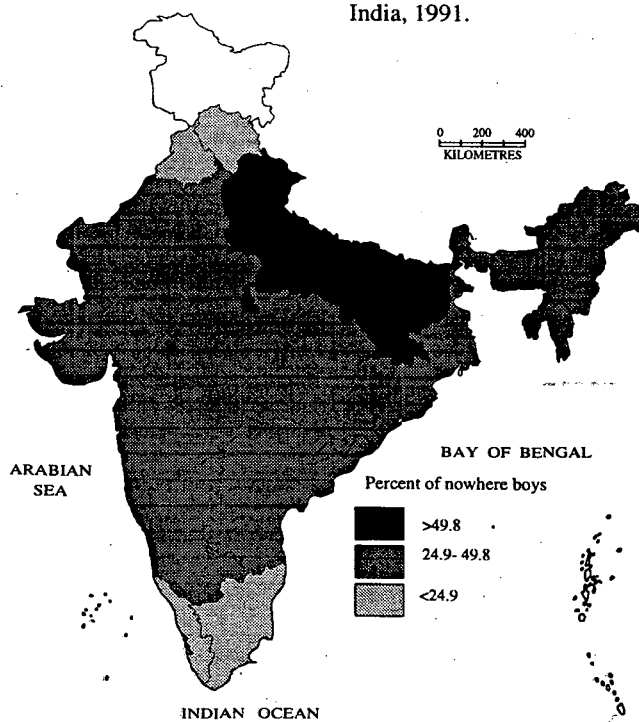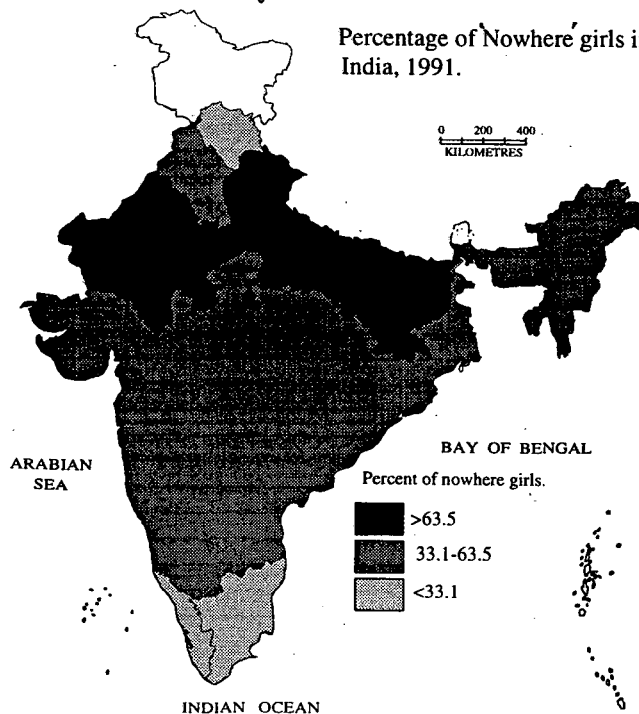
Fig. 2.6

Percentage of Nowhere boys in urban India, 1991.

0    200    400
KILOMETRES

ARABIAN
SEA

BAY OF BENGAL

Percent of nowhere boys

■ >34.1

▨ 19.4- 34.1

▨ <19.4

INDIAN OCEAN

Fig. 2.7

Percentage of Nowhere girls in urban India, 1991.

0    200    400
KILOMETRES

ARABIAN
SEA

BAY OF BENGAL

Percent of nowhere girls.

■ >42.1

▨ 22.0- 42.1

▨ <22.0

INDIAN OCEAN
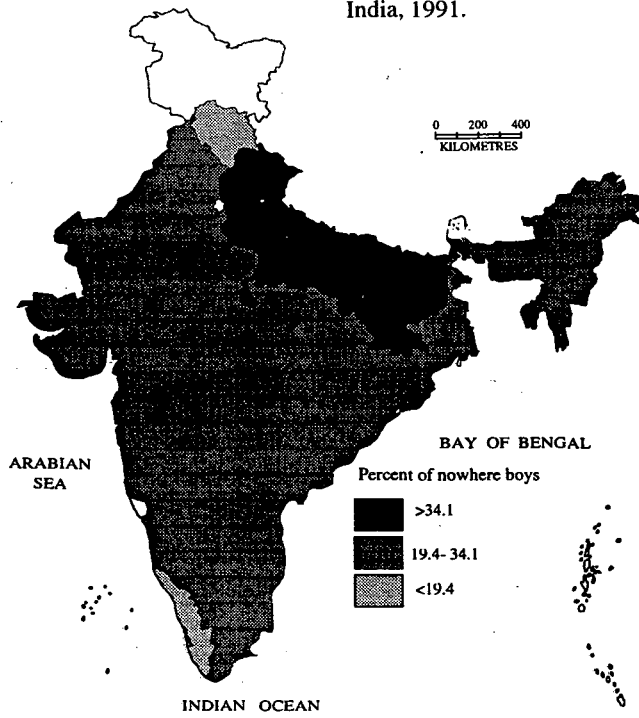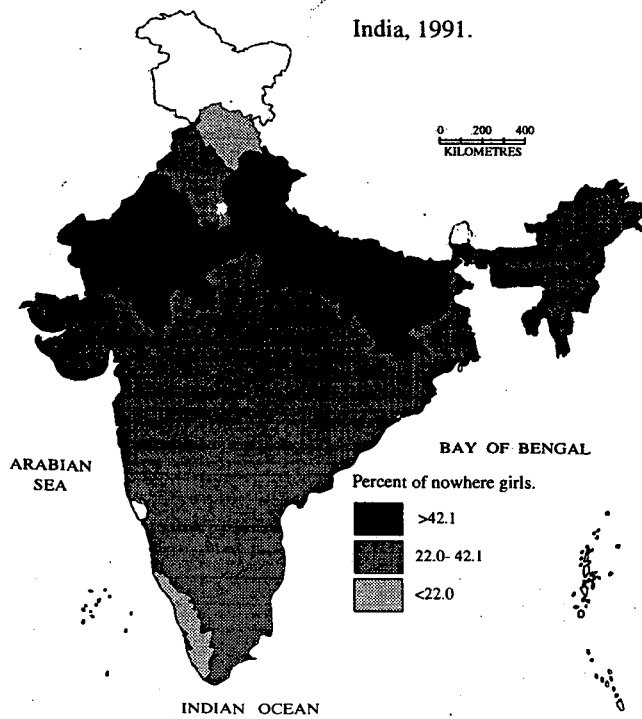
comprising of the BIMARU states of Rajasthan, Uttar Pradesh, Madhya Pradesh and Bihar clearly emerge as a region having high incidence of both the boys and the girls 'nowhere' children. What is worst is that these are among the most populated states in India. In 1991 the regional pattern shows a little change (see Figure 2.4 and 2.5). While the percentage of the boys 'nowhere' children is mainly concentrated in the states of Uttar Pradesh, Bihar both in rural (exceeding 49.8 percent) and urban (exceeding 34.1 percent) areas, that for girls Rajasthan, Uttar Pradesh and Bihar show the highest concentration (exceeding 63.5 percent in rural areas and 42.1 percent in urban areas). The reasons for the high incidence of 'nowhere' children in the above mentioned states may be attributed to the overall educational backwardness, widespread poverty, presence of Scheduled caste population, low status of woman in the society and lack of proper schooling facilities.

On the other hand, southern states of Kerala, Tamil Nadu and the northern state of Himachal Pradesh show the lowest concentration recording 'nowhere' boys of less than 24.9 percent and 'nowhere' girls of less than 33.1 percent (see Figure 2.4 and 2.5). So far as urban areas are concerned, Kerala and Himachal Pradesh fall in the category of less than 19.4 percent of boys and for girls in the category of less than 22.0 percent (Figure 2.7). The reasons for low incidence of 'nowhere' children in these states may be due to high literacy rate, high human development index and improved schooling facilities. The western and the south central states show the medium concentration of both 'nowhere' boys and girls during the period under observation.

The scatter diagram[3] shows that the BIMARU states- Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh fall in the underdeveloped space, where both the percentage of boys and girls 'nowhere' children are high and the sex disparity is also high. West Bengal also falls in this category. This we find in both 1981 and 1991 (see Figure 2.D.1 and 2.D.2). The states like Andhra Pradesh, Orissa and Madhya Pradesh fall in the category of 'gendered' space where the percentage of boys and girls 'nowhere' children is low, but the sex disparity is high in 1991. On the other hand, the southern states like Kerala, Tamil Nadu, and northwestern sates like Punjab, Gujarat etc. fall in the 'better off' space where the percentage of 'nowhere' boys and girls are low with corresponding low

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[3] Scatter diagram is computed by plotting the percentage of 'nowhere' boys in the x- axis and girls in the y-axis. The Indian average of 15 major states has been taken as a cut off points that divide the whole area into four spaces. Accordingly, all the districts are divided into four categories.

FIG. 2.D.1

Scatter diagram showing spatial variation of 'Nowhere' children in rural India, 1981.

Index

BACKWARD SPACE

GENDERED SPACE

BETTER OFF SPACE

Scale 1: 21000 000
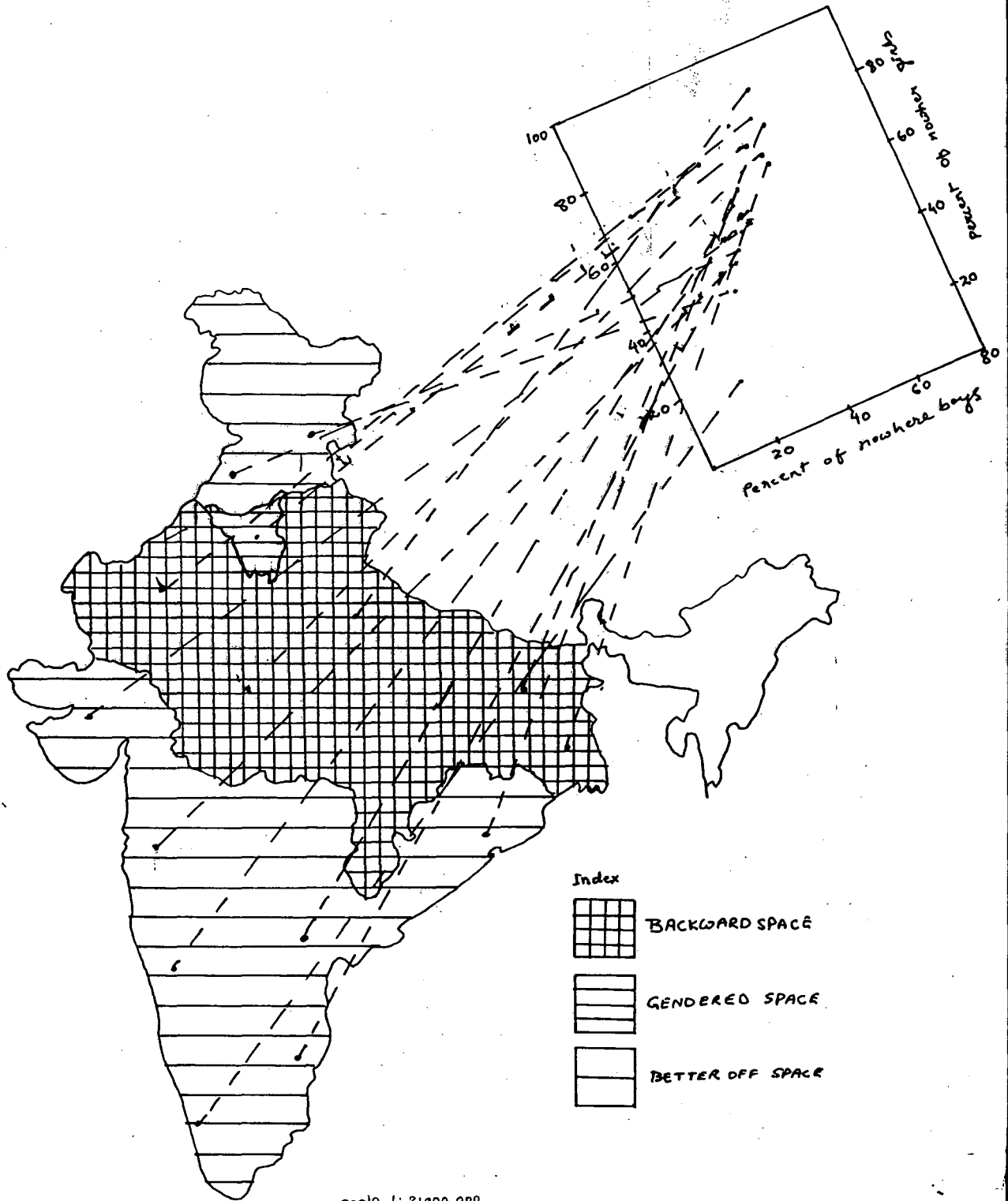
Scatter diagram showing spatial
variation of 'Nowhere' Children
in rural India, 1991.

FIG. 2.D.2.

Percent of nowhere girls

Percent of nowhere boys

INDEX

BACKWARD SPACE

GENDERED SPACE

BETTER OFF SPACE

scale 1: 21000000
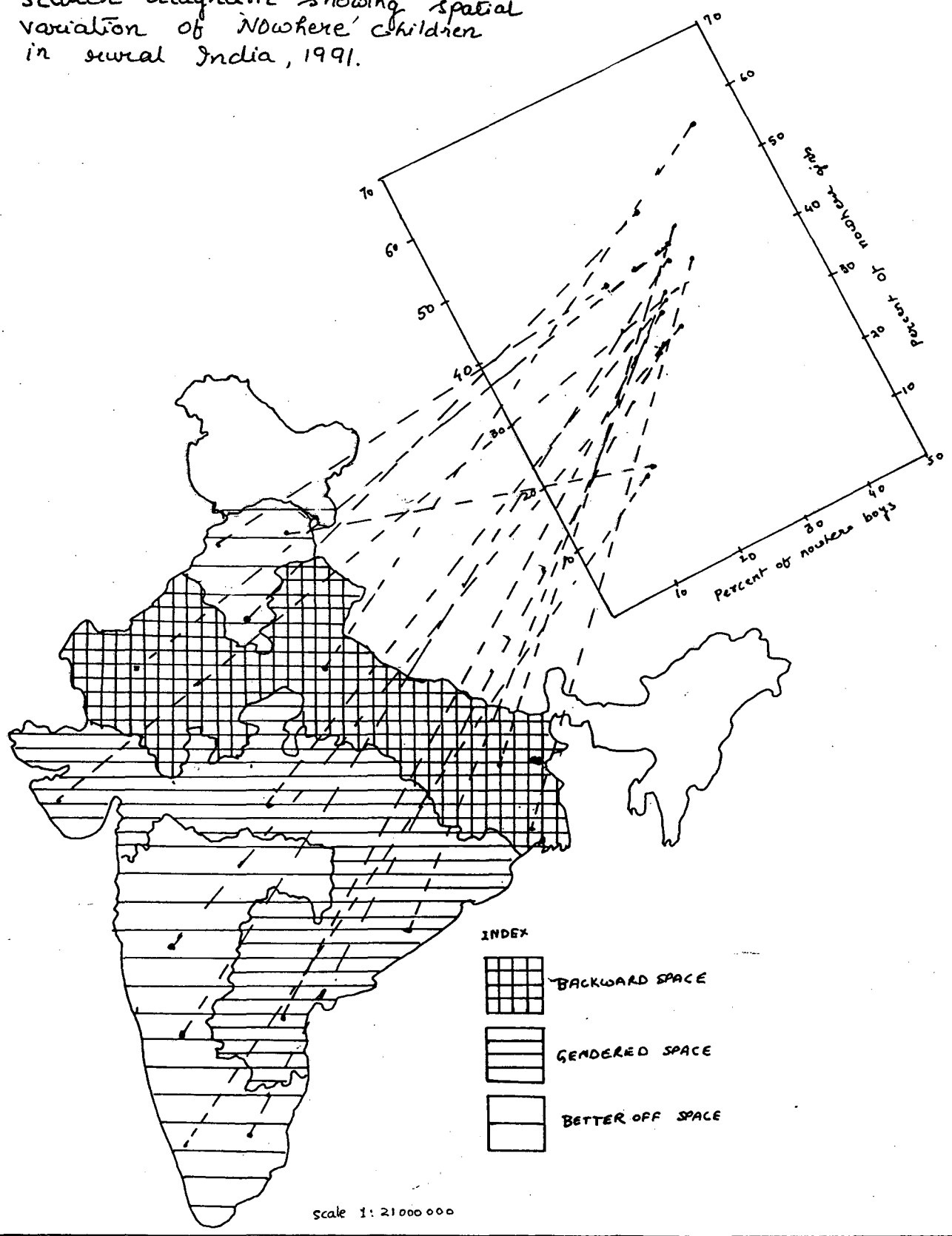
FIG. 2.D.3.

Scatter diagram showing spatial variation of 'Nowhere' children in urban India, 1981.
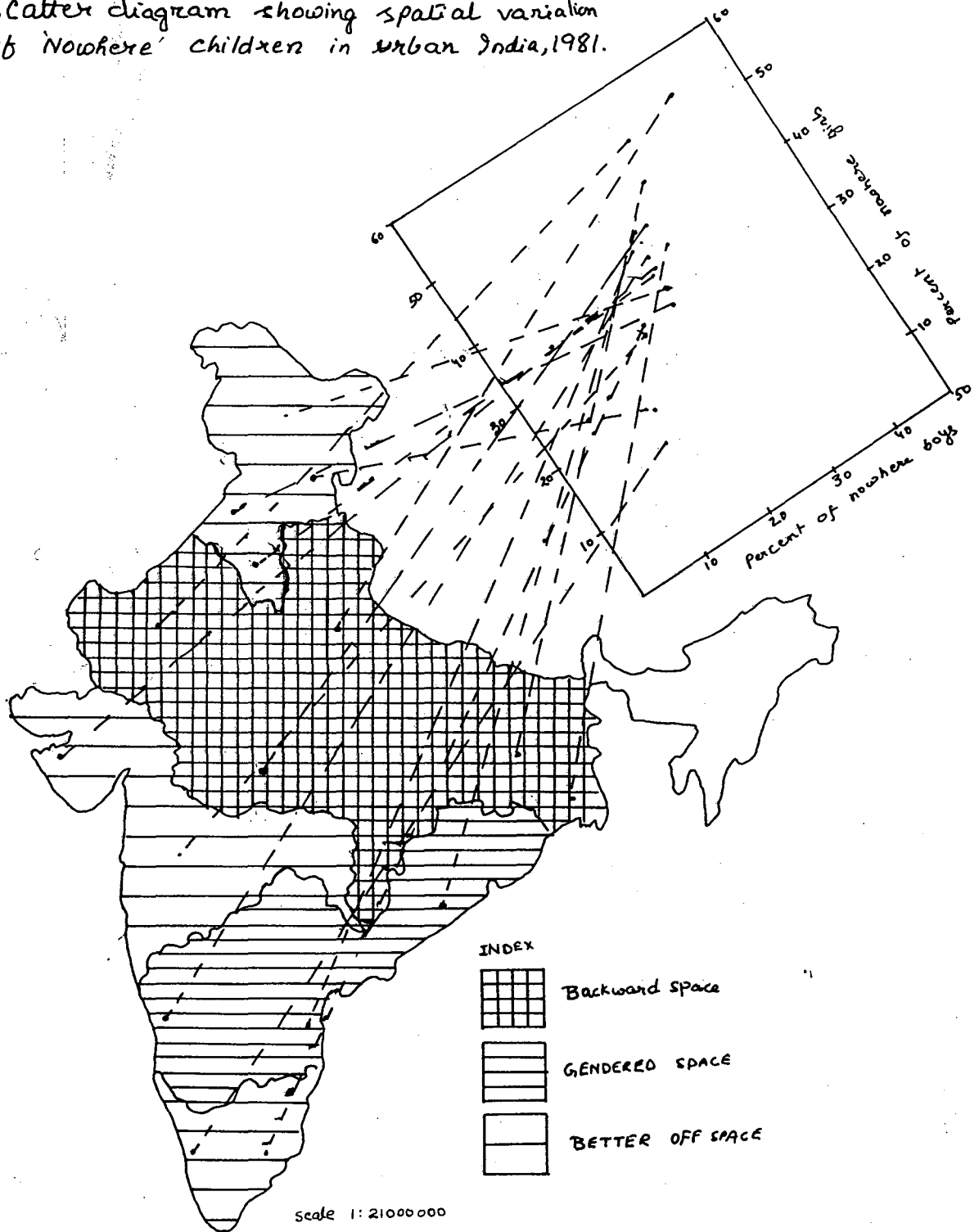
INDEX

Backward space

Gendered space

Better off space

scale 1: 21000000

FIG.Z.D.4.

Scatter diagram showing spatial variation of 'Nowhere' children in urban India, 1991.

Index.

BACKWARD SPACE

BETTER OFF SPACE

Percent of nowhere boys

Percent of nowhere girls

scale 1: 21 000 000
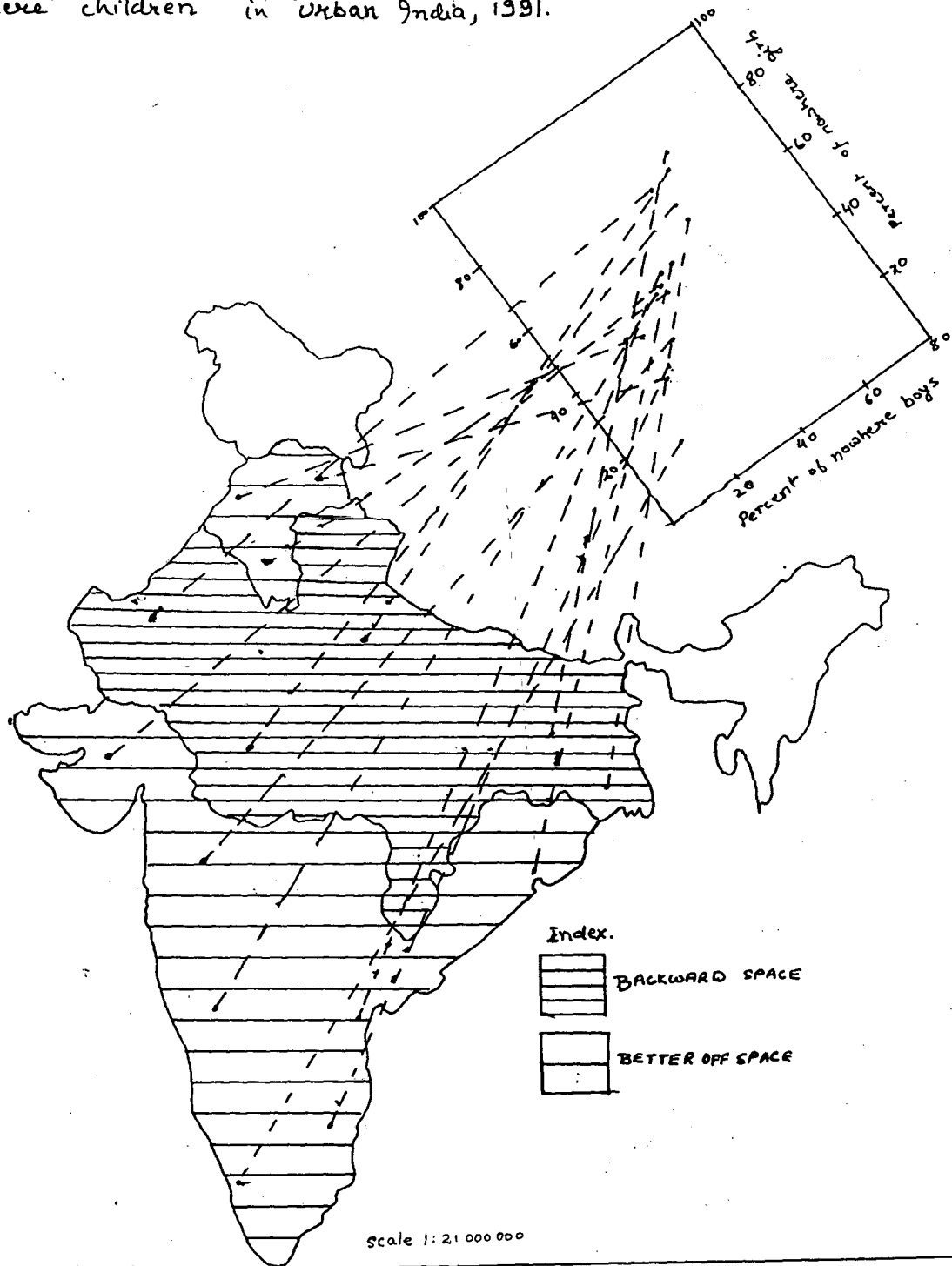
sex disparity. An interesting feature is improvement in the status of Haryana in rural areas over the period. In 1981 it was a part of the 'gendered' space whereas in 1991 it falls in the 'better off' space. Similarly, the urban areas of Karnataka have shifted from the 'gendered' space in 1981 to 'better off' space in 1991.

Table 2.6 and 2.7 present the ranks of the states according to the percentage of the 'nowhere' children in 1981 and 1991 respectively. We ranked the major 15 Indian states. Since the incidence of the 'nowhere' children is not desirable, the ordering of the states has been done in the reverse manner with the state recording the lowest percentage of 'nowhere' children occupying the first rank and the state with the highest percentage the last. A glance at the Tables show that despite an overall reduction in the percentage of 'nowhere' children during the period under observation, the relative position of the states has not shifted much. For example, Kerala has kept its first rank over the period 1981-1991 in both the rural and urban areas for both sexes. Himachal Pradesh has maintained its second position in both 1981 and 1991, whereas Uttar Pradesh has maintained it's 15th position from 1981 to 1991, so far as urban areas are concerned.

There are few exceptions. Rural Bihar, Madhya Pradesh, Orissa, Maharashtra, Punjab and West Bengal have higher ranks in 1991. That is to say, these states have deteriorated in terms of the share of the 'nowhere' children. Earlier analysis shows that these states with the exception of Maharashtra and Punjab had continued to remain in what has been termed as the 'underdeveloped space'. The states that have experienced a decline in the rank during the period 1981-1991 were Haryana, Andhra Pradesh and Karnataka. It may be recalled that the states have shifted from 'gendered' space to 'better off' space over the decade. Again Madhya Pradesh, Rajasthan and Tamil Nadu have experienced improved status as far as urban areas are concerned. Maximum decline has been found in the rural areas of Haryana, Karnataka and Madhya Pradesh, thereby improving their status over the period. Thus, educationally backward states, mainly Bihar, Uttar Pradesh, Madhya Pradesh and Orissa continue to remain at the bottom of the stratum. In comparison to these big states, the smaller states have improved as evident from their improvement of rank in national hierarchy.

38

## Table 2.6.

**Ranks of the states according to percentage of 'Nowhere' children in rural areas, 1981 and 1991.**

| States | 1981 | | | | 1991 | | | |
|---|---|---|---|---|---|---|---|---|
| | Boys | Ranks | Girls | Ranks | Boys | Ranks | Girls | Ranks |
| India | 41.96 | | 64.85 | | 42.16 | | 57.14 | |
| Andhra Pradesh | 39.48 | 10 | 59.78 | 8 | 37.6 | 6 | 52.25 | 10 |
| Bihar | 52.06 | 15 | 79.05 | 13 | 55.05 | 13 | 75.03 | 13 |
| Gujarat | 35.49 | 6 | 55.19 | 6 | 32.94 | 9 | 45.52 | 7 |
| Haryana | 37.29 | 9 | 69.1 | 11 | 32.99 | 7 | 49.85 | 6 |
| Himachal Pradesh | 25.22 | 2 | 40.59 | 2 | 21.52 | 2 | 28.22 | 2 |
| Karnataka | 37.19 | 8 | 58.59 | 7 | 31.91 | 8 | 44.84 | 9 |
| Kerala | 17.37 | 1 | 19.57 | 1 | 14.39 | 1 | 14.84 | 1 |
| Madhya Pradesh | 45.4 | 11 | 70.91 | 12 | 43.22 | 11 | 59.07 | 11 |
| Maharashtra | 28.99 | 3 | 47.05 | 3 | 28.89 | 4 | 37.65 | 3 |
| Orissa | 36.97 | 7 | 62.71 | 9 | 38.19 | 10 | 53.62 | 12 |
| Punjab | 31.36 | 5 | 50.62 | 5 | 21.2 | 5 | 43.41 | 5 |
| Rajasthan | 47.53 | 12 | 80.45 | 14 | 46.37 | 14 | 72.89 | 14 |
| Tamil Nadu | 29.59 | 4 | 48.44 | 4 | 23.35 | 3 | 31.48 | 4 |
| Uttar Pradesh | 50.77 | 14 | 81.6 | 15 | 52.41 | 15 | 73.82 | 15 |
| West Bengal | 47.73 | 13 | 65.52 | 10 | 48.31 | 12 | 59.79 | 8 |
| Coef. of Var. | 26.6 | | 28.18 | | 34.93 | | 35.03 | |

Source. Based on the percentage of 'nowhere' children.

## Table 2. 7.

**Ranks of the states according to percentage of 'Nowhere' children in urban areas, 1981 and 1991.**

| States | 1981 | | | | 1991 | | | |
|---|---|---|---|---|---|---|---|---|
| | Boys | Ranks | Girls | Ranks | Boys | Ranks | Girls | Ranks |
| India | 26.92 | | 37.91 | | 28.97 | | 35.73 | |
| Andhra Pradesh | 24.94 | 9 | 39.12 | 9 | 26.81 | 7 | 34.65 | 8 |
| Bihar | 31.04 | 15 | 46.13 | 15 | 34.39 | 14 | 45.33 | 14 |
| Gujarat | 26.42 | 7 | 36.37 | 7 | 30.03 | 11 | 36.72 | 10 |
| Haryana | 25.29 | 8 | 35.22 | 8 | 24.72 | 6 | 30.84 | 6 |
| Himachal Pradesh | 14.91 | 3 | 19.59 | 2 | 14.87 | 2 | 15.98 | 2 |
| Karnataka | 26.35 | 6 | 37.14 | 6 | 24.28 | 5 | 30.36 | 5 |
| Kerala | 13.93 | 1 | 14.68 | 1 | 12.38 | 1 | 12.48 | 1 |
| Madhya Pradesh | 27.72 | 11 | 40.92 | 11 | 27.79 | 8 | 35.89 | 9 |
| Maharashtra | 20.36 | 5 | 28.76 | 4 | 23.02 | 4 | 27.37 | 4 |
| Orissa | 27.46 | 10 | 41.36 | 10 | 28.43 | 10 | 36.94 | 11 |
| Punjab | 24.82 | 2 | 30.25 | 5 | 27.96 | 9 | 31.76 | 7 |
| Rajasthan | 31.15 | 12 | 52.25 | 13 | 31.61 | 12 | 42.99 | 13 |
| Tamil Nadu | 20.23 | 4 | 29.96 | 3 | 19.78 | 3 | 23.53 | 3 |
| Uttar Pradesh | 40.31 | 14 | 54.14 | 14 | 43.12 | 15 | 57.6 | 15 |
| West Bengal | 28.72 | 13 | 36.78 | 12 | 33.25 | 13 | 39.69 | 12 |
| Coef. of Var. | 25.67 | | 29.61 | | 28.67 | | 33.72 | |

Source. Based on the percentage of 'nowhere' children.

The coefficient of variation (CV) calculated for the boys and the girls separately shows that the CVs has increased from 1981 to 1991 both in rural and urban areas (see Tables 2.6 and 2.7). This implies that the phenomenon of 'nowhere' children is getting relatively more concentrated in few states. It may be recalled from the earlier discussion that the growth rate of 'nowhere' children had increased in the BIMARU states during the period 1981-1991. It is evident from the ongoing analysis that the southern states are better off compared to the northern states so far as 'nowhere' children is concerned and this particularly true for the girls' in the rural areas.

Correlation between rural and urban components of 'nowhere' children worked out separately for both boys and girls show that rural- urban correlation for both boys and girls are high and positive in 1981 as well as 1991. The correlation coefficient values for 'nowhere' boys are 0.66 in 1981 and 0.97 in 1991 respectively. Whereas, the corresponding values for the 'nowhere' girls were 0.97 in 1981 and 0.89 in 1991 respectively. Also boys and girls are highly correlated both in rural and urban areas. All the correlation coefficient values are found to be statistically significant at 0.01 levels. This shows that not only rural and urban 'nowhere' children co-spatially behave in a similar pattern, but that there is no difference between girls and boys suggesting that the phenomenon of 'nowhere' children is not a gendered construction although given the gendered nature of household responsibilities, more girls may still be seen occupying domestic spaces as 'nowhere' children as discussion elsewhere in this study reveal.

The following rank correlation for both boys and girls show an overall temporal stability. The rank correlation for the boys 'nowhere' children was positive and high both in rural (r=0.91) and urban areas (r=0.84) during the period 1981-1991. Similarly in case of girls, the rank correlation was high and positive both in rural and urban areas, the value of rank correlation being higher in urban areas than that of rural areas. The corresponding values were 0.91 and 0.95 respectively in the rural and urban areas. All correlation coefficient values are statistically significant at 1 percent level of significance.

## Gender Disparity

In contemporary India, growth with equity has been one of the major concerns in the developmental process. It may be recalled what Raza argued, 'growth without equity

leads to the accentuation of the structural disequilibrium which constrains growth itself (Raza 1990:62). An inquiry into the spatial patterns, interregional variation and disparities between sexes thus assumes wider implications for further probe into the realization of 'growth with equity' model. In the following section, an attempt has been made to evaluate this particular aspect taking 'nowhere' children into concerned.

Table 2.8 presents an overview of the sex disparity between 'nowhere' boys and girls at all India level and the states, both by rural and urban residence for 1981 and 1991.

**Table 2. 8. Sex disparity in the states of India in 1981.**

| States | 1981 | | 1991 | |
|---|---|---|---|---|
| | Rural | Urban | Rural | Urban |
| India | 0.26 | 0.18 | 0.14 | 0.11 |
| Andhra Pradesh | 0.24 | 0.23 | 0.18 | 0.13 |
| Arunachal Pradesh | NA | NA | 0.08 | 0.09 |
| Assam | NA | NA | 0.11 | 0.06 |
| Bihar | 0.27 | 0.21 | 0.19 | 0.15 |
| Goa | NA | NA | 0.08 | 0.09 |
| Gujarat | 0.25 | 0.17 | 0.17 | 0.11 |
| Haryana | 0.36 | 0.17 | 0.22 | 0.11 |
| Himachal Pradesh | 0.25 | 0.13 | 0.13 | 0.03 |
| Karnataka | 0.26 | 0.18 | 0.17 | 0.11 |
| Kerala | 0.06 | 0.02 | 0.002 | 0.003 |
| Madhya Pradesh | 0.27 | 0.20 | 0.17 | 0.03 |
| Maharashtra | 0.26 | 0.17 | 0.13 | 0.09 |
| Manipur | 0.12 | 0.13 | 0.04 | 0.02 |
| Meghalaya | 0.02 | 0.06 | 0.01 | 0.03 |
| Mizoram | NA | NA | 0.18 | 0.01 |
| Nagaland | 0.05 | 0.10 | 0.02 | 0.09 |
| Orissa | 0.3 | 0.22 | 0.19 | 0.13 |
| Punjab | 0.26 | 0.10 | 0.17 | 0.06 |
| Rajasthan | 0.34 | 0.28 | 0.28 | 0.16 |
| Sikkim | 0.13 | 0.12 | 0.07 | 0.09 |
| Tamil Nadu | 0.26 | 0.20 | 0.15 | 0.09 |
| Tripura | 0.16 | 0.10 | 0.09 | 0.05 |
| Uttar Pradesh | 0.31 | 0.17 | 0.22 | 0.17 |
| West Bengal | 0.19 | 0.13 | 0.12 | 0.09 |

Source: Based on Table 3 and 4.

Note: NA- not available in 1981.

From the above Table it is clear that the sex disparities show declining trend over the period (1981-91) under observation, in both rural and urban areas for India as a whole. The decline is more in the rural areas compared to the urban segment. In rural

areas sex disparity declined from 0.26 in 1981 to 0.18 in 1991. The corresponding values for the urban areas are 0.18 in 1981 and 0.13 in 1991 respectively. Also it has been noticed that the sex disparity is higher in the rural areas compared to urban counterpart.

So far as the states are concerned, most of the BIMARU states, both rural and urban, have higher incidence of sex disparity between the 'nowhere' boys and girls. At the lower stratum, we find the states of Kerala, Himachal Pradesh, North- eastern states and Punjab. This pattern is more or less similar in both rural and urban areas. Though sex disparity has declined over the period in almost all the states, sharp contrast among the states pertaining to sex disparity is found to exist even in 1991. In 1981, the state that showed the highest sex disparity was Haryana (0.36) in rural areas and lowest sex disparity was found in Nagaland (0.06). On the contrary, when urban areas are taken into consideration, Rajasthan performed worst in 1981, sex disparity being the highest (0.28), whereas Kerala exhibited the lowest sex disparity (0.02).

In 1991, Rajasthan has the highest sex disparity (0.28) so far as rural areas are concerned, while in urban areas sex disparity was found to be highest in the state of Uttar Pradesh (0.17). It may be noted that the sex disparity in Uttar Pradesh was constant over the period (1981-1991). Over the decade, other states with higher than the national average sex differentials both in rural and urban areas were Orissa, Bihar and Madhya Pradesh. Again Kerala maintained the position with lowest sex disparity that is 0.002 in rural areas and 0.003 in urban areas.

If we analyze the spatial pattern of the sex disparity, one can see sharp regional contrast. The north Indian states, particularly the BIMARU states once again emerge as the region having high sex disparity both in rural and urban areas in 1981 (see Figure 2.8). For 1991 this pattern remains the same. However, the urban area shows a temporal change of pattern so far as the sex disparity is concerned. While in 1981, the disparity was high in the BIMARU states, West Bengal, Orissa, Andhra Pradesh and Tamil Nadu (see Figure 2.9), disparity exceeding 0.19, in 1991 it is higher in the states of Rajasthan, Uttar Pradesh, Bihar and Andhra Pradesh (see Figure 2.10).

The correlation between rural and urban disparity has been worked out which shows the rural- urban correspondence of the incidence of sex disparity between 'nowhere' boys and girls. In 1981 the correlation between rural and urban sex disparity

Fig. 2.3

Percentage of Nowhere girls in urban India, 1981.

0    200   400
KILOMETRES

N.A.

