Social Science Spectrum
Vol. 1, No. 1, March 2015, pp. 8-19

Missing Age of Population in Indian Censuses during the Last 50 Years: Prevalence, Trends and Differentials[a]

Sayeed Unisa[*], Laxmi Kant Dwivedi[**], R.S. Reshmi[#] and Kaushlendra Kumar[£]

Abstract

Along with different indices of quality of age data, the rate of age not stated is also one of the important measures of the quality of age reporting in the census. The present study tries to explore the levels, trends and differentials in age not stated in India and the major states over the period 1971-2011. Sex-wise comparison of age not stated over the five censuses shows a distinct pattern of higher rates for males apart from few exceptions. Age not stated is higher in the urban areas in comparison with rural areas. It may be noted that except in 1991, in all other censuses, rates of age not stated are higher for illiterates compared with literates in all the major states. Moreover, omission of the population in the last two censuses is found higher than previous censuses. The same pattern is observed for age not stated too. Hence, it may be a problem of coverage with proxy reporting of the population where all characteristics can be probed but age is difficult to be reported by other persons. There is also the possibility of household members not reporting the age of young children. Moreover, this can be a problem of processing the information.

Key words: Census, Age, Missing Age, Population

I. Introduction

We are fortunate enough to have an uninterrupted series of decennial censuses in India during the past hundred years. The census of 2011 which is fifteenth in the series has published age returns by other characteristics recently. Census is the only source where we get at lowest level of aggregation like village and ward level the demographic and socio-economic information. It is valuable, authentic and key source of socio-economic and demographic data and serves many purposes related to public welfare. Hence, it provides a sampling frame in the designing of different sample surveys like National Family Health Survey and District Level Household Survey, etc. It provides information of the population by literacy and education, religion of the head of the household and composition of household by scheduled castes and scheduled tribes. It also makes available economic characteristics of the population like household and community amenities (health facilities, post office, bank, schools, etc.), housing condition, occupation and industrial classification of the labour force.

The question on age has been included in all Indian censuses since 1881.Population information by age and sex is useful to study age structure, sex ratio and vital rates (derived from age and sex). Therefore, age-sex counts are important in census data of India. Quality of vital rates and ratios based on age data depend on the quality of age returns. The commonest types of errors in Indian census are omissions at the time of enumeration, digit, and age preferences in age

[*] Sayeed Unisa, Professor, Department of Mathematical Demography and Statistics, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai 400 088. Email: unisa@iips.net
[**] Laxmi Kant Dwivedi, Assistant Professor, Department of Mathematical Demography and Statistics, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai400088. Email: laxmikant@iips.net
[#] R.S. Reshmi, Assistant Professor, Institute of Health Management Research, Bangalore 560105. Email: srreshmi@gmail.com
[£] Kaushlendra Kumar, Senior Data Coordinator, Evidence Action - Deworm the Word Initiative, New Delhi 110022. Email: kkd.iips@gmail.com
[a] This paper based on 1991 to 2001 census data was presented in Session No. 220 of IUSSP Population Conference, 27 September to 2 October, 2009, held at Marrakech, Morocco.

reporting and ignorance of actual age. The ignorance of age, negligence in reckoning the precise age, deliberate misstatement and misunderstanding of the questions are responsible for error of ages (Mukhopadhyay, 1983).

In census, there is usually the head of the household who supplies most of the information. It is assumed that he knows the ages of the members of the household, which generally consist of his/her spouse, married and unmarried children, brothers and sisters and others relatives as also unrelated persons (Jain, 1980). However, in societies like that of India, where one's age is not important, the ages of others may seem even less significant (Ewbank, 1981). Therefore, there is a chance of not reporting the ages of some of the household members. The proportion of age not stated depends not only on the socio-economic characteristics of the head of the household but other members of the household also. For instance, when the head of the household reports age of the household members the chance of reporting the age of a working or married member tends to be more than that of a non-working or unmarried member.

The mind of an educated person is trained and he is likely to appreciate the importance of the census better. Moreover, educational level of the informant may make a variation of the quality, as well as reporting of the age data. In India, majority of the population is illiterate and therefore the age data from census suffer from a number of problems such as ignorance of age, negligence in reckoning the correct age, deliberate misstatement, and misunderstanding of the question (Natarajan, 1972; Ambanavar & Visaria, 1975; Suong, 1995). Also, among the illiterates it is difficult to get the exact age of the population because of the ignorance of the respondents. It may be possible that an educated person does not know the exact age of his family members. However, when an educated person estimates his or his family member's age, he will try to link it with some events in his life. Therefore, it is possible that the estimates made by him will be nearer the actual age as compared with the estimate made by an illiterate person. Also, an educated person faces the necessity of remembering his age (Ambanavar & Visaria, 1975).

Age distribution of population plays a significant role in studying population change in association with its component. The demographic parameters, e.g., fertility, mortality, marriage and migration rates derived from census data are based on the age distribution of population. If a significant proportion of the population does not reported its age, then it will be difficult to get reliable estimates of the parameters, because we do not know that these proportions belong to which age group.

Accurate age distribution of population is also crucial from point of view of policy and programme. The whole planning framework for a better standard of living of the population, gender equality, public facilities and health programmes, labour force participation, economic dependency ratios, school enrolment, etc., involves population statistics by age (Borkotoky & Unisa, 2014). Suppose a significant portion of the age not stated belongs to aged or youngest population, then the proportion of aged or youngest will be underestimated. Therefore, the magnitude of the age stated population is an important component of the Census data and needs to be investigated.

