



Alarming child sex ratio of Haryana

¹ Surender Kumar, ² Priyanka

¹ Research Scholar, MDU, Rohtak, Haryana, India

² M.Sc & B.ed KUK, Kurukshetra, Haryana, India

Abstract

In the human species the ratio between males and females at birth is slightly biased towards the male sex. The natural “sex ratio at birth” is often considered to be around 105. This means that at birth on average, there are 105 males for every 100 females. Nature provides that the number of newborn males slightly outnumber newborn females because as they grow up, men are at a higher risk of dying than women not only due to sex differentials in natural death rates, but also due to higher risk from external causes (accidents, injuries, violence, war casualties). Thus, the sex ratio of total population is expected to equalize. Instead if a country’s population sex ratio does not equalize or rather exceeds the 105-threshold, it means societies with a dominating preference for male child tend to intervene in nature and reduce the number of born girl child by sex-selective abortion and infanticide. The present study is related to all districts of Haryana from 1991-2011. Haryana is one of the worst states in context of child sex ratio. The child sex ratio of Haryana state was improved from 819 to 830 (11 points) from 2001 to 2011 census that was declined points 23 from 1991 to 2011.

Keywords: child sex ratio, population, nature, abortion and infanticide

Introduction

Gender is the range of characteristics pertaining to, and differentiating between masculine and femininity. Depending on the context, these characteristics may include biological sex (state of being male or female), sex based social structures (gender roles/ identity). Unlike ‘Sex’ gender does not have a basis in science, although it is affected by the biological and physiological characteristics. The negative increase in sex ratio may lead to gender imbalances.

Sex ratio is the number of males and females for every hundred females. The gap between males and females leads to gender imbalance. The gender imbalance is a disparity between males and female in a population. Sex ratio is an important social indicator to measure the extent of the prevailing equity between males and females in a society at a given point of time. Changes in sex ratio largely reflect the underlying socio-economic and cultural patterns of a society in different ways. Determinants of changes in sex ratio vary from sex differentials in mortality, sex selective migration, sex ratio at birth, and at times, sex differentials in population enumeration. India is one of the few The human sex ratio is of particular interest to anthropologists and demographers. In human societies, however, sex ratios at birth may be considerably skewed by factors such as the age of mother at birth and by sex-selective abortion and infanticide. Exposure to pesticides and other environmental contaminants may be a significant contributing factor as well. As of 2014, the global sex ratio at birth is estimated at 107 boys to 100 girls (1000 boys per 934 girls). countries in the world where males outnumber females.

Generally, sex ratio is defined as the relative number of males per 100 females. This definition is followed all over the world.

But situation is entirely different in case of India where sex ratio is usually defined as the number of females per 1000 males. The primary reason for measuring sex ratio differently in the former case is because of deficit of males and whereas in case of India is the decreasing proportion of female population in contrast to males.

However, the high incidence of induced abortions and sharp decline in the child sex ratio in the last decade clearly proves the practice of female feticide. The increasing incidence of female feticide has led to a drastic decrease in the number of girls to boys in India in the 0-6 age group. The practice of eliminating female fetuses is believed to be one of the main reasons for the adverse child sex ratio. Pre-Birth Elimination of Females (PBEF) seems to be more prevalent in urban areas than in rural areas, but the gap is rapidly decreasing because of easy availability of sex determination tests in rural areas.

Literature Review

The sex ratio was an index of economy prevailing in an area and was useful tool for regional analysis. (Franklin, 1956). The proportion of the two sexes is fundamental to the geographic analysis of an area because it is not only an important feature of the landscape but it also influences the other demographic elements significantly and as such provides an additional means for analyzing the regional landscape. (Trewartha, 1953). The existing sex ratio in any area is determined by three basic factors. These are sex ratio at the time of birth, differences in the mortality rates of the two sexes, at different ages and differences in the migratory ethos of the two sexes. Rapid decline in child sex ratio is a serious problem with several socio-economic, demographic and cultural implications. It is a broad indicator, which reveals the

ground realities that exist in fabric of society. Moreover, the child sex ratio is a powerful index to examine the social response on female children. Present sex composition of child population determines the future of vital event such as marriage rate and labour force, age structure, birth and death, migration etc. (*Janaki Ramesh, and Chandrasekhar, 2011*). Sex ratio among children is therefore considered a better indicator of gender relations in a population emphasizes that sex ratio imbalances stem mainly from male-female differentials in survival rate, which in turn, are connected with various socio-economic, cultural and historical factors Agnihotri (2000).