ARABIAN
SEA

BAY OF BENGAL
Percent of nowhere girls

<15.2

15.2-27.00

>27.4

INDIAN OCEAN

Fig 2. 9 Sex disparity betwen Nowhere boys and girls in urban India, 1981.

0    200   400
KILOMETRES

N.A.

ARABIAN
SEA

BAY OF BENGAL
Sex disparity

>.19

.07-.19

<.07

INDIAN OCEAN
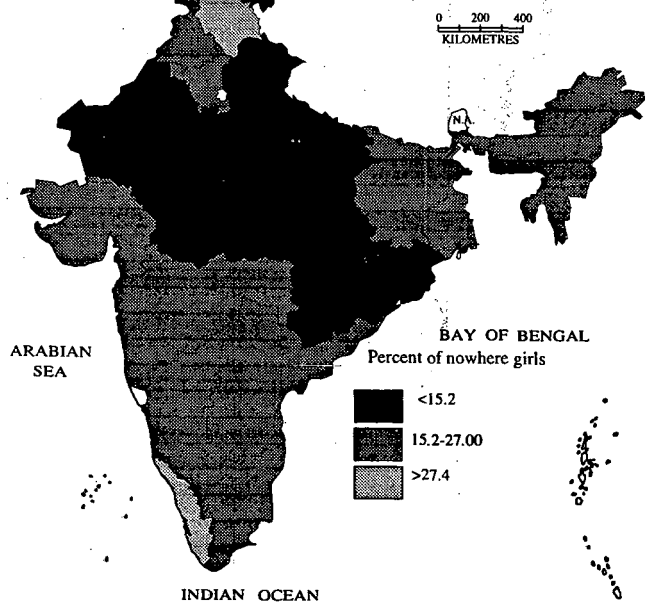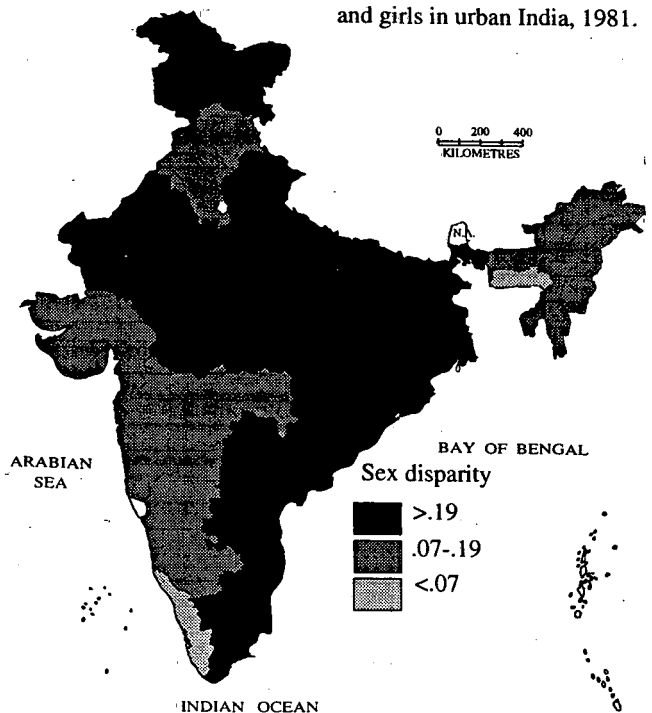
Fig. 2.8

Sex disparity between Nowhere boys and
girls in rural India, 1991.

0    200    400
KILOMETRES

BAY OF BENGAL

ARABIAN
SEA

Sex disparity

■  > .17
▨  .03-.17
▥  <.03

INDIAN OCEAN
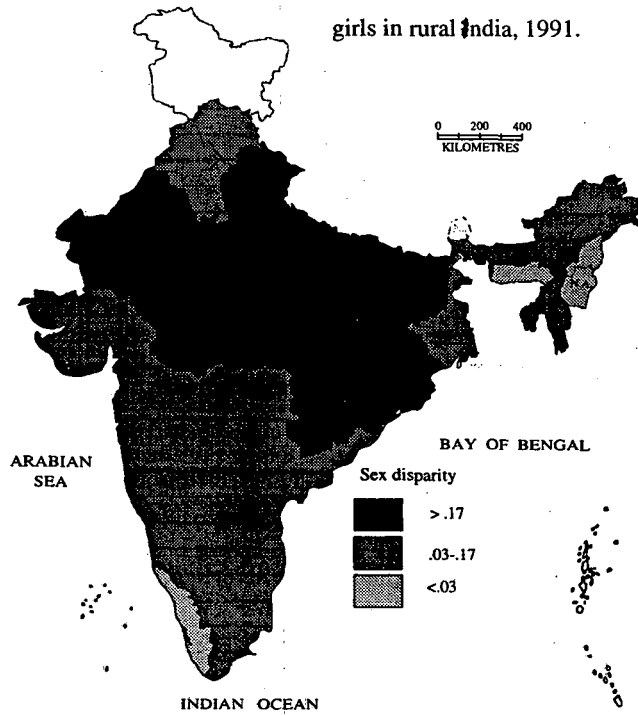
Fig. 2.10.

Sex disparity between Nowhere boys
and girls in urban India, 1991.

0    200    400
KILOMETRES

BAY OF BENGAL

ARABIAN
SEA

Sex disparity.

■  >.12
▨  .02-.12
▥  >.12

INDIAN OCEAN
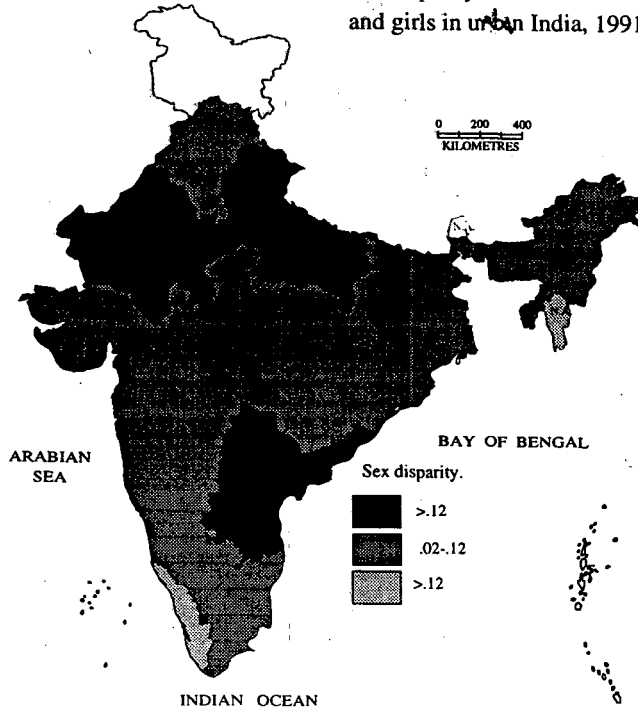
was high and positive, the coefficient value being 0.79. However, the coefficient value declined in 1991, the value being 0.73. Both the correlation coefficient values are statistically significant at 1 percent level of significance. This means that with the increase in rural and urban sex disparities move in the same direction.

Disparity may be low because of low percentage of both boys and girls 'nowhere' children or high percentage of the same. Conversely, disparity may be high either because of low percentage or high percentage of both the boys and the girls 'nowhere' children. Accordingly, in the following section the states are classified into low levels and low disparity, high levels and low disparity, low levels and high disparity and high levels with corresponding high disparity. It can be seen from the Tables 2.11 and 2.13 that the BIMARU states emerge as the most problematic region having high percentage of both boys and girls 'nowhere' children and also high sex disparity during the period under observation. We witness the same trend in both rural as well urban areas. Conversely, the southern states, Himachal Pradesh, Maharashtra and some of the north-eastern states have low percentage of both 'nowhere' boys and girls with the corresponding low sex disparity. Surprisingly, the states like Andhra Pradesh, Gujarat, Haryana, Punjab and Tamil Nadu though were falling in the category of low percentage of 'nowhere' children and low disparity in 1981, in 1991 were found to have low levels of percentage of 'nowhere' children and high sex disparity.

**Table 2.11. States according to levels of 'Nowhere' boys and girls and level of sex disparity, rural India.**

| | 1981 | 1991 |
|---|---|---|
| Low levels of both boys and girls nowhere children, low disparity. | Andhra Pradesh, Gujarat, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Nagaland, Punjab, Sikkim, Tamil Nadu, Tripura. | Goa, Himachal Pradesh, Kerala, Maharashtra,Manipur, Nagaland, Sikkim, Tripura. |
| High levels of both boys and girls nowhere children, low disparity. | West Bengal. | West Bengal, Karnataka, Meghalaya, Arunachal Pradesh, Assam, Mizorzm. |
| Low levels of both boys and girls nowhere children, high disparity. | ____ | Andhra Pradesh, Gujarat, Haryana, Orissa, Punjab, Tamil Nadu. |
| High levels of both boys and girls nowhere children, high disparity. | Bihar, Haryana, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh. | Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh. |

**Table 2.12 States according to levels of 'Nowhere' boys and girls and level of sex disparity, urban India.**

| | 1981 | 1991 |
|---|---|---|
| Low levels of both boys and girls nowhere children, low disparity. | Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Nagaland, Punjab, Sikkim, Tripura. | Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Meghalaya, Nagaland, Goa, Madhya Pradesh, Punjab, Tamil Nadu, Punjab, Sikkim, Tripura, Mizoram and Assam. |
| High levels of both boys and girls nowhere children, low disparity. | West Bengal, Uttar Pradesh. | Manipur, Arunachal Pradesh, Gujarat. |
| Low levels of both boys and girls nowhere children, high disparity. | Andhra Pradesh, Tamil Nadu. | Andhra Pradesh. |
| High levels of both boys and girls nowhere children, high disparity. | Bihar, Madhya Pradesh, Orissa, Rajasthan, Jammu and Kashmir | Bihar, Orissa, Rajasthan, Uttar Pradesh. |

**Concluding remarks:**

This chapter provides an overview of the incidence as well as spatio- temporal variation of 'nowhere' children in India. The proverbial BIMARU states stand out clearly as the region having higher incidence of 'nowhere' children (both boys and girls), by both rural and urban residence during the period 1981-1991. States having higher incidence of 'nowhere' children also show high sex disparities. Such states are mainly categorized as the underdeveloped space. On the other hand, southern states like Kerala and northern state of Himachal Pradesh are the 'better off' states. Though the overall percentage of 'nowhere' children has gone down over the period 1981-1991, there has been an absolute increase in the 'nowhere' children in some of the states as evident from the positive growth rates. Again these growth rates did not spread evenly among the states. Rather, it is getting concentrated in few BIMARU states. Also ranking of the major states and rank correlation shows the overall temporal stability. The increasing value of the coefficient of variation in both rural and urban areas over the period further confirmed this fact.

# Chapter –3
## Spatio- Temporal Analysis of 'Nowhere' Children in Uttar Pradesh

**Study area.**

The study of the physical landscape is of wide importance, which provides human beings the basic ground to play over and with as well as to evaluate economic, socio- cultural and political setup. Following is the brief account on the state.

Uttar Pradesh has a common border with Nepal and Tibet in the north whereas Himachal Pradesh, Haryana, Delhi and Rajasthan have common frontiers with it in the west and the southwest, Madhya Pradesh in the south and Bihar in the east. Situated between latitudes 23.52' N and 31.28' N and longitudes 77.3' E and 84.39' E, it covers an area of about 29411 square km. which is 9 percent of the country. It stands fourth largest state in area after Madhya Pradesh, Rajasthan and Maharashtra. But in terms of population, Uttar Pradesh is the most populous state in the country. In 1991, Uttar Pradesh had a population of 139 million.[1]

It has the advantage of better physical environment by virtue of its location in the agriculturally favorable fertile Gangetic plain which is spread over two third of the state resulting to predominance of agrarian economy. Eighty percent of the state's population (1991) inhibiting in rural areas mostly derives its livelihood from agricultural pursuits. Nearly three-fourth of its total labour force is engaged either as cultivator or as agricultural labourers.

Uttar Pradesh has been rated typically as one of the most educationally backward states of India. In 1991 the literacy rate of the male and female in the 7+ age group are 52 percent for males and 19 percent for the females in rural areas. The corresponding figures in the urban areas are 70 percent for the males and 50 percent for the females. So far as the specific issue of literacy is concerned, it has been found that there is persistence of high levels of illiteracy in the younger age groups. The problem is more acute in rural areas. The persistence of this endemic illiteracy is a distinct social failure (Dreze and Sen 1996:44). Also there is high sex disparity pertaining to the educational attainment.

The area of the districts in Uttar Pradesh have got alteration from time to time which had 56 districts in 1981. In 1991 the number of districts has increased to 64. In the present study the new districts in 1991 have been adjusted with that of 1981.

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[1] Dreze and Sen, 1996, ' *Indian Development. Selected Regional Perspectives'*, Oxford university press, p.34.,

FIG. 3.1.

# Location map

INDIA

0   200   400
KILOMETRES

ARABIAN
SEA

Bay of Bengal

INDIAN OCEAN

UTTAR PRADESH

0          50
Kilometres
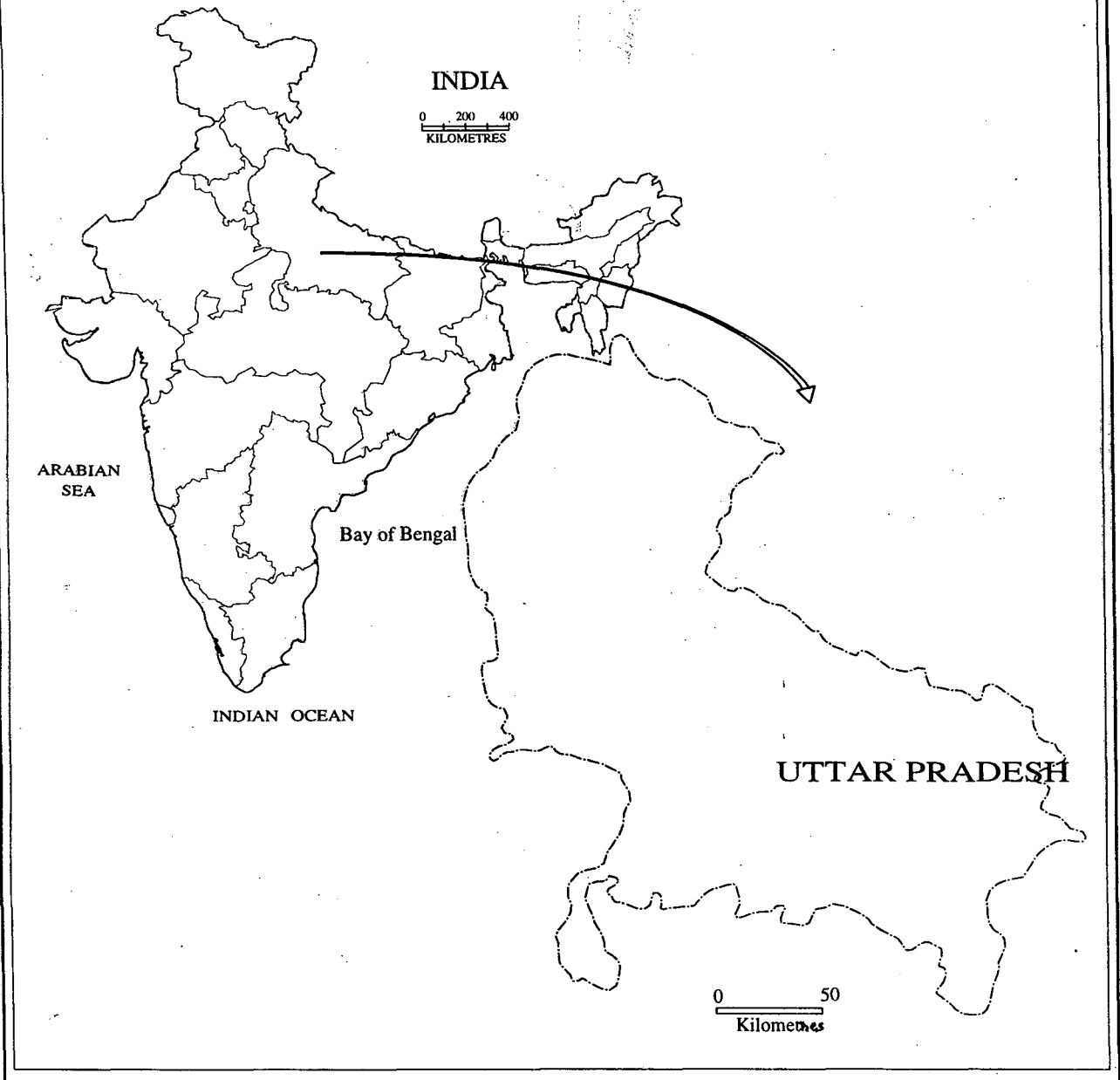
## Introduction:

Uttar Pradesh is taken here as a case study because of its extremely low level of educational performance. It is one of the most educationally backward states with not only low level of literacy and low levels of educational achievement but also acute gender gaps. Although the education scenario of Uttar Pradesh has been changing, yet it lags behind vis-à-vis rest of the country in terms of educational performance. In fact it is one of the worst performers among the states of India. The Fifth Educational survey, 1986-87, shows that the performance of the state in terms of enrolment is well below the all India average.[2] This fact is evident from the high percentage of children in the age cohort of 6-14 years, being out of the schooling system. It is estimated that about 17.4 lakhs children aged 6-14 years were 'out-of-school' in 1996-97, majority of them being girls. About 4.06 percent of the children in the age cohort 5-14 years in Uttar Pradesh are not classified as workers even in 1991 because of census definition of work. The alarming proportion of the 'nowhere' children, even in the 21st century, in Uttar Pradesh is a cause of serious concern. Taking into consideration this specific issue of the 'nowhere' children, Uttar Pradesh is nowhere near the realization of the constitutional goal of free and compulsory education for all children upto the age group of 14 years, irrespective of sex.[3]

Against this backdrop it becomes imperative to examine the causes of this endemic problem in the socio-economic, cultural and political set-up. A case study may help immensely to understand the problem at micro level and policy implications. In the following section an attempt has been made to analyze the spatio-temporal variation of 'nowhere' children, their growth rate and gender disparity during 1981-91.

### 1.1: Profile Of 'Nowhere' Children in Uttar Pradesh:

It may be recalled from earlier discussion that the state not only occupies the bottom most of the ladder among the states but also its position has deteriorated over the period 1981-91. According to 1991 census, the total percentage of 'nowhere' children in Uttar Pradesh is 59.46 percent as against 40.95 percent in the country as a whole. The percent of the boys 'nowhere' children is 50.63 whereas that of the girls is much higher i.e. 69.67 percent, which are again

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[2] Fifth All India Educational Survey, National Council of Educational Research and Training, 1992, Vol.1.

[3] Dreze and Sen, 1996, ' *Indian Development. Selected Regional Perspectives'*, Oxford university press, p. 44.

over and above national average. However, the share of the girls 'nowhere' children continue to remain highest in Uttar Pradesh among all the states over the period 1981-1991.This reveals that the girls are in most disadvantage situation in this state. It is noticeable from the Table 3.1. that though the overall percentage of the 'nowhere' children has declined over the period, however, the decline is very small. It has declined from 61.68 percent in 1981 to 59.46 percent in 1991. Even in 1991, nearly 60 percent of the children in the age group 5-14 years are out of school in Uttar Pradesh, of which rural areas account for 62 percent of the 'nowhere' children against 52.39 percent in urban areas.

**Table 3.1. Percentage of 'Nowhere' children in Uttar Pradesh, 1981-1991.**

|  | 1981 | | | 1991 | | |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Total** | **Boys** | **Girls** | **Total** | **Boys** | **Girls** |
| **Total** | 61.68 | 49.02 | 76.75 | 59.46 | 50.63 | 69.67 |
| **Rural** | 64.75 | 50.72 | 81.6 | 62.29 | 52.41 | 73.82 |
| **Urban** | 46.80 | 40.31 | 54.14 | 47.74 | 43.12 | 54.87 |

Source: Based on Socio-cultural tables, census of India, Uttar Pradesh, series- 22, 1981, 1991.

By breakdown of the sex, we find that more than 50 percent of the boys and 70 percent of the girls are out-of school in rural areas. Even in the urban areas nearly 55 percent of the girls are denied of the access of the schooling system. Therefore an alarming proportion of the girls are out of school. Taking into consideration this scenario, Uttar Pradesh deserves a great deal of attention in its own right.

It has been noticed from the Table that the total share has declined in the rural areas, whereas in urban areas the percentage of 'nowhere' children has increased over the period under observation. For the boys, the share has increased both in rural areas and urban areas. On the other hand, the share of the 'nowhere' girls has declined in the rural areas whereas in urban areas it has increased marginally.

If we analyze the growth rate of the 'nowhere' children vis-a vis population in the age cohort 5-14 years, we find that the population, both boys and girls, has registered a negative growth rate over the decade both in rural and urban areas (see Table 3.2). The decline is more in urban areas than that in rural areas. Interestingly, the decline in the growth rate of the girls' population is more than the boys' counterpart in the urban areas, whereas that of the boys is more in the rural areas. Against this, the boys 'nowhere' shows positive growth rate both in rural

and urban areas, the growth rate in urban areas is more than the rural areas. The girls on the other hand show negative trend in the growth in rural areas, whereas in urban areas the trend is positive. However, it is clear from the table that the growth rate of the boys 'nowhere' children is higher than the girls in both rural areas and urban areas. Therefore, we find that the growth of the 'nowhere' children is not consistent with the growth of the population over the period. This being the overall trend analysis at the district level will reveal interesting patterns.

**Table 3.2. Growth rate of population and 'Nowhere' children in the age group 5-14 years in Uttar Pradesh during 1981-91.**

| Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|
| Population | | Nowhere children | | Population | | Nowhere children | |
| Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| -8.07 | -3.87 | 3.23 | -9.53 | -28.75 | -31.05 | 6.97 | 6.39 |

Source: Based on Socio-cultural tables, census of India, Uttar Pradesh, series- 22, 1981, 1991.

Table A.1 and A.2 (see in annexure) present the district wise percentage of 'nowhere' children at two points of time 1981 and 1991. It has been noticed that there is vast sex disparities as well as intra- regional variations in the state of Uttar Pradesh pertaining to the incidence of the 'nowhere' children. In 1981, percentage of both boys and the girls 'nowhere' children were highest in the district of Rampur both in rural and urban areas. The figures were 65.42 percent for boys and 94.32 percent for the girls respectively. The corresponding figures in urban areas were 57.80 percent and 73.43 percent respectively for boys and girls.

In 1991, the percentage of the 'nowhere' boys is highest in the district of Bahraich (70.07 percent) in rural areas and Bareilly (57.89 percent) in urban areas. On the other hand, percentage of the 'nowhere' girls is highest in Bulandshar (94.92 percent) in rural areas and Budaun (70.56 percent) in urban areas. Lowest percentage of both the boys and the girls 'nowhere' children is found in the district of Garhwal, the figures being 26.50 percent for boys and 32.22 percent for the girls respectively in rural areas. In urban areas, the percentage of both boys and girls 'nowhere' children are lowest in Tehri Garhwal (14.32 percent for the girls and 19.01 percent for the boys). The districts, which maintained high incidence of 'nowhere' children over the period, are Moradabad, Budaun, Philbit, Bareilly, Kheri and Sitapur. On the

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contrary, low incidence of the 'nowhere' children is found in the districts of Almora, Dehradun, Garhwal, Pithoragarh and Tehri Garhwal.

It is seen from the tables (see Table A.1 and A.2) that there is general improvement in the trend for both boys and girls in rural areas since the share has declined in most of the districts during the period. However there are few exceptions. For instance in Dehradun, Almora, Bulandshar and Lalitpur the percentage of the girls 'nowhere' children has increased in 1991, whereas in case of boys it has increased in the districts of Rampur, Mujjarffarnagar, Agra, Kheri, Hardoi, Lucknow, Raebareilly, Kanpur, Hamirpur, Banda, Pratapgarh, Allahabad, Gonda and Sultanpur. So far as urban areas are concerned, the share of the boys 'nowhere' children has increased in most of the districts. Also in case of girls the share has increased over the period in many districts. The districts where both the boys and the girls 'nowhere' children have increased over the period are Tehri Garwhal, Moradabad, Rampur, Bulandshar, Philbit, Kheri, Lucknow, Hamirpur, Banda, Fhatehpur, Allahabad, Bahraich, Barabanki and Sultanpur. Therefore, the picture remains grim even in urban areas in 1991.

An analysis of the growth rate (see Table A.3 in annexure) at the district level reveals that the growth of the population is not consistent with the growth of the 'nowhere' children. Again it has been observed that the growth of the 'nowhere' children did not spread evenly over the districts. It is clear from the Table that the growth of both the boys and the girls' population has declined over the decade in most of the districts, both rural and urban. Few exceptions are the districts of northern region (Uttarkashi and Tehri Garhwal) and Basti which show positive trend. Taking into consideration the 'nowhere' children, we find that while the boys have registered a positive growth rate in most of the districts, the girls show negative trend in most of the districts. However there are few exceptions. For instance, the girls 'nowhere' children has registered positive growth rate in the hill districts of Chamoli, Tehri Garhwal and some districts of western Uttar Pradesh like Bijnor, Bulandshar etc. in rural areas. So far as urban areas is concerned, both boys and the girls 'nowhere' children have shown positive trend in districts like Dehradun, Pithoragarh, Meerut, Ghaziabad, Sitapur, Hardoi, Farrukhabad, Etah, Kanpur, Jhansi, Faizabad, Basti, Gorakhpur, Azamgarh, Jaunpur, Ballia and Varanasi. Also there is no consistency in the pattern of the growth of 'nowhere' boys and girls in rural areas among the districts.

By analyzing the spatial pattern we find that the pattern of both the boys and the girls

'nowhere' children remains more or less same in the rural areas during both the two points of time. It has been observed that there is a belt running from north west to north- east comprising Moradabad, Baduan, Philbit, Sahjahanpur, Kheri, Sitapur and Bahraich where the incidence of the 'nowhere' children is higher than the rest of the state. These are worst performers among the districts. In 1981 the percentage of the boys 'nowhere' children in this region was over 58 percent (see Figure 3.2 and 3.3) and that of the girls over 88 percent in rural areas. In 1991 again this region fall in the highest category of incidence of 'nowhere' children that is more than 59 percent for boys and more than 83 percent in case of girls in rural areas (see Figure 3.4 and 3.5). On the other hand the northern region comprising the districts of Uttarkashi, Chamoli, Tehri Garhwal, Dehradun, Garhwal, Pithoragarh and Almora maintained the positions with lowest incidence of the 'nowhere' children both in rural and urban areas over the period. The rest of Uttar Pradesh falls in the medium range of percentage of 'nowhere' children. In 1991, this region falls in the medium category of 38.96- 69.52 percent of 'nowhere' boys and 57.47- 83.83 percent of 'nowhere' girls. It has been noticed from the figure that both the rural and the urban areas have similar pattern of incidence of the 'nowhere' children. It is evident from the Fig.3.6 that the concentration is high in the western part and north - central part of Uttar Pradesh.

So far as urban areas are concerned, marked concentration of 'nowhere' children is found in the central- western part comprising of Bijnor, Moradabad, Rampur, Budaun, Bareilly, Bulandshar, Philbit, Kheri, Barabanki and Raebareilly. These 10 districts recorded 'nowhere' boys exceeding 45 percent, more than the state averages in 1981 (see Figure 3.6). In 1991, more or less similar pattern has been observed excepting the eastern part comprising Varanasi, Azamgarh and Basti, which also shows high incidence of 'nowhere' boys in 1991 (see Figure 3.8).

Again, maximum concentration of 'nowhere' girls in urban areas was found in the Rohilkhand division of western part comprising of Moradabad, Rampur, Bijnor, Budaun, Bareilly, Philbit and Bahraich in 1981. These 7 districts out of 56 districts recorded 'nowhere' girls exceeding 62 percent (see Figure 3.7). It is seen from figure 3.9 that in 1991, the districts having percentage of 'nowhere' girls more than the states average are mainly concentrated in the western part of Uttar Pradesh, north central part including sub- terai region and some part of eastern region. These districts record percent of 'nowhere' girls exceeding 58 percent.

On the other hand, northern region comprising Uttarkashi, Chamoli, Pithoragarh,

FIG. 3.2.

Percentage of Nowhere boys in rural
Uttar Pradesh, 1981
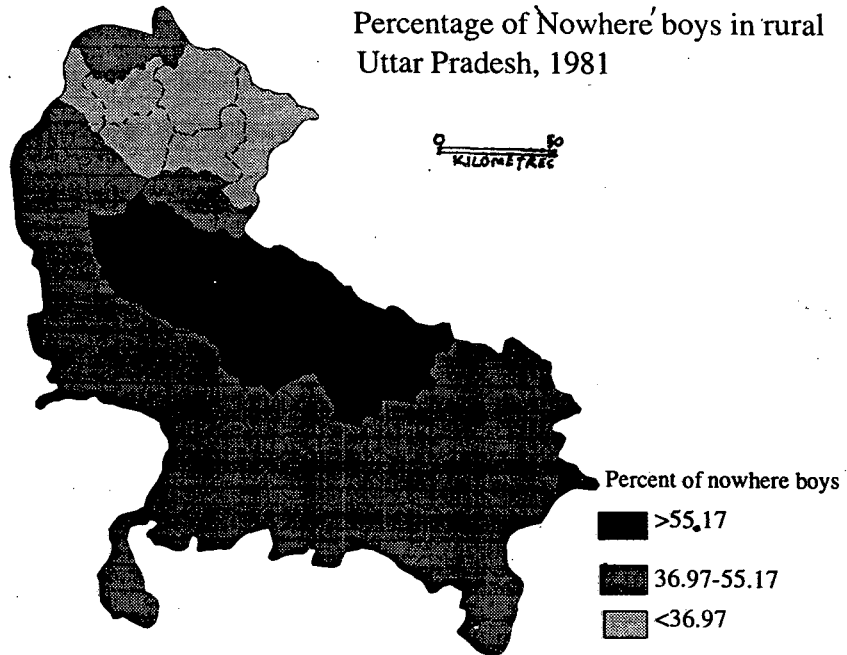
0 ⟼ 50
KILOMETRES

Percent of nowhere boys

■ >55.17

▨ 36.97-55.17

☐ <36.97

FIG 3.3.

Percentage of Nowhere girls in rural
Uttar Pradesh, 1981.

0 ⟼ 50
KILOMETRES

Percent of nowhere girls.

■ >88.0

▨ 59.32-88.0

☐ <59.0

FIG. 3.4.

Percentage of Nowhere boys in rural
Uttar Pradesh, 1991.

0 _____ 10
KILOMETRES

Percent of nowhere boys

■ >59.52

▓ 38.96-59.52

▒ <38.96

FIG. 3.5.

Percentage of Nowhere girls in rural
Uttar Pradesh, 1991.

0 _____ 50
KILOMETRES

Percent of nowhere girls

■ >83.83

▓ 57.47-83.83

▒ <57.47

FIG. 3·6

Percentage of 'Nowhere' boys in urban
Uttar Pradesh, 1981.

0     50
KILOMETRES

Percent of nowhere boys.

■ >45.00

▨ 25.38-45.00

▒ <25.38

FIG. 3·7    Percentage of 'Nowhere' girls in urban
Uttar Pradesh, 1981.

0     50
KILOMETRES

Percent of nowhere girls

■ >62.00

■ 36.18-62.00

▒ <36.18

FIG. 3.8.

Percentage of 'Nowhere' boys in urban

Uttar Pradesh, 1991



percent of nowhere boys.

■ >45.2

▨ 25.7-45.2

▤ <25.7

FIG. 3.9.

Percentage of 'Nowhere' girls in urban
Uttar Pradesh, 1991



Percent of nowhere girls.

■ >58.00

▨ 34.42-58.00

▤ <34.42
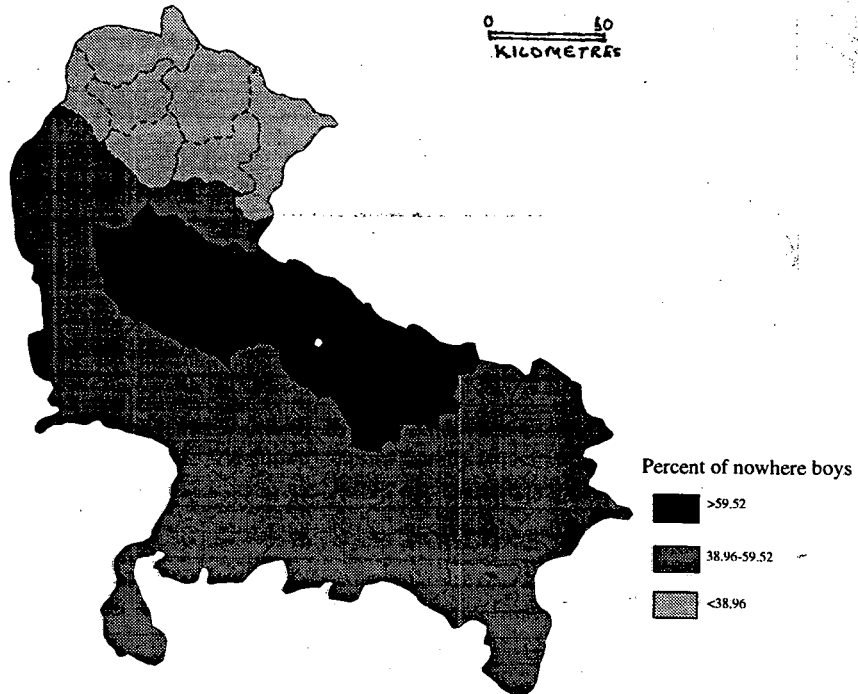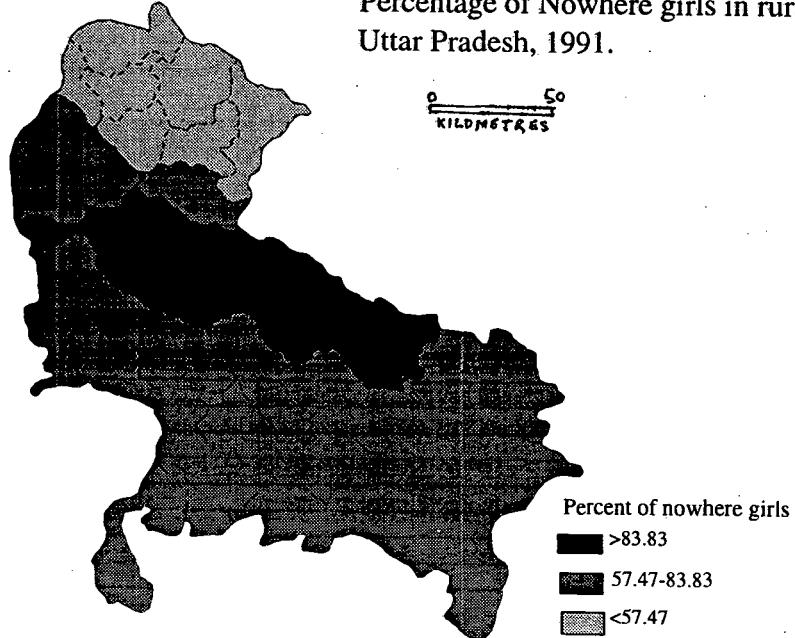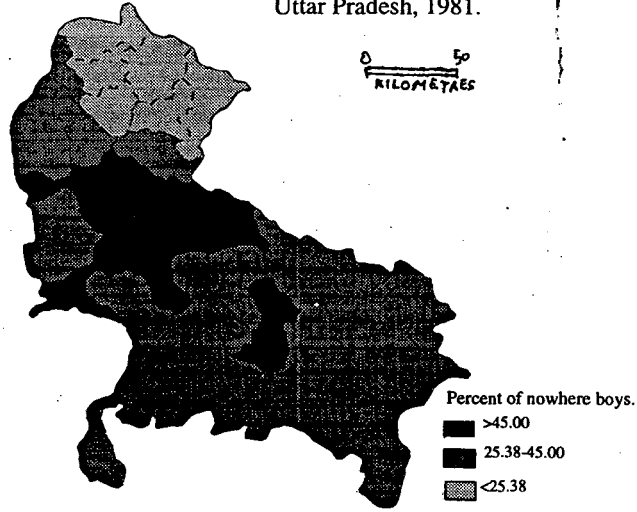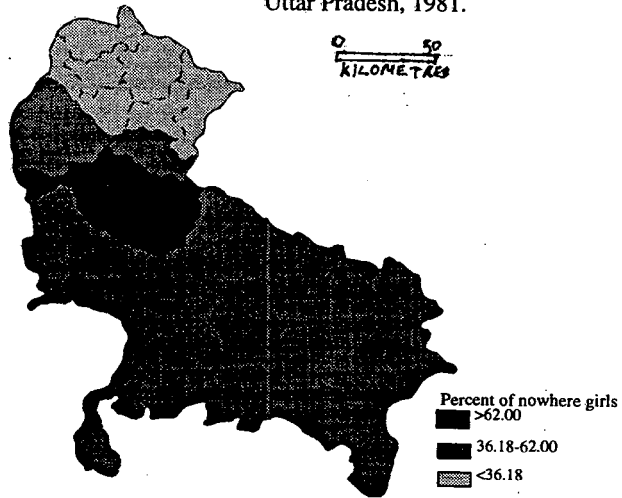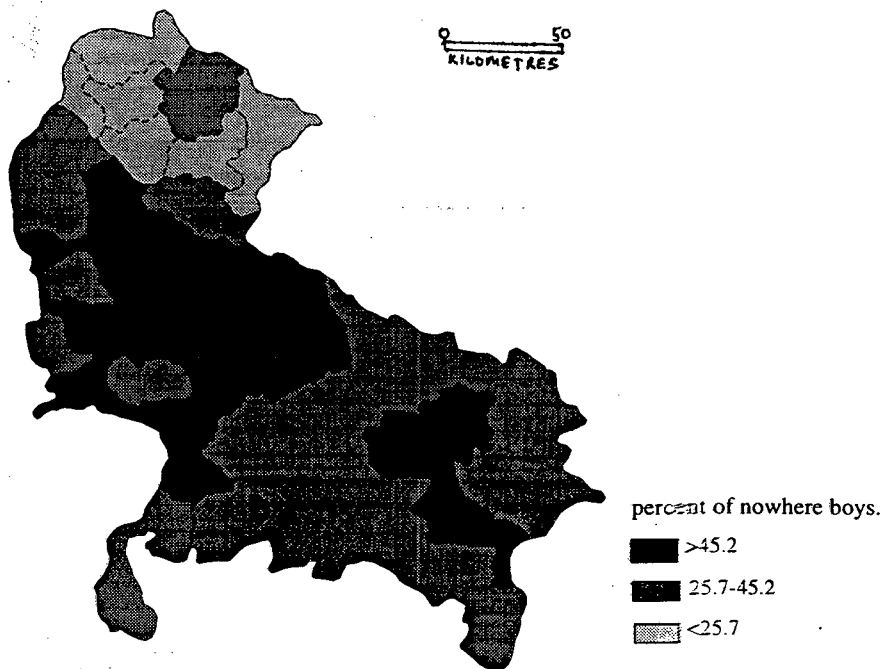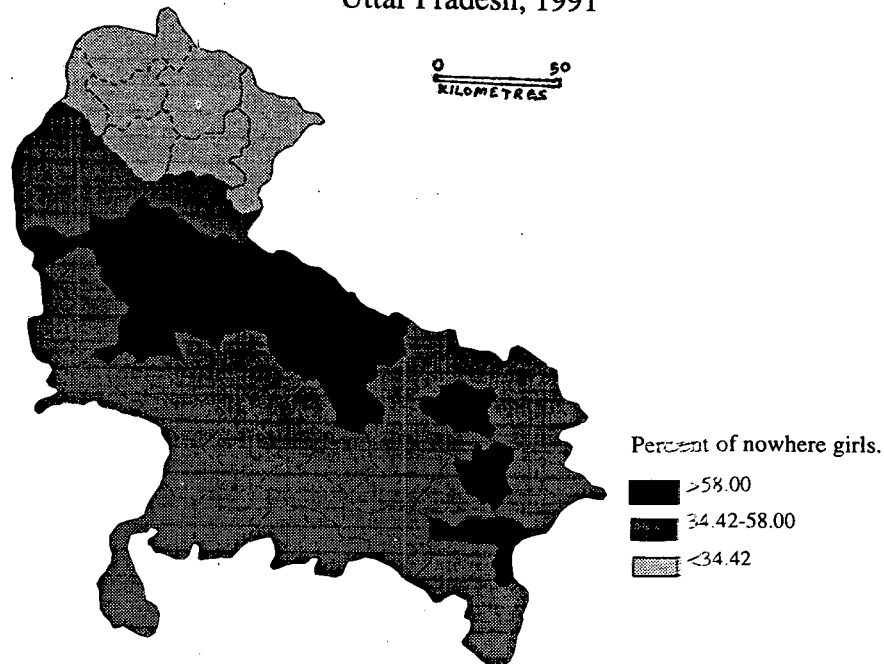
Almora, Tehri Garhwal, Garhwal and Dehradun emerges as the region having lowest concentration of 'nowhere' boys and girls, indicating that the performance of northern Uttar Pradesh is better than the other parts of the state. However, the pattern remains more or less same for boys and girls with some exception. 16 districts out of 56 districts have percentage of 'nowhere' girls exceeding 58 percent. We find that the phenomenon has spreaded over the decade rather being concentrated.