Several studies have been done on errors in age misreporting such as digit preference and age preference (Yusuf, 1967; Balasubramanian, 1974; Chandra, 1980; Ewbank, 1981; Jain, 1980; Prakasam, 1984; Zaki & Zaki 1983; Saxena et al., 1986). So far, no study has been done to understand the levels, trends and differentials in age not stated in Indian Census. The 2011 census data have been published recently by a single year of age. However, quite a few socio-economic tables by age are still not published for 2011 census. It is interesting to understand whether there is an improvement in 'age not stated' over the period 1971-2011 and whether the reporting of age not stated as shown by the census age data varies according to the socio-economic characteristics of the member. In this context, the present study tries to explore the levels, trends and differentials in age not stated in India and the major states over the period 1971-2011.

II. History of census data collection and processing

The census of India used to be a one-night count during the first 70 years by de facto approach, i.e., where the person is found on that night (Vijayanunni, 1998). In 1941, for the first-time census data were collected on staggered period as extended de facto approach (an enumeration period of two to three weeks). The first post-partition census in 1951 also used staggered time to collect data.

Basic series of population, age, sex, civil conditions, etc., are comparable since 1881 except for frequent changes in the boundaries of administrative divisions. The paucity of information published in the 1941 census (taken under war time conditions), the partition of British India and the Princely States of India and Pakistan in 1947, and the reorganization of Indian states largely along linguistic boundaries between the I95I and 1961 censuses have made it difficult to construct consistent series for major units of the country (McAplin, 1983). Most people work on population age data using census either on the I88I to 1931 or the I96I to 1971 periods. Practically only the work of Mukerjee (1976) presents the age distribution for comparable geographic units for all of the censuses from 1881 through 1971 (McAplin, 1983).

Age returns in the censuses were not uniform and based on the samples. The single year age returns data in 1971 were tabulated on the basis of a sample of individual slips (10 per cent in rural and 20 per cent in urban areas). In the case of 1981 census, single year age returns were tabulated on the basis of 5 per cent sample of enumeration blocks for the major states. In 1991 census, age data are based on 10 per cent sample of the states with the population of 10 million and above and 100 per cent of smaller states and union territories. From 2001 census onwards, age data are based on 100 per cent count of the population (Census of India, DP Department).

Data processing procedures also improved over the censuses. Prior to 1961 censuses, the data collection, data entry and processing were done manually. In 1961 census, hand punching machines were used for data entry. In 1971 census, key-punching (electrical-cum-mechanical) machines were used for data entry. In 1981 census, the data entry activities were decentralised, and these centres converted paper-based information into machine-readable form using key to disk machines. During 1991 census, data processing activities in the Office of Registrar General of India (ORGI) took place. ORGI had set up its computing facility by installing mainframe system at DP Division, Delhi and connected to the servers at 15 data centres. In 2001 census, data processing was done by large scale hardware up-gradation and using the latest Automatic Form Processing Technology using Intelligent Character Recognition (ICR) technology (Sikri, 2005). It enabled processing of cent percent data, that is, more than one billion records (228 million paper forms were scanned) for the first time in census history (Census of India, DP Department).

III. Methods and materials

This paper is based on five consecutive Indian censuses data from Social Cultural Tables. Tables that are based on age also have one more row of age not stated in the censuses. To fulfil the objectives of this study, the data from census years 1971-2011 have been utilized. The overall rate of age not stated (per thousand) has been computed for fifteen selected major states of India by residence from 1971 to 2011. The rate of age not reported by literacy and marital status was calculated for the fifteen selected major states of India for 2001 and 2011. Religion-wise analysis of age not stated is carried out only for 2001 as age data by religion is yet to be published. An attempt is made to examine work participation and age not stated in those states where population age not stated found high in comparison with other states in 2001 and 2011.

IV. Results and discussion

Table1 provides information on the rate of age not stated per thousand population by sex and residence in India and major states for the period 1971 to 2011. It can be seen from it that the proportion of age not stated has increased over time. The rate of age not stated was the highest in 1991 and lowest in 1971. The same picture was found in both urban and rural areas. The rate of age not stated was found to be much higher for both the males and females in urban areas as compared with rural areas during the period 1971-2011, except for females in the year 1971.

The rate of age not stated was found to have increased in most of the states over the period 1971-1991. In the Census of 1991, the rate of age not stated worsened in all the states except Haryana. However, in most of the states, the rate has declined during the period 1991- 2001. The possible reasons may be that in 2001 census, precise instructions were given to the interviewers to reduce the errors from their side and because of that there was an improvement in age reporting. In 2011,not only age was asked, but information regarding the date of birth was also collected. During 2001-2011 rate of age not stated increased slightly.

The proportion of age not stated was more than 10 per thousand in Bihar and Madhya Pradesh, whereas it was around 6 per thousand in West Bengal and 5 per thousand in Punjab. These states have shown a consistent improvement in the age not stated during the last three censuses. However, the rates for Uttar Pradesh, Orissa, Maharashtra, Gujarat, Rajasthan and Tamil Nadu rates are oscillating over the last three censuses. However, it is surprising to note the sudden and unexpectedly high rate of age not stated in 2011 census for Andhra Pradesh that had shown low rates in 1991 and 2001. However, the situation of Uttar Pradesh was also the same in 1991, improved in 2001 and become bad again in 2011.

