Levels, trends and patterns of age difference among the couples in India

Key words: Age, difference, husband, wife, couple, India.

Abstract: Age of the couples is one of the most basic and important information collected in almost all demographic and health surveys. This particular study makes an attempt in exploring the extent of age difference and the change over time among the couples in India. It also analyses the impact of other socio-economic, demographic and cultural factors in explaining the variation in age difference among the couples. The study analyses the age difference among the husbands and wives on the basis of the reporting of the age of the couples by the wives by using a nationally representative sample of the three rounds of National Family Health Survey conducted at three different points of time (1991-92, 1998-99 and 2005-06). The present study uses the data of 257629 (combined data for NFHS-1, NFHS-2 and NFHS-3) currently married women who married only once. It is found that in India the age difference among the couples has decreased over the period of time from 7 years during 1956-60 to 5.2 years during 2001-05.

Introduction

Traditionally, fertility and family planning research and programs have focused on women(Becker, 1996). With the expansion of the field to include reproductive health following the 1994 International Conference on Population and Development in Cairo(ICPD, Cairo, 1994), the more appropriate focus for most reproductive health components appears to be sexually active couple. Recently there have been studies on couples and their reproductive health outcomes focusing on reproductive events, of attitudes and reproductive intentions, of the effect of each partner's attitudes and intentions, of reproductive outcomes, and of the effectiveness of interventions that target couples compared with those that target one partner or the other. For couple's statements about reproductive events, studies throughout the world typically show identical reports less than 90 percent of the time. Concordance between partners on subjective matters is in the range of 60 to 70 percent. Data based on reports of reproductive intentions from both partners have been shown to lead to better predictions of behavior than have data from only partner. Finally, reproductive health interventions that target couples are found to be more effective than those directed to only one sex. The evidence clearly justifies a focus on couples.

Age difference between spouses influence fertility though at least three mechanisms. First, there is evidence that fecundability varies slightly with age of the man, and thus the age difference will affect marital fertility. The age difference is also positively associated with the risk of dissolution of marriage through widowhood before the end of a women's reproductive years. Finally, more substantial but less direct effect of the age difference on fertility, and on other variables as well, may come about through its influence on relations between the spouses and the resulting impacts on variables such as marital stability, marital satisfaction, family size preference and contraceptive use.

Casterline analyzed world fertility survey (WFS) data on 48826 couples from 28 countries which encompass an impressive diversity of culture and demographic settings(Casterline, 1986). In all countries, the analysis is confined to marriages for the wife. In all WFS survey the criterion for marriage is cohabitation rather than a formal ceremony or document. Age difference distribution is examined for marriage cohorts of women who first married during the ten years preceding the survey date. Throughout the analysis the age difference is calculated as the difference between the husband's age and that of the wife. Variance of the husband age at marriage is larger than the wife's. That's why the husband age at marriage contributes more than the wife's variation in the age difference. The variation in age difference distribution between societies can be directly interpreted in terms of two sets of factors: kinship structure and the status of women, themselves closely linked together. In patriarchal societies and in societies characterized by patrilineal kinship organization, the age difference is relatively large and unions in which the husband is ten or more years older are relatively frequent. In those settings where the traditional social structure allows for a more equal status of spouses, where western forms of family formation have become common, or where exposure to the West and the processes of modernization has improved the status of women, the age difference is relatively small (Casterline, 1986).

The age difference between a female and her partner may influence relationship dynamics in ways that put the female at increased risk of unintended pregnancies and sexually transmitted diseases. Data from 1975 female participants in the National

Longitudinal Study of Adolescent Health were analyzed using logistic regression to determine whether the age difference between an adolescent female and her romantic partner is a risk factor for sexual intercourse. Adolescent females involved with an older partner have higher odds of having intercourse with that partner than females with partners their own age, after adjustment for demographic covariates. The magnitude of this association is most dramatic among the youngest females—for example, the odds of intercourse among 13-year-old females with a partner six years older are more than six times the odds among 13-year-old females with a same-age partner (odds ratio, 6.4), while 17-year-old females with partners six years older have about twice the odds of intercourse when compared with those who have a same-age partner (2.1). Young adolescent females with substantially older partners are much more likely than their peers to have sex with their partner, which exposes them to the risks of pregnancy and sexually transmitted diseases (Christine, 2002).