India's population has been marked with large and growing deficit of females ever since the turnoff the last century. This has been matter of much investigation and speculation among researchers and police makers, (*Visaria, 1968; Rajan, 1991; Agnihotri, 2000; Bhat, 2002*). Historical low child sex ratio in India is mainly attributed to excess female child mortality (*Visaria, 1971*). However, the accelerated fall in child sex ratio after 1981 is largely due to the diffusion of pr-natal sex selection techniques in regions with well-entrenched gender bias. It may be noted that sex determination techniques are known to have existed in the region for over two decades now, A large part of the increased preponderance of male child at the birth can thus, be related to widespread incidence of sex selective foeticide. The recent past has, therefore witnessed a growing concern regarding the misuse of medical technology for sex determination (*George and Dahiya, 1998; Hassan, 2000*). In the wake of persisting gender inequality and discrimination against female, male child is prized more as a source of social security in old age and for augmenting parental wealth through dowry. On the contrary, a female child is conceived as a burden, which led to even cruel practice of infanticide in the past (*Hassan, 2000*). (*Bose, 2001*) has categorically remarked about Haryana as "Demaru" or daughter maru state. The killing of girl babies has long history in north-west India and remains quite common in particular area and communities. Three factors have been held responsible for decline in sex ratio in Haryana namely migration, mortality experiences of two sexes and changing sex ratio at birth. As recent times improvement in female death rate has been recorded mainly in childbearing age group, therefore, it seem that much of recent decline in sex ratio can mainly be attributed to the growing preponderance of male births over females births. Inter-state migration after green revolution also seems to be little responsible for low number of females in state. (*Hassan, 2000*).

Statement of the Problem

The child sex ratio is a powerful index to examine the social response on female children. Present sex composition of child population determines the future vital events such as marriage rate, labour force, age structure, birth and deaths, migration, and replacement etc. As per 2011 census, out of 21 district of Haryana, 16 districts have male improvement in child sex ratio. There are five districts in which sex ratio of child population has decreased from census 2001. These are

Mahendragrah 818 in 2001 to 778 in 2011 registering a fall of (40 points), Rewari 811 to 784 (27 points), Bhiwani 841 to 831 (10 points), Faridabad 847 to 842 (5 points) and Jhajjar 801 to 774 (27 points). Sex ratio among children in the age group 0-6 years (CSR) also, Mahendragarh reports a markedly faster deterioration than state average. In 2011 census, Bhiwani district of Haryana has recorded child sex ratio 774 girls per/1000 boys. Therefore, deficit in girl child population, leads to serious demographic imbalance and adverse social consequences. Therefore, efforts are needed to solve the issue thereby create equal regard and affection for the girl child. Otherwise, the child population will become skewed leading to a host of several societal problems. So, in the present study, an attempt has been made to examine the spatio-temporal dimensions of child sex ratio at macro, meso, and, micro levels. In our present study, we will concern on all districts in Haryana.

Importance of study

The earlier studies on child sex ratio in Haryana were diverse in nature. In the present study, an attempt has been made to examine the spatio-temporal dimensions of child sex ratio at macro, meso, and, micro levels in all Districts of Haryana. Hence, this study attempts to provide vital clues for policy makers.

Methodology

Research methodology is a vital part of any research work. Research methodology deals with the research method and takes into consideration the logic behind the methods researcher uses. It depends on the objectives of the research work. In research methodology, the researcher decides what type of tools he/she would be going to use in the study. Present study will be based on data drawn from secondary sources. Census will be the main secondary source of data. Arc Gis 9.3 software has been used for mapping and analysis of spatial and non-spatial information and statistical techniques, cartographic will be applied to the analysis of the results obtained from secondary sources. The sex ratio has computed by applying formula used by Census of India.

$$\text{Sex Ratio} = \frac{\text{Female Population}}{\text{Male population}} \times 1000$$

Objectives

The present study revolves around the following main objectives.