Sex-wise comparison of age not stated over the five censuses shows a distinct pattern of higher rates for males except few exceptions. Residence-wise also the same pattern is observed for males and females. At all-India level, the rate of age not stated during the period 1971-2011 was higher among men except in 1971.

Age not stated is higher in the urban areas in comparison with rural areas. The pattern of rural-urban differences is the same for all the censuses. The last census (where age data coverage is based on 100 percent population) is showing the same pattern, giving an impression that there is some problem in the data collection in the urban areas.

Researchers argue that the long run solution to the problems of age misreporting is expected along with the socio-economic development and improvement in the literacy levels (Yusuf, 1967; Jain, 1980). However, improvement in educational levels between 1971 and 1991 did not prevent a worsening in the percent of the population not stating age. Ambanvar & Visaria (1975) also think that the quality of age data in Indian censuses since 1951 has deteriorated in spite of the rapid growth of literacy and education. Some other studies have also tried to establish the relationship between increased literacy level and changes in data quality. But the significant improvement in data quality is not observed (Edmonston & Bairagi, 1981; Mukhopadhyay, 1983). Choudhary (2006) argues that when the levels of literacy in the population increased, associated positive changes are not observed in the quality of age reporting from 1961 to 1991.

Table 2 gives the rate of age not stated per thousand population by sex and literacy status in India and major states during the period 1971 to 2011. It is evident that the rates of age not stated for both males and females in major states were higher for literates than illiterates in 1991. In the census usually the heads of the households/older persons provide most information and a majority of them do not know the ages of members of the household. The heads of households might report the age of members, but they might not be aware of the exact ages of their young sons/daughters and other family members who may be educated persons with the progress of modernization. Consequently, the proportion of age not stated may be high among literate/educated

persons in comparison with non-literates. It may be noted that in all other censuses, rates of age not stated are higher for illiterates compared with literates in all the major states. This pattern is more justifiable and looks appropriate. Hence, 1991 census age returns give an indication that there was a problem of data collection or data processing, and it is not because of the head of household's ignorance of a literate person's age.

The age not stated rates (per 1000 population), computed for 2001 and 2011 census data by marital status, are presented in Table 3. The analysis shows that the rate of age not stated was much higher among never married in all the states for the last two census age returns. It is also found that for divorced/separated persons (males or females) the rate of age not stated is much higher than currently married persons. This suggests that respondents do not want to reveal the age of never married children or quality of age reporting of younger population, and divorced/separated persons required attention of census officials probing for age.

Table 4 presents the rate of age not stated (per 1000 population) by sex according to religion and place of residence for 2001 census (religion data of 2011 by age is not yet published). It is evident that the rate of age not stated at the national level was slightly high among Hindus than Muslims whereas the rate was the highest in the other category. The majority of the states of have a lower rate for Muslims in comparison with Hindus. Himachal Pradesh, Haryana, Tamil Nadu, Andhra Pradesh, etc., have slightly higher rate of age not stated for Muslims in comparison with Hindus.

Apart from the literacy level and religious characteristics, work status may also influence age not stated as their houses are locked when persons go for work, and there is a possibility of proxy reporting by neighbours. Hence, work status wise age not stated is analyzed for selected states for 2001 and 2011 censuses data that is based on 100 percent entry for age. In the year 2001, the rate of age not stated was the highest in Rajasthan, Tamil Nadu and Uttar Pradesh. In 2011 the highest rates of age not reported were found in Andhra Pradesh, Uttar Pradesh, Rajasthan and Gujarat. The states that have the highest rate of age not stated in 2001 and 2011 are selected to examine the reporting of age not stated classified according to work status. The results are shown in the Tables 5 and 6 for the year 2001 - 2011. In both the censuses, age not stated is more for non-workers than all workers. Among workers too, marginal workers' rates are higher than of main workers' rates. Residence-wise differences in workers' age not stated show higher rates for urban than rural areas. However, Rajasthan shows a different pattern with higher rates for rural areas. Overall, the rate of age not stated is greater for females when they are working as marginal workers.

V. Conclusions and suggestions

Age returns in the census enumeration were not uniform and based on the samples till 1991. It is a great achievement of census that age data are based on 100 percent count of the population from 2001 onwards. Over the period, the data processing procedure has improved. In 1971 census, electrical-cum mechanical machines were used. From 1991 onwards data processing activities started at ORGI. In 2001, data entry was done using Automatic Form Processing Technology by means of ICR. Published data on the age returns in census tables may have an impact of these changes over 1971-2011. It is evident from the published data of age not stated in 1971 census that it was less than one per thousand except for some states. However, these figures rose in 1991 census, and this gives speculation. In 1991 census, age not reporting was higher among literate than the illiterate and this pattern is contrary to other censuses age return and literacy status. Hence, it shows that there was a problem of data collection and processing in 1991 in a majority of the states.

The rate of age not stated in 2001 and 2011 is around 2-4 per 1000 population at the national level and in most of the states. Magnitude of age not stated is small in comparison with the total population. However, this required examination to understand who have not reported the age.