Scatter diagram shows that 19 districts out of 56 were in the category of backward space in 1981. These districts are mainly located in the western part, north central part and northeastern part of Uttar Pradesh. The rest of Uttar Pradesh were in 'better off' space where both boys and the girls were less. The pattern remains more or less same over the decade. However, there are few exceptions. Agra and Sultanpur have shifted from the 'gendered space' in 1981 to 'better off space' in 1991 (see Figure 3.11). It has been observed from the figure that rural area of districts like Sharanpur, Allahabad, Faizabad, Sultanpur, Basti, Gorakhpur and Jaunpur were in the 'backward' or 'gendered' space, whereas urban areas were in 'better off' category both in 1981 and 1991 (see Figure 3.12 and 3.13).

Coefficient of variation worked out separately for percentage of boys and girls in both rural and urban areas shows that in rural areas the value has increased over the decade for both boys and girls, which implies that the phenomenon has concentrated in few districts in rural areas. On the other hand, in urban areas the coefficient of variation has declined over the period for both boys and the girls. The coefficient of variation for boys has declined from 25.78 in 1981 to 24.75 in 1991. Similarly, in case of girls the coefficient of variation has declined from 25.58 to 23.49. Therefore, it can be argued that in urban areas the phenomenon is spreading. The Figure 3.8 and 3.9 also shows that 'nowhere' boys and girls have been spreading in other districts in urban areas.

Correlation between rural boys and urban boys is high and positive both in 1981 and 1991. The coefficient values are 0.825 in 1981 and 0.621 in 1991 respectively. Though the coefficient value has declined in 1991, both are statistically significant at 1 percent level of significance. Again for the girls we find strong correlation between the rural and the urban components both in 1981 and 1991. The coefficient values are 0.786 and 0.753 respectively in 1981 and 1991 and both are statistically significant at 1 percent level of significance. Also the boys and girls 'nowhere' children are highly and positively correlated both in rural and urban

FIG.3.18.

**'Nowhere' children in Uttar Pradesh, rural, 1981**
**Scatter diagram**



Note. S.A — State Average

FIG. 12.



**'Nowhere' children in Uttar Pradesh, urban, 1981**
**Scatter diagram**

Note :- S.A. - State average.

FIG. 3.11.

## 'Nowhere' children in Uttar Pradesh, rural, 1991
### Scatter diagram



Note :- S.A:- State Average

FIG.13.

## 'Nowhere' children in Uttar Pradesh, urban, 1991
### Scatter diagram
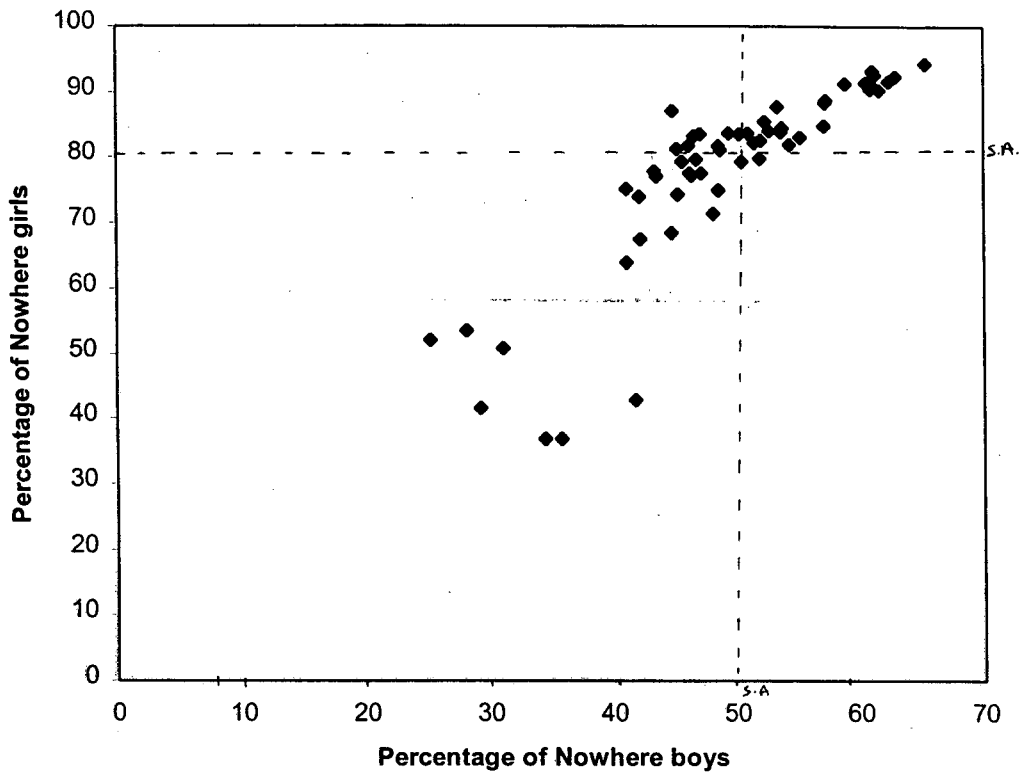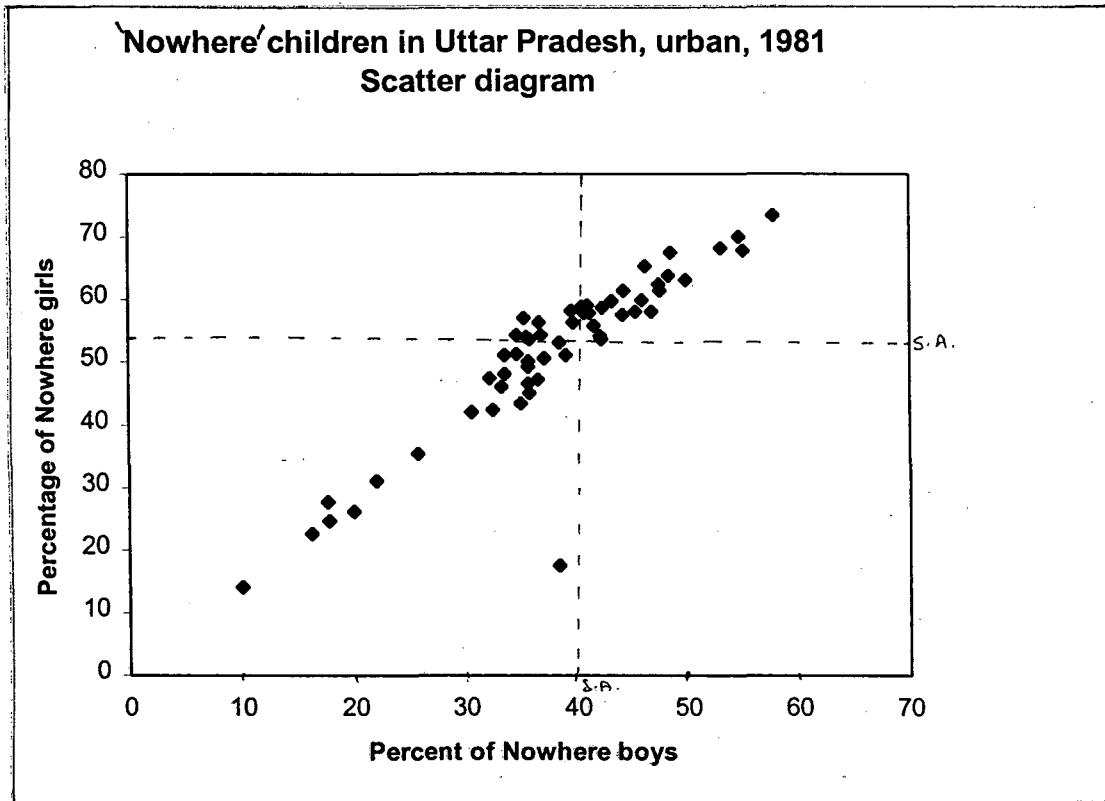


Note :- S.A:- State Average
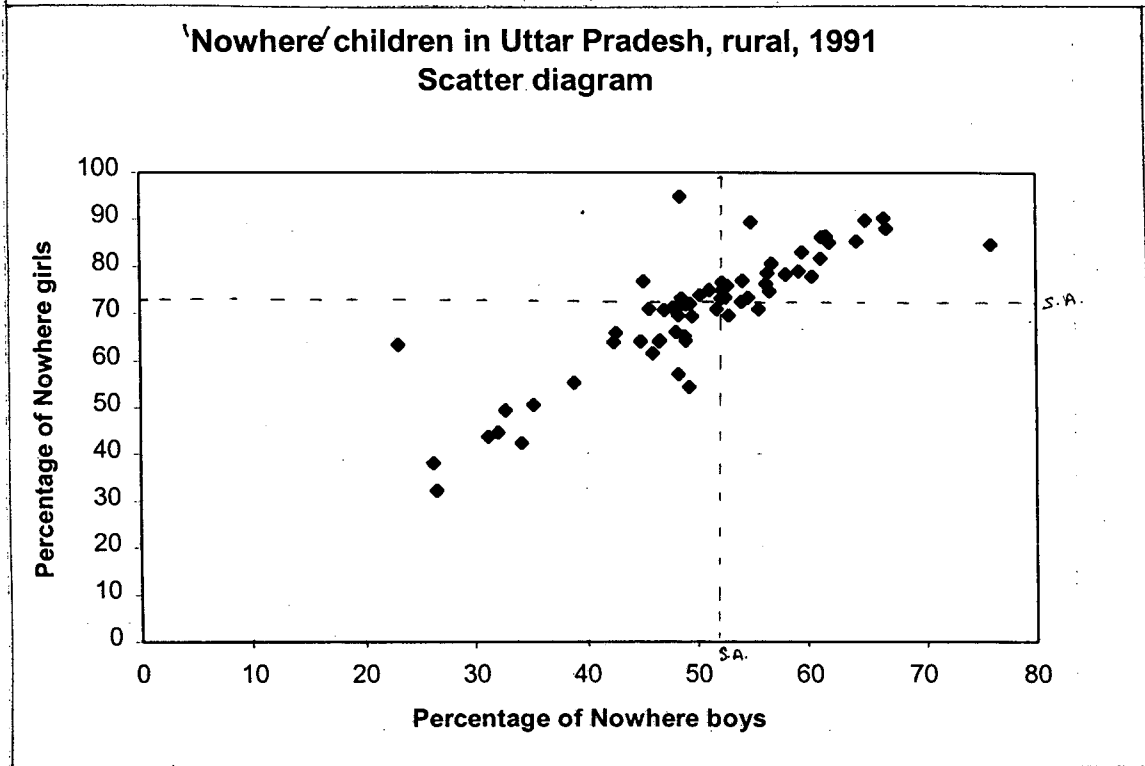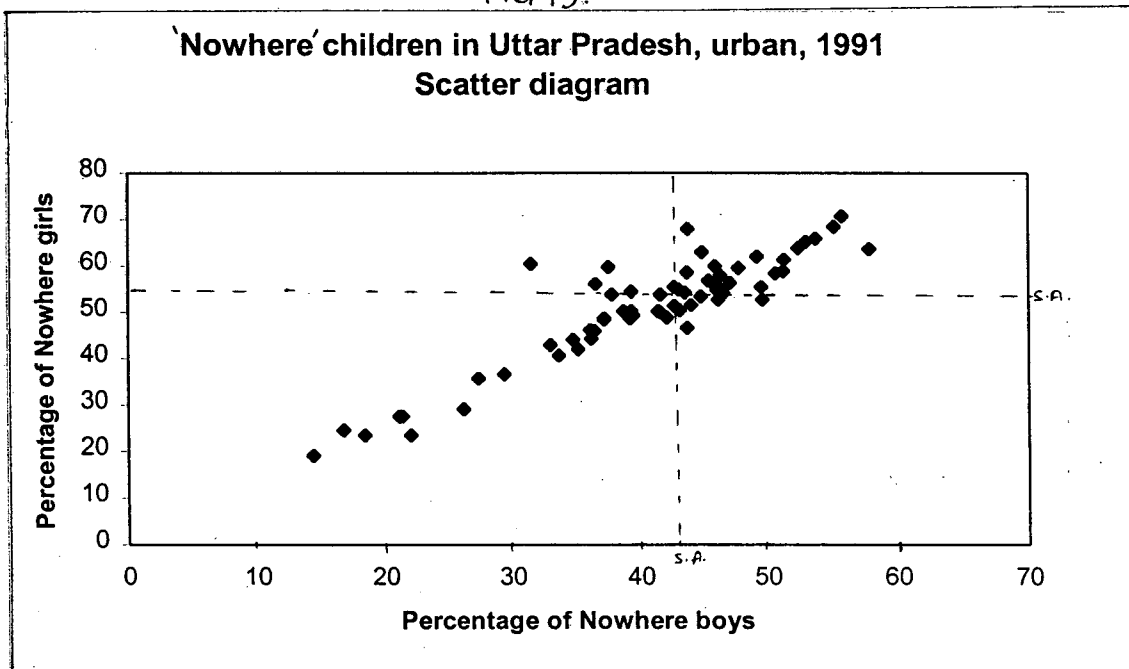
areas at two points of time. The coefficient values are very high and statistically significant at the same level (0.01). Therefore it is clear from our analysis that in Uttar Pradesh the pattern pertaining to 'nowhere' children exhibits rural- urban correspondence. Therefore the 'nowhere' boys and the girls have significant association in their incidence over space.

As we have discussed earlier, that the position of the state has deteriorated compared to other states of India in 1991. Table A.3. and A.4 ( see in annexure) show the ranks of the districts in 1981 and 1991 respectively. From the Tables it has been noticed that in rural areas out of 56 in 33 districts, the status has improved during the period so far as 'nowhere' boys are concerned. Among the districts, it was Almora with 25.24 percent topping the list but was in the 6$^{th}$ rank in case of the girls, whereas Rampur remained at the lowest rung of the ladder in 1981 both in rural and urban areas for both the sexes. The districts whose status has deteriorated over the period are Dehradun, Pithoragarh, Bijnor, Moradabad, Saharanpur, Muzzaffarnagar, Aligarh, Etah, Budaun, Bareilly, Pilbhit, Sitapur, Hardoi, Farrukhabad, Hardoi, Etawah, Lalitpur, Bahraich, Gonda, Barabanki, Deoria, Azamgarh and Jaunpur which are located mainly in the western part and eastern part of Uttar Pradesh. So far as the girls are concerned, one notable feature that is noticed is the considerable improvement in the status of most of the districts in rural areas. Few exceptions are hill districts of Uttarkashi, Chamoli, Tehri Garhwal, districts of central western region namely Bijnor, Muzzafarnagar, Bulandshar, Mainpuri, districts of eastern part like Jaunpur, Ghazipur, Mirzapur etc. It may be recalled that these districts have registered positive growth rate. It is noted from the Table that in 1991 Bulandashar occupies the bottommost position with rank (56) followed successively upward by Budaun (55), Bareilly (54), Rampur (53) and Moradabad (52) in rural areas for girls. In urban areas again Almora, which maintained the top position in 1981 for boys and girls, but deteriorated its position in 1991. In 1991, Tehri Garhwal is at the top position whereas Bareilly occupies the bottom of the ladder of scale for boys. For the girls Budaun is at the bottom of the scale. It has been noticed that the districts, which have deteriorated their position for both the boys and girls in urban areas are Nainital, Moradabad, Meerut, Gaziabad, Aligarh, Agra, Budaun, Bareilly, Shahjahanpur, Sitapur, Hardoi, Etawah, Kanpur, Jalaun, Ghazipur, Varanasi etc. However the shift in the ranks are only marginal in case of districts like Moradabad, Rampur, Budaun,

Bareilly, Philbit and Kheri. The reason for this is the persistent high levels of 'nowhere' boys and girls coupled with high sex disparity. Again, the rank correlation for both the boys and the girls shows an overall temporal stability. The rank coefficient values are high 0.898 in rural areas and 0.752 in urban areas respectively for the boys. The corresponding values in case of girls are 0.891 and 0.805 for rural and urban areas respectively. All the coefficient values are statistically significant at 0.01 level.

**Sex disparity:**

It can be seen from Table A.6. (see in annexure) that rural sex disparity is much more than the urban disparity both in 1981 and 1991. However there are few exceptions. For instance, in districts like Dehradun, Garhwal, Bahraich, Etwah, Barabanki etc., we find that the sex disparity in urban areas is more than that in rural segments. In 1991 there has been an improvement, since the sex disparity has declined over the period under the observation in both rural and urban areas. Over the decade the sex disparity has narrowed down in most of the districts excepting Mathura, Rampur and Hardoi where the disparity has increased as can be seen from the table. In Rampur it has increased from 0.24 in 1981 to 0.32 in 1991, that in Mathura from 0.29 to 0.31 in 1991 and in Kheri it from 0.27 in 1981 to 0.32 in 1991. In Hardoi, it increased from 0.26 in 1981 to 0.27 in 1991. In 1981, highest sex disparity was found in Budaun (0.43) whereas in 1991 highest sex disparity was found in the district of Rampur (0.32). On the other hand, lowest sex disparity is found in Tehri Garhwal (0.01) in 1981 and in Faizabad (0.05) in 1991.

So far as urban areas are taken into consideration, we find that lowest disparity is found in the district of Fatehpur (0.12) in 1981 whereas in 1991, lowest disparity is found in Pithoragarh and Jalaun, both having disparity of 0.03. On the other hand highest sex disparity was exhibited by Barabanki (0.37).

It has been noticed from the Figure 3.14 and Figure 3.15 that there is no similarity in the pattern of sex disparity in the rural areas 1981 and 1991. In 1981, the sex disparity was high in the western part of Uttar Pradesh, central eastern part and eastern part of Uttar Pradesh they record disparity exceeding 31 percent in rural areas. These districts form two clusters, which were spatially contiguous. Whereas northern part comprising hill districts of Uttarkashi, Chamoli, Tehri Garhwal and Garhwal record disparity less than 0.15. The rest of Uttar Pradesh

FIG. 3.14.

Sex disparity between boys and
girls in rural Uttar Pradesh, 1981
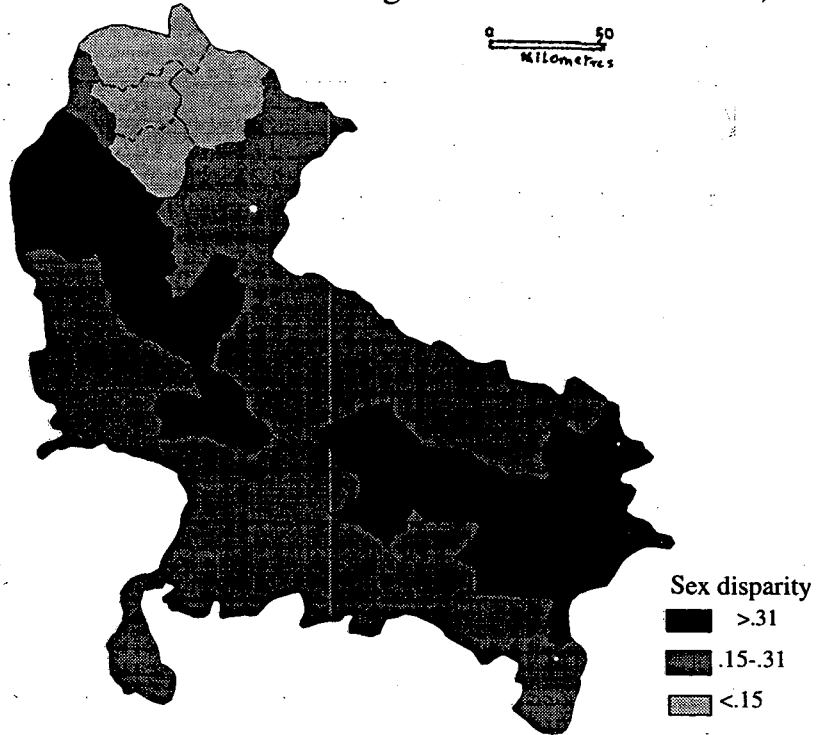
0 ————— 50
Kilometres

Sex disparity
■ >.31
▨ .15-.31
▤ <.15

Sex disparity between 'Nowhere' boys and girls in urban Uttar Pradesh, 1991.

0       50
KILOMETRES

Sex disparity
■ >.15
▨ .05-.15
▨ <.05

Sex disparity between 'Nowhere' boys and girls in rural Uttar Pradesh, 1991.

0       50
KILOMETRES
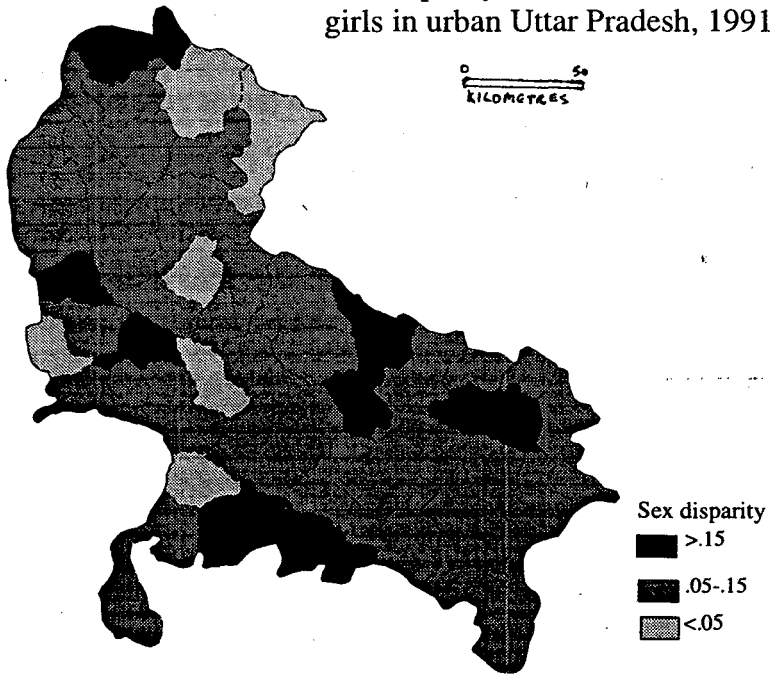
Sex disparity.
■ >.22
▨ .10-.22
▢ <.10
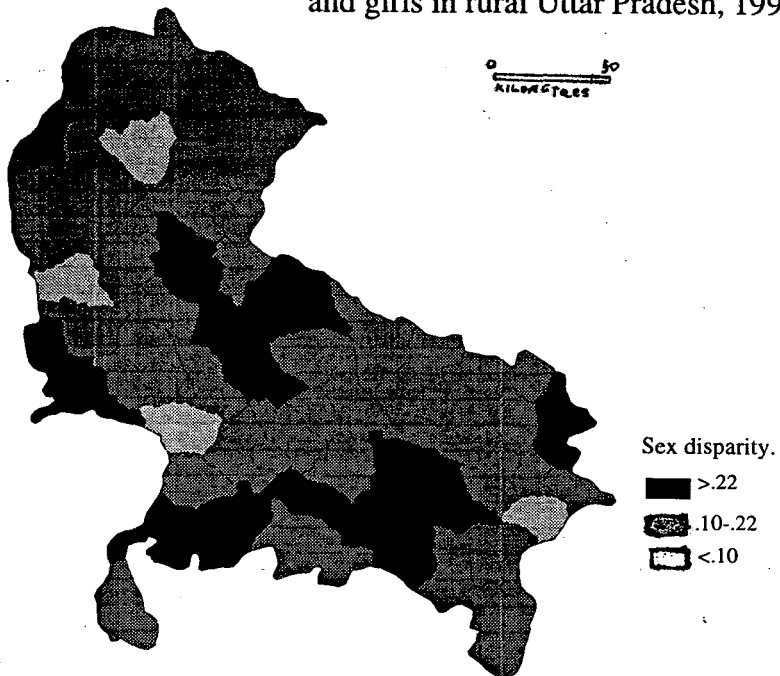
including Pithoragarh and Almora showed high medium disparity ranging between 0.15- 0.31. Against this scenario, in 1991 disparity was high in the central western part comprising of Budaun, Bareilly, Rampur, Kheri, Sahajahanpur and some of the southern part comprising of Jhansi, Hamirpur, Allahabad and Deoria exceeding 0.22 percent. In urban areas no distinct pattern emerged in 1991 (see Figure 3.15). Again there is no similarity in pattern between rural sex disparity and urban sex disparity in the districts of Uttar Pradesh during the period under observation. Correlation coefficient shows insignificant association between rural and urban sex disparity. This diverse scenario over the space needs deeper examination in order to unravel the reasons of the phenomena concerned.

The cut off point of sex disparity (state's average) for both boys and girls divide the districts into four categories- low levels of both 'nowhere' boys and girls and low disparity, high levels of both 'nowhere' boys and girls and low disparity, low levels of both 'nowhere' boys and girls and high disparity and high levels of both 'nowhere' boys and girls with corresponding high disparity. It has been noticed from the Table 3.3 that the districts having high levels of 'nowhere' children and high disparity stand as island in rural areas of 1981. They were Saharanpur in the north- west, Bulandshar in the west, Allahabad in the south and Gorakhpur in the east. Other districts although having low levels of 'nowhere' children but high disparity were found in clusters which are spatially contiguous. Four such clusters were identified:

- Northern cluster comprising Pithoragarh and Almora.
- Western cluster comprising Muzaffarnagarh, Bijnor, Gaziabad, Bulandshar, Aligarh, Mathura, Agra and Mainpuri.
- Southern cluster comprising Jalaun and Jhansi.
- Eastern cluster comprising Ballia, Gazipur, Varanasi, Jaunpur and Pratapgarh.

The rest of Uttar Pradesh had low disparity. We find that 25 districts out of 56 had high sex disparity in 1981 in rural areas, above than the state average. Whereas in 1991, there has been an improvement, as 16 districts out of 56 show high sex disparity, above the state average. They form clusters similar to the pattern of sex disparity in rural areas in 1991. The rest of the state exhibits lower sex disparity.

It is noticed from the Table 3.4 that in urban areas 27 out of 56 had high sex disparity in 1981, above the state average. 11 districts out of 27 had very high levels of 'nowhere' children as well as high sex disparity. These districts are Muzzaffarnagar, Bijnor, Bulandshar,

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Shahjanpur, Banda, Hardoi, Unnao, Bahraich, Gonda and Barabanki. They form five clusters. The rest of the 16 districts have low levels of 'nowhere' children but have high sex disparity. These districts are mainly located in southern part and eastern part of Uttar Pradesh. In all, it is evident that the western part including Rohilkhand division, southern part and eastern central part has high sex disparity, above the state average. On the other hand, the hill districts, Nainital, Kanpur, Saharanpur, Sultanpur, Etwah, Allahabad and Lucknow have low levels of 'nowhere' children with corresponding low levels of sex disparity. While in the urban areas of 1991, we find considerable improvement of some districts. For instance districts like Garhwal, Mathura, southern districts like Jalaun, Jhansi and Lalitpir, Eastern districts like Jaunpur and Faizabad have shifted from the category of low levels of 'nowhere' children and high sex disparity in 1981 to category of low levels of 'nowhere' children and low disparity in 1991. Also remarkable improvement has been found in districts of Unnao and Gonda which have shifted from high levels of 'nowhere' children and high disparity to low levels of 'nowhere' children and low disparity. On the other hand Moradabad and Rampur have shifted from the category of high levels of 'nowhere' children and low disparity to low levels and high disparity. Again Etah and Budaun has shifted from high levels of 'nowhere' children and high disparity to low levels and high disparity.

**Table 3.3. Districts according to the levels of Nowhere children and sex disparity in rural areas of Uttar Pradesh.**

| | Districts | |
|---|---|---|
| | **1981** | **1991** |
| Low levels of 'nowhere' boys and girls and low disparity. | Uttarkashi, Chamoli, Tehri Garhwal,Nainital, Farrukhbad Etawah Dehradun, Kanpur, Garhwal, Azamgarh Fatehpur . | Uttarkashi, Chamoli, Tehri Garhwal,Nainital, Farrukhbad Etawah Dehradun, Kanpur, Garhwal, Pithoragarh,, Almorah Muzzaffarpur,Meerut,Gaziabad, Aligarh, Mainpuri, Unnao, Lucknow, Jalaun, Banda, Faizabad, Ballia, Gazipur, Varanasi. |
| High levels of 'nowhere' boys and girls and low disparity. | Moradabad, Rampur, Budaun, Bareilly, Philbhit Sahjahanpur, Etah, Lalitpur, Hamirpur, Banda, Sitapur, Kheri, Hardoi Raebareilly, Gonda, Bahraich Basti, Deoria, Unnao, Lucknow, Mirzapur. | Bijnor, Moradabad, Saharanpur, Bulandshar, Bahraich, Barabanki,Gorakhpur,Budaun, Philbhit Etah, Lalitpur, Banda, Sitapur, Hardoi Raebareilly, Gonda, Bahraich Basti, Unnao, Lucknow, Mirzapur. |

*Contd....*

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| | Districts | |
|---|---|---|
| | 1981 | 1991 |
| Low levels of 'nowhere' boys and girls and high disparity. | Pithoragarh,, Almorah, Bijnor, Jaunpur,Ballia, Ghazipur,Barabanki, Varanasi. Muzzaffarpur,Meerut, Ghaziabad,Mathura, Mainpuri, Jalaun, Jhansi, Faizabad, Pratapgarh, Aligarh, Agra,, Jalaun, Jhansi. | Hamirpur, Deoria, Agra, Jhansi., Jaunpur,Firozabad, Fatehpiur,Pratapgarh,Azamgarh. |
| High levels of 'nowhere' boys and girls and high disparity. | Allahabad,Sultanpur, Gorakhpur, Bulandshar, Saharanpur. | Rampur, Bareilly, Sahjahanpur, Kheri, Allahabad,Sultanpur, |

**Table 3.4. Districts according to levels of 'Nowhere' children and sex disparity in urban areas of Uttar Pradesh.**

| | Districts | |
|---|---|---|
| | 1981 | 1991 |
| Low levels of 'nowhere' boys and girls and low disparity. | Uttarkashi, Chamoli, Tehri Garhwal,Nainital, Farrukhbad Etawah Dehradun, Kanpur, Garhwal,.Pithoragarh Saharanpur, Almorah Mainpuri Allahabad,Sultanpur, Gorakhpur,Lucknow | Chamoli, Tehri Garhwal,Nainital, Farrukhbad Etawah Dehradun, Kanpur, Garhwal, Pithoragarh,, Almorah Saharanpur, ,Ghaziabad, Mathura, Mainpuri, Unnao, Lucknow, Farrukhbad Raebareilly Jalaun, Jhansi, Lalitpur, Jaunpur, Allahabad, Gonda, Faizabad. |
| High levels of 'nowhere' boys and girls and low disparity. | Fatehpur Moradabad,Rampur, Budaun, Bareilly, Philbhit, Etah, Banda, Sitapur, Kheri, Hardoi Raebareilly, | Aligarh,Agra, Meerut, Bareilly, Philbit, Kheri, Sitapur, Hardoi. |
| Low levels of 'nowhere' boys and girls and high disparity. | Azamgarh Ghaziabad, Mathura, Jalaun, Jhansi Lalitpur, Hamirpur Pithoragarh,,Garhwal, Faizabad, Pratapgarh, Basti, Deoria,Jaunpur,Ballia, Ghazipur, Mirzapur. | Uttarkashi,Pithoragarh Bijnor,Moradabad,Rampur, Bahraich, Sultanpur, Barabanki,Gorakhpur, Deoria, Azamgarh, Ballia, Gazipur, Mirzapur, Muzzaffarnagar,Hamirpur,Banda, Pratapgarh,. |
| High levels of 'nowhere' boys and girls and high disparity. | Bijnor, Sahjahanpur Bulandshar, Gonda, Unnao, Barabanki, Varanasi. Muzzaffarpur,Meerut, Banda,Hardoi,Bahraich. | Bulandshar Etah, Badaun, Basti, Varanasi, Sahjahanpur, |

It is important to point here that the southern districts and some of the eastern districts such as Jaunpur and Faizabad have registered decline in the percentage of 'nowhere' children in 1991 with corresponding decline in sex disparity. On the other hand in Moradabad and Rampur although there has been considerable decline in the percentage of both 'nowhere' boys and girls, the sex differentials between them is high. This may be attributed to the socio- cultural factors, poor quality of schools, lack of government schools and lack of female teachers. In the districts like Etah and Budaun the decline in the percentage of both 'nowhere' boys and girls is comparatively less and sex disparity continues to remain high. It may be recalled that the ranks of these districts have deteriorated over the period.

**Concluding remarks:**

This chapter provides an overview of the incidence of 'nowhere' children as well as spatio- temporal variation in Uttar Pradesh. It has been found that central- western part continues to remain in backward space in terms of 'nowhere' children. Maximum concentration of 'nowhere' children is found in this region over the period. This can be attributed to the failure of the region to take any advantage in the field of education and health. This region has high infant mortality rate, low participation of women in main category of work, lower sex ratio, persistent unequal gender relations, restricted social roles of women in the society, poor functioning of government schools, poor quality of schools and lack of female teachers. In some of the eastern districts the phenomenon is spreading as evident from the spatial pattern and decreasing coefficient of variation in urban areas over the decade. Also the ranks of these districts have deteriorated over the period. The rank correlation between the 1981 and 1991 percentages of 'nowhere' boys and girls show temporal stability. Though sex disparity was high in the western part and eastern part in 1981, in 1991 the districts having high sex disparity forms clusters, which are not spatially contiguous. On the other hand, northern region emerges as the region having lower incidence of 'nowhere' children over the decade. This region is relatively 'progressive' region of Uttar Pradesh in terms of socio- cultural aspects like low infant mortality, more active participation of women in society and main category of work and overall demand of education in earlier times. The phenomenon of 'nowhere' children does not seem to be gendered or locational dimensions as the pattern is almost similar for boys and girls in rural and urban areas.

# Chapter-4
## Determinants of 'Nowhere' children:

**Choice of Explanatory variables:**

In the previous two chapters we have seen the spatial variation of the phenomena of 'nowhere' children at two points of time in India and in the state of Uttar Pradesh. In this chapter an attempt has been made to assess the strength and establish relationship between selected socio- economic and school related factors that contribute to the phenomena of 'nowhere' children. The first section gives an account of the variables chosen followed by analysis of the correlation matrix. The second section deals with regression analysis that includes significant variables.

The choice of the explanatory variables, here, are influenced by the availability of data, results of earlier research studies and based on some perceptions. Given the earlier results discussed, one can expect social, economic and demographic characteristics of the household and school related factor to have considerable influence on the phenomenon of the 'nowhere' children. For this purpose, multivariate analysis- method of correlation and step- wise regression has been worked out in order to provide a convincing explanation to the phenomena of 'nowhere' children. The step regression analysis has been carried out separately for boys, girls and disparity.

Following variables are considered:-

A. Home related factors:

i. Socio- economic factors.

- Education level of the parents- primary and middle.
- Agricultural labour, Scheduled Caste population and non-workers population.
- Muslim population.
- Sex ratio.
- Child woman ratio.
- Dependents.
- Infant mortality rate.
- Boys and girls (5-14 years) doing household duties.
- Female main workers.

B. School related factors.

- Availability of schools.

- Availability of schools within 1-2 kms.

- Infrastructural facilities.

  a. Physical (schools having drinking water facilities, schools having separate urinals for the girls, schools having shortage of blackboard, type of building of schools, rooms available for instructional purposes).

  b. Human (availability of female teachers and trained teachers).

- Type of institution (government, private aided and private unaided).

- **Variable Definition used in the Multiple Regression Analysis:**

Following is the definition of the variables used in the analysis.