- To analyze the temporal & regional pattern of child sex ratio in Haryana.
- To analyze the Spatio-temporal pattern of child sex in all Districts.
- To trace the spatial inequality in child sex ratio in study region.
- To find out the causes of declining child sex ratio in Study Area.
- To indentify the consequences of high gender imbalances on socio-cultural composition



Fig 1

Table 1: India: Range of Child Sex Ratio (1981-2011)

Value	Number of States/Union Territories		
	1991	2001	2011
Below-900	3	6	11
900-950	9	11	14
Above	22	18	10
	34	35	35

Source: Census of India, General Population Tables of 1991, 2001, 2011

Table 2: Haryana and India: Trends in Child Sex Ratio (1991-2011)

Years	India Sex Ratio Decadal Change		Haryana Sex Ratio Decadal Change	
1991	945	-17	879	-23
2001	927	-18	819	-60
2011	914	-13	830	11

Source: Census of India, 2011

Table 3: Haryana: Sex Ratio, Child Sex Ratio, Literacy by Districts, (2001- 2011)

	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
Haryana	861	877	15.8	13.0	819	830	67.9	76.64	78.5	85.4	55.7	66.8
Panchkula	823	870	14.1	11.7	829	850	74.0	83.4	80.9	88.6	65.7	77.5
Ambala	868	882	13.2	10.9	782	807	75.3	82.9	82.3	88.5	67.4	76.6
Yamunanagar	862	877	14.4	11.8	806	825	71.6	78.9	78.8	85.1	63.4	72.0
Kurukshetra	866	889	14.2	12.0	771	817	69.9	76.7	78.1	83.5	60.6	69.2
Kaithal	853	880	15.4	12.6	791	821	59.0	70.6	69.2	79.3	47.3	60.7
Karnal	865	886	15.1	12.9	809	820	67.7	76.4	76.3	83.7	58.0	68.3
Panipat	829	861	16.4	13.7	809	833	69.2	77.5	78.5	85.4	58.0	68.2
Sonapat	839	853	15.4	12.7	788	790	72.8	80.8	83.1	89.4	60.7	70.9
Jind	852	780	15.8	12.4	818	835	62.1	72.7	73.8	82.5	48.5	61.6
Fatehabad	884	903	16.1	12.6	828	845	58.0	69.1	68.2	78.1	46.5	59.3
Sirsa	882	896	15.0	11.9	817	852	60.6	70.4	70.1	78.6	49.9	61.2
Hisar	851	871	15.5	12.1	832	849	64.8	73.2	76.6	82.8	51.1	62.3
Bhiwani	879	884	15.7	12.6	841	831	67.4	76.7	80.3	87.4	53.0	64.8
Rohtak	847	868	14.5	11.9	799	807	73.7	80.4	83.2	88.4	62.6	71.2
Jhajjar	847	861	15.0	12.1	801	774	72.4	80.8	83.3	89.4	59.6	71.0

Mahendergarh	918	894	15.8	11.9	818	778	69.9	78.9	84.7	91.3	54.1	65.3
Rewari	899	898	15.2	12.5	811	784	75.2	82.2	88.4	92.9	60.8	70.5
Gurgaon	850	853	15.5	13.1	807	826	78.5	84.4	88.0	90.3	67.5	77.6
Mewat	899	906	25.1	22.3	893	903	43.5	56.1	61.2	73.0	23.9	37.6
Faridabad	826	871	15.8	13.2	847	842	76.3	83.0	85.1	89.9	65.5	75.2
Palwal	862	879	20.0	16.5	854	862	59.2	70.3	75.1	82.6	40.8	56.4

Source: Census of Haryana, 2001-2011, Series-I, Paper-I

Table 4: Haryana: districts wise variation sex ratio in child ratio (2001 -2011)