If the age gap between spouses increases, the value consensus might decrease also as it may produce a power imbalance that could generate tension and will have a negative impact on inter-spouse communication. Greater communication was found to be associated with greater success of family planning. Inter-spouse communication though is not a new dimension in the family planning research; however it appears that this area has not been much explored in Indian context(Das, 1997). The present paper primarily aims to study the effect of age difference between spouses on their contraceptive use. While doing so the paper also tries to examine the effect of age difference between spouses on husband-wife communication and the effect of husband-wife communication

on contraceptive use. Relevant data for the present study has been taken from NFHS 1992-93 and analysis has been restricted to the currently married women aged 13-49 who are using one contraceptive method and have married only once.

In urban areas the age difference is slightly higher than rural areas. About 75 percent of the respondents are illiterate whose age difference is 4.8 years which is comparatively higher than those who studied up to high school level and above (3.9 years). Among Muslims, mean age difference is higher as compared to Hindus. For those respondents who were married below age 18 years, their mean age difference is 5.0 years. However, for those who married after 18 years their mean age difference is comparatively less (i.e. 4.5 years). Age difference between the spouses has got an inverse relationship with interspouse communication i.e. as age difference between the spouses increases communication for family planning among spouses decreases. Further the study has shown that as for the husband wife communication and current use of contraception is concerned, there exists a positive relationship between these two variables i.e. as communication increases contraceptive use also found to be increasing. While examining the effect of age difference between spouses on contraceptive use the result obtained by bivariate technique though did not show significant relationship however, an inverse trend between these two variables have been observed (Das, 1997).

The study by Barbieri (Barbieri, 2005)attempts to test the existence of an association between the age difference between spouses and contraceptive practice on the basis of a of recent Demographic and Health Survey (DHS) conducted in 18 countries of

continental Sub-Saharan Africa. The improvement in the status of women and more generally, the trend in gender relations towards the empowerment of women in the socioeconomic sphere (education, economic activity, access to resources, etc.) and in interpersonal and family relationships (freedom of speech, freedom to travel, decisionmaking power, etc.) are unanimously recognized as important factors in the contemporary fertility transition. At the individual level, a large age difference generates distance between the spouses, first because age is fundamental to establishing a relationship of subordination, and second because it creates a generational and cultural gap between spouses who are at different stages in their life cycle and who had different experiences of pre-marital life. In the regions where large age differences are rare, the spread of modern contraception is well advanced, whereas in most countries where the non-egalitarian model is widespread, contraceptive diffusion is low. For women from the 18 countries taken together, when the age difference between spouses is small, the likelihood of ever having used modern contraception is 2.4 times higher than when the age difference is large, and around one-third higher than when the age difference is moderate.

The probability for a woman of marrying a man close in age increases significantly with level of education, residence in an urban area, monogamy and Christian religion. Conversely, living in a rural area, not having been to school, the presence of co-wives and Muslim religion are individual characteristics associated with unions where the age difference is 15 years or more. The results confirm the effect of age difference between spouses on women's contraceptive practice. The probability of having ever used modern

contraception is higher when the age difference between spouses is small (excluding the atypical group of women at least 5 years older than their husbands). The polygynous or monogamous nature of the union, which may be considered as another indicator of the nature of the marital relationship, has a similar (slightly smaller) effect to the age difference between spouses: being in a monogamous couple significantly increases the probability of using contraception (Barbieri, 2005).

One of the ways in men in traditional society maintained their control over women by ensuring that husband was considerably older than their wives so that the advantage of age could be add to the superiority sex(Ramachanndran, 2002). Greater age gives the husband a considerable advantage in terms of status, experience and power. Even in a society where men and women share complete equality in education and occupational opportunities, men could always maintain their superior position as long as status increase with age and men married women younger than themselves. It is often argued that when the status of he women is low, the age gap between the boy and girl would be more. Researcher contends is also that joint decision-making in a family will mostly happen if the wife is much closer to the husband's age.