**Table 4.1: Variable Definition used in the Multiple Regression Analysis.**

| | Variables | Definitions |
|---|---|---|
| A. | **Dependent** | |
| | BOYS | Percentage of 'nowhere' boys . |
| | GIRLS | Percentage of 'nowhere' girls . |
| | DISP | Sex disparity between 'nowhere' boys and girls . |
| B. | **Independent** | **Home Related** |
| | AGL | Percentage of total agricultural labour to total population. |
| | SCPOP | Percentage of Scheduled Caste in total population. |
| | MPOP | Percentage of Muslims in total population. |
| | NWP | Percentage of non-workers(15-59 years) in total population. |
| | SRATIO | Number of girls (0-6 years) per thousand boys (0-6 years). |
| | DEPR | Number of dependents (0-14 years + 60 years above) on working population (15-59 years) |
| | CWR | Child-woman ratio. |
| | MPED | Percentage of men population (15-59 years) educated up to primary level in total men population (15-59 years) . |

*Contd...*

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| Variables | Definitions |
|---|---|
| FPED | Percentage of women population (15-59 years) educated up to primary level in total women population (15-59 years) . |
| MMED | Percentage of men population (15-59 years) educated up to middle level in total men population (15-59 years). |
| FMED | Percentage of women population (15-59 years) educated up to middle level in total women population (15-59 years), |
| INFR | Infant mortality rate. |
| BHD | Percentage of boys (5-14 years) doing household duties in total boys population (5-14 years). |
| GHD | Percentage of girls (5-14 years) doing household duties in total girls population (5-14 years) |
| FMW | Percentage of female main workers (15-59 years) in total female population (15-59 years). |

| SCHOOL RELATED | |
|---|---|
| GS | Percentage of girls school in total schools |
| SPU | Percentage of schools having *pucca* building in total schools |
| SKA | Percentage of schools having *kaccha* building in total schools |
| FT | Percentage of female teachers in total teachers |
| TRT | Percentage of trained teachers in total teachers |
| INSR | Percentage of schools having two classrooms for instructional purpose |
| OISTA | Percentage of schools at a distance of 1-2 Kms. |
| GOV | Percentage of government schools in total schools |
| PA | Percentage of private aided schools in total schools |
| PUA | Percentage of private unaided schools in total school |
| SS BLACK | Percentage of schools having shortage of blackboards in total schools |
| MDM | Percentage of schools having mid-day schemes in total schools |
| FTB | Percentage of schools having free text books in total schools |
| SDRW | Percentage of schools having drinking water facilities in total schools |
| SURI | Percentage of schools having separate urinals for girls |

A broad idea regarding the different variables chosen in multiple regression analysis, which are responsible for the phenomenon of 'nowhere' children are discussed below.

**Poverty.**

Poverty is an important determinant of children's access to school. However many studies reveal that poverty has less impact on the 'nowhere' children. In this study, agricultural labour has been taken as a proxy variable of poverty.

**Scheduled caste population:**

Scheduled caste population has been taken into consideration in order to examine the incidence of 'nowhere' children. The people belonging to Scheduled caste are generally very poor, backward and socially segregated. It has been noted that where the scheduled caste population is high, the 'nowhere' children is also high.

**Muslim population:**

Muslim population has been taken in the study in order to examine the incidence of 'nowhere' children. Several studies give evidence that the Muslim community is educationally backward. It has been observed that where the Muslim population is, incidence of 'nowhere' children is high.

**Dependency ratio:**

Dependency ratio is the number of dependents on the worker (15-59 years). Dependents are children of the age- group 0-14 years and the population of the age group above 60 years. It has been noted that as dependency ratio increases, the incidence of the 'nowhere' children will also increase.

**Child- woman ratio.**

Child woman ratio is the number of children in the age group 0-4 years to the woman under reproductive age group. It has been observed that where the child woman ratio is high the 'nowhere' children is also high.

**Infant mortality rate.**

Infant mortality rate is the ratio of infant death (children who die before their first birthday) in a given year to the total number of live births registered during the same year. It plays significant role in determining the access of children to schools. It arises from the literature that where the infant mortality rate is high, the incidence of 'nowhere' children is also high.

**Educational status of adult men and women.**

Education of the parents can be expected to have positive effect in reducing 'nowhere' children. It increases awareness of the benefits of education and accordingly with higher levels of education has more positive effect on the children. Education has multiple effect. If the education of the women is high, child woman ratio and infant mortality rate would be low and subsequently dependency ratio also would be low. The lower the burden of the childcare and dependents lower would be the 'nowhere' children.

**Sex ratio:**

Sex ratio is defined as number of females per 1000 male population. The sex ratio is one of the basic indicators of unequal gender relations. It reflects the disadvantaged position of women. In the study under consideration, 0-6 age group population (boys and girls) has been taken as this group is less affected by migration.

**Female main workers:**

It is the percentage of the adult female (in the age group 15-59 years) in the main category of work in total population (15-59 years). Percentage of female main worker is an important indicator of gender relations. Higher female participation in the main category of work tends to lower the gender inequality in the family. Secondly it indicates the general participation of women in the society. It has been found that where the female participation is high, the infant mortality is low and 'nowhere' children would reduce.

**Household duties:**

It is the percentage of boys and girls in total population in the age cohort 5-14 years who are counted as non-workers but doing 'household duties'. It plays significant role in deterring the children's access to schooling. It has been found that in the sates and the districts where the burden of 'household duties' are high, more children particularly girls do not go to school.

**School related factors.**

One can expect significant relationships between 'nowhere' children and the quality and quantity of school facilities available. Accordingly following variables are considered.

**Distance:**

Distance of the primary and middle schools is considered to measure the access to education. One can expect that as the distance of schools increase, 'nowhere' children

particularly the girls increase.

**Incentives:**

It include mid meals, text- books and uniforms. It has been noticed that where the incentive schemes are available, incidence of 'nowhere' children is low.

**The type of institution:**

The type of institution- government, private aided and private- unaided school, which is available, is an important factor. The expenditures would be higher in private schools and less in government schools. One can expect that with the availability of government schools 'nowhere' children would reduce.

# Correlation results of the 'Nowhere' children and home related variables:

The correlation analysis has been done separately for rural and urban areas to look at the variables which are highly associated with the 'nowhere' children. Table 4.2 and Table 4.3 present the significant variables that contribute to the incidence of 'nowhere' boys and girls in India and Uttar Pradesh.

It has been noticed that both boys and girls 'nowhere' children do not show any correlation with agricultural labour, a proxy variable for poverty (Table A.7 in annexure). This corroborates the findings of Jeemol Unni, Majumder, Sinha and Sinha, Kangaribari and Kulkarni and Nidhi Mehrotra. Similar is the case with Scheduled caste population, the correlation being negligible for the boys. In case of girls and the sex disparity the correlation are small but the coefficient values are higher than that of the boys. Similar results we find in 1991 in rural and urban areas (see Table A.9 and A.10in annexure). Also in Uttar Pradesh there is no correlation of 'nowhere' boys and girls with agricultural labour and Scheduled caste population in rural areas of 1991 (see Table A.13 in annexure). But in 1981 we find significant positive correlation between agricultural labour and girls 'nowhere' children. The coefficient was 0.438 and statistically significant at 0.01 level (Table A.11). However, the relationship has weakened over the decade in rural areas, as evident from the insignificant correlation. So far as urban areas is concerned, agricultural labour had a very high positive correlation with both boys and girls in 1981 as well as 1991 thus making it clear that poverty prevents the poor from

sending their children to school (see Table A.12 and A.14 in annexure). The coefficient values were 0.542 for boys and 0.588 for girls respectively in 1981. The corresponding figures in 1991 are 0.494 and 0.608 respectively for boys and girls. All the coefficient values are statistically significant at 0.01 level.

**Table 4.2. Significant variables of home related characteristic for 'Nowhere' children in India.**

| Independent variables | Rural | | | | | | Urban | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1981 | | | 1991 | | | 1981 | | | 1991 | | |
| | Boys | Girls | Boys & girls | Boys | Girls | Boys & girls | Boys | Girls | Boys & girls | Boys | Girls | Boys & girls |
| TAGL | | | | | | | | | | | | |
| SCPOP | | | | | | | | | | | | |
| NMPOP | | | | | | | | | | | | |
| SRATIO | | | | | | | | | | | | |
| DEPR | | | | | | ** | | | ** | | | ** |
| MPOP | | | | | | | | | | | | |
| CWR | | | ** | | | ** | | | | | | ** |
| MPEDU | | | ** | | | ** | | | | | | ** |
| FPEDU | | | ** | | | ** | | | | | | ** |
| PMEDU | | | | | ** | | | | | | | |
| FMEDU | | * | | * | | ** | | | | | | |
| BHD | | | | | | | | | | * | * | |
| GHD | | * | | | * | | | | ** | | ** | |
| FMW | | | | | | | | | | | | * |
| INFR | | | | | * | | | | | | | * |

** Significant at 0.01 level

* Significant at 0.05 level

## Table 4.3. Significant variables of home related characteristic for 'Nowhere' children in Uttar Pradesh.

| Independent variables | Rural | | | | | | Urban | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dependent variables | | | | | | | | | | | |
| | 1981 | | | 1991 | | | 1981 | | | 1991 | | |
| | Boys | Girls | Boys & girls | Boys | Girls | Boys & girls | Boys | Girls | Boys & girls | Boys | Girls | Boys & girls |
| TAGL | | ** | | | | | | | | | | ** |
| SCPOP | | | * | | | | * | | | | | |
| NMPOP | | | | | | | | | | | | |
| SRATIO | | | | | | | | | | | | |
| DEPR | | | | | * | | | | ** | | | ** |
| MPOP | | | | | | ** | | | ** | | | ** |
| CWR | | | ** | | | ** | | | ** | | | ** |
| MPEDU | | | | | | | | | | | | |
| FPEDU | | | | | | | | | | | | |
| PMEDU | | | | | | | | | | | | |
| FMEDU | * | ** | | | | | | | ** | | | |
| BHD | | | | | | | | | | -- | | |
| GHD | | | | | | ** | | | | | | ** |
| FMW | | | | | | | | | * | | | |
| INFR | | - | | | | ** | | | | | | |

** Significant at 0.01 level

* Significant at 0.05 level

Also Scheduled caste population had strong positive correlation with both boys (0.303) and girls (0.331) in rural areas in 1981. Both were statistically significant at 0.05 level. This mean that as the Scheduled caste population, who are generally poor, increases 'nowhere' children tend to increase as found in Uttar Pradesh. It may be recalled that Scheduled caste children is less likely to go to school in Uttar Pradesh, being afraid of physical punishment, frequently beaten by higher caste classmates and finally lack of commitment in location of schools in scheduled caste settlements (Bashir 1993:20; Dreze and Sen 1996: 85). Interestingly, in urban areas there was negative correlation with the boys and the girls. The correlation with the girls was insignificant whereas with the boys, it was significant at 0.05 level. However, in 1991 there is no significant relationship between 'nowhere' children and Scheduled caste population both in rural and urban areas. Therefore the variable as a determinant has weakened over the

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period.

Though there is no relationship between non-working population and 'nowhere' children in the states of India, in Uttar Pradesh the relationship with both boys (coefficient is 0.346) and girls (0.392) has become significant in 1991. With any increase in non-working population, 'nowhere' children would increase.

Although we find no significant correlation between the percentage of Muslim population and the 'nowhere' children at all India level, the variable has very strong positive correlation with both boys and girls in both rural and urban areas during the period in Uttar Pradesh. The coefficient values are 0.673 for boys and 0.728 for girls in urban areas in 1991. All the values are statistically significant at 0.01 level. Thus proving the fact that with the increase in proportion of the Muslim population, the proportion of 'nowhere' children will increase. This is substantiated by the findings of Srivastava (1999) and Dreze and Sen (1996). Earlier studies show that the Muslim community as a whole is backward in educational spheres whose educational purpose is linked with livelihood. The smaller size of middle class Muslim community seeks educational opportunities only. Therefore motivation and demand for education among children are also less.

The other important variables having positive correlation are dependency ratio and child woman ratio. Although in 1981 no significant correlation has been found between boys 'nowhere' children and dependency ratio in the rural areas of India as well as Uttar pradesh, the relationship has strenthened in 1991. For India, in 1991 the coefficient value is 0.715 and statistically significant at 0.01 level of significance. Similar results have been noticed in case of the girls' (0.798). In case of Uttar Pradesh the coefficient value is moderate (0.288) for girls in rural areas of 1991 and statistically significant at 0.05 level. On the other hand, in urban areas, in India as well as Uttar Pradesh dependency ratio has significant positive and high correlation with both the boys and the girls 'nowhere' children. The coefficient values are 0.624 and 0.677 for boys and girls respectively at India level. In Uttar Pradesh the coefficient values in 1981 were 0.569 and 0.620 respectively for boys and girls. The correspondingly values in 1991 are 0.742 for the boys and 0.829 for the girls respectively. All the values are statistically significant at 0.01 level. It may be recalled that the burden of dependents significantly affects the access of schooling to the children, particularly girls in Uttar Pradesh. This can

be substantiated by the studies of Srivastava and Anuradha Pande.

With child woman ratio both 'nowhere' boys and girls have significant positive correlation in rural areas during 1981-1991 (see Table A.7 and A.9 in annexure). The coefficient values were 0.665 and 0.685 respectively for boys and girls in 1981. In 1991 the corresponding coefficient values are 0.757 for boys and 0.778 for girls respectively. All the values are found to be statistically significant at same level of significance (0.01 level of significance) at all India. Similar relationship has also been found in Uttar Pradesh in rural as well as urban areas during the period. In rural areas of 1991 coefficient value is 0.509 for girls and 0.379 for boys respectively. The corresponding values in urban areas are 0.669 and 0.751 respectively for the boys and girls. All coefficients are statistically significant at 0.01 level. This means that as the child woman ratio increases, burden of looking after the siblings' fall on the children that deters their access to schooling.

Another significant relationship is between 'girls doing household duties' and 'nowhere' girls. The variable has significant positive impact on the 'nowhere' girl child both in rural and urban areas of India as well as Uttar Pradesh. The correlation is stronger in urban areas compared to the rural segment. In India, the coefficient value was moderate (0.489) and statistically significant at 0.05 level, whereas in urban areas, the coefficient was high (0.619) and statistically significant at 0.01 level in 1981. In 1991 this factor continues to have equally significant influence in deterring the girls' schooling, the coefficient value being (0.440). Again in urban areas the coefficient is high (0.589). (see Table A.9 and A.10 in annexure). In 1991, in Uttar Pradesh, the coefficient is 0.720 in rural areas and 0.778 in urban areas respectively for the girls. All the coefficient values are significant at 0.01 level of significance. It may be recalled that girls are mainly engaged in domestic chores, rather than out of home activities. It has been found that girls are forced not to go to school because of household work (Anuradha Pande 2000: 88 and Aggarwal 1992).

The educational status of the parents has negative correlation with both boys and girls 'nowhere' children. Educational level up to primary for both men and women has negative correlation with both 'nowhere' boys and girls in rural and urban areas during the period. The coefficient values were -0.625 and -0.677 respectively for the boys in rural

areas of 1981 at all India level. For the girls the corresponding coefficient values were - 0.620 with men and -0.755 with women respectively. All the values are statistically significant at the same level (0.01 level). In Uttar Pradesh, similar relationship has been observed. The coefficient values were -0.544 for boys and -0.551 for girls in rural areas of 1981. Whereas that of men had no significant correlation in 1981, but in 1991 the correlation with both boys and girls are significant at 0.01 level. This mean that educated men and women motivate children to go to school.

The educational status up to middle level of men and women did not show any significant association with the boys 'nowhere' children in 1981 at all India level, the impact of the middle educational status of the adult women has strenthened on the 'nowhere' boys in 1991. The coefficient value is moderate (-0.405) for boys and statistically significant at 0.05 level of significance. With the 'nowhere' girls the coefficient values are -0.635 in 1981 and -0.619 in 1991 and statistically significant at 0.01 level of significance. This shows higher the educated women higher is the motivation for girls' schooling. In Uttar Pradesh, though the variable had significant correlation with both boys (-0.316) and girls (-0.351) in 1981, in 1991 the variable as a determinant becomes insignificant. While opposite is true when educational status of adult men is considered. In 1981 the relationship between the variable and 'nowhere' children was insignificant, while in 1991 significant correlation has been noticed between the two. In case of boys the coefficient is -0.549 and statistically significant at 0.01 level, whereas that in case of girls the impact is less as evident from the lower significant level (0.05). This proves that the decision making power rest with men in the family and higher educated men favour education of their boys' offspring more compared to girls. Therefore educational motivation is gender specific.

The other variable that shows significant relationship with the 'nowhere' children is infant mortality rate. In 1991, infant mortality rate has positive correlation with the girls 'nowhere' children, the coefficient being moderate (0.481) and statistically significant at 0.05 level, but with the boys the correlation is insignificant. This shows greater influence of the health condition as a constraint on the girls' access to the school compared to the boys' counterpart. However in urban areas, the correlation is statistically significant at same level (0.05) for both boys and girls. The coefficient values are 0.448

and 0.475 respectively for boys and girls. In Uttar Pradesh the variable shows greater impact on both 'nowhere' boys and girls as evident from the very high correlation coefficient and level of significance in rural areas. The coefficient values are 0.647 for boys and 0.534 for the girls. Both are statistically significant at 0.01 level. On the other hand in urban areas, there is no association of the variable with boys, where as with the girls the correlation coefficient is small (0.280) and statistically significant at 0.05 level. It can be said that infant mortality rate being a proxy variable show the link between health and schooling. Moreover, in Uttar Pradesh it acts as a severe deterrent to the children's schooling in rural areas. Proper health is a prerequisite for the children to learn.

**Correlation between the sex disparity and home related factors.**

So far as sex disparity is concerned, Scheduled caste population has significant positive impact on sex disparity in rural areas of 1981 and 1991 in India. The coefficient was 0.576 in 1981 and statistically significant at 0.01 level of significance, whereas the coefficient is 0.521 in 1991 and statistically significant at 0.05 level (see Table A.7 and A.9 in annexure). This implies that sex disparity between the boys and the girls increases with the Scheduled Caste population as more girls of the disadvantage groups remain out of the schooling system. Findings of National Council of Applied Economic and Research/Human Development Index study (1994) substantiate this fact. However, the association of the variable with sex disparity has weakened in 1991 since the significant level has declined from 0.01 in 1981 to 0.05 level of significance in 1991. On the contrary, there is no correlation in urban areas of India. Also there is no significant association between the variable with sex disparity in Uttar Pradesh.

Other variables that have significant correlation with sex disparity are Muslim population and 'girls doing household duties'. Both the variables are positively correlated with sex disparity. Although in 1981, Muslim population had no correlation with sex disparity in urban areas, in 1991 it is moderately and positively correlated with sex disparity (0.444) and statistically significant at 0.05 level. In the rural areas there is no relationship. In Uttar Pradesh there is no significant correlation with the sex disparity.

'Girls doing household duties' has positive and high correlation with sex disparity

at all India level both in rural and urban areas in the states during the period, the coefficient values are high and are statistically significant at 0.01 level (see Table A.7, A.8, A.9 and A.10). Again in Uttar Pradesh the variable has significant correlation with sex disparity (0.791) in rural areas in 1991, but no relation in urban areas (see Table A.in annexure). This gives the evidence that the girls' responsibility of doing the household work impacts more in increasing the gap between the boys' and girls' 'nowhere' children in rural areas.

With the parent's educational (primary and middle) level, sex disparity shows negative correlation. In 1981 as well as 1991 the educational status up to primary level of both men and women do not show any significant correlation. However, higher level of education (middle level) particularly that of the adult women is found to have higher influence in reducing the disparity, reflected from the higher coefficient. The coefficient value was -0.524 and statistically significant at 0.05 level of significance in rural areas of 1981. On the other hand, in 1991 the impact of educational status up to middle level of both men and women has strenthened in reducing the disparity. The coefficient values are -0.566 and -0.684 for men and women respectively in rural areas and both are statistically significant at 0.01 level. So far as urban areas are taken into consideration, there was no correlation in 1981, whereas in 1991 the influence of educational status up to middle level of men has strenthened (-0.614), the coefficient being statistically significant at 0.01 level. Therefore men hold educational decision within the family in urban areas, reducing gender inequality. On the other hand in Uttar Pradesh, there is no significant association between adult middle educational status and sex disparity.

It is evident from the analysis, that with increase in sex ratio, the sex disparity would decrease at all India level in rural areas. This is evident from the high significant correlation between the two during the period. The coefficient values are -0.526 in 1981 and -0.607 in 1991. The relationship has strenthened over the period as evident from the increase in significant level (i.e. 0.05 in 1981 to 0.01 level of significance in 1991). It has been found that the states where the sex ratio is low, equal gender relations would tend to reduce sex disparity. Whereas there is no relation between sex ratio and 'sex disparity Uttar Pradesh.

The variable female main workers had significant negative correlation in 1981

with sex disparity (-.520), but the relationship has weakened over the period of time at all India level. This mean that with increase in participation of women in main work, the 'nowhere' children would reduce. Also in Uttar Pradesh similar relationship has been noticed. In 1981 the correlation was significant at 0.01 level, but in 1991 the significant level was 0.05.

Infant mortality rate has no significant correlation with the sex disparity at all India level. On the other hand, in Uttar Pradesh the variable has significant positive correlation with sex disparity (0.275) in rural areas of 1981, thus telling us that with increase in infant mortality rate, a proxy variable of health condition, the sex disparity between 'nowhere' boys and the girls would increase. Again in 1991 significant correlation has been found between the two in rural and urban areas. All the correlation coefficients are statistically significant at 0.05 level.

## Correlation result of 'Nowhere' children and school related variables:

Table 4.4 and 4.5 present the significant school related variables for 'nowhere' boys and girls in India and Uttar Pradesh.

From the correlation matrix of school related factors in rural India in 1981, it has been noticed that the percentage of schools and boys 'nowhere' children were positively correlated (coefficient is 0.626) and statistically significant at 0.01 level. The girls on the other hand do not have any significant correlation with the percentage of schools in rural areas. However in urban areas, the variable had significant positive correlation with both the boys' (0.461) and the girls' (0.500). Both the coefficient values were statistically significant at 0.05 level. This is surprising, as this is generally believed to have negative association with 'nowhere' children. But in 1991 there is no such correlation between the percentage of schools with boys and the girls 'nowhere' children, thereby, implying that the influence of the variable as a determinant has become insignificant over the period.

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**Table 4.4. Significant variables of school related factors for 'Nowhere' children in India.**

| Independent variables | Rural 1981 Boys | Rural 1981 Girls | Rural 1981 Boys & girls | Rural 1991 Boys | Rural 1991 Girls | Rural 1991 Boys & girls | Urban 1981 Boys | Urban 1981 Girls | Urban 1981 Boys & girls | Urban 1991 Boys | Urban 1991 Girls | Urban 1991 Boys & girls |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SCH | ** | | | | | | | | * | | | |
| SDRW | * | | | * | | | | | | | | |
| SSURI | | | ** | ** | * | | | | | | | |
| GOV | | | | | | | | | | | | |
| PA | | ** | | | | | | | | | | * |
| PUN | | | | | | | | | ** | | | |
| TRT | | | | * | | | | | | | | |
| FT | | * | | | | ** | | | ** | | | |
| SPU | | | | | | | | | | | | |
| SKA | | | | | | | | | | | | |
| DISTA | | | | | | | | | | | | |
| MIDM | | | | | * | | | | | | | |
| FTB | | | | | | * | | | | | | * |
| SHBLAC | | | | ** | | | | | | | | |

** Significant at 0.01 level

* Significant at 0.05 level

*for Nowhere' children*

**Table 4.5. Significant variables of school related factors in Uttar Pradesh, 1991**

| Independent variables | RURAL Boys | RURAL Girls | RURAL Boys & girls | URBAN Boys | URBAN Girls | URBAN Boys &girls |
|---|---|---|---|---|---|---|
| SDRW | | | | | | ** |
| SSURI | | | | | | |
| GOV | | | | | | ** |
| PA | | | | | | |
| PUN | | | | | | |
| FT | | * | ** | | | ** |
| SPU | | | | | | |
| SKA | | | | | | |
| SINSR | | | ** | * | | |

** Significant at 0.01 level

* Significant at 0.05 level

As expected, the variable- percentage of schools having drinking water facilities and schools having separate urinals for girls are significantly and negatively correlated with the boys 'nowhere' children in rural areas of 1981. The coefficients are -0.488 and 0.596 respectively and both are statistically significant at 0.01 level. In case of girls, schools having drinking water facilities do not show any relationship. However, schools having separate urinals for girls do matter, as evident from high and significant negative correlation (-0.563). Again in 1991 we find similar relationship between schools having separate urinals and 'nowhere' children in rural areas. For the boys the coefficient is -0.542 and for girls it is -0.488 and both are statistically significant at 0.01 level. But in urban areas there is no significant relationship both in 1981 and 1991. This confirms the fact that the infrastructural facilities reflected by schools having separate urinals for girls' positively influence in reducing the 'nowhere' children and this more true in rural areas.

In Uttar Pradesh, surprisingly schools having drinking water shows significant positive correlation in rural areas for both boys (0.376) and girls (0.443) in 1981. Both are statistically significant at 0.01 level. But in urban areas the variable does not have any significant relationship.

From the Table A (see in annexure) it is clear that separate school for girls at all India level does not have any impact on both the 'nowhere' boys and girls in rural areas of 1981 and 1991. Whereas, in urban areas of 1981 the variable shows significant positive correlation (0.456) with the 'nowhere' boys. It is statistically significant at 0.05 level. Also in Uttar Pradesh there is no correlation between separate schools for girls and 'nowhere' children.

The other highly correlated variable is the percentage of female teachers' which is negatively correlated with 'nowhere' children both in rural as well as in urban areas in 1981 at the same level of significance (0.01 level). In rural areas the coefficient values were -0.511 and -0.617 for boys and girls respectively. In urban areas the corresponding values were -0.609 and -0.614 respectively. This means that with the availability of the female teachers the 'nowhere' children would decline. Again in 1991, the variable is strongly correlated with both the boys (-0.712) and girls (-0.761) in rural areas, but there

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is no correlation in urban areas. Similarly, in Uttar pradesh the variable has high and strong negative association with both boys (-0.628) and girls (-0.618) in rural areas. Whereas in urban areas though the variable has significant positive impact in reducing the 'nowhere' girls (-0.336), but with the boys the correlation is insignificant. This implies that it is in rural areas that availability of female teachers has stronger impact in reducing the 'nowhere' children, and it is more true for the girls in urban areas. This corroborates the findings of Narayan (1995) and Dreze and Sen (1996).

The other significant correlation is between the private aided schools and 'nowhere' children, which show high and negative association, as expected. With the girls', private aided schools were negatively correlated (- 0.574) and statistically significant at 0.01 level in 1981. It may be pointed out here that direct costs of schooling which impose severe burden on family is a severe deterrent to children' access to school. Therefore as the private aided schools increases, the 'nowhere' children, particularly 'nowhere' girls declines. But the variable had no correlation with the boys in rural areas. However, in 1991 in urban areas private aided schools has negative and significant relationship with both the boys and girls 'nowhere' children, the coefficient being -0.450 and 0.472 respectively. Both are statistically significant at 0.05. This implies that with the increase in private aided schools, 'nowhere' children would decreases. This relationship is much stronger in rural areas. Whereas in Uttar Pradesh, significant negative correlation has been found between government schools and 'nowhere' children- both boys and girls at the same level of significance (0.01 level). This is true for both rural and urban areas. This proves the fact that as the government school increases, the 'nowhere' children will decrease. The coefficient values are -0.401 for boys and -0.397 for girls in rural areas. The corresponding values in urban areas are -0.512 for boys and -0.483 for girls respectively.

Private unaided schools show positive correlation with the 'nowhere' boys (0.589) and girls (0.616) at all India level in urban areas 1981. Whereas, in 1991 the variable as a determinant has weakened, as evident from the insignificant relationship between the 'nowhere' boys and private unaided schools. However with the girls the coefficient is

moderate (0.472) and is significant at 0.05 level of significance. This means that, as the private unaided schools increase, the 'nowhere' children also tend to increase.

The remaining variables like teacher's in-service training, type of building (pucca and kaccha) of schools, availability of schools at a distance of 1-2 km and schools having two classrooms for instructional purpose do not have any significant correlation. Also in Uttar Pradesh, there is no correlation between the distance of schools and 'nowhere' girls. Findings of Dreze and Sen (1996) and Tyagi (1993) substantiate this finding.

The other significant relationships are between 'nowhere' children and quality of schools, reflected by percentage of schools having shortage of instructional (blackboard) materials and incentive schemes. In 1991 at all India level percentage of schools having shortage of blackboards have positive and high correlation with both boys and girls 'nowhere' children. The coefficient is 0.609 for boys and 0.490 respectively. It has been noted that the variable is statistically significantly at higher level (0.01 level) with boys than that of the girls (0.5 level). This proves the fact that availability of the instructional materials, which is a proxy variable of school quality, create interest and motivation among the children, thereby, positively influence in reducing the 'nowhere' children. The relationship is much stronger in case of boys and true in rural areas. This corroborates the finding of Sinha and Sinha (1995). However the relationship between the schools having instructional materials and 'nowhere' children in urban areas is weak, as evident from the insignificant correlation.

Incentive schemes like free text- book is found to have significant negative correlation (-0.444) with the boys. For the girls, both mid meal scheme and free text-books have significant negative correlation in rural areas thus implying that with the availability of the incentive schemes, the 'nowhere' children tend to reduce. The coefficient values are with schools having mid day meal schemes and -0.423 with schools having facilities of free text- books respectively. All the values are statistically significant at 0.05 level. Whereas in urban areas, mid day meal schemes have more influence on the 'nowhere' children than other schemes which is evident from significant negative correlation with both boys (-0.459) and girls (0.416). However, the impact of mid meal

scheme is more on the boys than girls' are which is evident from the higher level of significance in case of boys. The variable is statistically significant at 0.01 level in case of boys and 0.05 level in case of girls. In urban areas there is no correlation between the free text- books and the 'nowhere' children. Earlier studies show that incentive schemes like mid day meals create motivation among children and parents.

Another variable that shows significant relationship in rural areas in 1991 is percentage of trained teachers which is a proxy variable of the school quality. The variable is negatively correlated with 'nowhere' boys (-0.410) in rural areas and statistically significant at 0.05 level. However, there is no correlation of the variable with the girls. Also in urban areas we find no significant relationship. This proves the fact that quality of school is an important determinant of the 'nowhere' boys.

Although we find no significant correlation between 'nowhere' children and the type of building, schools having pucca building has significant positive correlation with disparity in rural areas of 1981.The coefficient is 0.624 and statistically significant at 0.01 level. Whereas the Kaccha building, on the other hand, is negatively correlated with disparity, the coefficient value is -0.496 and statistically significant at 0.05 level. In urban areas these two variables do not show any significant correlation. In urban areas of 1991, the variable schools having pucca building has positive correlation (0.465) and statistically significant at 0.01 level. This surprising as it is generally believed that availability of schools having pucca building would reduce 'nowhere' children.

Distance of school (1-2km) is positively and moderately correlated with disparity in rural areas in 1981. The coefficient is 0.462 and statistically significant at 0.05 level thus making it clear that with the increase of distance of schools the sex disparity among the 'nowhere' children increases. This variable has no correlation in 1991 implying that the impact of the variable as a determinant has declined over the period.

So far as the type of schools are concerned we find significant negative correlation between private aided school and disparity in rural areas, both in 1981 and 1991. The coefficient values are is -0.551 in 1981 and -0.497 in 1991. However, the impact has weakened in 1991 as revealed from the lower significant level (0.05 level of

significance) in 1991 compared to 1981 (0.01 level). On the contrary, the private unaided had positive correlation (0.470) in urban areas in 1981 and statistically significant at 0.05 level. As expected, the correlation shows that with increase of private unaided schools, the sex disparity increases. But in 1991 this relationship has weakened as revealed from the insignificant correlation between the private unaided schools and the 'nowhere' children. The remaining variables do not show any significant relationship with disparity.

## Regression Analysis:

In this study, stepwise regression method has been employed to get the best possible factor that explains larger part of the phenomena of 'nowhere' children. In this procedure a series of intermediate regression equations are obtained one for each addition of the variables. The variables entered in the equation are added up in order of their improvement to the overall goodness of fit. The cumulative sum of squares of the multiple "R" and standard error (S.E.) of the estimate indicates the variance included and the confidence limits. In order to avoid the problem of multicollinearity, some selected variables have been taken.

The step wise regression analysis has been computed for both rural and urban areas taking the significant socio- economic and school related variables in consideration, with boys 'nowhere' children and girls nowhere' children and disparity as dependent variables.

### 'Nowhere' children as explained by socio- economic variables.

In rural areas of India in 1981 the most important determinant of both 'nowhere' boys and girls was primary educational status of adult women that entered in the step I of the analysis. Other independent variables entered in the analysis were primary educational status of adult men and sex ratio in that order, all of which have negative association with 'nowhere' boys. The primary educational status of adult women alone explained the maximum proportion of variation (43 percent) of boys and girls (54.4 percent). The three

variables together explained 57.5 percent of the variation of the boys. It is clear from the Table A.21 and A.22 (see in annexure) that the value of F ratio becomes less significant after step I as its value is decreasing. Thus the relationship as given in step I may be identified as an optimal. Therefore primary education of adult women was the most important determinant in 1981 at all India level which highly motivate for children' schooling.

With the girls as the dependent variable the independent variable entered in the subsequent steps following the primary educational status of women were 'girls doing household duties', child woman ratio, middle educational status of adult women and primary educational status of adult men. However, the contribution of adult men primary education is very small in increasing in the value as evident from the gap in $R^2$ in Table A.22 (see in annexure).

Whereas, in urban areas with 'nowhere' boys and girls as dependent variables the first independent variable to enter the equation was 'girls doing household duties' followed by dependency ratio, both of which had positive correlation with the 'nowhere' boys and girls. 'Girls doing household duties' explained 27 percent of variation of boy's only (see Table A.23 in annexure) and 35 percent of variation of girls. Girls doing household duties and dependency ratio put together explained 47 percent of boys (see Table A.24 in annexure) and 58 percent of girls. Therefore, we find that these two variables are more important determinants of both 'nowhere' boys and girls. Also earlier studies confirm this finding that where the burden of the household duties' and that of dependents are high, 'nowhere' children is high and the impact is more on girls.

Also in case of sex disparity 'girls doing household duties' was the most important determinant that enter in step I both in rural and urban areas. While in urban areas it explains 33 percent of variation of sex disparity, in rural areas it explains 53 percent (see Table A.25 and A.26. in annexure). It indicates that in rural areas, the sex disparity among the 'nowhere' children increase more with the burden of household duties' among the girls compared to the urban areas. The other significant variables that enter in the subsequent steps in order of their importance are middle educational status of adult women, sex ratio and female main workers, all of which are negatively correlated. These

three variables and that of 'girls doing household duties' put together explain 58 percent of the variation of disparity. Therefore it can be argued that higher the educational status of women in the society and participation in main category of work, equal gender relations and decision making process of the women in the family significantly influence in reducing the sex disparity.

From the regression analysis in 1991, it is revealed that the most significant variable explaining the phenomenon of 'nowhere' boys in rural areas is child woman ratio which is positively correlated with the 'nowhere' boys. Other independent variables that enter in the result in the order of their importance are primary education of adult women and middle educational status of adult men, both of which are negatively correlated. While child woman ratio explains 56.8 percent of the variation, the least explanatory variable is adult men middle educational status. It has been observed from the Table A.27 (see in annexure) that the contribution of the variable in increasing the value of $R^2$ is very less. After step III, $R^2$ and F value are reducing significantly. Thus step III is the explanation for the 'nowhere' boys in rural areas where the maximum variation of the phenomenon among the states are explained by the three variables.

Whereas rural areas in case of girls, the most significant variable that enter in the first step is the dependency ratio both in rural and urban areas, which has high positive correlation. The variable alone explains 64 percent of variation in rural areas and 43 percent in urban areas. Therefore dependency ratio the most important determinant of 'nowhere' girls at all India level. In rural areas other significant variables that enter in the analysis in that order are primary education of adult women, primary education of adult men, middle education of adult men and child women ratio. However, it has been noted from the Table A.28 (see in annexure) that after step II, the $R^2$ and F value are decreasing significantly. Thus step II is the optimal explanation for the variation of 'nowhere' girls where the maximum variation among the states are explained by the two variables- dependency ratio and the adult women primary education together explain 85 percent of variation of girls in rural areas, which is remarkably high.

On the other hand, in urban areas, dependency ratio is the most important

determinant of 'nowhere' children that enters in the first step of the analysis. The variable has the highest positive correlation with the 'nowhere' boys and explains 36 percent of the variation of boys. Other important determinants are infant mortality rate and the primary education of adult women that enter in the step II and step III respectively. Infant mortality rate has positive correlation with the 'nowhere' boys which explains 13.4 percent of the variation. However the three variables when put together explain 51 percent only, the contribution of infant mortality rate, a proxy variable of health condition, is less in case of boys. With the girls as dependent variable, the independent variables that enter in the result following dependency ratio (enter in step I) are girls doing household duties and infant mortality rate. While girls doing household duties explain 16.9 percent of the variation, infant mortality rate explains only 7.3 percent. It has been noted from Table A.29 and A.30 that step III is the optimal explanation for variation of both boys as well as girls 'nowhere' children after which $R^2$ shows declining trend.

When disparity is taken as dependent variable, the independent variable that enters first in the analysis is middle educational status of adult women, which explains 39.8 percent of the variation in disparity. The value increase to 53.93 percent when sex ratio is added up in the next step. Girls doing household duties enter in the third step (Table A.31 in annexure) whose contribution in increasing the value of $R^2$ is very less. It explains only 2.25 percent of the variation. On the other hand in urban areas, the significant variables that enter in the result in order of their importance are middle educational status of adult men, 'girls doing household duties' and primary education of adult women. While middle educational status of adult men explains 34.8 percent of the variation in disparity, the other two variables together explain 12 percent only (Table A.32 in annexure). It may be recalled from earlier studies that higher educational status of the parents has positive impact in reducing the sex disparity among the 'nowhere' children.

From the regression analysis it is revealed that in case of Uttar Pradesh with boys and girls as dependent variables, the independent variables that enter in the result were similar, though not in the same order of their importance. This is true for both rural and urban areas of 1981. It has been observed from the Table A.33 (see in annexure) that in

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rural areas the most important determinant of both boys and girls 'nowhere' children was percentage of female main workers(enter in step I) which had negative correlation with the 'nowhere' boys and girls. While for boys percentage of female main workers explained 31 percent, in case of girls it explained 65 percent. Other determinants were primary educational status of adult men, Muslim population, Scheduled Caste, child women ratio and primary education of adult women. However, both in case of boys and girls after step IV the value of $R^2$ and F value has decreased significantly. Therefore step IV is the optimal explanation of the variation. These four variables together explained 53 percent of the variation of the 'nowhere' boys. On the other hand they explained 81 percent of the variation of the 'nowhere' girls, which is remarkably high (Table A.34 in annexure). However, the contribution of the Muslim population and Scheduled caste was small.