From the ongoing analysis it is found that the rates are higher for those who are living in urban areas, males, literates, never married and non-workers. From the differential analysis of age not stated, it is found that the rate is higher among the never-married population, and this population may be below ten years. However, the rate of age not stated for those whose literacy status is known and married gives an indication that they may be of ages above ten years. From the post-enumeration check too, it is found that the omission of children in 0-4 age group and population in 20-24 group is the highest in comparison with all other age groups. Moreover, omission of population in the last two censuses is found higher than previous censuses. The same pattern is observed for age not stated too. Hence, it may be a problem of coverage with proxy reporting of population where all characteristics can be probed but age is difficult to be reported by other persons. There is also the possibility of household members not reporting the age of young children (Srinivasan & Shastri, 2001). Moreover, this can be a problem of processing the information.

Accuracy of vital rates and ratios based on age data depends on the quality of age returns. Some of the developed countries adjust the missing age of the population using different techniques (Ikeda and Cantwell, 2001). Hence, age return in the census has to be improved as well as adjusted to have better demographic estimates.

References

Ambkanavar, J. P. & Visaria, P. (1975). Influence of literacy and education on the quality of age returns. *Demography India*, *4*(1), 11-15.

Balasubramanian, K. (1974). Type of age reporting errors in the census data of Indonesia. *Demography India*, *3*(2), 287-305.

Borkotoky K., & Unisa, S. (2014). Indicators to examine quality of large scale survey data: An example through District Level Household and Facility Survey. *PLoS ONE*, *9*(3), e90113. doi: 10.1371/journal.pone.0090113

Chandra, N. K. (1980). Adjustment of age data for India's census population. *Demography India 9*(1&2), 274-285.

Choudhary, C. R. (2006). *A Study of Quality of Single Year Age Data in India*. MPS Seminar Paper, Mumbai, International Institute for Population Sciences.

Edmonston, B. & Bairagi, R. (1981). Errors in age reporting in Bengali populations. *Rural Demography*, *8*(1), 63-87.

Ewbank, D. C. (1981). *Age Misreporting and Age-Selective Under Enumeration: Sources, Patterns and Consequences for Demographic Analysis*. Report No.4, Committee on Population and Demography, Washington, D.C., National Academy Press.

Ikeda, M. & Cantwell, P. J. and Bureau of the Census (2001). Missing data procedures for the Census 2000 accuracy and coverage evaluation Sample. *Proceedings of the Annual Meeting of the American Statistical Association 2001*, Atlanta.
Retrieved from https://www.amstat.org/sections/SRMS/Proceedings/y2001/Proceed/00361.pdf

Jain, S. P. (1980). Census single year age returns and informant bias. *Demography India 9*(1&2), 286-296.

McAlpin, M. B. (1983). Famine, epidemics, and population growth: The case of India. *Journal of Interdisciplinary History*, *14*(2), 351-366.

Mukherjee, Sudhansu B. (1976). *The Age Distribution of the Indian Population. A Reconstruction for the States and Territories, 1881-1961*. Honolulu: East West Population Institute.

Mukhopadhyay, B. K. (1983). Pattern of change in age reporting during 1961-71, Indian census data. *Demography India*, *12*(1), 131-144.

Natarajan, D. (1972). *Age and Marital Status, Census of India, 1971*. New Delhi, Registrar General, India.

Office of the Registrar General and Census Commissioner (1971*). Census of India 1971, Series 1, Part II-C, Social and Cultural Tables.* New Delhi, Registrar General and Census Commissioner.

Office of the Registrar General and Census Commissioner (1986). *Census of India 1981, Series 1, Part IVA, Social and Cultural Tables.* New Delhi, Registrar General and Census Commissioner.

Office of the Registrar General and Census Commissioner (1998). *Census of India 1991, Series 1, Part IVA C Series, Social and Cultural TablesVol.2*. New Delhi, Registrar General and Census Commissioner.

Office of the Registrar General and Census Commissioner (CD, nd). *Census of India 2001, Report and Series on Age, Series 1,* New Delhi, Registrar General and Census Commissioner.

Office of the Registrar General and Census Commissioner, India (nd). *Census of India 2001*. Retrieved from http://censusindia.gov.in/Data_Products/Data_Highlights/Data_Highlights_link/introduction.pdf

Office of the Registrar General and Census Commissioner (nd). *Data Processing Division: Data Processing Activities Performed by the D.P. Division*. Retrieved from census website http://www.censusindia.gov.in/2011-common/dpdivision.html

Office of the Registrar General and Census Commissioner (nd). *Post Enumeration Survey Reports.* http://www.censusindia.gov.in/2011Census/pes/pes_highlights.html

Prakasam, C. P. (1984). *On quality of age data for population count-1981, in Indian states*. Paper presented at Annual Conference of Indian Association for the Study of Population, Bangalore, 24-27 December 1984.

Saxena, P. C., Verma, K. R. & Sharma, K. A. (1986). Errors in age reporting in India, a socio-cultural and psychological explanation. *Indian Journal of Social Work, 47*(2), 127-135.

Sikri, D. K. (2005). *Challenges of 2001 Census in India and future issues*. Paper presented at 22nd Population Conference, Washington, 7- 9 March, 2005.

Srinivasan, K. & Shastri, V. D. (2001).*Errors in age reporting of children in the 2001 Census: A preliminary appraisal*. Paper presented at Symposium on Sex Ratio in India, Mumbai, 10-11 January, 2001.