The data were drawn from the doctoral work of the senior author of this paper and were collected in January 2001. The sample size of 600 comprises 222 and 378 female respondents from rural and urban areas respectively. In Indian society, the age gap between the spouses is one of the criterion in fixing up marriage alliance. Some argue that the larger the gap, the more subordinate women will be to their husbands. In the

study area, no wife was older than her husband. The average age gap between the spouses was found to be 6.9 years, which closely approximates the 7.0 years for Tamil Nadu state. With regards to place of residence, higher age gap are observed between the spouses in rural areas (7.4 years) as compared with the corresponding value for the spouses in urban areas (6.6 years). High female illiteracy and early age at marriage for girls are the most common factor in rural areas responsible for the spousal age gap. The age gap between spouses among Muslim is relatively high, which may be attributed to lower age at marriage for girls in this religious community. Schedule caste and schedule tribe have a relatively small gap. It was observed that the age gap between spouse's increases if the female age at marriage increases; education and employment may postpone age at marriage for girls leading them to seek husbands of not less than their status or position and husbands cannot postpone their marriages for a long time (Ramachanndran, 2002).

The main object of another study was to study the historical perspective of the age gap between the sexes, at the time of marriage, trends and differentials and also to examine the linkages between the age difference between the sexes and the status of women(Sharma, 1994). For the present study data has been collected from the census of India and Orissa baseline Survey 1982. The Orissa baseline survey was conducted in the five district of Orissa. Out of these five districts two districts namely Kalahandi and Phulbani districts were analysed in this paper. In the Hindu mythology there is a mention about the age gap between the sexes at the time of marriage Manusamitha (one of the sutras) prescribed that a man of thirty to marry a girl of twelve and a man of twenty four

to marry a girl of eight. According to Manu (the first Indian law giver) the ideal marriage was one in which the bride was one third the age of groom. Kamasutra (Hindu science of love), a contemporary work, records that a wife should be younger than the bride groom by at least three years. This study reveals that the age gap between the sexes is decline over the period of time. Southern states tend to have wider age disparity than north India. Hindu, Brahmins, older generation women and illiterates less educated have higher age gap between the sexes than their counter parts (Sharma, 1994).

Age is one of the most basic and important information collected in almost all demographic and health surveys. Most of the research on fertility, reproductive health and contraception focus on males and females of particular age group especially who are in their reproductive age group. Women and men belonging to this particular age bracket only become eligible respondents to provide information on those aspects. Most of the demographic indicators are estimated on the basis of reporting of the female eligible respondent. The available literature on the concordance and discordance of the reporting of age between husband and wife is also scanty especially throughout the developing countries in general and India in particular. Hence, this particular study is makes an humble attempt in exploring the degree of matching and mismatching in reporting of age by the couples in India.

Data and methods

The present paper discusses the age differences among the couples in India as reported by the women. In this paper we have used data from the women files of National Family Health Survey-1, 2 and 3 (NFHS-1 1992-93, NFHS-2 1998-99 & NFHS-3 2005-06). The data from the women file of three rounds of NFHS has been merzed and a single data file has been generated. NFHS-1 collected the information of 89777 ever married women

aged 13-49, NFHS-2 collected the information of 89199 ever married women aged 15-49 and NFHS-3 collected the information of the 124385 ever married women aged 15-49. The present study uses the data of 257629 (combined data for NFHS-1, NFHS-2 and NFHS-3) currently married women who married only once. From the chapter 3 it is clear that the reporting of women about their husband's age and education is reliable. That's why in this chapter we are using the information provided by the women for age and education of both husband and wife. For the present study we have taken the age and education of the husband and wife in continuous single years. The difference between age and education of husband and wife is calculated by subtracting age and education of the wife from the age and education of the husband respectively.

During the process of merging of data of women file of NFHS-1, NFHS-2 and NFHS-3, we also computed some variables and in some variables we did some changes. In NFHS-3, information of family type(nuclear and joint) is directly available but for the NFHS-1 and NFHS-2, we have computed family type. In case of occupation of the husband and wife, we have converted all the occupations into four categories- primary, secondary, tertiary and other for all three rounds of NFHS. In NFHS-3, three new states are involved (Chhattisgarh, Jharkhand and Uttaranchal) after bifurcation of the three parent states. For the present paper, we have taken states of NFHS-1 as a standard for all three rounds of NFHS and clubbed these three new states with their parent state namely Chhattisgarh with Madhya Pradesh, Jharkhand with Bihar and Uttaranchal with Uttar Pradesh. After the merzer of states, weight has been calculated for the merged states, regions and country.

Apart from the bivariate and multivariate analysis used in this chapter, we also use correlation coefficient to find out the relationship between macro level developments indicators and mean age and education gap. In order to examine effect of socio-economic factors on mismatching, a linear regression analysis was carried out in which dependent variable is age gap among the couples and independent variables are age at marriage, year of marriage, education of the wife, place of residence (urban and rural), religion (Hindu, Muslim and others), caste (schedule caste, schedule tribe and others),

family type (nuclear and joint), occupation of husband and wife (primary, secondary, tertiary and others), wealth (poor, middle, rich), region and states.