Against this, in urban areas with boys and girls as dependent variables, the independent variable that entered in the step I was Muslim population (Table A.35 and A.36 in annexure). The variable explained 55.2 percent of the variation of 'nowhere' boys and 41 percent of variation of 'nowhere' girls. Earlier discussion shows that overall poor performance of the community do not motivate children' schooling. In case of boys other independent variables that enter in the analysis in that orders were agricultural labour, primary educational status of adult men, dependency ratio, female main workers and middle educational status of adult women. Agricultural labour had positive correlation with the 'nowhere' boys and explained 7.47 percent of the variation. The rest of the variables contribute little in the increase of $R^2$. Also the value of $R^2$ decreases after step VI. Therefore step was the optimal explanation of variation in case of boys where the six variables together explained 71.7 percent. In case of girls we find that step V was the optimal explanation of variation where the variables- Muslim population, dependency ratio, agricultural labour, primary educational status of women and female main workers together explained the variation by 63.86 percent.

On the other hand in 1991 the most important determinant of 'nowhere' boys, girls and sex disparity in rural areas is 'girls doing household duties' (see Table A.37, A.38 and A.40a) that enter in step I. The variable has positive correlation with all the three

dependent variables and explains the maximum variation of 'nowhere' boys (40.8 percent), girls' (51 percent) and sex disparity. This is followed by middle educational status of adult men, infant mortality rate, primary educational status of adult men, percentage of non- workers and primary educational status of adult women, that entered in the subsequent steps. All the variables together explain 69.5 percent in variation of 'nowhere' boys. In case of girls, step VII is the optimal explanation.

In urban areas, the independent variable that enters in the step I of analysis is the dependency ratio that explains maximum variation of both 'nowhere' boys and girls. Other important determinants are 'girls doing household duties' and Muslim population. It has noticed from the Table A.39 and A.40 (see in annexure) that these three variables explain 66 percent of variation of 'nowhere' boys and 80 percent of variation of 'nowhere' girls, which is remarkably. In urban areas the burden of the dependents and household duties are most important factors that contribute to 'nowhere'.

With disparity as dependent variable, the most important determinant is female main workers in rural areas, which has negative correlation with that of disparity. Other independent variables that enter in the subsequent steps are agricultural labour and child women ratio, which are positively correlated. It has been noticed from the Table that step II is the optimal explanation of the variation where the two variables- female main workers and agriculture labour explain 47.98 percent of variation in disparity in rural Uttar Pradesh (see Table A.41 in annexure). On the other hand, in urban areas the most important determinant of sex disparity (see Table A.42 in annexure) is the agricultural labour. In rural areas the participation of the women in main category of work is important for implanting equal gender relations that would reduce sex disparity. Earlier studies also show that with the increase in poverty, the sex disparity among the 'nowhere' children increase in Uttar Pradesh.

**'Nowhere' children as explained by school related factors:**

From the regression analysis it has been observed that with boys as dependent variable the most important determinant was the percentage of schools that entered in the step I and explain 36 percent of variation in rural areas of 1981 (Table A.43). Other important determinants were schools having separate urinals for girls, schools having drinking water facilities and percentage of female teachers (enter in the subsequent steps). Our earlier analysis shows that with the availability of these physical as well as human facilities, 'nowhere' boys reduces significantly. However, from the Table it is revealed that after step I the adjusted $R^2$ and the F value decreases significantly, implying that step I is the optimal explanation of the variation.

On the other hand, the most important determinant of the 'nowhere' girls was percentage of female teachers in rural areas that explained 34.2 percent of the variation. Other important determinants were private aided schools and schools having separate urinal for the girls both of which had negative association with the 'nowhere' girls. From the Table A.44 (see in annexure) we can say that the step II was the optimal explanation where the variables- percentage of the female teachers and private aided schools explained maximum variation (42.2 percent) in India as a whole. Whereas in urban areas the most important determinant is the percentage of private unaided schools which has positive correlation with the 'nowhere' girls and explain 37.9 percent of the variation (Table A.45). The other important determinant was percentage of female teachers', that explained 22 percent of variation. Again in case of boys in urban areas the most important determinant, the percentage of female teachers', explained 33.75 percent of the variation (Table A.46 in annexure). Other important variables were percentage of private unaided schools, percentage of girls' schools and percentage of schools, all of which together explained 58 percent of the variation of 'nowhere' boys.

The important determinants of the sex disparity in rural areas were the schools having pucca building, percentage of private aided schools and distance of schools (1-2 kms) in 1981. All the variables together explained 70.7 percent of the variation (Table A. 47). Whereas, in urban areas the most important determinant was the percentage of

private unaided schools that explained 17.9 percent of the variation of sex disparity in urban areas (table A.48).

In 1991, the most important determinant of both boys and girls 'nowhere' children is the percentage of female teachers (enter in the step I) which has high negative correlation in rural areas of 1991. The variable explains 48 percent of variation of the 'nowhere' boys and 56 percent of the variation of 'nowhere' girls (Table A.49 and A.50 in annexure). With boys as dependent variable the significant variables that enter in the analysis in order of their importance following the percentage of female teachers are schools having shortage of blackboard, trained teachers, free text- books, schools having drinking water facilities and schools having separate urinals for the girls. However, the step IV is the optimal explanation because after step IV adjusted $R^2$ and F value are decreasing significantly. The contribution of schools having drinking water facilities in raising the $R^2$ is very less. All the five variables together explain 78.2 percent of the variation of 'nowhere' boys. Thus in 1991 the important factors that influence the 'nowhere' children are availability of female teachers, quality of schools and incentive schemes.

On the other hand with the 'nowhere' girls as dependent variable, the significant variables that enter in the result following the percentage of female teachers are schools having shortage of blackboard, schools having facility of free text- book and mid day meal meals. All the variables together explain 68.35 percent of variation. It is clear from the table, that step IV is the optimal explanation. However, the contribution of incentives schemes (free text- book and mid day meal) in raising $R^2$ is less, as evident from the difference of $R^2$.

In urban areas, the most important determinant of the 'nowhere' boys is the schools having mid day meal facilities which explains 13.9 percent of the variation of 'nowhere' boys. The other important determinant is private aided school but its contribution in raising the $R^2$ is very less (Table A.57). Earlier studies also shows that both the variables have significant positive impact in reducing the 'nowhere' children.

In case of 'nowhere' girls', the independent variable that enter in the first step of the analysis is the private unaided schools which is positively correlated with the 'nowhere' girls. This is followed by percentage of private aided schools, percentage of government schools and schools having mid day meal facilities, all of which positive impact in reducing the 'nowhere' girls. It has been noticed from the Table that the step II is the optimal explanation, where the two variables- private unaided schools and private aided schools explain maximum variation of 'nowhere' girls at all India by 29.33 percent (Table A.52).

The most important determinant of sex disparity in rural areas is found to be percentage of trained teachers' (enter in step -I), that has negative correlation with that of disparity. It may be recalled from earlier studies that as the percentage of trained teachers which is a proxy variable of school quality, increases the sex disparity among the 'nowhere' children would decrease. The variable explains 46.22 percent of the variation of sex disparity (Table A.53). Other significant variables that enter in the analysis in that order are percent of private aided schools, percent of girls' school and schools having pucca building in that order. They together explain 73.2 percent of variation. The contribution of the schools having pucca building is very less. Whereas in urban areas, the most important determinant is the schools having kaccha building that explain only 14 percent of the variation (Table A.54).

In Uttar Pradesh among the school- related factors, the most important determinant is the percentage of female teachers for both 'nowhere' boys and girls in rural areas. It explains 38.4 percent of variation of 'nowhere' boys and 36.5 percent of variation of 'nowhere' girls (Table A.55 and A.56). Other variables like. schools having 2 classrooms for instructional purpose, drinking water facilities and government schools, enter in that order, female teachers put together with schools having 2 classrooms for instructional purpose explain 52.5 percent of variation of 'nowhere' boys. Again in case of girls we find that the contribution of these variables- schools having drinking water facilities and government schools in raising the value of $R^2$ is less. Earlier analysis show where there is lack of female teachers the incidence of 'nowhere' children is high.

On the other hand in urban areas, the most important determinant of both the boys and girls 'nowhere' is government schools that enter first in the analysis. It has been noticed from the Table (Table A.58 in annexure) that the next important determinant of the 'nowhere' boys is the schools having 2 classrooms for instructional purpose, a proxy variable of school quality, which has very little contribution in increasing the value of $R^2$. In case of girls other important determinant is the percentage of female teachers which explains 15.8 percent of the variation of the 'nowhere' girls. Again percentage of female teachers explains the maximum variation of sex disparity. It may be recalled from the earlier studies that where the percentage of female teachers is low, the percentage of 'nowhere' girls, in particular, as well as sex disparity is high. Lack of female teachers reflects the unequal gender relation in the schools and society.

Significantly, a wide spectrum of socio- cultural and school related factors contribute to keeping the children 'out-of-school'. Both boys and girls seem to be affected by the same set of factors, although for girls, 'household duties' do emerge as having a more significant bearing on their staying at home. Moreover the availability of female teachers, quality of schools, type of institution and provision of incentive schemes appear again and again in the study as the most important factors of 'nowhere' children.

# Chapter-5
## Programs and policies

Against the background of the problem pertaining to the 'nowhere' children discussed so far, the present study tries to focus on the various programs and efforts that have been undertaken in different states of India and in the state of Uttar Pradesh in particular.

The 1986 National policy on education set the stage for central government to play an increasingly important role in primary education. Besides having recognizing the needs to make concerted effort to expand and improve elementary, education (both formal and informal) the policy gave priority to reduce the disparities in the access to the education for girls. To carry out the goals and implement the policy, the Ministry of the Human Resource Development, Department of the programs (or centrally sponsored schemes) assist states with the development of primary education (MHRD 1993). India's central government is responsible for developing various policies and for funding centrally sponsored plan schemes in primary education. It supported Operation Blackboard for small rural schools, a national research and development programs, district institute of education and training to provide professional support to teachers, state level programs of non formal education and total literacy campaigns. Secondly, recognizing the role of location specific factors influencing the access to education the central government launched District Primary Education Program in 1993 in order to increase enrollment and improving the quality. A brief account of the schemes and the success there off, are discussed in this section.

It may be recalled from the earlier studies that the phenomena of 'nowhere' children in India exhibit regional and temporal variation. Also it arises from our analysis that multiplicity of the factors contribute to the phenomenon of 'nowhere' children. Among the home- related factors important determinants are educational status of the parents, burden of child- care, dependents and household duties.

Among the school related factors, the important determinants of 'nowhere' children are percentage of female teachers, instructional materials like blackboard, schools having drinking water facilities, schools having separate urinals for girls, government schools, private aided schools etc. which have positive impact in reducing the 'nowhere' children. In other words where there is lack of these facilities, the 'nowhere'

children is high. Recognizing the needs of these physical and human facilities in schools, concerted effort have been made by the central government and state specific initiatives have taken in order to expand and improve the facilities.

For instance, Operation blackboard program was established by the department of education in 1986, which tried to focus on the bare minimum facilities like lack of female teachers, inadequate teaching materials and aids. This program also enhances state education support programs, including text book development and publications, planning and management, research and evaluation and teacher training.[1] We find that there is significant positive impact of the training of teachers in reducing the 'nowhere' boys in rural areas. In this context, Operation blackboard program emphasizes on the teachers training by establishing Cluster Resource Centre at the school levels and Block Resource Centre at the block level. Thus Operation Blackboard treated these three interdependent components in order to form a composite approach to the problems concerned in the school. a. It should have at least two reasonably large sized all weather rooms along with separate toilet facilities for boys and girls. b. at least two teachers and one of them should be woman. c. essential learning and teaching material including blackboards, maps, charts, a small library, toys, games, some equipment for work experience.[2] Taking into consideration the importance of the female teachers in reducing the 'nowhere' children, Uttar Pradesh Basic Education Projects aims to increase the female teachers in the state. There has been increase of 3 percent points (i.e. 24 percent in 1994 to 27 percent in 1997) of the female teachers in the state (World Bank 1997:26).

Another program, District Institutes of Education and Training (DIETS), started in 1998, by the Department of education, follow a standard organization model, with objectives of training, planning and management, research and evaluation, curriculum and material development, education technology and work experience education. It finances for the establishment of new institutes of education and training in all rural districts and converting the existing ones. With the establishment of the District Institutes of Education and training, the teachers training programs were made more meaningful empowering them with decision making, which increased their motivation.[3]

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[1] World Bank Report, 1997, p.22.
[2] Department of Education, Annual Report, 1997-98, p.32.
[3] 'The state off primary education in India', World Bank Report, 1997, p.32.

Earlier studies and our analysis have established strong relationship between the 'nowhere' boys and the quality of schools reflected by the availability of trained teachers and instructional rooms and materials. In this context, the Central Advisory Board on Education (CABE) started in 1992, called for an integrated approach to primary education development focussing on the quality of primary education. It emphasizes investment in the quality of primary instruction, particularly in- service teacher training, improved teaching and learning materials and improved school facilities. It has objectives of providing schooling facilities to girls and under privilege groups, in particular.

States have also initiated Basic education Project. The flagship basic education project, the Bihar education project, was started with assistance from the UNICEF, Government of India with objective to get every child into the school. We found in our analysis that the girl child comprises the vast proportion of the 'nowhere' children. Also it has been found that in specific pockets and among certain population sections of Uttar Pradesh, access to school is very low. This is particularly true for the girls' of disadvantaged groups of society such as Scheduled Caste and minority communities. It has been found that Muslim population and Scheduled Caste population has positive impact in increasing the 'nowhere' children. In other words, children of Scheduled Caste population and Muslim population are less likely to go to school. Therefore special effort has been made by the Bihar education project to provide education to the girl child and children of the Scheduled Caste. This problem has also been addressed through a range of interventions by District Primary Education Project of Uttar Pradesh. District Primary Education Project of Uttar Pradesh developed model clusters in respect to the need of schooling access to the girls'. This clusters aims to work intensively so as to provide all the possible Project inputs and closely monitor progress in an attempt of bringing nowhere children into the mainstream schooling system. This Model Cluster stressed on the issue of the gender sensitization of all- including the teachers, teaching- learning process in the classrooms through use of gender aware material such as songs, slogans, scripts etc. Besides, efforts have been given to strengthen Maktabs/ Madrasas in order to impart the formal education to 'nowhere' girls' of Muslim community. It aims to develop formal curriculum. In some districts, special efforts are made like establishing short and

long term camps which seek to mainstream the 'nowhere' children that achieved remarkable success.

Literature and our analysis shows that primary education of the adult women has significant positive impact in reducing the 'nowhere' children. Thus in order to mobilize the women for the educational activity, Mahila Samakhya Program was launched with the community support. A consequence of the Bihar Education Project is that the enrollment of children in schools has improved.

In Rajasthan, Rajasthan Basic Education Project, the Lok Jumbish (a people's movement) was started in 1992, supported by SIDA, Government of Rajasthan (Swedish Intervention Development Agency). In each state, registered societies have been created to receive and disburse funds and to provide an umbrella organization, closely tied to state education department, for project implementation. The phase 1 of the project was started in September 1992, mainly to establish a management system and improve the quality of primary education. In local government the unit of intervention is a block community development. It extended to 25 blocks. The phase II is now under implementation with duration of three years, whose main objective directs toward the universalization of primary education, simultaneously emphasizing on the quality improvement. It is expected to cover 75 blocks. The block level project management structure has been fully strenthened to allow for educational processes and local area planning. The technique of 'school mapping' is Lok Jumbish's special contribution to the task of mobilizing people for education. School mapping refers to the exercise of depicting every household in the village with symbols- indicating the schooling status of any household member in the 5-14 age group and thereby to locate households that needs special attention. The members mainly consist of Lok Jumbish's workers called 'Perak Dal', are engaged in field surveys relating to the school mapping and making proposals. The Lok Jumbish culture emphasizes a high degree of autonomy and freedom at the block level. This school mapping, careful micro planning at the village level makes it possible to monitor the participation of every child in primary education. Besides it stresses on the empowerment of the women. Special facilities are provided to the women and the girls, who want to educate but missed the chance. Also schooling improvement planning programs through Building Nirman Samitis, effective Non formal education, a

very innovative management structures and teacher- training programs are some of the other initiatives. The Lok Jumbish approach to non formal education called Sahej Shiksha aims to support fully educate child up to class V level. Thus the principal strategies of this project are decentralization, empowering women, improving teachers staff and participation, quality, training and evaluation.

In western Rajasthan, Marushalas (desert schools), alternative school conceived by URMUL trust - an NGO working in the deserts of Rajasthan, was started in 1992. At present, there are 6 Marushalas working in Rajasthan, especially in those areas where no school exists. Studies show that due to poor quality of schooling system and lack of instructional materials children lost interest in education. Therefore the Marushalas came up with plenty of teaching aids to attract children. It emphasis on the friendly relations between children and the teachers. Rajasthan has now been an innovative state in this respect, where the issue of the teacher absenteeism has been pointed out. More and more efforts have been made to sort out the problem with the help of Shiksha Karmi Scheme by appointing local youth and training them well for teaching the primary classes, so as to increase the interest of the children. Another non- governmental organization, Eklavya, started in Madhya Pradesh emphasize on curriculum development and teacher training programs. The teacher training programs emphasize on the joyful activity as a tool of learning. This package also stresses on the active classroom teaching activity with confident and articulate children who enjoy their task. Teachers are encouraged to be free of the rigidity of the fixed time for learning and relate subject matter to the environment of the children in order to bring the 'nowhere' children in schools. The spirit of the enquiry, learning by observation and learning by doing are the essential features of Eklavya approach. It also emphasizes the need for integrating cognitive and non-cognitive areas. Eklavya text- books are the products of interaction with the children in Madhya Pradesh, text- books are contextualised so as to reflect the experience of the children. The language in text- books is so simple to assimilate children into class activities. The package for class I-V called Khushi Khushi,[4] along with supplementary classroom material and a system for teacher support, training was ready by 1993-94. Based on this experience, later, Shiksha Samakhya and Madhya Pradesh SCERT (State

[4] Probe Report, 1999, p.484.

Council of Educational Research and Training) developed a comprehensive package program for quality involvement in primary schools so as to attract the nowhere children in 16 districts and then across the whole state.

Another non - government organization, M. Venkatarangaiya (M.V.) Foundation has been working since 1987 in the state of Andhra Pradesh which has different strategies for different age groups. It identify the 5-8 age group children who are often idle or just help their parent in several ways. It may be recalled from the literature that children do not go to school and engaged in domestic chores. Also our analysis gives the evidence that the burden of the dependents and of household duties increase positively influence the 'nowhere' children. M. Venkatarangaiya Foundation tried to convince the parents to send them to schools.[5] In Non Formal Education centres, which increase motivation among children and pursuade them to join a residential 'summer camp'. These summer camps are the cornerstones of the M. Venkatarangaiya Foundation's work. It has done pioneering work in getting children out of work and into the school in more than 500 villages of Ranga Reddy district. It may be recalled from our analysis that burden of household duties significantly increases the incidence of 'nowhere' children, particularly the girls in the states as well as in the districts of Uttar Pradesh. Therefore, the summer camps are held separately for boys and girls separately and children are divided into various committees to organize the day to day chores (cleaning utensils, sweeping etc.) and reallocate the work responsibilities in order to bring the girls into schools in particular. In order to make the atmosphere attractive and joyful there area library sessions, review sessions and homework sessions. It seeks to make creative use of local resources. In 1992, the M. Venkatarangaiya Foundation survey in Shankarapally Mandal found that the 'out of-school' children aged 5-14 years reduced to 5550 out of total 10,661.[6] Taking into consideration the success of M. Venkatarangaiya Foundation, the Social Welfare Department of the Government of Andhra Pradesh (GOAP) took it as a model and initiated a back- to school program through bridging courses.

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[5] Burra, N., 'Cultural stereotypes in household behabiour, girl child labour', *Economic and political Weekly*, p.84.
[6] Probe Report, 1999, p.111.

Earlier studies reveal that the persistent unequal and stereotype gender relations is highly responsible for the vast section of girls who are out of school. In this context M. Venkatarangaiya Foundation came up Andhra Pradesh that influenced in shaping the cultural preferences, particularly in relation to gender stereotypes, as part of multiple strategies. Taking into consideration the girl 'nowhere' children, M. Venkatarangaiya Foundation has appointed 150 girl child activities consisting of 25 Mahila organizers and 27 motivators working full time exclusively for this issue and motivating parents to send girls to school. In this regard, M. Venkatarangaiya Foundation organizers, volunteers and Mahila organizers had come forward to motivate girls' education in the Dhannaran village, Marpally Mandal and tried to change the gender relations within the household. The result is the intense motivation at the village level and discussion with the women's groups in the area that have led to large number of girls getting into the school system.

Another organization, Lokshala was initiated in March, 1995, in Bihar by Bharat Jan Vigyan Jath, an All India people's science network with academic support from Delhi University's Department of Education, as an alternative to the universalization of education. It envisaged as a nation- wide process of social intervention in the government school system. It consists of those sections of a society whose children do not go the school at all. It stressed on the access of the good quality education and reconstruction of the relevant curricula. It is found to have positive effect in creating awareness among the parents to send their children in the school in Bihar, Assam and Maharashtra.

In our earlier studies we have found that incentives schemes have considerable impact in reducing the 'nowhere' children. Of the various incentive schemes, mid day meal schemes and that of text- book facilities have significant impact even in urban areas. Studies also showed the positive effects of the program in reducing non-attendance (Devdas 1972; Harris 1991; Jayakunar and Rajan 1992). Government has provided many states with the educational and non- educational incentive schemes. For instance, Tamil Nadu has laid great emphasis on the non- educational incentives like the Chief Minister Noon Meal Program, emphasizing on day care siblings and target at interventions like Tamil Nadu Integrated National Program. The Mid day meal scheme was introduced in Tamil Nadu in 1956 for the first time in order to attract children in school and improving the nutritional status of children. Minimum levels of learning, started in 1989 also aims to

form the basis for new curricula and primary text books in various states. Bihar education project aims to provide free text- books and uniforms for the girl child and children from the Scheduled Caste.

It may be recalled from the literature that the physical facilities in schools are highly lacking in Uttar Pradesh. Our analysis reveals that availability of physical facilities (drinking water and separate urinals for girls) and the quality of schooling reflected through the availability of instructional materials and trained teachers have significant positive impact in reducing the 'nowhere' children. The Uttar Pradesh Basic Education Project (UPBEP) started in October, 1993 in 17 districts aims at providing effective and quality teaching- learning process reaching to all children in the age group 5-14 years. Also it placed greater emphasis on the infrastuctural development of the schools. It also stressed on the setting of the drinking water facilities in schools as well as separate toilets for girls'.

Taking into consideration the sex disparity our analysis reveal significant impact of the factors like burden of household duties, educational status of adult men and women, trained teachers etc. In this context, the gender strategies of Uttar Pradesh Basic Education Project's Program include the following:

- Creating girl friendly school environment through awareness building activities.
- Imparting gender sensitization through attitudinal change and interactive process.
- Teacher's training process to help reduce gender- bias practice in classrooms.

Also efforts directed at motivating parents to send their girl children to schools and exerting pressure on the school authorities to cater to the needs of girls are the high points of the program's intervention for girls' education. Interestingly, it strives to built a pro-active community, with better understanding of issues in primary education. So far as the question of the girls' education is concerned, it is taken as a central issue of universal Primary Education of Uttar Pradesh by duly addressing the gender concerns at all levels of program implementation. It stresses on the creation of the favorable environment for the girls, with simultaneous effort being directed at the community and the school system, with backing of the supportive state policy. Besides, it also addresses the regional and gender disparities of the educationally backward states. It's gender strategy seeks to make educational system more responsive and supportive to the needs of the girls and

create community demand for girl's education and motivating the parents through the campaigns, environmental building efforts, women's camps and meals, ate. It seeks to establish closer link between parent's band the teachers setting up facilitative structure at the grass roots.

As we have already seen that with the increase in distance of schools the sex disparity increases. Taking into consideration this factor, Uttar Pradesh Basic Education Project I and II as well as District Primary Education Project II has made efforts to provide primary school within a radius of 1.5 km. For a habitation of 300 population in order to make easy access to schools for the girls', in particular. It builds confidence among the parents to send their daughters to schools (located nearby), as it reduces the distance, which she has to travel to reach schools. The Uttar Pradesh Basic Education Project has also played a major role in augmenting the strength of teachers. It Centre based approach called 'Shiksha Ghar'. About 60 alternative schools in the remote areas of two District Primary Education Project districts- Sonbhadra and Lakhimpur Kheri are functioning.

A number of Programs has being organized in Uttar Pradesh with the objective of sensitizing the people regarding girls' education so as to create supportive environment for girls' education at community level. One such example is Village Education Committee, a grass root level body. The Village Education Committees are more active in the states of Uttar Pradesh and Orissa. It is involved in bringing the community and schools closer to each other to establish an interaction and effective school, management systems. They are actively involved in carrying out a large number of activities for micro planning such as household surveys, listing the 'nowhere', intervening with their parents to motivate them to send their children, specially daughters to school. Village Education Committee members play crucial role in coordinating girl child centered intervention under the project. Within the Village Education Committee, there is provision of at least three women members, one elected member from the panchayat, one nominated Scheduled Caste women and one nominated mother. Besides, Mothers' and Teachers' Association are formed in schools in order to increase women's participation.

Another program is that of Meena Campaigns, a special intervention to create community commitment for girls' education has been initiated under District Primary

Education Project. Mahila Samakhya Program has been initiated in Uttar Pradesh with the objective of providing space for women to raise questions and demand for education for themselves and their daughters. Such empowerment oriented strategies is operation in 10 districts of Uttar Pradesh viz. Tehri Garhwal, Saharanpur, Banda, Varanasi, Pauri Garhwal, Allahabad, Sitapur, Auriya, Gorakhpur and Nainital with support from Uttar Pradesh Basic Education Project funding. Apart from this the Mahila Samakhya Program provides a range of educational opportunities for different age groups. These initiatives are Bal Kendras (children in the age group 6-14 years), Kishore Kendras, Women's Literacy Camps and Mahila Shikshan Kendras. Of these, special mention is that of the Bal Kendras. These are operational in 10 districts and play a crucial role in providing space for 'nowhere' children, especially girls'. The characteristic feature of Bal Kendras that deserves mention is that these are established taking into consideration each district's needs and motivating women to educate their children. Therefore it sought to provide a local space near homestead for imparting education. Accordingly, they are known as Udan Khatolas in Tehri Garhwal, Bal Kendras in Varanasi Rhododendron flower in Baraunser and Hurly burly in Saharanpur. Bal Kendras were started in Varanasi, Tehri Garhwal and Saharanpur in 1990. At present, there are 164 Bal Kendras operating in the State of Uttar Pradesh. In order to create an environment supportive for girls' education, in particular, it placed central focus on girl child within the curriculum. 'Anudresika', co called teachers at Bal Kendras were trained for multigrade teaching process in the age group 4-14 years.

Another program, Kishore Kendras stressed on the flexible timings and presence of local female teachers, which have contributed to the access of the schooling facilities to the girls' in large numbers. Such Kendras are operational in Gorakhpur district (in those villages where there are no schools in the vicinity), 4 Kendras in Nainital, 4 in Sitapur and 6in Auraiya district. These Kendras help to facilitate entry of the 5-14 age group children into the mainstream school and creating awareness in the community about the positive role played by educated girls' in terms of development.

Besides, Core Team has been developed with members from the women's and youth group, Cluster co-ordination, the district co-ordinator for girls' education and the district project officer. It gives specific attention to the enrollment of 'nowhere' girl

child. Depending on the cause that keeps girls out of the schooling system, it intends to provide for alternative schooling facilities. By carrying house to house survey, it aims to coinscentise parents' and teachers' combined efforts to ensure girl's attendance in school. The idea of flexible timing was one of its central objectives. District Primary Education Project- II also provide a range of alternative models in order to cater to the needs of the 'nowhere' children, considering the girls' in particular. These alternative school centres, numbering a total of 645 centres in different districts of Uttar Pradesh, have achieved remarkable success in bringing the 'nowhere' children into the schooling system.

We have seen in our analysis that the burden of the young siblings reflected by the child woman ratio has significant impact in keeping the children out of schooling system. Therefore child- care centres were set up to take of the child under the initiative of the Kishore Kendras. Another model, known as Balshala, also targets to bring the girl child in the age group 6-11 years in the schools, by targeting to overcome the problem of child- care, that is a serious deterrent of the girls' access to education. Prahar Pathshalas, on the other hand, seek to cover the 'nowhere' girl child in the age group 9-14 years, as it is the critical period for the girls' when they are mainly withdrawn from attending schools.

Recently considerable thrust has been given to the quality improvement Packages under Programs of Uttar Pradesh Basic Education Project and District Primary Education Project, in order to make the curriculum interesting and attractive. This include systematic revision of the curriculum, instructional materials and teacher training methodologies etc., so as to remove gender bias in text- books and curriculum. This would enhance self- esteem of the girls' and ensure equal opportunity for participatory learning activities. Neverthless, some special interventions are also undertaken in the state of Uttar Pradesh, but addressing the issue of ' nowhere' children, in particular, needs specific attention. This will go on long way to solve the problem of the vast proportion of the children who are virtually denied of the basic human rights.

The Government of India had introduced the Non formal education scheme in 9 states identified as educationally backward in 1979-80 as an alternative to the formal system of education which aimed at bringing 'nowhere' children to the schools. The parallel system of the non- formal education was given primacy in the National

Education policy of 1986.This program operates in 20 states and union territories, Officially there are 2.4 lakh Non Formal Centres in India.[7] It aims to provide real flexibility rather than subject centered in both the content and the process of elementary education, through flexible school timing. The teaching- learning material has been specially designed for this purpose (written in local language) and supplied free of cost to all the learners. As a result, learning (where the themes in the text- books are taken from local environment), becomes a joyous activity. Blackboard was the main teaching aid. It stressed on the active participation and willingness instead of compulsion.

Evaluation studies shows that in most of the cases the programs did not achieve remarkable success. For instance, Probe survey reports the success of the operation blackboard. Although the proportion of the single teacher primary schools in the BIMARU states has significantly declined, inadequacies of the teaching aid and classroom material has been partially relieved, the overall achievements of the Operation Blackboard are said to be well below the target. Only one fourth of all the government schools in the Probe villages attain the minimal benchmark. One of the consequences of the appointment of the extra teachers under Operation Blackboard (which meant additional appointment) is that several states slowed down on regular teacher appointments. It substituted for normal teacher appointments rather than supplementing them. However, in many states, it led to an improvement in schooling facilities, but did not lead to the involvement of the community in the management of schools. We have the extreme examples of states like Bihar, Madhya Pradesh, Andhra Pradesh, Assam, Uttar Pradesh and Rajasthan.

Even Lok Jumbish program has its problems and weakness. Though enrollment has gone up but achievement level has been modest. Even the goal of the empowering women has been met with partial success.

National Institute of Educational Planning and Administration (NIEPA) in 1987, survey by PROBE investigators confirmed that the states' non formal education programs have not been able to achieve success. They found a large proportion of these Non Formal Education centres are non- functional. This is evident from the fact that PROBE survey found only 2 children being actually enrolled in Non Formal Education Centre out

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[7] Probe Report, 1999, p.99.

of 1221 sample households. The studies attributed the failure to inefficiency of the national and state authorities, a weak institutional structure, under funded and poorly motivated staff, weak links with formal schooling, weak community support and insufficient knowledge of rigid centralization of administrative and financial powers at the Directorate and District level. It has been also argued that the fund flow by the state sector is erratic and too small to run these centers. As a result, these centres run with acute shortage of teaching learning materials (TLM). Given the general weakness of Non Formal Education infrastructure, Non Formal Education system could not come out to be attractive to the adequate number of the 'nowhere' children. Also utilization of central funds is different in the different states. In 1993-94, the utilization rate was as low as 19 percent in Bihar and 67 percent in Uttar Pradesh, which was highest among the states. In some of the backward states like Andhra Pradesh, Madhya Pradesh and Orissa (excepting Rajasthan), it was found that 72 percent of the centres remained closed for more than 10 days in a month. Thus the constraint to the access to the Non formal schools binds more from the supply side. Thus this system of education, in reality, contributed only marginally towards addressing the problem pertaining to the 'nowhere' children. Neverthless, one of the strength of the non-formal education system, upon which it aims to stress, is the involvement of the parents and local community in the functioning of the Centres. Each non- formal Centre is set up with the help of local community which mobilizes resources for effective running of the centres. It has been observed that Non formal education centres are concentrated primarily in areas where formal school is not available within the reasonable distance. The biggest problem is the availability of truly dedicated volunteers and qualified women taking responsibility to run the Non Formal Education centres. Secondly, because of the very nature of the Non formal education, multi-grade segregation of the learners could not be possible in the process. As a result, the task of the multi- grade teaching to the mixed age group learners remain unsolved, even in Non Formal Education centres, specially in backward areas. The belief that Non Formal Education necessarily fosters development- also that it is an alternative solution to the formal education- seems to be quite widespread. In fact, the centrally sponsored Non Formal Education centres, replicate the operational problem of the formal schooling systems. With such limitations and weakness, the functioning of the Non Formal

Education centres undoubtedly is likely to fail. Also the evaluation pertaining to the quantitative and qualitative achievement are short- terms, long term which is never percieved as an integral part of the development process. [8]

Though in the BIMARU states rural areas had few school facilities run by non-governmental organizations, but they have done remarkable achievement in specific areas. The importance of non- governmental organizations is that it can play a crucial advocacy role and increase public participation in schooling matters. The non-governmental organizations are involved on a large scale in the management and implementation of Bihar Education Project and Alternate schools, Mahila Shikshan Kendras and Non formal education centres. Although the projects vary substantially in design, they all share the objectives and strategies of the 1986 policy.

The experiences of success and failures of the programs, discusssed so far are important to adopt a lot of current policies. From the undergoing analysis, it has been found that reasons for the children remain out of the schooling system vary widely across regions. Therefore, region specific programs looking into the local needs (needs of the 'nowhere' children itself) would be necessary to undertake.

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[8] Ambasht, Myzia Bacquelain, 'Evaluation of non formal education children at the primary stage', *Journal of Indian Education*, Vol.21, No.2, P.

# Chapter-6
# Summary and Conclusion

Although universalization of elementary education is a recognized as a constitutional responsibility of the state in India, the size of the 'nowhere' children remains significantly high in India in general and in the state of Uttar Pradesh in particular. While much of the intellectual inputs have gone into studying this issue, study pertaining to the geographical patterning of 'nowhere' children in India is very limited and research on the determinants at micro level is increasingly required, particularly in the context of socio- economic and political setup. The present exercise is an attempt to towards this direction in analyzing the spatio- temporal variation of 'nowhere' children at the state level and the macro level within the state. Uttar Pradesh has been selected because it occupies a place at the rock bottom of the scale among all states in terms of 'nowhere' children.

This chapter provides a summary of the major conclusions emerging from the study.

Despite the nature of available data and their limitation, a through probe does bring out some significant results regarding the size, distribution of 'nowhere' children over space and their determinants. Some of the observations are in conformity with what is known from other studies and a few raise further questions. In fact, the catch- all of the 'household duties' so often held responsible for preventing children from going to school needs serious examination. For instance, how much time is spent in domestic chores, how many children are used to collect fuel and water, the distance of source of water and forest and how many cattle are owned by the households, are the questions that arises. It is hoped that this analysis would be of help to those who are grappling with the problems of 'nowhere' children in the states and the districts of Uttar Pradesh for specific policy interventions. The main findings are summarized below.

Even cursory overviews of the literature which deals with 'nowhere' children bring out clearly that multiplicity of the factors are responsible for the incidence of 'nowhere' children in India. With the exceptions of few studies that have been analyzed in the beginning, however, none deals with growth as well as disparities therein in a comprehensive manner, the way this study tries to. Apart from a very detailed discussion on spatio- temporal trends in India and the state of Uttar Pradesh, the present study explores the relative position of the boys and the girls by their rural- urban location and provides an 'explanatory' framework within which the incidence of 'nowhere' children can be situated and possibly understood.

From the earlier discussion, it can be recalled that there is striking inter- regional variation in the incidence of 'nowhere' children among the states. Over the period the overall percentage of 'nowhere' children has declined from 48.36 percent to 42.21 percent. While in rural areas it shows a declining trend, in urban areas the share has gone up. In rural areas it has declined from 49.46 percent to 49.32 percent whereas, in urban areas it has increased marginally from 31.92 to 32.23 percent. By breakdown of sex, the relative share of 'nowhere' boys has increased from 38.66 percent in 1981 to 38.99 percent in 1991and that of girls has declined from 58.91 percent to 51.09 percent. Among the states Uttar Pradesh had the highest percentage of 'nowhere' children in 1981, which was 61.68 percent, whereas Kerala with 15.16 percent exhibited the lowest share. In 1991, the range varies from a highest of 61.23 percent in Bihar to lowest of 13.92 percent in Kerala. Uttar Pradesh, which has registered a marginal decline in the total share over the period, occupies the second position from the bottom of the ladder in 1991.

The distribution of 'nowhere' children by breakdown of sex and residence at all India level shows somewhat different trend. Meghalaya maintained its position with the highest percentage of 'nowhere' boys over the decade in rural areas. The share has increased from 53.53 percent in 1981 to 59.78 percent in 1991 in rural areas. Similarly Kerala maintained the position with the lowest percentage of 'nowhere' boys and girls over the decade. The share of 'nowhere' girls has declined in Kerala from 19.57 percent in 1981 to 14.87 percent in 1991. On the other hand Uttar Pradesh with 81.6 percent had the highest share of 'nowhere' girls in 1981. However, the share has declined to 73.82 percent in 1991. In 1991 Bihar shows the highest percentage of 'nowhere' girls.

So far as urban areas are concerned, it has been noticed that Uttar Pradesh maintained the position with highest percentage of 'nowhere' boys and girls over the decade. In fact, the share has increased for both the boys and the girls. The percentage of 'nowhere' boys has increased from 40.31 percent in 1981 to 43.12 percent in 1991. For girls, it has increased from 54.14 percent in 1981 to 57.6 percent in 1991. On the other hand Kerala maintained the position with the lowest share of 'nowhere' boys (13.93 percent in 1981 and 12.38 percent in 1991) and girls (14.68 percent and 12.48 percent) over the decade in urban areas.