Suong, Y. (1995). *Quality of Age Data by Sex in Censuses of Some Selected Asian Countries*. DPS Seminar Paper, Mumbai, International Institute for Population Sciences.

Vijayanunni, M. (1998). *Planning for 2001 Census of India based on 1991 Census*. Paper presented at18th Population Census Conference, Hawaii, 26-29 August 1998.

Yusuf, Farhat, (1967). On the extent of digital preference in reporting of ages in Pakistan. *The Pakistan Development Review, 7* (4), 519-526.

Zaki, P. K. & Zaki, A. J. (1983). A comparative study of age reporting in Pakistani censuses and surveys: 1951-1981. *Demography India, 12*(1), 145- 172.

Table 1: Rate of age not stated (per 1000 Population) by sex and residence in India and major states, 1971-2011

State	1971		1981		1991		2001		2011	
	M	F	M	F	M	F	M	F	M	F
All areas										
India	0.20	0.23	0.55	0.45	6.22	4.93	2.82	2.49	3.81	3.60
Andhra Pradesh	0.09	0.06	0.36	0.29	3.32	2.76	1.93	1.57	9.13	9.11
Karnataka	0.03	0.10	1.06	0.91	5.87	4.97	1.07	0.89	0.82	0.68
Kerala	0.05	0.04	0.09	0.10	2.25	2.59	0.91	0.76	1.08	0.99
Tamil Nadu	0.09	0.07	0.02	0.02	3.45	3.10	7.13	6.62	0.96	0.89
Maharashtra	0.16	0.14	1.43	1.36	4.19	3.73	1.30	1.13	3.77	3.48
Gujarat	0.10	0.07	0.21	0.13	5.38	4.76	1.01	0.84	3.99	3.91
West Bengal	1.21	1.79	0.37	0.28	6.29	5.40	1.51	1.27	1.36	1.10
Orissa	0.18	0.15	0.43	0.29	5.69	4.30	1.84	1.53	2.89	2.79
Uttar Pradesh	0.08	0.09	0.41	0.30	8.03	5.84	4.54	4.07	7.98	7.61
Madhya Pradesh	0.06	0.04	0.62	0.49	10.14	8.22	2.43	2.18	1.10	1.06
Rajasthan	0.07	0.10	0.75	0.60	3.78	2.36	5.00	5.18	3.87	4.00
Bihar	0.07	0.12	0.40	0.27	11.30	8.25	2.18	1.63	3.97	3.61
Punjab	0.50	0.02	1.05	0.96	5.16	4.53	4.03	3.65	1.52	1.47
Haryana	0.10	0.15	0.65	0.50	0.49	0.48	4.01	3.57	1.25	1.24
Himachal Pradesh	0.07	0.03	0.29	0.20	3.69	2.90	2.66	2.18	1.54	1.42
Rural										
India	0.20	0.25	0.45	0.35	5.98	4.44	2.71	2.39	3.58	3.40
Andhra Pradesh	0.05	0.04	0.35	0.28	2.75	2.15	1.58	1.27	7.14	7.11
Karnataka	0.12	0.08	0.95	0.79	5.44	4.34	1.06	0.88	0.74	0.64
Kerala	0.05	0.03	0.09	0.10	2.56	2.82	0.88	0.73	1.03	0.96
Tamil Nadu	0.09	0.08	0.02	0.01	3.67	3.19	4.85	4.47	1.00	0.93
Maharashtra	0.17	0.15	1.30	1.22	2.04	1.73	1.55	1.32	3.45	3.24
Gujarat	0.08	0.06	0.21	0.13	5.57	4.71	0.90	0.68	3.33	3.34
West Bengal	1.58	2.26	0.35	0.25	6.43	5.31	1.37	1.18	0.83	0.73
Orissa	0.16	0.13	0.37	0.24	5.56	4.01	1.80	1.49	2.76	2.69
Uttar Pradesh	0.09	0.10	0.33	0.22	7.54	5.08	4.57	4.15	7.46	7.10
Madhya Pradesh	0.05	0.02	0.54	0.40	9.76	7.53	2.42	2.16	0.87	0.83
Rajasthan	0.07	0.10	0.61	0.44	2.98	1.43	5.14	5.43	4.08	4.26
Bihar	0.07	0.09	0.35	0.22	10.22	6.95	2.24	1.67	3.63	3.28
Punjab	0.04	0.02	0.55	0.39	4.22	3.66	3.75	3.45	1.74	1.67
Haryana	0.10	0.16	0.37	0.23	0.41	0.37	4.03	3.60	1.25	1.24
Himachal Pradesh	0.07	0.03	0.25	0.17	3.50	2.72	2.70	2.22	1.58	1.46
Urban										
India	0.19	0.13	0.84	0.78	6.88	6.39	3.09	2.78	4.29	4.06
Andhra Pradesh	0.24	0.14	0.41	0.30	4.86	4.44	2.85	2.38	13.10	13.12
Karnataka	0.16	0.14	1.33	1.19	6.81	6.41	1.07	0.92	0.95	0.74
Kerala	0.05	0.05	0.13	0.07	1.38	1.97	1.00	0.84	1.13	1.03
Tamil Nadu	0.09	0.07	0.01	0.02	3.03	2.92	10.00	9.36	0.92	0.85
Maharashtra	0.15	0.13	1.67	1.65	5.39	5.35	0.99	0.85	4.14	3.78
Gujarat	0.14	0.10	0.20	0.16	5.00	4.84	1.20	1.12	4.84	4.72
West Bengal	0.18	0.17	0.43	0.38	5.92	5.66	1.86	1.52	2.50	1.89
Orissa	0.38	0.38	0.80	0.63	6.48	6.32	2.08	1.76	3.55	3.28
Uttar Pradesh	0.03	0.02	0.73	0.67	9.99	8.96	4.45	3.75	9.76	9.39
Madhya Pradesh	0.15	0.11	0.93	0.89	11.38	10.58	2.45	2.24	1.73	1.70
Rajasthan	0.04	0.10	1.27	1.20	6.43	5.54	4.58	4.35	3.24	3.23
Bihar	0.05	0.40	0.70	0.68	18.10	17.24	1.86	1.37	5.97	5.61
Punjab	1.95	0.02	2.33	2.47	7.37	6.63	4.57	4.07	1.16	1.13
Haryana	0.08	0.07	1.64	1.50	0.75	0.81	3.96	3.48	1.24	1.23
Himachal Pradesh	0.06	0.00	0.70	0.58	5.45	4.88	2.32	1.77	1.22	1.02