Results and Discussions

Table 1 shows the correlation between macro level development indicators and age gap among the couples in different states of India. Gross domestic product shows the negative correlation with mean age gap whereas female literacy and human development index show positive relation. Among the different states Assam (8 years) shows the highest age gap followed by Tripura (7.4 years) and Karnataka (7.3 years). In Delhi GDP is highest

Table 1: Mean age gap among the couples and macro level development indicators in different states of India

		GDP*#	Female Literacy**	HDI
States	Mean Age Gap	(2003-04)	(2001)	(2001)***
Punjab	4.0	15800	67	0.668
Gujarat	4.1	16779	65.8	0.634
New Delhi	4.4	29231	77.5	0.74
Rajasthan	4.4	8571	43.8	0.541
Haryana	4.5	15721	59.8	0.643
Uttar Pradesh	4.6	5702	51.1	0.535
Madhya Pradesh	4.7	8310	52.4	0.534
Mizoram	4.7	-	89.5	0.688
Manipur	4.8	8751	70.2	0.702
Sikkim	4.9	-	65.4	0.665
Himachal Pradesh	4.9	12302	73.3	0.667
Jammu	5.2	-	57.7	0.59
Goa	5.5	-	78.5	0.764
Meghalaya	5.6	-	66.3	0.629
Bihar	5.6	4730	41.4	0.524
Andhra Pradesh	6.2	11333	54.9	0.585
Arunachal Pradesh	6.2	9678	55.5	0.647
Maharashtra	6.4	16479	70.6	0.689
Orissa	6.4	6487	57.8	0.537
Kerala	6.5	12109	90	0.764
Tamil Nadu	6.6	12976	69.4	0.666
Nagaland	6.6	-	68.5	0.7
West Bengal	7.3	11612	64	0.642
Karnataka	7.3	13141	62.6	0.622
Tripura	7.4	-	75.7	0.663
Assam	8.0	6520	70.5	0.595
Correlation Coefficient		-0.287	0.150	0.039

Source: *Planning Commission (2002) National Human Development Report 2001, Government of India, New Delhi.

^{**}Register General of India (2002) Census of India 2001, Government of India, New Delhi.

^{***}Planning Commission (2007) National Human Development Report 2006, Government of India, New Delhi. # At constant prices (in rupees)

Education of the women is not showing any effect on age gap. When we go from the rural area to urban area, age gap between couples increases by .34 years. As compared to (rupees 29231) and mean age gap is 4.4 years. Among the different states, value of human development index is highest in Goa and Kerala (0.764) and lowest in Bihar (0.524). However, the mean age gap is 6.5 years in Kerala and 5.6 years in Bihar. The above findings show that there is relationship between macro level development indictors and mean age gap among the couples. With development, the mean age gap between the couples is expected to decrease further.

Table 2 shows the results of multiple regression analysis explaining the variation in age difference among couples. For this two regression models have been used. In the first model, we have taken only socio-economic and demographic variables as explanatory variables and in second model we also have included some interaction terms to find if the change is uniform across the states and regions. Age at marriage has negative effect on age gap between couples. As age at marriage increases, the age gap between couples declines. With the one year increase in year of marriage, age gap declines by .01 years. Hindus, the age gap is higher among Muslim couples and low in other caste. As compared to scheduled caste, the age gap between couples is low in schedule tribe. There is 0.43 years decline in the age gap between couples when we go from nuclear family to joint family. Husband's occupation and wife's occupation has significant effect on age gap between couples. As compared to couples whose husbands are working in the primary sector, age gap is low among couples whose husband are working in the secondary sector and high among the couples whose husband is working in the tertiary sector. In case of wife's occupation, age gap is low among couples whose wife is working in either secondary sector or tertiary sector. Wealth has negative effect on age gap, as wealth increases age gap declines. As compared to central region, age gap is 1.6 years high in the East, 1.2 years high in the West, 2.3 years high in the south and 2.6 years high in the North-East. As year of marriage increases, age gap between couples in urban area declines as compared to rural area couples. As compared to couples who are engaged in primary sector, age gap are increases with the increase in year of marriage among couples who are engaged in secondary and tertiary occupation. As compared with