An important finding of the study is that significant proportion of the out-of-school or 'nowhere' children are concentrated in few states of India. The states, which have maintained

high percentage of 'nowhere' children at both the points of time, are the so-called BIMARU states and West Bengal. On the other hand the states, which have maintained low percentage of 'nowhere' children, are Kerala, Goa, Himachal Pradesh, Tamil Nadu and Maharashtra.

We find that although the relative share of 'nowhere' children is high in rural areas compared to urban areas, the urban areas show positive trend in growth of 'nowhere' children. It has been noticed from the earlier discussion that while the boys 'nowhere' children have registered positive growth rate in urban areas and rural areas, the girls have registered considerable decline in the growth rate both in rural and urban areas. On the other hand the population of both the boys and the girls shows declining trend over the decade in rural as well urban areas. Again the different states show similar trend in the growth rate with that of the national level. One interesting finding of the study is that while most of the states have maintained declining trend of 'nowhere' children, north eastern states, Bihar, Orissa, Punjab and Uttar Pradesh actually show an increasing trend for both boys and girls in urban areas. The growth of 'nowhere' children is not consistent with the growth of population in the same age group.

Among the states, the highest negative growth rate has been found in Punjab in rural areas and lowest in Kerala in urban areas. Besides, the 'nowhere' girls have drastically reduced in rural areas of Tamil Nadu and Himachal Pradesh. In contrast, the maximum increase in the 'nowhere' children have been found in the north-eastern states as evident from the positive growth rate and this is true in the urban areas. Another interesting finding of the study is that there is rural-urban correspondence of the incidence of 'nowhere' children among the states. It has been observed that the spatial pattern of the distribution of 'nowhere' boys and girls remains similar in both rural and urban areas over the decade. The district level analysis also reveals similar results. The high positive correlation between the rural and the urban components for both 'nowhere' boys and the girls confirms this finding.

Also it has been noticed that the phenomenon has become concentrated in few states mainly in the proverbial BIMARU states, both in rural and urban areas, as evident from the increased value of the coefficient of variation over the decade. These states are underdeveloped, poor and educationally backward states. Kerala, Tamil Nadu, Punjab and Gujarat are the 'better off' states where both the share of 'nowhere' boys and the girls are low. Whereas, the states like Andhra Pradesh, Orissa and Madhya Pradseh have high percentage of 'nowhere' girls than the boys' counterpart. These states fall in the category of 'gendered' space.

An interesting trend that has been noticed is the improvement in the status of Haryana and Karnataka as they have shifted from the 'gendered' space in 1981 to 'better off' space in 1991. Also these states have experienced improvement in their respective ranks on the national front. While the 'better off' states like Kerala and Himachal Pradesh have maintained their respective upper ranks in the ladder, the so- called BIMARU states and West Bengal not only continue to occupy the lower rung of the ladder, their position has deteriorated over the decade. The rank correlation for both the boys and the girls show overall temporal stability.

As we have already seen, the state of Uttar Pradesh continues to remain at the rock bottom of the ladder over the decade in terms of 'nowhere' boys and girls. Although over the period, the 'nowhere' children do show an overall declining trends in growth in the state, the decline in the share is marginal. It declined from a total percent of 61.68 percent in 1981 to 59.46 percent in 1991, which is again higher than all India average. Even in 1991, 50 percent of the boys and more than 70 percent of girls remain 'out-of-school'. This presents sad picture, as there has been hardly any improvement over the decade.

It is found that Rampur maintained the lowest position with the highest percentage of both 'nowhere' boys and girls in 1981 in rural as well as urban areas. However in 1991, Bahraich occupies the position with highest percentage of 'nowhere' boys in rural areas, whereas in urban areas Bareilly is at the bottom of the list. So far as the girls are concerned, Bulandshar with 94.92 percent is at the bottommost position of the ladder in rural areas, while Budaun with 70.56 percent occupies the position in urban areas. While Garhwal lead the ranking in rural areas having the lowest percentage of both 'nowhere' boys (26.50) percent and girls (32.22 percent), in urban areas, Tehri Garhwal is at the top with 14.32 percent of 'nowhere' boys and 19.01 percent of girls.

Earlier discussion shows that Uttar Pradesh has registered a positive growth in terms of 'nowhere' boys both in rural and urban areas. Although the girls have registered a positive trend in growth in urban areas, the growth rate is negative in rural areas.

In Uttar Pradesh there are clear- cut clusters of districts with similar pattern of 'nowhere' children in rural and urban areas. It has been observed from the figures (3.2, 3.3, 3.4, 3.5, 3.8 and 3.9) that the central western part comprising Moradabad, Budaun, Philbit, Bareilly, Kheri and Sitapur districts is the worst performer with concentration of 'nowhere' boys and girls over the decade, much above the state average. It may be noted that the western

despite its high economic performance continues to lag behind the rest of the state. They could not take advantage of their economic progress to achieve any kind of lead in the field of education. Moreover high infant mortality rate, low female participation in main working category, poor school quality, lack of female teachers and poor functioning of schools led to the high concentration of 'nowhere' children in this region.

On the contrary, the northern region comprising of Uttarkashi, Chamoli, Tehri Garhwal, Dehradun, Garhwal, Pithoragarh and Almora emerge as the region having the lowest concentration of 'nowhere' children in both rural and urban areas. These 7 districts out of 56 are under the lowest category of 'nowhere' children over the period, indicating the better performance compared to other parts of Uttar Pradesh. This can be attributed to the historical background of the region. We know from existing literature that from earlier times, job in the defense forces and the public sector did provide impetus for the demand for education in early years, particularly among the boys. Since educated boys want educated girls, this in turn increased the need of education among girls. However, with few exceptions, the pattern remains remain more or less the same over the decade in rural areas.

'Backward' spaces and the 'gendered' spaces in rural areas are mainly located in the western part, north central part and eastern part of the state. The rest of Uttar Pradesh is the 'better off' space where both the percentage of 'nowhere' boys and girls are less. However, there was improvement in some of the districts over the decade.

As we have discussed earlier, the position of the state has deteriorated compared to other states of India in 1991. The districts whose status has deteriorated over the period are primarily located in the western part and eastern part. One notable feature that is noticed is the considerable improvement in the status of most of the districts in rural areas in terms of 'nowhere' girls with a few exceptions of hill districts and districts of central western region where there has been growth in 'nowhere' girl children. Urban areas of districts like Nainital, Moradabad, Meerut, Ghaziabad, Aligarh, Agra, Budaun, Bareilly, Shahjahanpur, Sitapur, Hardoi, Etawah, Kanpur, Jalaun, Ghazipur, and Varanasi have registered deterioration in their position for both 'nowhere' boys and girls. However, the shift in the ranks is only marginal in case of districts of Moradabad, Rampur, Budaun, Bareilly, Philbit and Kheri. Again, the rank correlation between 1981 and 1991 percentages of 'nowhere' boys and girls children show an overall temporal stability, as the coefficient values are high and statistically significant at 0.01

levels. Also in urban areas of Uttar Pradesh the phenomenon has been spreading as evident from the reduced coefficient of variation over the decade.

Earlier discussion revealed that the states, which have maintained high percentages of 'nowhere' children also, are also generally the ones that exhibit high sex disparity. Apart from the BIMARU states, high disparities have also been observed in rural and urban Andhra Pradesh. Gujarat, Haryana, Orissa, Punjab and Tamil Nadu also show high sex disparity in 1991, although the percentages of 'nowhere' boys and girls are low. In fact, north- western states have always discriminated the girls. Also these states have low sex ratio, low female participation in main working category and persistent high levels of unequal gender relations.

Over the decade the sex disparity has declined both in rural and urban areas in Uttar Pradesh. It declined from 0.26 in 1981 to 0.18 in 1991 in rural areas. The corresponding decline in sex disparity in urban areas is from 0.18 in 1981 to 0.13 in 1991, which is higher than all national average. Despite a general narrowing down of sex differentials over the decade, considerable sex disparities still persists in both rural and urban districts. In 1981, the lowest sex disparity was found in Tehri Garhwal (0.01), while Budaun exhibited the highest sex disparity with a value of 0.43. In 1991, the disparities range from 0.05 in Faizabad to 0.32 in Rampur in rural areas, whereas in urban areas it ranges from 0.03 in Pithoragarh and Jalaun to 0.37 in Barabanki.

It has been observed that the districts having high sex disparity form clusters in rural areas that are not spatially contiguous. This is true of both for rural and urban areas. In rural areas three clusters have been identified. They are central western cluster (comprising Budaun, Bareilly, Rampur, Kheri and Saharanpur), southern cluster (comprising Jhansi, Hamirpur, Allahabad and Deoria) and western cluster comprising of (Agra and Mathura). On one hand, with high sex disparities, Deoria located in the extreme east and Saharanpur in the extreme northwest stand as islands. Tehri Garhwal, Bulandshar, Etawah and Ghazipur form islands of low sex disparities with values lower than 0.10 on the other. There is no clear pattern in urban areas as well.

In 1981, almost 50 per cent of total districts in the state had sex disparities that were above the state average. Against this the percentage of such districts has declined considerably in 1991.

On reviewing the factors that are responsible for the incidence of 'nowhere' children, we find that socio- economic, cultural and some school- related factors intensify the incidence of 'nowhere' children. These factors have direct impact on the 'nowhere' children as can be seen from the discussion in chapter IV where the relationship has been examined with the help of correlation matrix.

Three dependent variables that have been considered are 'nowhere' boys and girls and the corresponding sex disparity between them. The important independent variables are agricultural labour that has been taken as a proxy variable for poverty. Also Scheduled caste population is generally poor and one expects positive correlation between Scheduled caste population and 'nowhere' children. Muslim population on the other hand is educationally backward community, therefore with increase of Muslim population, 'nowhere' children would tend to increase. Female main workers and sex ratio reflects the gender relations in the society. One can expect that higher the sex ratio and higher the participation of female in main category of work, lower is the phenomenon of 'nowhere' children. Child woman ratio, dependency ratio and 'household duties' increase the burden of domestic work that have deterring effect on children' access to school. Educational levels of adult men and women are important to increase motivation and demand for schooling of children. Infant mortality rate reflects the link between schooling and health. The school related variables are schools having drinking water facilities, separate urinals for girls that reflect the physical facilities of schools. Availability of incentive schemes like mid day meal and free text- books reduce the cost of schooling and increase motivation among children. Quality of schools is proxied by trained teachers and rooms (two) available for instructional purpose. Distance of schools and percentage of female teachers are other variables.

From the correlation matrix it is observed that for India as a whole and also for Uttar Pradesh, the dependency ratio and child woman ratio have significant bearing on the incidence of 'nowhere' children, evident from the high and positive correlation. This means that the drudgery of child bearing and looking after the dependants increases the chance of children being 'nowhere'.

An important outcome of the matrix is that in rural areas primary educational status of men and women has significant positive impact in reducing the 'nowhere' children in India as a whole as well as Uttar Pradesh. In urban areas of Uttar Pradesh the relationship between

'nowhere' children and primary educational status has become insignificant over the period. Again, higher educational status of adult women is strongly and negatively correlated with 'nowhere' girls at the country level over the period 1981-1991. The coefficient values are -0.635 in 1981 and -0.619 in 1991 respectively. Both are statistically significant at the same level (0.01 level). Where women are better educated generally more equal agents within the household and in society help in reducing the 'nowhere' children, particularly girls. Whereas the impact of higher educational status of women on the boys is less, compared to that on girls' as evident from the lower significant level (0.05 level of significance). In Uttar Pradesh while higher educational level of the women as a determinant become insignificant over the period, that of men has strenthened in 1991. This reflects the decision-making power within the household lies with the men and educated men reduce the incidence of 'nowhere' children, the impact being more on 'nowhere' boys (coefficient being-0.549 and statistically significant at 0.01 level) compared to the girls (coefficient being -0.300 and statistically significant at 0.05) level.

From the correlation matrix table, it is revealed that where the burden of the 'household duties' is more on the girls, more girls remain out of school. In rural areas the coefficient values are 0.489 in 1981 and 0.440 in 1991 and both are statistically significant at 0.05 level. Interestingly, this relationship is much stronger in urban areas in the India (significant at 0.01 level) and both in rural as well as urban areas of Uttar Pradesh. (see Table A.6 and A.7 in annexure).

Another variable that has significant positive association with the 'nowhere' boys and the girls is infant mortality rate. At all India level, the variable has significant correlation with girls' (0.481) only in rural areas and with both boys (0.448) and girls (0.475) in urban areas. Similar results have been noticed in Uttar Pradesh. High infant mortality rate is once again a proxy variable for health and it can be expected that if children are not healthy they may end up being 'nowhere' children.

Another major finding of the study is that poverty is an important factor, which contribute to the incidence of 'nowhere' children in Uttar Pradesh. In rural areas the variable had positive correlation with girls (0.438) in 1981. It is the girls who are withdrawn first with the poverty. However, the relationship has weakened over the period as evident from the insignificant correlation between the two. Also in urban area there is high correlation with

both boys and girls in urban areas over the period. The coefficient values are statistically significant at 0.01 level in rural areas of Uttar Pradesh. Similar relationship has been noticed with sex disparity.

From the correlation matrix it is clear that Muslim population is positively correlated with 'nowhere' girls (0.475) in rural areas of Uttar Pradesh, whereas in urban areas it has significant positive association with both boys (0.673) and girls (0.728). All the values are statistically significant at 0.01 level. In rural areas the girls of the minority group suffer from the double deprivation. We know from the existing literature that the Muslim community as whole is educationally backward. The middle class amongst the Muslims, that too is relatively smaller size, uses the positive outcome of education is responsible for seeking educational opportunities. Where the Muslim population is high therefore 'nowhere' children tend to high.

Although the variable 'girls doing household duties' has significant and strong positive correlation with the sex disparity in both rural and urban areas at all India level over the period, in Uttar Pradesh it is an important factor determining sex disparity in rural areas only.

It is revealed from the correlation matrix that where the educational status of the adult women is high, gender equal relations within the family reduce the sex disparity, as evident from the high correlation both in India. Again, the relationship has strengthened (significant at 0.01 level) in 1991 in rural areas. Whereas, in urban areas men with education up to middle level seems to have a positive bearing upon reduction in sex disparity (-0.614) in 1991. Higher educated men are aware of education thereby, have stronger positive impact in reducing the sex disparity in urban areas.

Another important variable that has direct impact on sex disparity is the infant mortality rate both in rural (0.275) and urban (0.316) of Uttar Pradesh in 1991. In 1981 it was significant in rural areas only. This gives the evidence that poor health condition severely increases sex disparity in 'nowhere' children in Uttar Pradesh.

In the second step, a multiple regression analysis has been carried out. In all the cases, 'nowhere' boys, girls and sex disparity have been taken as dependent variable and other variables have been analyzed step by step. It helped in identifying the major determinants. The primary educational status of adult women (enter in step I) was the most important determinant for both 'nowhere' boys and girls. in 1981 For example, their primary education had

negative association with both 'nowhere' the boys and the girls in India in 1981. The variable explained 57.5 percent of the variation of the boys and 54.5 percent of the variation of the girls. This signifies that with any increase in the educational status of women (primary), the number of 'nowhere' children tends to reduce. Whereas in Uttar Pradesh, this variable entered in step II and explained 20.45 percent of variation of boys and 15.83 percent of girls. In India, the other important determinants were primary education of men (enter in step II) and child women ratio (enter in step III).

In case of Uttar Pradesh, it has been noticed from the regression analysis that factors that have contribute to the incidence of' nowhere' children are similar for both boys and girls. In rural areas, female main workers explained the maximum variance with 31 percent of variation of 'nowhere' boys and 65 percent of the variation of girls in 1981. This means that in Uttar Pradesh, with any increase in participation of women workers in main activity, 'nowhere' children would tend to reduce. Also factors like primary educational status of men, Muslim population and Scheduled Caste population had direct impact on 'nowhere' children. They together explained 53 percent of variation of the boys and 81 percent of the variation of the girls, which is remarkably high.

On the other hand, in urban areas the most important variables that explained maximum variance of 'nowhere' children were the 'girls doing household duties' (enter in step I) and dependency ratio (enter in step II). The two variables together explained 47 percent of the variation of the boys and 58 percent of the variation of 'nowhere' girls for India as a whole. Whereas, in Uttar Pradesh Muslim population explained maximum variation of 'nowhere' children (55.29 percent of variation of boys and 41.34 percent of variation of girls). It may be recalled from earlier discussion that Muslim community has been slow in terms of taking advantage of secular education. Education is not a motivation for them, whose main purpose is linked with livelihood. This in turn does not motivate children to go to school.

In 1991 rural areas of India child women ratio (enter in step I) alone explains 56.8 percent of the variation of 'nowhere' boys, whereas in case of girls it is the dependency ratio (enter in step I) that explains maximum variance with 64 percent which is remarkably high. Other important determinants are primary education of adult men and women for both boys and girls that enter in step II and step III respectively.

In case of Uttar Pradesh, 'girls doing household duties' explains maximum variation of girls (51.39 percent) in rural areas. Other important factors that have direct bearing on both 'nowhere' boys and girls are educational status of adult men, infant mortality rate and primary educational status of adult women and non-working population, contribution of these variables in increasing the value of $R^2$ is less (see Table A.37 and A.38 in annexure).

Against this, in urban areas dependency ratio (enter in step III) is the most important factor determining the incidence of 'nowhere' children at all India level as well as the districts of Uttar Pradesh. It explains 36 percent of the variation of the boys and 43 percent of the variation of the girls for the country. Therefore burden of dependents severely deter the children' access to school and this is more true for girls. Other important factors determining 'nowhere' boys are infant mortality rate and adult women primary education. For girls the other important determinants are 'girls doing household duties' and 'infant mortality rate' and together they explain 24.2 percent. While for the boys' health condition and attitude of parents towards education are important, that for girls, drudgery of domestic work and health condition that forces them being 'nowhere'. Whereas in Uttar Pradesh important factors determining 'nowhere' boys and girls are 'girls doing household duties' (enter in step II) and Muslim population (enter in step III).

When sex disparity is the dependent variable, the maximum variance was explained by the 'girls doing household duties' in 1981, which explained 33 percent of the variation in urban areas and 53 percent in rural areas. Whereas, in 1991, the most important variable that explains maximum variation of sex disparity is the education up to middle level among adult women (enter in step I). Together with sex ratio, it explains 53.93 percent of variation of sex disparity in India as a whole. Both the variables have negative correlation with sex disparity, thereby, implying that higher the educational status of women and higher the sex ratio in rural areas, lower is the sex disparity between the 'nowhere' boys and the girls as is happening in Kerala, whereas in urban areas education up to middle level among men explains maximum variation (34.84 percent). We have already discussed that in India, decision-making power within the family rests with the men and when educated men are aware sex disparity reduces in urban areas. In case of Uttar Pradesh while maximum variance of sex disparity (45.95 percent) was explained by female main workers in rural areas in 1981, in 1991 'girls doing household duties explains maximum variation of 6.96 percent. On the other hand in urban

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areas, agricultural labour is the most important determinant. Therefore it seems that in Uttar Pradesh poverty is one of the important factors that increases sex disparity in 'nowhere' children.

Among the school- related factors, percent of schools explained maximum variation of boys (36.03) in India in rural areas of 1981. In case of girls most important factors were female teachers and private aided schools (together explain 42.23 percent percent) that enter in step I and step II respectively. Whereas in urban areas percentage of female teachers and private unaided schools were important determinants (together explained 53.23 percent of variation of boys and 56.73 percent of girls). From our earlier discussion we know that availability trained teachers is a proxy variable of school quality. This variables had direct impact on the 'nowhere' boys at all India level in rural areas in 1981, thereby implying that if the quality of schools are poor the' nowhere' boys tend to increase.

However, in 1991 availability of female teachers, quality of schools reflected by shortage of teaching materials like blackboards and trained teachers and availability of incentive schemes are the most important factors that have direct impact on the incidence of 'nowhere' children. In rural areas percentage of female teachers' (enter in step I) explains 48 percent of variation of boys and 56 percent of the girls for the country and 38.4 percent of variation of boys and 36.5 percent of variation of girls in Uttar Pradesh. Other important factors that have considerable influence on 'nowhere' children in Uttar Pradesh are availability of infrastructural facilities (schools having drinking water) and type of institution (government schools) in rural and urban areas. Among the incentive schemes, while the availability of the free text- books has direct impact on the 'nowhere' boys in India, the availability of both the free text- books and mid day meals have considerable impact on the girls. As we have seen that elementary education is not free of cost in our country which include direct costs of schooling. Therefore availability of free text- books tend to decrease the 'nowhere' girls, in particular.

Also in urban areas the availability of mid day meal schemes explains the maximum variation of 'nowhere' boys (13.39 percent) in India. With any increase of mid-day meal schemes in schools the 'nowhere' children would decline as happening in Tamil Nadu. Incentive schemes increase motivation among the children.

Another important factor that has significant bearing on the 'nowhere' children is the type of institution. It has been observed that the states where there are private aided schools, the 'nowhere' children would reduce. In case of Uttar Pradesh, the availability of government schools (enter in step I) explains the maximum variation of 'nowhere' girls in urban areas (22.05percent). With percentage of female teachers (enter in step II) it explains 37.15 percent of variation of girls.

So far sex disparity is concerned, it has been noticed from the regression analysis that in 1981in India, private aided schools and distance of schools had direct impact on sex disparity in rural areas, whereas in urban areas private unaided schools was the most important factor. In 1991, quality of schools is found to have considerable positive influence in reducing the sex disparity. So in order to reduce the sex disparity we have to increase private aided schools, female teachers and improve the quality of schools in rural areas.

Thus from the study it can be concluded that 'nowhere' children is not essentially a gendered construction because both boys and girls seem to be affected by the same set of factors, although for girls, 'household duties' do emerge as having a more significant bearing on their staying at home and some of the gendered responsibilities do enhance the phenomenon of 'nowhere' children among the girls. Also the study shows that rural and urban 'nowhere' boys and girls co- spatially behave in a similar pattern in India as a whole as well as in the state of Uttar Pradesh. Significantly, a wide spectrum of socio- cultural and school related factors contribute to keep the children 'out-of-school.' Moreover, against a common sense presumption, poverty is not an overarching contributor to the phenomenon of 'nowhere' children, at least for the country as a whole although in case of Uttar Pradesh it is an important determinant of sex disparity between 'nowhere' boys and girls. Implicit in this is the preferential treatment a boy would receive vis-à-vis a girl in terms of going to a school. But it must also be pointed out that the significance of this factor as a determinant has weakened over the period.

All these have clear policy implications. The problem of 'nowhere' children is deep rooted in the socio-cultural fabric of the society. So far as Uttar Pradesh is concerned, poverty does matter, perhaps increasingly less over the decade, in keeping the children, particularly girls, out of school. The important steps such as poverty alleviation, enforcement of compulsory education, introduction of health and recreation programs etc. should be taken in

right direction. Also the low participation of the disadvantage group in turn reflects the continuing influence of sharp inequalities relating to caste and gender. The major task is to overcome the social, economic and political constraints in the educationally backward states to provide basic minimum educational security to the deprived sections. Infrastructural factors such as non- functioning schools, lack of women teachers, absence of incentive schemes and physical facilities and poor quality of schools magnifies this problem over the period.

In order to eliminate the problem, we need an integrated and a comprehensive approach. It is important that the government should increase provision of the incentive schemes such as noon meals and text- books. This would increase motivation and demand for education among the children. It may be important to improve the efficiency of the noon meals program. As regard to type of schools, it should be noted that the private sector cannot be relied upon for reaching the goals of eliminating the 'nowhere' children. It is required to revitalize and improve the quality of government schools. At this hour, it is necessary for the state to shoulder the entire responsibility to improve the quality of the government schools with appropriate strategies. Also it is required to increase the female teachers in the schools. In the light of these findings the promotion of basic education in the state of Uttar Pradesh and other backward states is undoubtedly one of the India's foremost development priorities.

Last but not the least the peoples awareness and involvement of the local community is needed to eliminate the incidence of 'nowhere' children. Government organization, non-government organization and moreover the people's participation is necessary.

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# Annexure

Table A.1. District wise percentage of the Nowhere children in Uttar Pradesh in 1981.

| Districts | Rural | | Urban | |
|---|---|---|---|---|
| | Boys | Girls | Boys | Girls |
| Uttarkashi | 41.84 | 42.85 | 21.95 | 31.03 |
| Chamoli | 34.55 | 36.8 | 25.67 | 35.33 |
| Tehri G | 35.84 | 36.84 | 19.93 | 26.02 |
| Dehradun | 31.12 | 50.75 | 16.13 | 22.54 |
| Garhwal | 29.34 | 41.49 | 17.61 | 27.49 |
| Pithoragarh | 28.19 | 53.43 | 17.65 | 24.44 |
| Almora | 25.24 | 52.04 | 9.96 | 14.12 |
| Nainital | 41.11 | 63.93 | 35.69 | 46.47 |
| Bijnor | 48.16 | 71.31 | 48.55 | 67.49 |
| Moradabad | 60.98 | 91.27 | 55.11 | 67.8 |
| Rampur | 65.42 | 94.32 | 57.8 | 73.43 |
| Saharanpur | 50.39 | 83.49 | 37.14 | 50.53 |
| Muzaffarnagar | 43.37 | 77.85 | 40.53 | 58.94 |
| Meerut | 41.12 | 74.99 | 38.42 | 17.49 |
| Ghaziabad | 43.55 | 76.94 | 33.56 | 48.04 |
| Bulandshar | 46.64 | 83.07 | 47.45 | 62.38 |
| Aligarh | 48.61 | 81.7 | 44.18 | 57.56 |
| Mathura | 44.83 | 86.98 | 39.77 | 56.29 |
| Agra | 49.49 | 83.61 | 45.31 | 57.93 |
| Etah | 53.86 | 84.46 | 45.91 | 59.89 |
| Mainpuri | 45.28 | 74.15 | 39.05 | 51.14 |
| Budaun | 62.96 | 92.44 | 54.76 | 69.96 |
| Bareilly | 61.33 | 92.49 | 49.85 | 63.16 |
| Pilbhit | 58.95 | 91.23 | 53.07 | 68.23 |
| Shahjahanpur | 60.97 | 90.47 | 48.33 | 63.7 |
| Kheri | 62.43 | 91.65 | 46.78 | 58.09 |
| Sitapur | 61.61 | 90.33 | 41.55 | 55.79 |
| Hardoi | 57.4 | 88.64 | 43.22 | 59.72 |
| Unnao | 51.59 | 82.19 | 40.95 | 58.96 |
| Lucknow | 57.18 | 84.74 | 34.99 | 43.38 |
| Raebareily | 51.98 | 79.72 | 47.56 | 61.43 |
| Farrukhabad | 48.59 | 74.95 | 42.17 | 54.13 |
| Etawah | 42.25 | 67.48 | 35.73 | 45.05 |
| Kanpur | 44.82 | 68.42 | 32.53 | 42.29 |
| Jalaun | 42.18 | 73.83 | 34.59 | 51.33 |
| Jhansi | 45.64 | 79.26 | 32.19 | 47.44 |
| Lalitpur | 54.44 | 81.82 | 33.52 | 51.04 |
| Hamirpur | 52.11 | 82.46 | 39.54 | 58.19 |
| Banda | 53.74 | 83.8 | 40.68 | 57.78 |
| Fatehpur | 50.52 | 79.18 | 42.21 | 53.67 |
| Pratapgarh | 47.13 | 83.42 | 35.25 | 56.95 |
| Allahabad | 53.44 | 87.71 | 36.59 | 47.15 |
| Bahraich | 61.16 | 93.27 | 44.31 | 61.39 |
| Gonda | 60.62 | 91.47 | 41.19 | 57.8 |
| Barabanki | 57.32 | 88.29 | 46.18 | 65.29 |
| Faizabad | 48.8 | 80.99 | 35.69 | 49.18 |
| Sultanpur | 51.06 | 83.68 | 33.29 | 46 |

| Districts  | Rural |       | Urban |       |
|------------|-------|-------|-------|-------|
| Basti      | 52.75 | 83.97 | 35.49 | 53.88 |
| Gorakhpur  | 52.47 | 85.39 | 30.59 | 41.99 |
| Deoria     | 46.29 | 77.55 | 34.59 | 54.26 |
| Azamgarh   | 47.26 | 77.45 | 35.69 | 50.13 |
| Jaunpur    | 45.25 | 81.24 | 38.5  | 53.19 |
| Ballia     | 46.42 | 77.12 | 35.82 | 53.61 |
| Ghazipur   | 46.77 | 79.53 | 36.66 | 56.37 |
| Varanasi   | 46.21 | 81.69 | 42.3  | 58.64 |
| Mirzapur   | 55.29 | 82.99 | 36.81 | 54.33 |

*Source: Socio-cultural tables, census of India, Uttar Pradesh, series- 22, 1981.*

Table A.2. District wise percentage of 'Nowhere' children in Uttar Pradesh in1991.

| Districts    | Rural |       |       | Urban |       |       |
|--------------|-------|-------|-------|-------|-------|-------|
|              | Total | Boys  | Girls | Total | Boys  | Girls |
| Uttarkashi   | 46.79 | 38.93 | 55.22 | 20.48 | 16.75 | 24.44 |
| Chamoli      | 42.34 | 31.12 | 43.74 | 27.32 | 26.16 | 29.09 |
| Tehri G      | 41.00 | 32.73 | 49.27 | 16.46 | 14.32 | 19.01 |
| Dehradun     | 38.18 | 34.22 | 42.37 | 20.74 | 18.42 | 23.36 |
| Garhwal      | 29.48 | 26.50 | 32.22 | 24.02 | 21.12 | 27.40 |
| Pithoragarh  | 38.22 | 32.05 | 44.55 | 22.62 | 22.07 | 23.32 |
| Almora       | 32.82 | 26.20 | 38.15 | 24.22 | 21.40 | 27.46 |
| Nainital     | 42.69 | 35.23 | 50.55 | 40.92 | 36.46 | 45.86 |
| Bijnor       | 62.75 | 56.61 | 74.75 | 59.41 | 53.82 | 65.81 |
| Moradabad    | 76.65 | 66.97 | 88.02 | 58.07 | 52.46 | 63.93 |
| Rampur       | 76.74 | 54.98 | 89.45 | 61.76 | 55.21 | 68.37 |
| Saharanpur   | 62.06 | 51.44 | 74.79 | 39.20 | 35.46 | 43.41 |
| Muzaffarnagar| 53.32 | 42.68 | 65.83 | 48.68 | 43.06 | 55.05 |
| Meerut       | 53.85 | 44.92 | 63.98 | 50.67 | 46.07 | 55.68 |
| Ghaziabad    | 54.43 | 46.56 | 63.87 | 44.09 | 39.55 | 49.34 |
| Bulandshar   | 65.78 | 48.59 | 94.92 | 50.77 | 43.70 | 58.70 |
| Aligarh      | 62.04 | 52.64 | 73.40 | 51.42 | 47.11 | 56.35 |
| Mathura      | 59.14 | 45.25 | 76.70 | 49.29 | 43.70 | 46.68 |
| Agra         | 59.51 | 48.97 | 68.44 | 51.94 | 48.06 | 56.23 |
| Etah         | 84.04 | 54.17 | 77.07 | 52.02 | 45.97 | 59.96 |
| Mainpuri     | 56.00 | 48.13 | 65.93 | 45.26 | 42.14 | 48.81 |
| Budaun       | 76.79 | 66.79 | 90.22 | 62.59 | 55.82 | 70.59 |
| Bareilly     | 75.31 | 65.12 | 89.97 | 58.19 | 57.89 | 63.55 |
| Pilbhit      | 61.41 | 61.99 | 85.03 | 58.70 | 53.02 | 65.28 |
| Shahjahanpur | 72.67 | 61.65 | 86.47 | 55.30 | 49.20 | 61.96 |
| Kheri        | 72.61 | 61.27 | 86.18 | 51.91 | 46.34 | 58.00 |
| Sitapur      | 73.83 | 64.33 | 85.35 | 54.35 | 50.64 | 58.45 |
| Hardoi       | 67.35 | 56.79 | 80.72 | 55.97 | 51.35 | 61.34 |
| Unnao        | 61.94 | 52.27 | 73.14 | 46.84 | 42.69 | 51.36 |
| Lucknow      | 62.58 | 54.08 | 72.49 | 37.00 | 33.72 | 40.74 |
| Raebareily   | 58.44 | 48.34 | 69.62 | 47.62 | 44.04 | 51.53 |
| Farrukhabad  | 60.48 | 52.92 | 69.61 | 54.89 | 49.55 | 55.51 |
| Etawah       | 54.68 | 48.32 | 57.03 | 50.02 | 46.12 | 54.80 |

| Districts | Rural | | | Urban | | |
|---|---|---|---|---|---|---|
| | Total | Boys | Girls | Total | Boys | Girls |
| Kanpur | 54.20 | 34.57 | 62.38 | 42.51 | 39.16 | 46.32 |
| Jalaun | 54.59 | 46.69 | 64.26 | 48.86 | 49.67 | 52.66 |
| Jhansi | 58.94 | 48.58 | 71.92 | 40.86 | 36.13 | 46.14 |
| Lalitpur | 70.74 | 61.13 | 81.80 | 39.92 | 36.23 | 44.25 |
| Hamirpur | 62.00 | 51.15 | 74.94 | 46.23 | 39.36 | 54.50 |
| Banda | 62.49 | 52.33 | 74.94 | 46.09 | 37.83 | 53.94 |
| Fatehpur | 52.99 | 42.56 | 63.80 | 44.57 | 39.33 | 50.27 |
| Pratapgarh | 58.22 | 47.11 | 70.75 | 44.25 | 38.75 | 50.25 |
| Allahabad | 63.65 | 52.36 | 76.64 | 39.28 | 34.80 | 44.11 |
| Bahraich | 71.14 | 76.07 | 84.78 | 53.68 | 37.54 | 59.86 |
| Gonda | 70.19 | 59.51 | 83.18 | 48.61 | 43.59 | 54.31 |
| Barabanki | 68.40 | 59.25 | 79.02 | 55.20 | 31.49 | 60.56 |
| Faizabad | 58.89 | 49.33 | 54.34 | 42.16 | 46.18 | 52.62 |
| Sultanpur | 58.86 | 47.89 | 71.27 | 37.69 | 33.01 | 42.95 |
| Basti | 67.65 | 57.17 | 77.39 | 52.17 | 45.15 | 59.91 |
| Gorakhpur | 66.92 | 55.55 | 75.95 | 44.84 | 37.94 | 52.38 |
| Deoria | 60.71 | 49.06 | 64.19 | 42.72 | 37.23 | 48.58 |
| Azamgarh | 56.97 | 47.20 | 72.11 | 47.09 | 42.71 | 59.04 |
| Jaunpur | 60.75 | 49.58 | 69.32 | 50.26 | 46.60 | 54.19 |
| Ballia | 58.24 | 49.41 | 72.10 | 47.41 | 41.63 | 53.84 |
| Ghazipur | 60.87 | 51.88 | 70.91 | 42.39 | 37.20 | 48.46 |
| Varanasi | 58.56 | 55.66 | 70.90 | 53.67 | 47.77 | 59.56 |
| Mirzapur | 66.07 | 56.64 | 76.91 | 39.87 | 35.06 | 45.55 |

*Source: Socio-cultural table, Uttar Pradesh, 1991, series-22, volume-2.*

Table A.3. District wise growth rate of population and Nowhere children in the age group 5-14 years during 1981-1991.

| | Rural | | | | Uraban | | | |
|---|---|---|---|---|---|---|---|---|
| | Population | | Nowhere children | | Population | | Nowhere children | |
| | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| Uttarkashi | 7.19 | -0.74 | -6.96 | 28.87 | 7.84 | 10.26 | -23.69 | -21.24 |
| Chamoli | -7.10 | 4.76 | -9.93 | 18.86 | -6.30 | 5.49 | 1.91 | -17.66 |
| Tehri G | 8.82 | -10.01 | -8.68 | 33.74 | 16.42 | 2.99 | -28.15 | -26.94 |
| Dehradun | -6.17 | -4.70 | 9.96 | -16.51 | -2.15 | -2.17 | 14.20 | 3.64 |
| Garhwal | -9.02 | -5.84 | -9.68 | -22.34 | 0.32 | 0.61 | 19.93 | -0.33 |
| Pithoragarh | -5.90 | -0.67 | 13.69 | -16.62 | 12.26 | 4.89 | 25.04 | -4.58 |
| Almora | -3.70 | -5.46 | 3.80 | -26.69 | 0.49 | -12.12 | 114.86 | 94.48 |
| Nainital | -8.32 | -9.66 | -14.30 | -20.93 | -1.31 | -9.77 | 2.16 | -1.31 |
| Bijnor | -9.06 | -5.77 | 17.55 | 4.82 | -1.32 | -1.45 | 10.85 | -2.49 |
| Moradabad | -8.74 | -1.67 | 9.82 | -3.56 | -3.75 | -0.38 | -4.81 | -5.71 |
| Rampur | -8.62 | -8.78 | -15.96 | -5.16 | -6.93 | -1.89 | -4.48 | -6.89 |
| Saharanpur | -11.63 | -9.46 | 2.08 | -10.43 | -2.35 | -4.23 | -4.54 | -14.10 |
| Muzaffarnagar | -14.60 | -12.47 | -1.59 | -15.44 | -9.47 | -9.33 | 6.24 | -6.60 |
| Meerut | -13.29 | -6.36 | 9.24 | -14.68 | -0.08 | 0.59 | 19.91 | 218.35 |
| Ghaziabad | -14.25 | -9.74 | 6.91 | -16.99 | -5.75 | -7.03 | 17.85 | 2.71 |
| Bulandshar | -11.65 | -6.76 | 4.18 | 14.27 | -7.02 | -4.37 | -7.90 | -5.90 |