Note: Jharkhand, Chhattisgarh and Uttaranchal have been included in Bihar, Madhya Pradesh and Uttar Pradesh respectively in 2001 and 2011

Table 2: Rate of age not stated (per 1000 population) by sex, residence among illiterates/literate India and major states, 1971- 2001

State	1971		1981		1991		2001		2011	
	M	F	M	F	M	F	M	F	M	F
Illiterate										
India	0.20	0.22	0.32	0.29	1.72	1.48	3.19	2.64	3.93	3.62
Andhra Pradesh	0.10	0.07	0.26	0.23	0.44	0.37	2.10	1.60	10.2	10.4
Karnataka	0.18	0.11	0.80	0.70	0.62	0.63	1.43	1.06	0.89	0.73
Kerala	0.08	0.06	0.11	0.08	0.32	0.43	2.54	1.83	1.04	0.94
Tamil Nadu	0.10	0.08	0.01	0.00	1.05	0.78	6.79	5.95	1.01	0.93
Maharashtra	0.27	0.18	1.19	1.15	0.47	0.46	2.05	1.51	3.89	3.59
Gujarat	0.13	0.08	0.18	0.12	1.89	1.70	1.56	1.04	4.20	4.26
West Bengal	1.00	1.66	0.24	0.21	1.74	1.52	1.77	1.39	1.50	1.19
Orissa	0.21	0.16	0.28	0.21	1.11	0.93	2.25	1.66	2.95	2.81
Uttar Pradesh	0.10	0.09	0.14	0.13	1.96	1.66	4.29	3.69	8.40	7.98
Madhya Pradesh	0.07	0.04	0.40	0.36	6.66	5.47	3.07	2.42	1.12	1.16
Rajasthan	0.09	0.11	0.52	0.45	0.12	0.09	5.15	5.43	4.03	4.12
Bihar	0.09	0.10	0.14	0.10	2.21	2.08	2.01	1.57	4.34	4.08
Punjab	0.35	0.02	0.24	0.15	0.01	0.01	6.57	5.12	1.53	1.46
Haryana	0.12	0.16	0.13	0.10	0.12	0.10	7.67	5.08	1.21	1.24
Himachal Pradesh	0.09	0.04	0.18	0.12	1.09	0.74	6.62	3.98	1.46	1.40
Literate										
India	0.20	0.27	0.80	0.94	10.25	12.22	2.61	2.32	3.53	3.58
Andhra Pradesh	0.05	0.03	0.51	0.51	6.71	9.12	1.82	1.53	7.07	7.63
Karnataka	0.06	0.05	1.34	1.43	9.98	12.39	0.88	0.72	0.64	0.60
Kerala	0.03	0.02	0.09	0.11	2.71	3.31	0.56	0.45	1.30	1.24
Tamil Nadu	0.07	0.05	0.02	0.04	4.82	5.98	7.25	7.12	0.79	0.83
Maharashtra	0.06	0.04	1.61	1.76	6.32	8.00	1.04	0.85	3.32	3.27
Gujarat	0.06	0.06	0.23	0.16	7.61	9.22	0.75	0.64	3.36	3.38
West Bengal	1.49	2.24	0.50	0.45	9.77	11.62	1.38	1.16	0.99	0.94
Orissa	0.12	0.08	0.59	0.57	9.85	12.63	1.61	1.35	2.74	2.75
Uttar Pradesh	0.03	0.04	0.83	1.36	15.54	22.54	4.74	4.78	7.19	7.26
Madhya Pradesh	0.04	0.03	0.97	1.22	14.07	17.40	2.05	1.86	1.05	0.95
Rajasthan	0.01	0.02	1.15	1.76	8.44	13.99	4.91	4.74	3.55	3.91
Bihar	0.03	0.36	0.81	1.34	23.86	36.24	2.36	1.79	3.42	3.25
Punjab	0.71	0.01	1.95	2.57	9.39	10.71	2.67	2.48	1.51	1.48
Haryana	0.06	0.04	1.22	1.93	0.79	1.24	2.11	1.88	1.35	1.23
Himachal Pradesh	0.04	0.01	0.39	0.37	5.21	5.67	1.25	0.93	1.83	1.47

Note: Jharkhand, Chhattisgarh and Uttaranchal have been included in Bihar, Madhya Pradesh and Uttar Pradesh respectively in 2001 and 2011.