Table 2: Variation in age gap between couples: A Multiple regression analysis

Familian 440	Regression coefficient		
Explanatory variables	Model 1	Model 2	
Age at marriage	240***	243***	
Year of marriage	013***	011***	
Education of Wife		#	
Place of residence			
Rural®			
Urban	.107***	.340***	
Religion	,		
Hindu®			
Muslim	.326***	.313***	
Others	462***	446***	
Caste			
Schedule caste®			
Schedule tribe	351***	340***	
Others	.036	.040	
Family type	.030	.040	
Nuclear®			
Join	431***	431***	
Occupation of husband	431	.401	
Occupation of husband Primary®			
•	123***	468***	
Secondary	.224***	458***	
Tertiary	· ·		
Other	1.066***	5.095***	
Occupation of wife			
Primary®	077**	000	
Secondary	077**	069	
Tertiary	200***	190***	
Other	.129***	.146***	
Wealth index			
Poor®	4.00.11		
Middle	129***	061	
Rich	018	623***	
Region			
Central®			
North	.267***	1.027***	
East	1.636***	1.454***	
West	1.220***	1.592***	
South	2.330***	3.078***	
North-East	2.606***	3.795***	
Interaction Terms			
Residence*Year of Marriage		007***	
Occupation Secondary*Year of Marriage		.010***	
Occupation Tertiary*Year of Marriage		.020***	
Occupation Others*Year of Marriage		128***	
North*Year of Marriage		023***	
East*Year of Marriage		.005**	
West*Year of Marriage		012***	
South*Year of Marriage		023***	
North-East*Year of Marriage		034***	
Wealth Middle*Year of Marriage		002	
Wealth Rich*Year of Marriage		.018***	
R^2	.091	.096	

Note: Dependent Variable: Age Gap $^{***}p{<}0.01,\,^{**}p{<}0.05$ Reference category and # Coefficient value is very small and insignificant

Central region, age gap declines in North, West, South and North-East over the time. As year of marriage increases age gap declines among the middle class as compared to poor couples.

Table 3 shows the results of linear regression for the variation in age gap among the couples in India. In this table we show the results from two linear regression models. In the first model, we have included socio-economic, demographic and state as explanatory variables. In the second model, in addition to these variables we have also included interaction terms to see if the variation is uniform across regions and over time. From the table it is clear that age at marriage, year of marriage and education of the women has negative and significant effect on age gap. In urban area, age gap is high as compared to rural areas. As compared to Hindu couples, the age gap is high among Muslims and low in other religion couples. Among scheduled tribe and higher caste couples age gap is high as compared to schedule caste couples. Age gap is low among couples who are living in the joint families as compared to the couples who are living in the nuclear families. Age gap is less among couples where husbands are engaged in secondary occupation, as compared to the husbands who are engaged in primary sector. In case of wife's occupation, age gap is less among the wives who are engaged in secondary and tertiary sectors as compared to the wives who are engaged in primary sectors. Wealth has a negative effect on age gap, as wealth increases age gap declines.

Table 3: Variation in age gap between couples: A multiple regression analysis

Explanatory variables	Regression coefficient		
Explanatory variables	Model 1	Model 2	
Age at marriage	250***	248***	
Year of marriage	011***	010***	
Education of wife		017***	
Place of residence		.017	
Rural®			
Urban	.040*	.135*	
Religion	.040	.133	
Hindu®			
Muslim	.194***	162***	
	.194 093***	.163*** 074***	
Others	093	074	
Caste			
Schedule caste®			
Schedule tribe	.071**	.085**	
Others	.126***	.145***	
Family type			
Nuclear®			
Join	422***	423***	
Occupation of husband			
Primary®			
Secondary	131***	441***	
Tertiary	.202***	410***	
Other	1.104***	4.929***	
Occupation of wife			
Primary®			
Secondary	118***	100***	
Tertiary	216***	170***	
Other	.079***	.112***	
Wealth index	.070	2	
Poor®			
Middle	116***	124	
Rich	084***	12 4 775***	
States	004	775	
Uttar Pradesh®			
Haryana	.342***	1.607***	
Jammu and Kashmir	1.334***	1.750***	
Punjab	.338***	1.338***	
Rajasthan	317***	.495***	
Madhya Pradesh	.307***	.362***	
Bihar	.811***	.186	
Orissa	2.052***	1.514***	
West Bengal	2.777***	3.613***	
Assam Gujarat	3.915*** 089*	4.692*** .221	
Maharashtra	069 1.894***	2.651***	
Andhra Pradesh	1.753***	3.134***	
Karnataka	3.233***	3.828***	
Kerala	2.622***	2.913***	
Tamil Nadu	2.366***	3.210***	
Others	1.577***	2.232***	
Interaction Terms	1.577	2.202	
		222	
Residence*Year of Marriage		002	
Occupation Secondary*Year of Marriage		.009***	