*Contd......*

| | Rural | | | | Uraban | | | |
|---|---|---|---|---|---|---|---|---|
| | Population | | Nowhere children | | Population | | Nowhere children | |
| | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| Aligarh | -14.84 | -9.12 | 8.29 | -10.16 | -7.00 | -4.39 | 6.63 | -2.10 |
| Mathura | -14.82 | -9.65 | 0.94 | -11.82 | -5.03 | -7.02 | 9.88 | -17.07 |
| Agra | -12.58 | -8.83 | -1.05 | -18.15 | -7.81 | -4.26 | 6.07 | -2.94 |
| Etah | -14.64 | -12.20 | 0.58 | -8.75 | -8.53 | -9.09 | 0.13 | 0.12 |
| Mainpuri | -10.38 | -5.74 | 6.29 | -11.09 | -5.98 | -6.39 | 7.91 | -4.56 |
| Budaun | -8.63 | -7.47 | 6.08 | -2.40 | -4.55 | -5.74 | 1.94 | 0.90 |
| Bareilly | -8.96 | -5.81 | 6.18 | -2.72 | -1.71 | -0.96 | 16.13 | 0.62 |
| Pilbhit | -2.05 | -1.41 | 5.16 | -6.80 | -1.59 | -2.79 | -0.09 | -4.32 |
| Shahjahanpur | -6.34 | -5.01 | 1.12 | -4.42 | -5.05 | -5.92 | 1.80 | -2.73 |
| Kheri | -4.36 | -0.55 | -1.86 | -5.97 | -0.79 | 4.71 | -0.94 | -0.15 |
| Sitapur | -8.59 | -2.97 | 4.41 | -5.51 | -5.38 | -4.05 | 21.88 | 4.77 |
| Hardoi | -7.45 | -4.03 | -1.06 | -8.94 | -1.98 | -5.30 | 18.81 | 2.71 |
| Unnao | -11.10 | -7.51 | 1.32 | -11.01 | -6.00 | -3.46 | 4.25 | -12.89 |
| Lucknow | -6.35 | -4.26 | -5.42 | -14.46 | 5.51 | -2.99 | -3.63 | -6.09 |
| Raebareily | -6.39 | -1.80 | -7.00 | -12.67 | -0.57 | -0.07 | -7.40 | -16.12 |
| Farrukhabad | -10.21 | -5.52 | 8.91 | -7.12 | -1.86 | -2.27 | 17.50 | 2.55 |
| Etawah | -18.05 | -9.93 | 14.37 | -15.49 | -9.53 | -8.09 | 29.08 | 21.64 |
| Kanpur | -12.00 | -8.07 | -22.88 | -8.83 | 5.60 | -3.27 | 20.38 | 9.52 |
| Jalaun | -7.58 | -8.58 | 10.69 | -12.96 | 5.40 | -6.75 | 43.60 | 2.59 |
| Jhansi | -12.65 | -11.88 | 6.44 | -9.26 | -12.80 | -5.95 | -12.24 | -2.74 |
| Lalitpur | -4.46 | 1.37 | 12.29 | -0.02 | -4.62 | -5.48 | 8.08 | -13.30 |
| Hamirpur | -12.49 | -7.29 | -1.84 | -9.12 | -9.76 | -11.06 | -0.46 | -6.34 |
| Banda | -8.46 | -8.29 | -2.62 | -10.57 | -2.53 | -8.22 | -7.01 | -6.65 |
| Fatehpur | -7.19 | -6.21 | -15.76 | -19.42 | -4.50 | -2.98 | -6.82 | -6.34 |
| Pratapgarh | -5.05 | -0.88 | -0.04 | -15.19 | 1.13 | 7.39 | 9.93 | -11.76 |
| Allahabad | -5.36 | -1.01 | -2.02 | -12.62 | -1.70 | -0.15 | -4.89 | -6.45 |
| Bahraich | -2.03 | 0.79 | 24.38 | -9.10 | -10.65 | -4.09 | -15.28 | -2.49 |
| Gonda | -1.49 | 4.47 | -1.83 | -9.06 | 1.81 | 3.36 | 5.83 | -6.04 |
| Barabanki | -9.45 | -1.76 | 3.37 | -10.50 | -8.15 | -6.47 | -31.81 | -7.24 |
| Faizabad | -7.81 | -0.39 | 1.09 | -32.91 | -11.22 | -2.03 | 29.39 | 6.99 |
| Sultanpur | -9.67 | -1.35 | -6.21 | -14.83 | -3.51 | -5.87 | -0.84 | -6.63 |
| Basti | -1.23 | 3.67 | 8.37 | -7.84 | 4.12 | 3.53 | 27.22 | 11.18 |
| Gorakhpur | -3.94 | 2.41 | 5.87 | -11.06 | 7.06 | 2.35 | 24.01 | 24.74 |
| Deoria | -4.22 | -0.51 | 5.98 | -17.23 | -2.04 | 1.38 | 7.63 | -10.47 |
| Azamgarh | -6.88 | -41.38 | -0.13 | -6.89 | -2.98 | 0.67 | 19.67 | 17.77 |
| Jaunpur | -6.28 | 0.82 | 9.57 | -14.67 | 0.61 | 3.76 | 21.04 | 1.88 |
| Ballia | -7.59 | -8.63 | 6.44 | -6.51 | -3.80 | -3.44 | 16.22 | 0.43 |
| Ghazipur | -7.57 | -2.23 | 10.93 | -10.84 | 2.00 | -3.88 | 1.47 | -14.03 |
| Varanasi | -4.52 | -1.59 | 20.45 | -13.21 | -5.77 | 1.39 | 12.93 | 1.57 |
| Mirzapur | -7.28 | -12.58 | 2.43 | -7.33 | -1.50 | -0.14 | -4.75 | -16.17 |

*Source: Based on the percentage of nowhere children 1981-1991..*

Table A.4. Ranks of the districts of Uttar Pradesh, 1981.

| | Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|---|
| | Boys | Ranks | Girls | Ranks | Boys | Ranks | Girls | Ranks |
| Uttarkashi | 41.84 | 9 | 42.85 | 4 | 21.95 | 6 | 31.03 | 7 |
| Chamoli | 34.55 | 5 | 36.8 | 1 | 25.67 | 7 | 35.33 | 8 |
| Tehri Garhwal | 35.84 | 6 | 36.84 | 2 | 19.93 | 5 | 26.02 | 5 |
| Dehradun | 31.12 | 4 | 50.75 | 5 | 16.13 | 2 | 22.54 | 3 |
| Garhwal | 29.34 | 3 | 41.49 | 3 | 17.61 | 3 | 27.49 | 6 |
| Pithoragarh | 28.19 | 2 | 53.43 | 7 | 17.65 | 4 | 24.44 | 4 |
| Almora | 25.24 | 1 | 52.04 | 6 | 9.96 | 1 | 14.12 | 1 |
| Nainital | 41.11 | 7 | 63.93 | 8 | 35.69 | 20 | 46.47 | 14 |
| Bijnor | 48.16 | 26 | 71.31 | 11 | 48.55 | 51 | 67.49 | 52 |
| Moradabad | 60.98 | 50 | 91.27 | 50 | 55.11 | 55 | 67.8 | 53 |
| Rampur | 65.42 | 56 | 94.32 | 56 | 57.8 | 56 | 73.43 | 56 |
| Saharanpur | 50.39 | 31 | 83.49 | 35 | 37.14 | 27 | 50.53 | 20 |
| Muzaffarnagar | 43.37 | 12 | 77.85 | 20 | 40.53 | 33 | 58.94 | 42 |
| Meerut | 41.12 | 8 | 74.99 | 15 | 38.42 | 28 | 17.49 | 2 |
| Ghaziabad | 43.55 | 13 | 76.94 | 16 | 33.56 | 13 | 48.04 | 17 |
| Bulandshar | 46.64 | 22 | 83.07 | 33 | 47.45 | 48 | 62.38 | 48 |
| Aligarh | 48.61 | 28 | 81.7 | 28 | 44.18 | 42 | 57.56 | 35 |
| Mathura | 44.83 | 15 | 86.98 | 43 | 39.77 | 32 | 56.29 | 32 |
| Agra | 49.49 | 30 | 83.61 | 36 | 45.31 | 44 | 57.93 | 38 |
| Etah | 53.86 | 41 | 84.46 | 40 | 45.91 | 45 | 59.89 | 45 |
| Mainpuri | 45.28 | 17 | 74.15 | 13 | 39.05 | 30 | 51.14 | 22 |
| Budaun | 62.96 | 55 | 92.44 | 53 | 54.76 | 54 | 69.96 | 55 |
| Bareilly | 61.33 | 52 | 92.49 | 54 | 49.85 | 52 | 63.16 | 49 |
| Pilbhit | 58.95 | 47 | 91.23 | 49 | 53.07 | 53 | 68.23 | 54 |
| Shahjahanpur | 60.97 | 49 | 90.47 | 48 | 48.33 | 50 | 63.7 | 50 |
| Kheri | 62.43 | 54 | 91.65 | 52 | 46.78 | 47 | 58.09 | 39 |
| Sitapur | 61.61 | 53 | 90.33 | 47 | 41.55 | 37 | 55.79 | 31 |
| Hardoi | 57.4 | 46 | 88.64 | 46 | 43.22 | 41 | 59.72 | 44 |
| Unnao | 51.59 | 34 | 82.19 | 30 | 40.95 | 35 | 58.96 | 43 |
| Lucknow | 57.18 | 44 | 84.74 | 41 | 34.99 | 16 | 43.38 | 11 |
| Raebareily | 51.98 | 35 | 79.72 | 24 | 47.56 | 49 | 61.43 | 47 |
| Farrukhabad | 48.59 | 27 | 74.95 | 14 | 42.17 | 38 | 54.13 | 28 |
| Etawah | 42.25 | 11 | 67.48 | 9 | 35.73 | 22 | 45.05 | 12 |
| Kanpur | 44.82 | 14 | 68.42 | 10 | 32.53 | 10 | 42.29 | 10 |
| Jalaun | 42.18 | 10 | 73.83 | 12 | 34.59 | 14.5 | 51.33 | 23 |
| Jhansi | 45.64 | 18 | 79.26 | 22 | 32.19 | 9 | 47.44 | 16 |
| Lalitpur | 54.44 | 42 | 81.82 | 29 | 33.52 | 12 | 51.04 | 21 |
| Hamirpur | 52.11 | 36 | 82.46 | 31 | 39.54 | 31 | 58.19 | 40 |
| Banda | 53.74 | 40 | 83.8 | 38 | 40.68 | 34 | 57.78 | 36 |
| Fatehpur | 50.52 | 32 | 79.18 | 21 | 42.21 | 39 | 53.67 | 26 |
| Pratapgarh | 47.13 | 24 | 83.42 | 34 | 35.25 | 17 | 56.95 | 34 |
| Allahabad | 53.44 | 39 | 87.71 | 44 | 36.59 | 24 | 47.15 | 15 |
| Bahraich | 61.16 | 51 | 93.27 | 55 | 44.31 | 43 | 61.39 | 46 |
| Gonda | 60.62 | 48 | 91.47 | 51 | 41.19 | 36 | 57.8 | 37 |
| Barabanki | 57.32 | 45 | 88.29 | 45 | 46.18 | 46 | 65.29 | 51 |
| Faizabad | 48.8 | 29 | 80.99 | 25 | 35.69 | 20 | 49.18 | 18 |
| Sultanpur | 51.06 | 30 | 83.68 | 37 | 33.29 | 11 | 46 | 13 |

|  | Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|---|
|  | Boys | Ranks | Girls | Ranks | Boys | Ranks | Girls | Ranks |
| Basti | 52.75 | 38 | 83.97 | 39 | 35.49 | 18 | 53.88 | 27 |
| Gorakhpur | 52.47 | 37 | 85.39 | 42 | 30.59 | 8 | 41.99 | 9 |
| Deoria | 46.29 | 20 | 77.55 | 19 | 34.59 | 14.5 | 54.26 | 29 |
| Azamgarh | 47.26 | 25 | 77.45 | 18 | 35.69 | 20 | 50.13 | 19 |
| Jaunpur | 45.25 | 16 | 81.24 | 26 | 38.5 | 29 | 53.19 | 24 |
| Ballia | 46.42 | 21 | 77.12 | 17 | 35.82 | 23 | 53.61 | 25 |
| Ghazipur | 46.77 | 23 | 79.53 | 23 | 36.66 | 25 | 56.37 | 33 |
| Varanasi | 46.21 | 19 | 81.69 | 27 | 42.3 | 40 | 58.64 | 41 |
| Mirzapur | 55.29 | 43 | 82.99 | 32 | 36.81 | 26 | 54.33 | 30 |
| C.V. | 18.55 |  | 18.44 |  | 25.78 |  | 25.58 |  |

*Source: Based on the percentage of 'nowhere' children, 1981.*

## Table A.5. Ranks of the districts of Uttar Pradesh, 1991.

|  | Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|---|
| Districts | Boys | Ranks | Girls | Ranks | Boys | Ranks | Girls | Ranks |
| Uttarkashi | 38.93 | 9 | 55.22 | 9 | 16.75 | 2 | 24.44 | 4 |
| Chamoli | 31.12 | 3 | 43.74 | 4 | 26.16 | 7 | 29.09 | 7 |
| Tehri G | 32.73 | 5 | 49.27 | 6 | 14.32 | 1 | 19.01 | 1 |
| Dehradun | 34.22 | 6 | 42.37 | 3 | 18.42 | 3 | 23.36 | 3 |
| Garhwal | 26.50 | 2 | 32.22 | 1 | 21.12 | 4 | 27.40 | 5 |
| Pithoragarh | 32.05 | 4 | 44.55 | 5 | 22.07 | 6 | 23.32 | 2 |
| Almora | 26.20 | 1 | 38.15 | 2 | 21.40 | 5 | 27.46 | 6 |
| Nainital | 35.23 | 8 | 50.55 | 7 | 36.46 | 16 | 45.86 | 14 |
| Bijnor | 56.61 | 43 | 74.75 | 34 | 53.82 | 53 | 65.81 | 54 |
| Moradabad | 66.97 | 58 | 88.02 | 52 | 52.46 | 51 | 63.93 | 52 |
| Rampur | 54.98 | 40 | 89.45 | 53 | 55.21 | 54 | 68.37 | 55 |
| Saharanpur | 51.44 | 31 | 74.79 | 33 | 35.46 | 13 | 43.41 | 10 |
| Muzaffarnagar | 42.68 | 11 | 65.83 | 17 | 43.06 | 31 | 55.05 | 35.5 |
| Meerut | 44.92 | 12 | 63.98 | 14 | 46.07 | 38 | 55.68 | 37 |
| Ghaziabad | 46.56 | 14 | 63.87 | 13 | 39.55 | 26 | 49.34 | 21 |
| Bulandshar | 48.59 | 23 | 94.92 | 56 | 43.70 | 33.5 | 58.70 | 42 |
| Aligarh | 52.64 | 36 | 73.40 | 32 | 47.11 | 43 | 56.35 | 39 |
| Mathura | 45.25 | 13 | 76.70 | 39 | 43.70 | 33.5 | 46.68 | 17 |
| Agra | 48.97 | 24 | 68.44 | 19 | 48.06 | 45 | 56.23 | 38 |
| Etah | 54.17 | 39 | 77.07 | 41 | 45.97 | 37 | 59.96 | 47 |
| Mainpuri | 48.13 | 19 | 65.93 | 18 | 42.14 | 28 | 48.81 | 20 |
| Budaun | 66.79 | 59 | 90.22 | 55 | 55.82 | 55 | 70.59 | 56 |
| Bareilly | 65.12 | 56 | 89.97 | 54 | 57.89 | 56 | 63.55 | 51 |
| Pilbhit | 61.99 | 54 | 85.03 | 48 | 53.02 | 52 | 65.28 | 53 |
| Shahjahanpur | 61.65 | 53 | 86.47 | 51 | 49.20 | 46 | 61.96 | 50 |
| Kheri | 61.27 | 52 | 86.18 | 50 | 46.34 | 41 | 58.00 | 40 |
| Sitapur | 64.33 | 55 | 85.35 | 49 | 50.64 | 49 | 58.45 | 41 |
| Hardoi | 56.79 | 45 | 80.72 | 44 | 51.35 | 50 | 61.34 | 49 |
| Unnao | 52.27 | 33 | 73.14 | 31 | 42.69 | 29 | 51.36 | 24 |
| Lucknow | 54.08 | 38 | 72.49 | 30 | 33.72 | 10 | 40.74 | 8 |

*Contd....*

| | Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|---|
| Districts | Boys | Ranks | Girls | Ranks | Boys | Ranks | Girls | Ranks |
| Raebareily | 48.34 | 21 | 69.62 | 22 | 44.04 | 35 | 51.53 | 25 |
| Farrukhabad | 52.92 | 37 | 69.61 | 21 | 49.55 | 47 | 55.51 | 35.5 |
| Etawah | 48.32 | 20 | 57.03 | 10 | 46.12 | 39 | 54.80 | 34 |
| Kanpur | 34.57 | 7 | 62.38 | 11 | 39.16 | 23 | 46.32 | 16 |
| Jalaun | 46.69 | 15 | 64.26 | 16 | 49.67 | 48 | 52.66 | 28 |
| Jhansi | 48.58 | 22 | 71.92 | 27 | 36.13 | 14 | 46.14 | 15 |
| Lalitpur | 61.13 | 51 | 81.80 | 45 | 36.23 | 15 | 44.25 | 12 |
| Hamirpur | 51.15 | 30 | 74.94 | 35.5 | 39.36 | 25 | 54.50 | 33 |
| Banda | 52.33 | 34 | 74.94 | 35.5 | 37.83 | 20 | 53.94 | 30 |
| Fatehpur | 42.56 | 10 | 63.80 | 12 | 39.33 | 24 | 50.27 | 23 |
| Pratapgarh | 47.11 | 16 | 70.75 | 23 | 38.75 | 22 | 50.25 | 22 |
| Allahabad | 52.36 | 35 | 76.64 | 38 | 34.80 | 11 | 44.11 | 11 |
| Bahraich | 76.07 | 58 | 84.78 | 47 | 37.54 | 19 | 59.86 | 45 |
| Gonda | 59.51 | 50 | 83.18 | 46 | 43.59 | 32 | 54.31 | 32 |
| Barabanki | 59.25 | 49 | 79.02 | 43 | 31.49 | 8 | 60.56 | 48 |
| Faizabad | 49.33 | 26 | 54.34 | 8 | 46.18 | 40 | 52.62 | 27 |
| Sultanpur | 47.89 | 18 | 71.27 | 26 | 33.01 | 9 | 42.95 | 9 |
| Basti | 57.17 | 48 | 77.39 | 42 | 45.15 | 36 | 59.91 | 46 |
| Gorakhpur | 55.55 | 41 | 75.95 | 37 | 37.94 | 21 | 52.38 | 26 |
| Deoria | 49.06 | 25 | 64.19 | 15 | 37.23 | 18 | 48.58 | 19 |
| Azamgarh | 47.20 | 17 | 72.11 | 29 | 42.71 | 30 | 59.04 | 43 |
| Jaunpur | 49.58 | 28 | 69.32 | 20 | 46.60 | 42 | 54.19 | 31 |
| Ballia | 49.41 | 27 | 72.10 | 28 | 41.63 | 27 | 53.84 | 29 |
| Ghazipur | 51.88 | 32 | 70.91 | 25 | 37.20 | 17 | 48.46 | 18 |
| Varanasi | 55.66 | 42 | 70.90 | 24 | 47.77 | 44 | 59.56 | 44 |
| Mirzapur | 56.64 | 44 | 76.91 | 40 | 35.06 | 12 | 45.55 | 13 |
| C.V. | 20.57 | | 19.64 | | 24.75 | | 23.49 | |

Source: Based on percentage of 'nowhere' children, 1991.

Table A.6. Sex disparity in the districts, 1981, 1991.

| Districts | 1981 | | 1991 | |
|---|---|---|---|---|
| | rural | urban | Rural | urban |
| Uttarkashi | 0.01 | 0.17 | 0.20 | 0.18 |
| Chamoli | 0.03 | 0.16 | 0.17 | 0.05 |
| Tehri G | 0.01 | 0.13 | 0.22 | 0.13 |
| Dehradun | 0.27 | 0.16 | 0.11 | 0.12 |
| Garhwal | 0.18 | 0.22 | 0.09 | 0.13 |
| Pithoragarh | 0.35 | 0.16 | 0.17 | 0.03 |
| Almora | 0.39 | 0.16 | 0.19 | 0.12 |
| Nainital | 0.26 | 0.14 | 0.19 | 0.13 |
| Bijnor | 0.33 | 0.17 | 0.17 | 0.12 |
| Moradabad | 0.36 | 0.22 | 0.19 | 0.12 |
| Rampur | 0.24 | 0.20 | 0.32 | 0.13 |
| Saharanpur | 0.37 | -0.39 | 0.23 | 0.11 |
| Muzaffarnagar | 0.35 | 0.20 | 0.22 | 0.14 |
| Meerut | 0.37 | 0.16 | 0.20 | 0.11 |
| Ghaziabad | 0.28 | 0.13 | 0.15 | 0.12 |

| Districts | 1981 | | 1991 | |
|---|---|---|---|---|
| | rural | urban | Rural | urban |
| Bulandshar | 0.26 | 0.15 | 0.12 | 0.17 |
| Aligarh | 0.27 | 0.15 | 0.10 | 0.10 |
| Mathura | 0.29 | 0.14 | 0.31 | 0.04 |
| Agra | 0.30 | 0.16 | 0.24 | 0.09 |
| Etah | 0.27 | 0.17 | 0.22 | 0.16 |
| Mainpuri | 0.33 | 0.15 | 0.19 | 0.08 |
| Budaun | 0.43 | 0.20 | 0.21 | 0.15 |
| Bareilly | 0.34 | 0.14 | 0.23 | 0.06 |
| Pilbhit | 0.30 | 0.16 | 0.22 | 0.13 |
| Shahjahanpur | 0.30 | 0.15 | 0.23 | 0.14 |
| Kheri | 0.27 | 0.14 | 0.32 | 0.13 |
| Sitapur | 0.28 | 0.13 | 0.19 | 0.09 |
| Hardoi | 0.26 | 0.14 | 0.27 | 0.11 |
| Unnao | 0.29 | 0.14 | 0.21 | 0.10 |
| Lucknow | 0.33 | 0.14 | 0.18 | 0.10 |
| Raebareily | 0.34 | 0.22 | 0.22 | 0.09 |
| Farrukhabad | 0.35 | 0.21 | 0.17 | 0.07 |
| Etawah | 0.27 | 0.23 | 0.09 | 0.10 |
| Kanpur | 0.30 | 0.22 | 0.18 | 0.09 |
| Jalaun | 0.29 | 0.20 | 0.18 | 0.03 |
| Jhansi | 0.27 | 0.13 | 0.24 | 0.13 |
| Lalitpur | 0.27 | 0.17 | 0.19 | 0.11 |
| Hamirpur | 0.30 | 0.19 | 0.23 | 0.18 |
| Banda | 0.30 | 0.21 | 0.22 | 0.20 |
| Fatehpur | 0.26 | 0.12 | 0.23 | 0.14 |
| Pratapgarh | 0.28 | 0.15 | 0.25 | 0.14 |
| Allahabad | 0.30 | 0.19 | 0.24 | 0.13 |
| Bahraich | 0.29 | 0.20 | 0.10 | 0.27 |
| Gonda | 0.29 | 0.21 | 0.22 | 0.13 |
| Barabanki | 0.32 | 0.18 | 0.18 | 0.37 |
| Faizabad | 0.32 | 0.17 | 0.05 | 0.08 |
| Sultanpur | 0.37 | 0.27 | 0.24 | 0.14 |
| Basti | 0.31 | 0.23 | 0.22 | 0.17 |
| Gorakhpur | 0.32 | 0.17 | 0.21 | 0.18 |
| Deoria | 0.32 | 0.25 | 0.24 | 0.15 |
| Azamgarh | 0.31 | 0.19 | 0.22 | 0.18 |
| Jaunpur | 0.37 | 0.18 | 0.24 | 0.09 |
| Ballia | 0.32 | 0.22 | 0.21 | 0.15 |
| Ghazipur | 0.34 | 0.24 | 0.06 | 0.15 |
| Varanasi | 0.36 | 0.19 | 0.14 | 0.13 |
| Mirzapur | 0.27 | 0.22 | 0.20 | 0.14 |

Source: Based on the percentage of 'nowhere' boys and girls.

| | BOYS | GIRLS | DISP | AGL | SCPOP | NWP | SRATIO | DEPR | MPOP | CWR | MPED | FPED | MMED | FMED | BHD | GHD | FMW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | |
| BOYS | 1.000 | 0.805** | 0.056 | -0.137 | 0.096 | -0.158 | 0.152 | 0.036 | 0.047 | 0.665** | -0.625** | -0.677** | -0.406 | -0.421 | 0.158 | 0.074 | -0.076 |
| GIRLS | | 1.000 | 0.630** | 0.049 | 0.236 | -0.014 | 0.199 | 0.046 | 0.056 | 0.685** | -0.620** | -0.755** | -0.371 | -0.635** | 0.168 | 0.489* | -0.255 |
| DISP | | | 1.000 | 0.276 | 0.567** | 0.139 | -0.526* | 0.044 | 0.077 | 0.301 | -0.221 | -0.380 | -0.124 | -0.524* | 0.107 | 0.747** | -0.520* |
| AGL | | | | 1.000 | 1.163 | 0.017 | 0.082 | -0.143 | -0.191 | -0.307 | 0.245 | 0.182 | -0.023 | -0.066 | -0.169 | 0.281 | 0.005 |
| SCPOP | | | | | 1.000 | 0.607* | -0.464* | 0.005 | -0.086 | -0.119 | -0.111 | 0.070 | -0.234 | -0.488* | 0.017 | 0.469 | -0.675** |
| NWP | | | | | | 1.000 | -0.253 | -0.063 | 0.087 | -0.291 | 0.066 | 0.252 | 0.189 | -0.144 | -0.087 | 0.198 | -0.791** |
| SRATIO | | | | | | | 1.000 | -0.147 | 0.067 | -0.222 | -0.004 | -0.012 | -0.094 | 0.154 | -0.114 | -0.454 | 0.382 |
| DEPR | | | | | | | | 1.000 | -0.240 | 0.212 | 0.268 | 0.156 | 0.035 | 0.090 | -0.054 | 0.033 | 0.016 |
| MPOP | | | | | | | | | 1.000 | 0.098 | -0.163 | -0.074 | 0.232 | -0.063 | 0.574** | 0.231 | -0.378 |
| CWR | | | | | | | | | | 1.000 | -0.373 | -0.651** | -0.251 | -0.173 | 0.231 | 0.146 | -0.023 |
| MPED | | | | | | | | | | | 1.000 | 0.513* | -0.378 | 0.485* | -0.344 | -0.242 | 0.108 |
| FPED | | | | | | | | | | | | 1.000 | 0.478* | 0.604** | -0.218 | -0.252 | 0.027 |
| MMED | | | | | | | | | | | | | 1.000 | 0.405 | -0.022 | -0.060 | -0.060 |
| FMED | | | | | | | | | | | | | | 1.000 | -0.126 | -0.405 | 0.374 |
| BHD | | | | | | | | | | | | | | | 1.000 | 0.605** | -0.299 |
| GHD | | | | | | | | | | | | | | | | 1.000 | -0.585** |
| FMW | | | | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 Level
* Significant at 0.05 Level

| | BOYS | GIRLS | DISP | AGL | SCPOP | NWP | SRATIO | DEPR | MPOP | CWR | MPED | FPED | MMED | FMED | BHD | GHD | FMW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Table A.8: Inter- Correlation Matrix of Variables Considered for Multiple Regression Analysis (Home Related Characteristics) of Urban India 1981** | | | | | | | | | | | | | | | | | |
| BOYS | 1.000 | 0.951** | 0.604** | 0.259 | 0.167 | 0.190 | -0.119 | 0.539* | 0.372 | 0.415 | -0.426 | -0.401 | -0.412 | 0.047 | 0.287 | 0.556** | -0.327 |
| GIRLS | | 1.000 | 0.809** | 0.304 | 0.233 | 0.191 | -0.093 | 0.581** | 0.417 | 0.423 | -0.440 | -0.367 | -0.374 | -0.138 | 0.251 | 0.619** | -0.368 |
| DISP | | | 1.000 | 0.391 | 0.301 | 0.057 | -0.060 | 0.429 | 0.339 | 0.313 | -0.338 | -0.222 | -0.199 | -0.392 | 0.142 | 0.605** | -0.308 |
| AGL | | | | 1.000 | 0.079 | 0.291 | 0.194 | 0.715** | 0.123 | -0.067 | -0.247 | 0.196 | 0.292 | 0.020 | 0.104 | 0.217 | 0.003 |
| SCPOP | | | | | 1.000 | 0.292 | -0.406 | -0.012 | -0.237 | 0.121 | -0.015 | 0.167 | -0.278 | -0.266 | -0.019 | 0.170 | -0.664* |
| NWP | | | | | | 1.000 | -0.100 | 0.269 | 0.266 | -0.536 | -0.388 | 0.311 | 0.074 | -0.150 | -0.033 | 0.290 | -0.665** |
| SRATIO | | | | | | | 1.000 | 0.027 | -0.066 | -0.124 | 0.237 | 0.001 | 0.284 | 0.199 | -0.178 | -0.344 | 0.404 |
| DEPR | | | | | | | | 1.000 | 0.259 | 0.284 | -0.566** | 0.271 | 0.214 | -0.011 | -0.071 | 0.169 | 0.064 |
| MPOP | | | | | | | | | 1.000 | -0.159 | -0.307 | -0.181 | -0.107 | -0.009 | 0.434* | 0.592** | -0.322 |
| CWR | | | | | | | | | | 1.000 | -0.196 | -0.365 | -0.407 | 0.110 | -0.060 | -0.102 | 0.202 |
| MPED | | | | | | | | | | | 1.000 | 0.301 | 0.149 | -0.156 | -0.246 | -0.325 | 0.223 |
| FPED | | | | | | | | | | | | 1.000 | 0.388 | 0.015 | -0.217 | -0.075 | -0.178 |
| MMED | | | | | | | | | | | | | 1.000 | 0.149 | -0.128 | -0.135 | 0.349 |
| FMED | | | | | | | | | | | | | | 1.000 | 0.082 | -0.220 | 0.189 |
| BHD | | | | | | | | | | | | | | | 1.000 | 0.731** | -0.224 |
| GHD | | | | | | | | | | | | | | | | 1.000 | -0.501* |
| FMW | | | | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 Level

* Significant at 0.05 Level

# Table 4.9: Inter- Correlation Matrix of Variables Considered for Multiple Regression Analysis
## (Home Related Characteristics) of Rural India 1991

| | BOYS | GIRLS | DISP | AGL | SCPOP | NWP | SRATIO | DEPR | MPOP | CWR | MPED | FPED | MMED | FMED | INFR | BHD | GHD | FMW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOYS | 1.000 | 0.897** | 0.040 | -0.140 | -0.167 | 0.186 | 0.300 | 0.715** | 0.185 | 0.757** | -0.638** | -0.729** | -0.338 | -0.405* | 0.398 | 0.121 | 0.177 | 0.136 |
| GIRLS | | 1.000 | 0.449* | 0.026 | 0.106 | -0.104 | -0.047 | 0.798** | 0.141 | 0.778** | -0.632* | -0.801** | -0.522** | -0.619** | 0.481** | 0.337 | 0.440* | -0.098 |
| DISP | | | 1.000 | 0.333 | 0.521* | -0.044 | -0.607** | 0.399 | -0.108 | 0.264 | -0.081 | -0.386 | -0.566** | -0.684** | 0.032 | 0.383 | 0.527** | -0.376 |
| AGL | | | | 1.000 | 0.502* | -0.189 | -0.252 | -0.109 | -0.219 | -0.244 | 0.048 | -0.121 | -0.350 | -0.302 | -0.060 | -0.167 | 0.328 | -0.326 |
| SCPOP | | | | | 1.000 | 0.431 | -0.607** | 0.118 | 0.135 | -0.111 | 0.077 | 0.108 | -0.281 | -0.368 | 0.047 | 0.147 | 0.555** | -0.600* |
| NWP | | | | | | 1.000 | -0.378 | -0.151 | 0.471 | -0.290 | -0.009 | 0.274 | 0.339 | 0.308 | -0.108 | 0.005 | 0.219 | -0.835** |
| SRATIO | | | | | | | 1.000 | -0.175 | 0.075 | -0.065 | -0.152 | -0.039 | 0.220 | 0.351 | -0.001 | -0.345 | -0.397 | 0.629** |
| DEPR | | | | | | | | 1.000 | 0.098 | 0.936** | -0.363 | 0.407* | 0.460* | 0.521** | 0.517** | 0.212 | 0.252 | -0.080 |
| MPOP | | | | | | | | | 1.000 | 0.017 | 0.072 | 0.109 | 0.254 | 0.294 | 0.051 | -0.109 | 0.062 | -0.445* |
| CWR | | | | | | | | | | 1.000 | -0.376 | -0.518* | -0.477* | -0.488* | 0.550** | 0.205 | 0.144 | 0.098 |
| MPED | | | | | | | | | | | 1.000 | 0.742* | 0.182 | 0.254 | -0.047 | -0.262 | -0.229 | -0.101 |
| FPED | | | | | | | | | | | | 1.000 | 0.545** | 0.651** | -0.249 | -0.236 | -0.353 | -0.091 |
| MMED | | | | | | | | | | | | | 1.000 | 0.897** | -0.322 | -0.170 | -0.380 | 0.013 |
| FMED | | | | | | | | | | | | | | 1.000 | -0.311 | -0.237 | -0.429* | 0.030 |
| INFR | | | | | | | | | | | | | | | 1.000 | 0.202 | 0.273 | -0.156 |
| BHD | | | | | | | | | | | | | | | | 1.000 | 0.456* | -0.192 |
| GHD | | | | | | | | | | | | | | | | | 1.000 | -0.452* |
| FMW | | | | | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 Level
* Significant at 0.05 Level

| | | BOYS | GIRLS | DISP | AGL | SCPOP | NWP | SRATIO | DEPR | MPOP | CWR | MPED | FPED | MMED | FMED | INFR | BHD | GHD | FMW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**Table A.10: Inter- Correlation Matrix of Variables Considered for Multiple Regression Analysis (Home Related Characteristics) of Urban India 1991**

| | BOYS | GIRLS | DISP | AGL | SCPOP | NWP | SRATIO | DEPR | MPOP | CWR | MPED | FPED | MMED | FMED | INFR | BHD | GHD | FMW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOYS | 1.000 | 0.960 | 0.462 | 0.068 | 0.070 | 0.157 | 0.017 | 0.624 | 0.245 | 0.560 | -0.505 | -0.584 | 0.183 | -0.082 | 0.448 | 0.456 | 0.461 | -0.361 |
| GIRLS | | 1.000 | 0.642 | 0.153 | 0.172 | 0.248 | -0.073 | 0.677 | 0.383 | 0.568 | -0.518 | -0.617 | -0.365 | -0.230 | 0.475 | 0.342 | 0.589 | -0.452 |
| DISP | | | 1.000 | 0.157 | 0.304 | 0.323 | -0.230 | 0.366 | 0.444 | 0.296 | -0.276 | -0.444 | -0.614 | -0.352 | 0.208 | 0.025 | 0.555 | -0.571 |
| AGL | | | | 1.000 | 0.146 | 0.391 | 0.154 | 0.362 | 0.489 | -0.101 | -0.054 | -0.005 | -0.198 | -0.196 | -0.291 | -0.273 | 0.080 | -0.188 |
| SCPOP | | | | | 1.000 | 0.581 | -0.660 | 0.114 | 0.133 | -0.041 | -0.270 | -0.161 | -0.631 | -0.506 | 0.081 | -0.290 | 0.396 | -0.696 |
| NWP | | | | | | 1.000 | -0.166 | 0.011 | 0.492 | -0.298 | -0.272 | -0.158 | -0.305 | -0.269 | 0.097 | -0.305 | 0.270 | -0.817 |
| SRATIO | | | | | | | 1.000 | -0.231 | 0.122 | -0.202 | 0.111 | 0.146 | 0.566 | 0.371 | 0.004 | 0.230 | -0.319 | 0.518 |
| DEPR | | | | | | | | 1.000 | 0.256 | 0.790 | -0.385 | -0.499 | -0.237 | -0.078 | 0.100 | -0.006 | 0.215 | -0.181 |
| MPOP | | | | | | | | | 1.000 | -0.025 | -0.050 | -0.102 | -0.288 | -0.268 | -0.068 | -0.027 | 0.335 | 0.397 |
| CWR | | | | | | | | | | 1.000 | -0.313 | -0.468 | -0.094 | 0.167 | 0.385 | 0.230 | 0.110 | -0.016 |
| MPED | | | | | | | | | | | 1.000 | 0.925 | 0.246 | 0.228 | -0.336 | -0.213 | -0.190 | 0.252 |
| FPED | | | | | | | | | | | | 1.000 | 0.242 | 0.220 | -0.335 | -0.255 | -0.243 | 0.202 |
| MMED | | | | | | | | | | | | | 1.000 | 0.533 | -0.146 | 0.246 | -0.435 | 0.590 |
| FMED | | | | | | | | | | | | | | 1.000 | -0.176 | -0.114 | -0.559 | 0.461 |
| INFR | | | | | | | | | | | | | | | 1.000 | 0.404 | 0.346 | -0.301 |
| BHD | | | | | | | | | | | | | | | | 1.000 | 0.385 | 0.117 |
| GHD | | | | | | | | | | | | | | | | | 1.000 | -0.563 |
| FMW | | | | | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 Level
* Significant at 0.05 Level

**Table A.II: Inter- Correlation Matrix of Variables Considered for Multiple Regression Analysis (Home Related Characteristics) of Rural Uttar Pradesh 1981**

| | BOYS | GIRL | DISP | AGL | SCP | CWR | MPOP | SRAT | MME | FMED | FMW | DEPR | NWP | MPED | FPED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOYS | 1.000 | 0.863 | 0.099 | 0.223 | 0.303 | 0.423 | 0.513 | 0.134 | -0.177 | -0.316 | -0.576 | 0.020 | -0.022 | -0.220 | -0.544 |
| GIRLS | | 1.000 | 0.582 | 0.438 | 0.331 | 0.508 | 0.519 | -0.036 | -0.058 | -0.351 | -0.811 | 0.058 | 0.002 | -0.257 | -0.551 |
| DISP | | | 1.000 | 0.455 | 0.166 | 0.311 | 0.206 | -0.258 | 0.154 | -0.178 | -0.679 | 0.083 | 0.016 | -0.163 | -0.165 |
| AGL | | | | 1.000 | 0.144 | 0.388 | 0.357 | -0.105 | -0.047 | -0.328 | -0.445 | -0.128 | -0.065 | 0.156 | -0.206 |
| SCPOP | | | | | 1.000 | 0.029 | -0.102 | 0.157 | 0.004 | -0.179 | -0.203 | 0.096 | -0.103 | -0.036 | -0.282 |
| CWR | | | | | | 1.000 | 0.470 | -0.110 | -0.008 | -0.090 | -0.515 | -0.165 | -0.214 | -0.189 | -0.231 |
| MPOP | | | | | | | 1.000 | 0.023 | -0.240 | -0.106 | -0.487 | -0.116 | -0.030 | 0.104 | -0.330 |
| SRATIO | | | | | | | | 1.000 | -0.373 | -0.035 | 0.277 | 0.225 | -0.108 | 0.234 | -0.192 |
| MMED | | | | | | | | | 1.000 | 0.130 | -0.135 | -0.358 | -0.131 | -0.053 | 0.141 |
| FMED | | | | | | | | | | 1.000 | 0.139 | -0.021 | 0.201 | 0.018 | 0.567 |
| FMW | | | | | | | | | | | 1.000 | -0.029 | -0.126 | 0.161 | 0.198 |
| DEPR | | | | | | | | | | | | 1.000 | 0.470 | -0.117 | 0.039 |
| NWP | | | | | | | | | | | | | 1.000 | 0.006 | 0.143 |
| MPED | | | | | | | | | | | | | | 1.000 | 0.271 |
| FPED | | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 Level
* Significant at 0.05 Level