State/District	Sex Ratio		Percent (0-6 pop.)		Sex Ratio (0-6 pop.)	
	2001	2011	2001	2011	2001	2011
HARYANA	861	877	15.8	13.0	819	830
Panchkula	823	870	14.1	11.7	829	850
Ambala	868	882	13.2	10.9	782	807
Yamunanagar	862	877	14.4	11.8	806	825
Kurukshetra	866	889	14.2	12.0	771	817
Kaithal	853	880	15.4	12.6	791	821
Karnal	865	886	15.1	12.9	809	820
Panipat	829	861	16.4	13.7	809	833
Sonipat	839	853	15.4	12.7	788	790
Jind	852	870	15.8	12.4	818	835
Fatehabad	884	903	16.1	12.6	828	845
Sirsa	882	896	15.0	11.9	817	852
Hisar	851	871	15.5	12.1	832	849
Bhiwani	879	884	15.7	12.6	841	831
Rohtak	847	868	14.5	11.9	799	807
Jhajjar	847	861	15.0	12.1	801	774
Mahendragarh	918	894	15.8	11.9	818	778
Rewari	899	898	15.2	12.5	811	784
Gurgaon	850	853	15.5	13.1	807	826
Mewat	899	906	25.1	22.3	893	903
Faridabad	826	871	15.8	13.2	847	842
Palwal	862	879	20.0	16.5	854	862

Source: Census of India 2001 and 2011

Spatial pattern of child sex ratio

Table 3 & 4 presents an overall picture of child sex ratio (2011) in the state. In 2011 census, Haryana has been recorded improvement in child sex of 11 points from 819(2001) to 830(2011). Sex ratio also reveals a wide disparity across districts. The lowest sex ratio is found in Bhiwani district. Map no. 3. 1 gives a visual impression of inter-districts variations in sex ratio in the state. The range of child sex ratio divided into three categories, that is, (i) high, (ii) moderate, (iii) low.

High child sex ratio

Out of 21, only 10 districts have high child sex ratio. The highest child sex ratio that is 903 found in Mewat followed by Palwal (862), Faridabad (842), Sirsa (852), Panchkula (850), and Hissar (849). Due to people are highly matured and discrimination against girl child is not strong in these districts, lesser accessibility and awareness about scanning centers may be the main reasons, which are responsible of high child sex ratio in these districts.

Moderate child sex ratio

Moderate sex ratio has recorded in the districts of Jind (835), Panipat (833), Ambala (807), Kurukshetra (817), Rohtak(807), Bhiwani (831), Yamunanagar (825) and kaithal (821), Karnal(820). It is because of shortage of clinic, low literacy

rate and not well transport system are main reasons, which are responsible for moderate child sex ratio in these districts.

Low Child Sex Ratio

Low child sex ratio is found a contiguous zone consisting of Mahendergarh (778), Rewari (784), Jhajjar (774) and Sonipat (790) districts in southern part of Haryana. Due to the patriarchal system is very strong and the rapid growth of pre-natal diagnostic test center has added to decline of female child.

Conclusion

The present study shows the continuous decline in child sex ratio in the country over the last five decades. The decline has been more rapid in last three decades. For instance, from 1961 to 1981 the decline is 14 points. On the other hand, from 1981 to 2011 the decline is as much as 48 points. In other words, it is concluded that the decline is more conspicuous since 1980. On the other hand, Haryana has observed continuous decline in child sex ratio from 1961 to 2001. However an increase of 11 points from 819 to 830 has been recorded. But, it is still low when compared to national average of 914.

The spatial pattern of child sex ratio shows that the sharpest decline in child sex ratio has been observed in Punjab, Haryana, Himachal Pradesh, Gujarat, and Chandigarh, Delhi during 1981-2001. But in recent decade, a sharp decline is

recorded in states & union territories of Jammu Kashmir, Maharashtra, Rajasthan, Manipur, Jharkhand, and Uttaranchal, Nagaland, Dadra & Nagar Haveli and Lakshadweep. In Haryana, all the districts have reported child sex ratio lower than national average of 914. In 2011 census reports, southern districts like Jhajjar (774) Mehandergah (778), Rewari (784) and other like Sonapat (790) have reported very low sex ratio i.e, below 800.