Table 3: Rate of age not stated (per 1000 population) by sex and marital status in India and major states, 2001-2011

State	Never Married		Currently Married		Widowed		Divorced/Separated	
	M	F	M	F	M	F	M	F
2001								
India	3.49	3.19	2.00	1.95	2.40	1.77	2.40	1.42
Andhra Pradesh	2.82	2.53	1.00	0.92	1.48	0.96	1.41	0.76
Karnataka	1.38	1.27	0.69	0.61	0.85	0.57	0.71	0.50
Kerala	1.41	1.34	0.36	0.38	0.63	0.34	0.60	0.21
Tamil Nadu	8.94	8.18	5.27	5.83	5.65	4.59	4.74	3.44
Maharashtra	1.57	1.47	1.01	0.90	1.01	0.70	0.67	0.52
Gujarat	1.48	1.29	0.50	0.50	0.64	0.53	0.45	0.47
West Bengal	1.81	1.64	1.14	0.99	1.77	0.99	1.43	0.90
Orissa	2.43	2.16	1.13	0.97	1.51	1.08	1.88	0.94
Uttar Pradesh	5.47	5.06	3.30	3.13	3.13	3.07	4.65	4.31
Madhya Pradesh	2.86	2.78	1.92	1.63	2.15	2.09	1.99	1.61
Rajasthan	5.22	4.82	4.73	5.55	5.06	4.85	6.91	6.44
Bihar	2.80	2.15	1.38	1.17	1.59	1.20	4.24	2.10
Punjab	5.45	5.42	2.42	2.28	2.48	2.23	2.75	2.79
Haryana	5.52	6.00	2.16	1.53	2.51	2.13	2.64	3.42
Himachal Pradesh	3.86	3.92	1.23	0.77	1.43	1.11	1.87	0.84
2011								
India	4.47	3.82	3.05	3.47	3.95	3.32	4.03	2.85
Andhra Pradesh	11.6	10.2	6.81	8.73	8.54	7.40	8.16	6.85
Karnataka	1.14	0.91	0.48	0.51	0.94	0.68	1.58	0.77
Kerala	1.45	1.24	0.71	0.79	1.53	1.13	1.75	0.93
Tamil Nadu	1.33	1.21	0.60	0.64	1.33	1.08	1.45	0.95
Maharashtra	4.20	3.40	3.31	3.49	4.23	3.74	6.19	3.63
Gujarat	4.37	3.74	3.58	3.92	4.62	4.84	4.36	4.30
West Bengal	1.70	1.29	1.01	0.94	1.68	1.20	1.91	1.03
Orissa	3.42	3.07	2.30	2.48	3.18	3.14	4.77	3.34
Uttar Pradesh	2.11	1.57	1.44	1.40	1.58	1.39	3.19	3.51
Madhya Pradesh	2.39	2.11	1.25	1.40	1.92	1.86	4.73	4.70
Rajasthan	4.12	3.75	3.57	4.13	4.15	4.70	4.41	4.57
Bihar	8.64	7.17	6.57	6.94	7.50	7.28	28.6	19.0
Punjab	2.18	1.92	1.27	1.48	1.66	1.65	3.64	6.08
Haryana	1.53	1.43	0.94	1.07	1.21	1.33	1.45	0.93
Himachal Pradesh	2.12	1.93	1.03	1.14	1.17	1.26	3.34	6.29

Note: Jharkhand, Chhattisgarh and Uttaranchal have been included in Bihar, Madhya Pradesh and Uttar Pradesh respectively in 2001 and 2011.

Table 4: Rate of age not stated (per 1000 population) by sex and residence and religion in India and major states, 2001