**Table 4.12: Inter- Correlation Matrix of Variables Considered for Multiple Regression Analysis (Home Related Characteristics) of Urban Uttar Pradesh 1981**

| | BOY | GIRL | DISP | AGL | SCPO | CWR | MPOP | SRAT | MME | FMED | FMW | DEPR | NWP | MPED | FPED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOYS | 1.000 | 0.902 | -0.061 | 0.542 | -0.272 | 0.480 | 0.749 | -0.206 | -0.243 | -0.475 | -0.334 | 0.569 | 0.230 | -0.521 | -0.367 |
| GIRLS | | 1.000 | 0.368 | 0.588 | -0.244 | 0.555 | 0.651 | -0.167 | -0.192 | -0.432 | -0.312 | 0.620 | 0.233 | -0.425 | -0.354 |
| DISP | | | 1.000 | 0.124 | 0.001 | 0.178 | -0.079 | 0.069 | -0.099 | 0.067 | -0.001 | 0.146 | 0.021 | 0.089 | -0.013 |
| AGL | | | | 1.000 | -0.052 | 0.396 | 0.348 | -0.198 | -0.220 | -0.311 | -0.123 | 0.519 | -0.168 | -0.130 | -0.189 |
| SCPOP | | | | | 1.000 | -0.273 | -0.575 | -0.124 | -0.326 | 0.126 | 0.090 | 0.052 | 0.070 | 0.178 | 0.283 |
| CWR | | | | | | 1.000 | 0.442 | -0.122 | -0.090 | -0.314 | -0.267 | 0.589 | -0.077 | -0.204 | -0.345 |
| MPOP | | | | | | | 1.000 | -0.047 | -0.240 | -0.388 | -0.283 | 0.413 | 0.054 | -0.499 | -0.413 |
| SRATIO | | | | | | | | 1.000 | 0.031 | 0.265 | 0.149 | -0.125 | 0.149 | 0.051 | 0.446 |
| MMED | | | | | | | | | 1.000 | 0.477 | -0.009 | 0.076 | -0.009 | 0.171 | 0.067 |
| FMED | | | | | | | | | | 1.000 | 0.099 | -0.292 | -0.013 | 0.306 | 0.365 |
| FMW | | | | | | | | | | | 1.000 | -0.165 | 0.016 | 0.011 | 0.200 |
| DEPR | | | | | | | | | | | | 1.000 | 0.362 | -0.151 | -0.044 |
| NWP | | | | | | | | | | | | | 1.000 | 0.151 | 0.287 |
| MPED | | | | | | | | | | | | | | 1.000 | 0.379 |
| FPED | | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 Level
* Significant at 0.05 Level

## Table A.13 Inter- Correlation Matrix of Variables Considered for Multiple Regression Analysis (Home Related Characteristics) of Rural Uttar Pradesh 1991

| | BOY | GIRL | DISP | AGL | SCPO | CWR | BHD | GHD | MPOP | DEPR | INFR | MPED | FPED | SRAT | MME | FMED | FMW | NWP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOYS | 1.000 | 0.857 | 0.115 | 0.083 | 0.099 | 0.379 | 0.179 | 0.647 | 0.468 | 0.182 | 0.588 | -0.592 | -0.452 | -0.067 | -0.549 | -0.214 | -0.181 | 0.346 |
| GIRLS | | 1.000 | 0.373 | -0.096 | 0.110 | 0.509 | 0.106 | 0.720 | 0.475 | 0.288 | 0.534 | -0.604 | -0.481 | -0.125 | -0.300 | -0.151 | -0.251 | 0.392 |
| DISP | | | 1.000 | -0.159 | 0.011 | 0.232 | -0.055 | 0.791 | 0.150 | 0.146 | 0.275 | -0.070 | -0.192 | -0.045 | -0.029 | -0.133 | -0.083 | 0.047 |
| AGL | | | | 1.000 | -0.119 | 0.061 | 0.266 | 0.151 | 0.148 | -0.108 | -0.158 | -0.056 | 0.046 | -0.126 | 0.153 | 0.141 | 0.017 | 0.165 |
| SCPOP | | | | | 1.000 | -0.146 | -0.065 | -0.122 | -0.271 | -0.200 | 0.039 | 0.018 | -0.055 | -0.016 | 0.068 | -0.016 | 0.014 | -0.016 |
| CWR | | | | | | 1.000 | -0.046 | 0.684 | 0.525 | 0.416 | 0.244 | -0.427 | -0.084 | -0.234 | -0.013 | 0.040 | -0.271 | 0.380 |
| BHD | | | | | | | 1.000 | 0.268 | 0.003 | -0.052 | 0.046 | -0.145 | -0.205 | -0.170 | -0.194 | -0.131 | 0.134 | 0.133 |
| GHD | | | | | | | | 1.000 | 0.670 | 0.274 | 0.411 | -0.560 | -0.397 | -0.250 | -0.227 | -0.122 | -0.278 | 0.403 |
| MPOP | | | | | | | | | 1.000 | 0.331 | 0.237 | -0.459 | -0.134 | -0.389 | -0.120 | 0.134 | -0.186 | 0.327 |
| DEPR | | | | | | | | | | 1.000 | 0.203 | -0.351 | -0.366 | -0.095 | -0.182 | -0.086 | 0.092 | 0.254 |
| INFR | | | | | | | | | | | 1.000 | -0.249 | -0.172 | 0.021 | -0.342 | -0.101 | -0.183 | 0.066 |
| MPED | | | | | | | | | | | | 1.000 | 0.412 | 0.106 | 0.270 | 0.175 | 0.207 | -0.285 |
| FPED | | | | | | | | | | | | | 1.000 | -0.066 | 0.332 | 0.360 | -0.084 | -0.188 |
| SRATIO | | | | | | | | | | | | | | 1.000 | -0.145 | -0.403 | 0.129 | -0.180 |
| MMED | | | | | | | | | | | | | | | 1.000 | 0.523 | -0.081 | 0.035 |
| FMED | | | | | | | | | | | | | | | | 1.000 | 0.074 | 0.178 |
| FMW | | | | | | | | | | | | | | | | | 1.000 | 0.034 |
| NWP | | | | | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 Level

* Significant at 0.05 Level

**Table A14. Inter correlation matrix of the variables included in multiple regression analysis (Home related factors) in urban Uttar Pradesh, 1991.**

| | BOYS | GIRLS | DISP | AGL | SCPOP | CWR | BHD | GHD | MPOP | DEPR | INFR | MPED | FPED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOYS | 1.000 | 0.913** | -0.149 | 0.494** | -0.160 | 0.669** | -0.021 | 0.722** | 0.673** | 0.742** | 0.165 | -0.074 | 0.124 |
| GIRLS | | 1.000 | 0.263* | 0.608** | -0.174 | 0.751** | -0.089 | 0.778** | 0.728** | 0.829** | 0.280* | 0.023 | 0.175 |
| DISP | | | 1.000 | 0.313* | -0.080 | 0.233 | -0.159 | 0.176 | 0.182 | 0.241 | 0.316* | 0.204 | -0.089 |
| AGL | | | | 1.000 | -0.141 | 0.504** | -0.125 | 0.565** | 0.345* | 0.614** | 0.120 | 0.089 | 0.003 |
| SCPOP | | | | | 1.000 | -0.134 | 0.002 | -0.199 | -0.414** | -0.193 | -0.053 | 0.002 | -0.071 |
| CWR | | | | | | 1.000 | 0.210 | 0.576** | 0.572** | 0.890** | 0.155 | 0.219 | 0.020 |
| BHD | | | | | | | 1.000 | -0.029 | -0.071 | -0.149 | -0.062 | -0.032 | 0.010 |
| GHD | | | | | | | | 1.000 | 0.636** | 0.687** | 0.212 | -0.127 | -0.062 |
| MPOP | | | | | | | | | 1.000 | 0.628** | 0.166 | 0.100 | 0.074 |
| DEPR | | | | | | | | | | 1.000 | 0.143 | 0.214 | 0.021 |
| INFR | | | | | | | | | | | 1.000 | 0.080 | -0.127 |
| MPEP | | | | | | | | | | | | 1.000 | 0.056 |
| FPEP | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 level.
* Significant at 0.05 level.

| | BOYS | GIRLS | DISP | SC | SDRW | SURI | GS | GOV | PA | PUA | TRT | FT | SPU | SKA | DISTA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Table 4.15: Inter correlation matrix of the variables included in multiple regression analysis (school related factors) in rural India, 1981.** | | | | | | | | | | | | | | | |
| BOYS | 1.000 | 0.805** | 0.056 | 0.626** | -0.488* | -0.596** | 0.213 | 0.191 | -0.378 | 0.397 | -0.252 | -0.511* | -0.307 | 0.019 | -0.033 |
| GIRLS | | 1.000 | 0.630** | 0.429 | -0.155 | -0.563** | 0.422 | -0.152 | -0.574** | 0.051 | -0.362 | -0.617* | 0.150 | -0.253 | 0.236 |
| DISP | | | 1.000 | -0.057 | 0.350 | -0.244 | 0.409 | -0.002 | -0.551** | -0.441 | -0.264 | -0.401 | 0.624** | -0.496* | 0.462* |
| SC | | | | 1.000 | -0.565* | -0.733** | -0.024 | -0.152 | -0.301 | 0.285 | 0.015 | -0.659 | -0.340 | 0.155 | 0.001 |
| SDRW | | | | | 1.000 | 0.600** | -0.075 | 0.149 | 0.098 | -0.440 | -0.086 | 0.273 | 0.665** | -0.544 | 0.244 |
| SURI | | | | | | 1.000 | -0.127 | 0.089 | 0.563** | -0.172 | 0.047 | 0.731* | 0.315 | -0.268 | -0.282 |
| GS | | | | | | | 1.000 | 0.099 | -0.260 | -0.024 | 0.258 | -0.018 | 0.139 | -0.073 | 0.293 |
| GOV | | | | | | | | 1.000 | -0.268 | -0.274 | 0.090 | 0.136 | -0.179 | 0.262 | 0.187 |
| PA | | | | | | | | | 1.000 | 0.295 | 0.014 | 0.482* | -0.053 | -0.048 | -0.212 |
| PUA | | | | | | | | | | 1.000 | -0.201 | 0.071 | -0.368 | 0.224 | -0.269 |
| TRT | | | | | | | | | | | 1.000 | 0.223 | 0.040 | 0.009 | -0.232 |
| FT | | | | | | | | | | | | 1.000 | 0.118 | -0.060 | -0.176 |
| SPU | | | | | | | | | | | | | 1.000 | -0.904** | 0.092 |
| SKA | | | | | | | | | | | | | | 1.000 | 0.063 |
| DISTA | | | | | | | | | | | | | | | 1.000 |
| ** Significant at 0.01 level. | | | | | | | | | | | | | | | |
| * Significant at 0.05 level. | | | | | | | | | | | | | | | |

| Table A.16 : Inter correlation matrix of variables included in multiple regression analysis (school related factors) in urban India,1981. | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BOYS | GIRLS | DISP | SC | SDRW | SURI | GS | GOV | PA | PUA | TRT | FT | SPU | SKA |
| BOYS | 1.000 | 0.951** | 0.604** | 0.461* | 0.185 | -0.117 | 0.456 | -0.147 | -0.381 | 0.589** | -0.386 | -0.609** | 0.219 | -0.282 |
| GIRLS | | 1.000 | 0.890** | 0.500* | 0.187 | -0.025 | 0.497 | -0.103 | -0.396 | 0.616** | -0.365 | -0.614** | 0.263 | -0.333 |
| DISP | | | 1.000 | 0.395 | 0.178 | 0.136 | 0.419 | -0.030 | -0.567** | 0.470* | -0.254 | -0.414 | 0.275 | -0.319 |
| SC | | | | 1.000 | 0.292 | 0.188 | 0.273 | 0.009 | -0.466* | 0.422 | 0.110 | -0.729** | -0.217 | 0.059 |
| SDRW | | | | | 1.000 | 0.695 | 0.182 | -0.169 | -0.338 | 0.528 | -0.072 | 0.088 | 0.449* | -0.361 |
| SURI | | | | | | 1.000 | 0.134 | -0.025 | -0.486* | 0.395 | 0.085 | 0.140 | 0.440* | -0.321 |
| GS | | | | | | | 1.000 | 1.000 | -0.477** | 0.500* | 0.274 | -0.130 | 0.139 | -0.103 |
| GOV | | | | | | | | 1.000 | 1.000 | -0.187 | 0.234 | 0.101 | -0.392 | 0.441* |
| PA | | | | | | | | | 1.000 | -0.402 | 0.011 | 0.331 | 0.126 | -0.135 |
| PUA | | | | | | | | | | 1.000 | 0.268 | -0.239 | 0.464* | -0.358 |
| TRT | | | | | | | | | | | 1.000 | 0.162 | -0.319 | 0.324 |
| FT | | | | | | | | | | | | 1.000 | 0.396 | -0.278 |
| SPU | | | | | | | | | | | | | 1.000 | -0.915* |
| FT | | | | | | | | | | | | | | 1.000 |
| SPU | | | | | | | | | | | | | | |
| SKA | | | | | | | | | | | | | | |

** Significant at 0.01 level.
* Significant at 0.05 level.

| | BOYS | GIRLS | DISP | GS | SPU | SKA | INSR | FT | DISTA | GOV | PA | PUA | SSBLACK | MDM | FTB | SURI | SDRW | TRT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Table A.17: Inter correlation matrix of variables included in the multiple regression analysis (school related factors) in rural India, 1991.** | | | | | | | | | | | | | | | | | | |
| BOYS | 1.000 | 0.897** | 0.040 | 0.035 | -0.401 | 0.207 | 0.070 | -0.712 | -0.017 | -0.141 | -0.230 | 0.297 | 0.609** | -0.346 | -0.444* | -0.542** | 0.594** | -0.410 |
| GIRLS | | 1.000 | 0.449 | 0.196 | -0.114 | -0.037 | 0.226 | -0.761 | 0.055 | -0.128 | -0.402 | 0.183 | 0.490* | -0.464 | -0.423* | -0.488 | -0.384 | -0.081 |
| DISP | | | 1.000 | 0.425* | 0.500* | -0.448* | 0.362 | -0.377 | 0.157 | -0.087 | -0.497 | -0.188 | -0.132 | -0.328 | -0.026 | -0.129 | 0.208 | 0.697 |
| GS | | | | 1.000 | 0.364 | -0.320 | 0.103 | 0.066 | -0.011 | -0.119 | -0.214 | 0.066 | -0.108 | -0.215 | 0.250 | 0.299 | 0.307 | 0.150 |
| SPU | | | | | 1.000 | -0.887* | 0.469* | 0.366 | 0.206 | -0.169 | -0.104 | -0.264 | -0.139 | 0.044 | 0.312 | 0.325 | 0.605* | 0.686* |
| SKA | | | | | | 1.000 | -0.415* | -0.280 | -0.219 | 0.223 | 0.125 | 0.284 | -0.041 | -0.140 | 0.333 | -0.422* | -0.257 | 0.010 |
| INSR | | | | | | | 1.000 | -0.122 | 0.160 | 0.154 | -0.545** | 0.040 | 0.031 | -0.368 | 0.274 | 0.654* | 0.556* | 0.084 |
| FT | | | | | | | | 1.000 | -0.109 | -0.301 | 0.499* | -0.036 | 0.060 | -0.106 | 0.037 | 0.121 | 0.178 | 0.260 |
| DISTA | | | | | | | | | 1.000 | 0.099 | -0.049 | -0.190 | 0.187 | -0.073 | 0.099 | -0.073 | 0.013 | 0.241 |
| GOV | | | | | | | | | | 1.000 | -0.294 | -0.117 | 0.157 | 0.053 | 0.055 | -0.121 | 0.005 | -0.250 |
| PA | | | | | | | | | | | 1.000 | -0.217 | -0.009 | -0.334 | -0.601 | -0.082 | -0.352 | -0.038 |
| PUA | | | | | | | | | | | | 1.000 | -0.267 | -0.108 | -0.247 | -0.434 | -0.411 | 0.284 |
| SSBLACK | | | | | | | | | | | | | 1.000 | 0.393 | 0.042 | 0.659* | 0.551 | -0.230 |
| MDM | | | | | | | | | | | | | | 1.000 | 0.468 | -0.061 | 0.275 | 0.077 |
| FTB | | | | | | | | | | | | | | | 1.000 | -0.072 | 0.420 | 0.060 |
| SURI | | | | | | | | | | | | | | | | 1.000 | 0.582 | 0.219 |
| SDRW | | | | | | | | | | | | | | | | | 1.000 | 0.505 |
| TRT | | | | | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 level.
* Significant at 0.05 level.

| | | BOYS | GIRLS | DISP | GS | SPU | SKA | INSR | FT | GOV | PA | PUA | SSBLACK | MDM | FTB | SURI | SDRW | TRT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Table 4.18: Intercorrelation matrix of the variables included in the multiple regression analysis (school related factors) in urban India, 1991. | | | | | | | | | | | | | | | | | | |
| BOYS | | 1.000 | 0.960 | 0.462 | 0.338 | -0.174 | 0.216 | -0.027 | -0.294 | -0.076 | -0.405 | 0.382 | 0.135 | -0.459 | -0.301 | 0.069 | -0.320 | -0.305 |
| GIRLS | | | 1.000 | 0.642 | 0.415 | 0.047 | -0.013 | 0.029 | -0.271 | -0.123 | -0.491 | 0.472 | 0.203 | -0.416 | -0.256 | 0.102 | -0.174 | -0.132 |
| DISP | | | | 1.000 | 0.262 | 0.465 | -0.425 | 0.165 | -0.026 | -0.166 | -0.380 | 0.319 | 0.025 | -0.126 | 0.015 | 0.109 | 0.193 | 0.234 |
| GS | | | | | 1.000 | 0.440 | -0.421 | -0.090 | 0.079 | -0.317 | -0.273 | 0.607 | 0.225 | -0.235 | -0.114 | -0.031 | 0.289 | 0.156 |
| SPU | | | | | | 1.000 | -0.873 | 0.262 | 0.375 | -0.307 | -0.018 | 0.411 | 0.061 | 0.245 | 0.299 | 0.247 | 0.769 | 0.487 |
| SKA | | | | | | | 1.000 | -0.268 | -0.286 | 0.299 | -0.040 | -0.200 | -0.257 | -0.143 | -0.257 | 0.047 | -0.632 | -0.663 |
| INSR | | | | | | | | 1.000 | 0.209 | 0.131 | -0.134 | -0.111 | 0.199 | -0.140 | 0.076 | 0.400 | -0.219 | -0.029 |
| FT | | | | | | | | | 1.000 | -0.015 | -0.030 | 0.022 | -0.172 | 0.097 | 0.283 | 0.160 | 0.422 | -0.169 |
| GOV | | | | | | | | | | 1.000 | -0.509 | -0.344 | 0.269 | -0.230 | 0.152 | -0.152 | -0.329 | -0.185 |
| PA | | | | | | | | | | | 1.000 | -0.294 | -0.210 | 0.538 | 0.203 | -0.021 | 0.033 | 0.164 |
| PUA | | | | | | | | | | | | 1.000 | -0.084 | -0.232 | -0.365 | 0.260 | 0.330 | -0.002 |
| SSBLACK | | | | | | | | | | | | | 1.000 | -0.211 | 0.012 | -0.234 | -0.174 | 0.001 |
| MDM | | | | | | | | | | | | | | 1.000 | 0.556 | 0.468 | 0.390 | 0.280 |
| FTB | | | | | | | | | | | | | | | 1.000 | 0.295 | 0.404 | 0.038 |
| SURI | | | | | | | | | | | | | | | | 1.000 | 0.502 | -0.107 |
| SDRW | | | | | | | | | | | | | | | | | 1.000 | 0.368 |
| TRT | | | | | | | | | | | | | | | | | | 1.000 |

** significant at 0.01 level.
* significant at 0.05 level.

| Table A.19. Inter- correlation matrix of the variables included in the multiple regression |
|---|
| (school related factors) in rural Uttar Pradesh, 1991. |

| | BOYS | GIRLS | DISP | GS | SPU | SKA | SDRW | SURI | FT | GOV | LB | PA | PUA | INSR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BOYS | 1.000 | .857* | 0.189 | -0.123 | 0.135 | -0.035 | .376** | -0.011 | .628** | -0.401 | 0.039 | 0.134 | -0.017 | 0.278 |
| GIRLS | | 1.000 | 0.314 | -0.007 | 0.224 | -0.042 | 0.443 | 0.077 | -0.613 | -0.397 | 0.008 | 0.139 | 0.015 | 0.139 |
| DISP | | | 1.000 | 0.082 | -0.031 | 0.060 | 0.073 | 0.069 | -0.210 | -0.005 | 0.015 | 0.073 | -0.018 | 0.030 |
| GS | | | | 1.000 | 0.086 | -0.128 | 0.050 | 0.145 | -0.083 | -0.208 | -0.174 | 0.054 | 0.166 | -0.074 |
| SPU | | | | | 1.000 | -0.263 | 0.259* | 0.223 | -0.101 | -0.661 | 0.079 | -0.051 | 0.067 | 0.112 |
| SKA | | | | | | 1.000 | 0.098 | 0.015 | -0.019 | 0.113 | -0.144 | 0.054 | 0.118 | -0.120 |
| SDRW | | | | | | | 1.000 | 0.548 | -0.334 | -0.381 | -0.378 | 0.413 | 0.425 | -0.134 |
| SURI | | | | | | | | 1.000 | -0.154 | -0.242 | 0.399 | 0.247 | 0.474 | -0.255 |
| FT | | | | | | | | | 1.000 | 0.330 | 0.246 | -0.211 | -0.196 | 0.080 |
| GOV | | | | | | | | | | 1.000 | 0.118 | -0.211 | -0.241 | 1.084 |
| LB | | | | | | | | | | | 1.000 | -0.719 | -0.911 | 0.556 |
| PA | | | | | | | | | | | | 1.000 | 0.631 | -0.306 |
| PUA | | | | | | | | | | | | | 1.000 | -0.591 |
| INSR | | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 level.

* Significant at 0.05 level.

| Table A.20. Inter correlation matrix of variables included in for multiple regression analysis (school related factors) in urban Uttar Pradesh, 1991. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BOYS | GIRLS | DISP | GS | SPU | SKA | SDRW | SSURI | FT | GOV | PA | PUA | INSR |
| BOYS | 1.000 | 0.913 | -0.149 | 0.214 | 0.017 | -0.329 | 0.118 | -0.074 | -0.185 | -0.502 | 0.057 | 0.029 | -0.448 |
| GIRLS | | 1.000 | 0.263 | 0.294 | 0.032 | -0.315 | 0.179 | -0.039 | -0.336 | -0.438 | 0.086 | -0.033 | -0.439 |
| DISP | | | 1.000 | 0.180 | 0.037 | 0.025 | 0.151 | 0.096 | -0.352 | 0.028 | 0.077 | -0.153 | 0.009 |
| GS | | | | 1.000 | 0.471 | 0.025 | 0.376 | 0.330 | -0.345 | 0.007 | 0.322 | 0.240 | 0.103 |
| SPU | | | | | 1.000 | -0.056 | 0.713 | 0.642 | 0.021 | 0.175 | 0.288 | 0.536 | 0.355 |
| SKA | | | | | | 1.000 | 0.241 | 0.414 | -0.064 | 0.558 | 0.189 | 0.164 | 0.615 |
| SDRW | | | | | | | 1.000 | 0.816 | -0.092 | 0.152 | 0.247 | 0.701 | 0.237 |
| SSURI | | | | | | | | 1.000 | -0.160 | 0.299 | 0.254 | 0.744 | 0.418 |
| FT | | | | | | | | | 1.000 | -0.124 | 0.046 | -0.051 | 0.174 |
| GOV | | | | | | | | | | 1.000 | 0.062 | 0.179 | 0.650 |
| PA | | | | | | | | | | | 1.000 | -0.110 | 0.206 |
| PUA | | | | | | | | | | | | 1.000 | 0.220 |
| INSR | | | | | | | | | | | | | 1.000 |

** Significant at 0.01 level.
* Significant at 0.05 level.

Table A.21. Regression analysis of the home related factors for 'nowhere' boys in rural areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FPED | .4577 | - | .4292 |
| 2 | MPED | .5626 | .1049 | .5140 |
| 3 | CWR | .6390 | .0764 | .5753 |

Table A.22. Regression analysis of the home related factors for 'nowhere' girls in rural areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FPED | .5668 | - | .54409 |
| 2 | FHD | .6024 | .0356 | .6249 |
| 3 | CWR | .7323 | .1299 | .6851 |
| 4 | FMED | .7952 | .0629 | .74408 |
| 5 | MPED | .8185 | .0233 | .75809 |

Table A.23 . Regression analysis of the home related factors for 'nowhere' boys in urban areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FHD | .3095 | - | .2732 |
| 2 | DEPR | .5248 | .0215 | .4720 |

Table A.24. Regression analysis of the home related factors for girls in urban areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FHD | .3829 | - | .3505 |
| 2 | DEPR | .6243 | .2414 | .5825 |

Table A.25. Regression analysis of the home related factors for sex disparity in rural areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FHD | .55871 | - | .5354 |
| 2 | FMED | .6168 | .0580 | .57433 |
| 3 | SRATIO | .6640 | .0472 | .6047 |
| 4 | FMW | .6645 | .0005 | .5806 |

Table A.26. Regression analysis of the home related factors for sex disparity in urban areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|-----------------|------------------------------|---------------------------|
| 1 | GHD | .3655 | - | .3321 |

Table A.27. Regression analysis of the home related factors for 'nowhere' boys in rural areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square | Adjusted R square $(R^2)$ |
|-------|-----------|-----------------|----------------------|---------------------------|
| 1 | CWR | .5884 | - | .5688 |
| 2 | FPED | .7391 | .1507 | .7130 |
| 3 | FMED | .7838 | .0048 | .7497 |
| 4 | MPED | .7873 | .0035 | .7400 |
| 5 | DEPR | .7897 | .0002 | .7279 |

Table A.28. Regression analysis of the home related factors for 'nowhere' girls in rural areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|-----------------|------------------------------|---------------------------|
| 1 | DEPR | .6571 | - | .6408 |
| 2 | FPED | .8676 | .2105 | .8544 |
| 3 | MPED | .8712 | .0036 | .8509 |
| 4 | MMED | .8720 | .0008 | .8437 |
| 5 | CWR | .8721 | .0001 | .8345 |

TableA.29. Regression analysis of the home related factors for 'nowhere' boys in urban areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|-----------------|------------------------------|---------------------------|
| 1 | DEPR | .3890 | - | .3612 |
| 2 | INFR | .5396 | .1506 | .4958 |
| 3 | FPED | .5786 | .0399 | .5754 |
| 4 | CWR | .5868 | .0082 | .4998 |
| 5 | MPED | .5897 | .0029 | .4757 |

TableA.30. Regression analysis of the home related factors for 'nowhere' girls in urban areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|-----------------|------------------------------|---------------------------|
| 1 | DEPR | .4585 | - | .4339 |
| 2 | GHD | .6380 | .1795 | .6035 |
| 3 | INFR | .7189 | .0809 | .6768 |
| 4 | FMW | .7264 | .0075 | .6688 |
| 5 | CWR | .7294 | .0030 | .6542 |

Table A.31 . Regression analysis of the home related factors for sex disparity in rural areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FMED | .4256 | - | .3983 |
| 2 | SRATIO | .5811 | .1555 | .5393 |
| 3 | FHD | .6215 | .040 | .5618 |
| 4 | MMED | .6239 | .0024 | .5404 |
| 5 | SCPOP | .6252 | .0013 | .51507 |

TableA.32 . Regression analysis of the home related factors for sex disparity in urban areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted in R square $(R^2)$ |
|---|---|---|---|---|
| 1 | MMED | .3767 | - | .3484 |
| 2 | GHD | .4790 | .1030 | .4290 |
| 3 | FPED | .5451 | .0661 | .4769 |
| 4 | MPOP | .5887 | .0436 | .5022 |
| 5 | FMW | .5970 | .0083 | .4851 |

Table A.33. Regression analysis of the home related factors for 'nowhere' boys in rural areas, Uttar Pradesh, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FMW | .3314 | - | .3191 |
| 2 | FPED | .5244 | .1929 | .5244 |
| 3 | MPOP | .5474 | .0230 | .5474 |
| 4 | SCPOP | .5668 | .0190 | .5668 |
| 5 | CWR | .5694 | .0026 | .5694 |
| 6 | FMED | .5698 | .0004 | .5698 |

TableA.34 . Regression analysis of the home related factors for 'nowhere' girls in rural areas, Uttar Pradesh, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FMW | .6579 | - | .6516 |
| 2 | FPED | .8168 | .1589 | .8099 |
| 3 | SCPOP | .8219 | .0050 | .8116 |
| 4 | MPOP | .8256 | .0030 | .8119 |
| 5 | CWR | .8270 | .0014 | .8100 |
| 6 | FMED | .8584 | .0314 | .8074 |
| 4 | AGL | .8284 | .000 | .8034 |

Table A.35. Regression analysis of the home related factors for 'nowhere' boys in urban areas, Uttar Pradesh, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|------------------|------------------------------|----------------------------|
| 1 | MPOP | .5610 | - | .5529 |
| 2 | AGL | .6508 | .1747 | .6376 |
| 3 | MPED | .6858 | .035 | .6677 |
| 4 | DEPR | .7180 | .0327 | .6949 |
| 5 | FMW | .7387 | .0202 | .71258 |
| 6 | FMED | .7484 | .0097 | .7176 |
| 7 | SCPOP | .7492 | .0008 | .7126 |
| 8 | CWR | .7495 | .0003 | .7069 |
| 9 | FPED | .7495 | .000 | .7005 |

Table A.36. Regression analysis of the home related factors for 'nowhere' girls in urban areas, Uttar Pradesh, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|------------------|------------------------------|----------------------------|
| 1 | MPOP | .4241 | - | .4134 |
| 2 | DEPR | .5731 | .1490 | .5569 |
| 3 | AGL | .6309 | .0578 | .6096 |
| 4 | MPED | .6531 | .0220 | .6259 |
| 5 | FMW | .6714 | .0180 | .6386 |
| 6 | CWR | .6775 | .0040 | .6380 |
| 7 | PMED | .6825 | .0050 | .6362 |
| 8 | FPED | .6840 | .0015 | .6302 |

Table A.37 Regression analysis of the home related factors for 'nowhere' boys in rural areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|------------------|------------------------------|----------------------------|
| 1 | GHD | .4182 | - | .4086 |
| 2 | MMED | .5885 | .1703 | .5748 |
| 3 | INFR | .6500 | .0615 | .6322 |
| 4 | MPED | .6958 | .1073 | .6748 |
| 5 | NWP | .7195 | .0695 | .6949 |
| 6 | FPED | .7247 | .0052 | .6952 |
| 7 | MPOP | .7258 | .0011 | .6909 |
| 8 | CWR | .7266 | .0008 | .6862 |

TableA.38 . Regression analysis of the home related factors for 'nowhere' girls in rural areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|------------------|------------------------------|---------------------------|
| 1 | GHD | .5219 | - | .5139 |
| 2 | INFR | .5878 | .0659 | .5738 |
| 3 | MPED | .6434 | .0556 | .6249 |
| 4 | FPED | .6692 | .0258 | .6459 |
| 5 | NWP | .6849 | .0157 | .6567 |
| 6 | DEPR | .6925 | .0076 | .6589 |
| 7 | FMW | .7012 | .0080 | .6625 |
| 8 | MPOP | .7019 | .0007 | .6500 |
| 9 | MMED | .7020 | .0001 | .6343 |
| 10 | CWR | .7025 | .0005 | .6340 |

Table A.39. Regression analysis of the home related factors for 'nowhere' boys in urban areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|------------------|------------------------------|---------------------------|
| 1 | DEPR | .5506 | - | .5433 |
| 2 | GHD | .6523 | .1017 | .6407 |
| 3 | MPOP | .6808 | .0285 | .6646 |
| 4 | AGL | .6893 | .0085 | .6679 |
| 5 | CWR | .6924 | .0031 | .6654 |
| 6 | FMED | .6941 | .0017 | .6613 |

Table A.40. Regression analysis of the home related factors for 'nowhere' girls in urban areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|-------|-----------|------------------|------------------------------|---------------------------|
| 1 | DEPR | .6753 | - | .6700 |
| 2 | GHD | .7806 | .1053 | .7733 |
| 3 | MPOP | .8109 | .0303 | .8013 |
| 4 | CWR | .8170 | .0061 | .8044 |
| 5 | FMED | .8196 | .0025 | .8038 |
| 6 | MMED | .8197 | .0001 | .8004 |
| 7 | AGL | .8198 | 0000 | .7967 |

Table A.40.Regression analysis of the home related factors for sex disparity in rural areas, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FMW | .4692 | - | .4594 |
| 2 | AGL | .4987 | .0295 | .4798 |
| 3 | CWR | .5045 | .0058 | .4760 |

TableA.41 . Regression analysis of the home related factors for sex disparity in rural areas, Uttar pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | GHD | .0846 | - | .0696 |
| 2 | INFR | .1135 | .0288 | .0839 |

Table A.42. Regression analysis of the home related factors for sex disparity in urban areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | AGL | .0980 | - | .0832 |

Table A.43. Regression analysis of the school related factors for 'nowhere' boys in rural areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | SC | .3923 | - | .3603 |
| 2 | SURI | .4235 | .0312 | .3595 |
| 3 | SDRW | .4362 | .0127 | .3367 |
| 4 | FT | .4468 | .0106 | .3084 |

Table A.44. Regression analysis of the school related factors for 'nowhere' girls in rural areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FT | .3803 | - | .3477 |
| 2 | PA | .4800 | .0997 | .4223 |
| 3 | SURI | .4832 | .0003 | .3919 |

TableA.45 . Regression analysis of the school related factors for 'nowhere' boys in urban areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FT | .3710 | - | .3379 |
| 2 | PUA | .5790 | .2080 | .5323 |
| 3 | GS | .6116 | .0326 | .5431 |
| 4 | SC | .6223 | .0107 | .5529 |

TableA.46 . Regression analysis of the school related factors for 'nowhere' girls in urban areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | PUA | .3792 | - | .3465 |
| 2 | FT | .6106 | .0231 | .5673 |

TableA.47. Regression analysis of the school related factors for sex disparity in rural areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | SPU | .3895 | - | .3573 |
| 2 | PA | .6589 | .2694 | .6210 |
| 3 | DISTA | .7154 | .05654 | .7076 |
| 4 | SKA | .7543 | .0389 | .6929 |

Table A.48. Regression analysis of the home related factors for sex disparity in urban areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | PUA | .2204 | - | .1793 |

Table A.49. Regression analysis of the school related factors for 'nowhere' boys in rural areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FT | .5070 | - | .4846 |
| 2 | SSBLACK | .6939 | .1869 | .6648 |
| 3 | TRT | .7641 | .0702 | .7287 |
| 4 | FTB | .8118 | .0470 | .7722 |
| 5 | SDRW | .8294 | .0175 | .7699 |
| 6 | SURI | .8300 | .0006 | .7699 |

Table A.50. Regression analysis of the school related factors for 'nowhere' girls in rural areas, India, 1981.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FT | .5797 | - | .5606 |
| 2 | SSBLACK | .6664 | .0867 | .6347 |
| 3 | FTB | .7060 | .0396 | .6619 |
| 4 | MDM | .7523 | .0463 | .6835 |
| 5 | SURI | .7532 | .0009 | .6621 |

Table A.51. Regression analysis of the school related factors for 'nowhere' boys in urban areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | MDM | .1767 | - | .1393 |
| 2 | PA | .2146 | .0379 | .1398 |

Table A.52 . Regression analysis of the school related factors for 'nowhere' girls in urban areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | SKA | .1780 | - | .1406 |
| 2 | SPU | .2045 | .0264 | .1287 |

Table A.53. Regression analysis of the school related factors for sex disparity in rural areas, India, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | TRT | .4856 | - | .4622 |
| 2 | PA | .7071 | .2214 | .6792 |
| 3 | SC | .7776 | .0705 | .7308 |
| 4 | SPA | .7903 | .0131 | .7326 |
| 5 | SKA | .7808 | .0001 | .7170 |

Table A.54. Regression analysis of the school related factors for sex disparity in urban areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FT | .1239 | - | .1095 |

Table A.55. Regression analysis of the school related factors for 'nowhere' boys in rural areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FT | .3946 | - | .3843 |
| 2 | INSR | .5030 | .1016 | .4859 |
| 3 | SDRW | .5455 | .0356 | .5215 |
| 4 | GOV | .5570 | .0020 | .5253 |

Table A.56. Regression analysis of the school related factors for 'nowhere' girls in rural areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FT | .3756 | - | .3651 |
| 2 | SDRW | .4393 | .0637 | .4200 |
| 3 | GOV | .4577 | .0184 | .4290 |

Table A.57 . Regression analysis of the school related factors for 'nowhere' boys in urban areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in $(R^2)$ R square | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | FT | .3946 | - | .3843 |
| 2 | INSR | .5030 | .1016 | .4859 |
| 3 | SDRW | .5455 | .0356 | .5215 |
| 4 | GOV | .5570 | .0020 | .5253 |

TableA.58 . Regression analysis of the school related factors for 'nowhere' girls in urban areas, Uttar Pradesh, 1991.

| Steps | Variables | R square $(R^2)$ | Increase in R square $(R^2)$ | Adjusted R square $(R^2)$ |
|---|---|---|---|---|
| 1 | GOV | .2330 | - | .2205 |
| 2 | FT | .3918 | .1580 | .3715 |
| 3 | INSR | .3992 | .0074 | .3686 |
| 4 | SKA | .3995 | .3003 | .3580 |