Conclusions and suggestions

Sex ratio is an important social to measure the extent of the prevailing equity between males and females in a society at a given point of time. Changes in sex ratio largely reflect the underlying socio-economic and cultural patterns of a society in different ways. Determinants of changes in ratio vary from sex differentials in mortality, sex selective migration, sex ratio at birth, and at times, world where males outnumber females. However, the high incidence of induced abortions and sharp decline in the last clearly proves the practice of female's feticide. In any population, distribution by sexes is generally unequal. The sex ratio of a place particularly depends upon number of males and female babies born, the differential in mortality rates of two sexes and spatial mobility of population. In addition, in a country like India, differential counting of males and females at the time of enumeration is also factor which affects the sex composition of the population.

India's population has been marked with large and growing deficit of females ever since the last century. This has been matter of much investigation and speculation among researchers and policy makers. Historical low child sex ratio in India is mainly attributed to excess female child mortality. However, the accelerated fall in child sex ratio after 1981 is largely due to the diffusion of pre-natal sex selection techniques in regions with well-entrenched gender bias. It may be noted that sex determination techniques are known to have existed in the region for over to decade's in the wake of persisting gender inequality and discrimination against female, male child is prized more as a source of social security in old age and for augmenting parental wealth through dowry. During reviewing of literature I find, many scholars are of the opinion that current declining sex ratio is mainly due to further increase in preponderance of males at birth. This is attributed to wide spread misuse of advance medical technology, properly known as amniocentesis, for determination of the sex of baby in the mother's womb. On basis of the test if the baby is detected to be female the parents go for the termination of the pregnancy. This is termed as female feticide

Suggestion

The decline in child sex ratio suggests that marked improvements in the economy and literacy rates do not seem to have much positive impact on this aspect. The following measures, based on the finding of this study are suggested which can help in improving the child sex ratio. The following suggestive measures should be taken by the government and the people to eradicate the problem of declining sex ratio.

- The first and foremost need is a change in mindset of the society toward the girl child. Unless the citizens of country themselves wake up to the evil of female feticide

these malpractices targeting the girl children shall not be done away with.

- It is required that every girl child gets the right to be born and is extended the same love and affection as the boys, provided tender care and nourishment without any discrimination and given equal opportunities for education as the boys.
- Registering and monitoring of all pregnancies from the 6th week onward and not from the 12th week.
- The state should initiate to modify the two-child norm with the combination of one son and one daughter, so that imbalance in the child sex ratio could be removed.
- People should be motivated to perform rituals by daughter over son at parent's cremation and at every death anniversary thereafter.
- Beti Bachao and Beti Padhao Yojana (Should be implemented effectively).
- Ladli Pariyojana in Haryana (Should implemented in other states also).

References

1. Bhargava. Working and Non-working Women On education, Economic Activity and Marital Fertility in Greater Bombay, 1983.
2. Krishna PVT, Mohan AG, Khan. Two child Family Norms: Women's Attitude In Uttar Pradesh, IIPS. Bombay. 2003; 49(1).
3. Elizabeth Thouron, Paula Goldman. Measuring Fertility Norm. *American sociological Association*, New York, 1986.
4. Kankure KB. A Study of Sex Ratio in Parbhani District (M.S). *International Reserch Journal*. 2011; 3(31):1-2.
5. Kaur G, Kaur R. Pattern of Sex Ratio in Punjab, *Asian Profile*. 2007; 35(1):59-70.
6. Mahesha D, Shivalingappa BN. Child Sex Ratio in Karnataka-a Spatio- Temporal Analysis, *Indian Streams Research Journal*. 2012; 2(7):1-7.
7. Garg S, Dahiya RS. Female Foeticide in Rural Haryana, *Economic and Political weekly*. 1998; 27:1153-56.
8. Census of India. Provisional Data, Census of India, New Delhi, 2011.
9. Census of India. Primary Census Abstract and Administrative Tables-Delhi, Census of India, Delhi, 2001.
10. www.jstor.com
11. <http://Bhiwani.nic.in/>
12. www.PoPONILE.com
13. <http://censusindia.gov.in/>
14. <http://esaharyana.gov.in/Data/StateStatisticalAbstract/StatisticalAbstract%28282%20Bhiwani%20District%20Census%202011%20data%20available%20at%20http://www.census2011.co.in/census/district/223-Bhiwani.html>