State	Hindu		Muslim		Others	
	Males	Females	Males	Females	Males	Females
All areas						
India	2.80	2.50	2.55	2.25	3.66	2.98
Andhra Pradesh	1.78	1.46	2.47	2.10	6.40	4.18
Karnataka	1.06	0.87	0.98	0.89	1.58	1.28
Kerala	0.84	0.71	0.92	0.78	1.09	0.86
Tamil Nadu	7.01	6.54	7.60	6.95	8.32	7.32
Maharashtra	1.17	0.99	1.14	0.99	2.68	2.43
Gujarat	0.95	0.79	1.12	0.92	3.42	3.06
West Bengal	1.46	1.23	1.51	1.32	3.02	2.12
Orissa	1.80	1.50	1.86	1.53	2.91	2.12
Uttar Pradesh	4.59	4.15	3.86	3.45	12.95	8.84
Madhya Pradesh	2.38	2.14	2.88	2.70	3.23	2.61
Rajasthan	5.11	5.33	3.92	3.94	4.84	4.24
Bihar	2.17	1.66	2.05	1.54	2.84	1.58
Punjab	4.08	3.80	4.01	3.85	4.00	3.57
Haryana	3.91	3.47	6.00	5.80	3.53	2.91
Himachal Pradesh	2.63	2.16	2.78	3.00	3.36	2.41
Rural						
India	2.70	2.39	2.44	2.12	3.53	2.84
Andhra Pradesh	1.54	1.25	1.38	1.24	5.24	3.11
Karnataka	1.04	0.85	1.15	0.99	1.45	1.34
Kerala	0.84	0.70	0.91	0.77	0.94	0.74
Tamil Nadu	4.83	4.47	4.70	4.36	5.45	4.61
Maharashtra	1.32	1.10	1.39	1.11	4.55	4.17
Gujarat	0.88	0.68	0.88	0.60	2.34	1.66
West Bengal	1.31	1.12	1.43	1.28	2.13	1.60
Orissa	1.76	1.46	1.91	1.49	2.72	2.05
Uttar Pradesh	4.58	4.20	3.94	3.55	15.65	10.71
Madhya Pradesh	2.39	2.14	2.75	2.55	3.55	2.70
Rajasthan	5.27	5.60	3.37	3.41	4.31	3.55
Bihar	2.23	1.70	2.10	1.58	2.76	1.51
Punjab	3.54	3.38	3.48	3.13	3.82	3.47
Haryana	3.91	3.48	6.07	5.81	3.48	2.77
Himachal Pradesh	2.66	2.20	3.05	2.93	3.71	2.65
Urban						
India	3.09	2.79	2.75	2.49	3.49	3.27
Andhra Pradesh	2.56	2.16	3.25	2.73	7.70	5.37
Karnataka	1.08	0.92	0.87	0.82	1.71	1.21
Kerala	0.85	0.74	0.95	0.79	1.59	1.24
Tamil Nadu	10.10	9.51	8.65	7.95	10.47	9.37
Maharashtra	0.94	0.80	1.04	0.94	1.18	1.02
Gujarat	1.08	1.00	1.29	1.16	3.88	3.67
West Bengal	1.77	1.46	1.86	1.50	6.88	4.50
Orissa	2.03	1.74	1.79	1.58	4.18	2.66
Uttar Pradesh	4.67	3.94	3.72	3.25	8.47	5.77
Madhya Pradesh	2.35	2.14	2.95	2.79	2.83	2.50
Rajasthan	4.53	4.25	4.50	4.51	5.64	5.24
Bihar	1.81	1.33	1.78	1.36	3.49	2.11
Punjab	4.51	4.16	4.65	4.88	4.66	3.91
Haryana	3.92	3.43	5.63	5.70	3.68	3.26
Himachal Pradesh	2.35	1.74	1.39	3.56	2.31	1.63

Note: Jharkhand, Chhattisgarh and Uttaranchal have been included in Bihar, Madhya Pradesh and Uttar Pradesh respectively in 2001.

Table 5: Rate of age not stated (per 1000 population) by sex and classification of work in selected states of India, 2001

State	Total workers		Main Workers		Marginal Workers		Non-Workers	
	Males	Females	Males	Females	Males	Females	Males	Females
All areas								
Tamil Nadu	7.13	6.62	6.13	5.60	6.04	5.00	8.50	7.15
Rajasthan	5.00	5.18	4.68	6.10	5.29	5.44	5.25	4.88
Uttar Pradesh	4.66	4.19	3.51	5.21	4.34	3.59	5.54	4.18
Rural								
Tamil Nadu	4.85	4.47	4.00	4.17	4.75	4.31	5.94	4.66
Rajasthan	5.14	5.43	4.79	6.12	5.31	5.42	5.42	5.20
Uttar Pradesh	4.68	4.27	3.44	5.06	4.29	3.52	5.67	4.32
Urban								
Tamil Nadu	10.00	9.36	8.77	9.01	9.60	8.58	11.49	9.45
Rajasthan	4.58	4.35	4.31	5.87	5.13	6.01	4.76	4.18
Uttar Pradesh	4.55	3.85	3.78	6.11	4.69	5.20	5.10	3.71

Note: Uttaranchal has been included in Uttar Pradesh in 2001.

Table 6: Rate of age not stated (per 1000 population) by sex and classification of work in selected states of India, 2011.

State	Total workers		Main Workers		Marginal Workers		Non-Workers	
	Males	Females	Males	Females	Males	Females	Males	Females
All areas								
Andhra Pradesh	7.85	7.97	7.52	7.73	10.45	8.73	10.83	9.75
Uttar Pradesh	7.53	7.84	7.41	7.96	7.88	7.75	8.40	7.56
Rajasthan	3.74	4.15	3.66	4.07	4.12	4.23	4.01	3.92
Gujarat	3.83	3.74	3.73	3.79	5.04	3.68	4.20	3.97
Rural								
Andhra Pradesh	6.14	6.97	5.98	6.98	7.41	6.93	8.54	7.21
Uttar Pradesh	7.01	7.34	6.92	7.45	7.26	7.25	7.86	7.05
Rajasthan	3.91	4.23	3.86	4.21	4.13	4.25	4.26	4.28
Gujarat	3.27	3.41	3.17	3.48	4.20	3.34	3.41	3.31
Urban								
Andhra Pradesh	11.53	12.62	10.81	11.24	17.59	16.84	14.97	13.24
Uttar Pradesh	9.21	10.82	8.80	9.98	11.38	12.28	10.30	9.21
Rajasthan	3.21	3.27	3.14	3.09	4.01	3.74	3.27	3.22
Gujarat	4.56	5.05	4.41	4.59	7.20	6.64	5.22	4.68

Note: Uttaranchal has been included in Uttar Pradesh in 2011.