Explanatory Variables	Model 1	Model 2
Occupation Tertiary*Year of Marriage		.019***
Occupation Others*Year of Marriage		121***
Wealth Middle*Year of Marriage		.001
Wealth Rich*Year of Marriage		.022***
Haryana* Year of Marriage		038***
Jammu and Kashmir* Year of Marriage		013**
Punjab* Year of Marriage		030***
Rajasthan* Year of Marriage		025***
Madhya Pradesh* Year of Marriage		002
Bihar* Year of Marriage		.019***
Orissa* Year of Marriage		.016***
West Bengal* Year of Marriage		025***
Assam* Year of Marriage		023***
Gujarat* Year of Marriage		009*
Maharashtra* Year of Marriage		023***
Andhra Pradesh* Year of Marriage		042***
Karnataka* Year of Marriage		018***
Kerala* Year of Marriage		008*
Tamil Nadu* Year of Marriage		025***
Others* Year of Marriage		019***
R ²	.109	.114

Note: Dependent Variable: Age Gap

**** p<0.01, *** p<0.05

® Reference category

As compared to Uttar Pradesh age gap is high in Haryana, Jammu and Kashmir, Punjab, Madhya Pradesh, Bihar, Orissa, West Bengal, Assam, Maharashtra, Andhra Pradesh, Karnataka, Kerala and Tamil Nadu and low in Rajasthan and Gujarat. When we take interaction terms, we found that with the increase in the year of marriage age gap declines in the urban area as compared to rural area. Husbands who are working in the secondary and tertiary sector age gap increases as compared to the husbands who are working in the primary sector over the time. With the increase in year of marriage, age gap also increases among rich couples as compared to poor couples. Over the years, as compared to Uttar Pradesh age gap declines in Haryana, Jammu and Kashmir, Punjab, Rajasthan, Madhya Pradesh, West Bengal, Assam, Gujarat, Maharashtra, Andhra Pradesh, Karnataka, Kerala and Tamil Nadu.

Fig 1 shows the mean age gap among the couples in India by years of marriage. From the fig it is clear that mean age gap among the couples declined over the time. It is 7 years during 1956-60, 6 years in 1976-80 and 5.2 years during 2001-05.

8.0 7.0 6.9 6.7 7.0 6.4 6.1 5.9 5.8 5.7 6.0 5.6 5.2 4.9 5.0 4.0 3.0 2.0 1.0 0.0 1956-60 1961-65 1966-70 1971-75 1976-80 1981-85 1986-90 1991-95 1996-2001-05 2006-10 2000 Year of Marriage

Fig 1: Mean age gap among the couples in India by year of marriage

Fig 2 shows that the mean age gap among the couples in India by residence and years of marriage. Over the years mean age gap has declined both in urban and rural areas but the decline is quite faster in urban area as compared to rural areas.

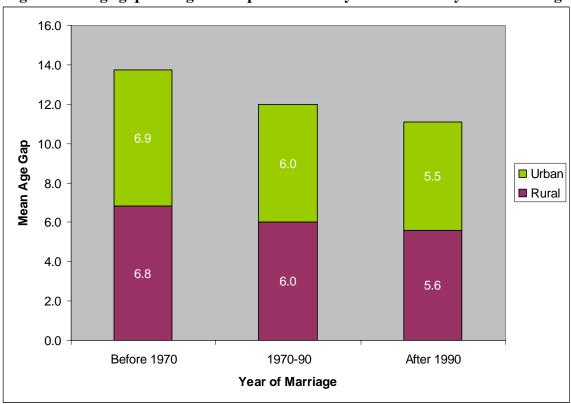


Fig 2: Mean age gap among the couples in India by residence and year of marriage

Fig 3 shows the mean age gap by wealth and year of marriage. From the figure it is clear that the couples of all type of wealth quintile show declining trend in age gap over time. Among the poor class age gap is 6.9 years before 1970 and 5.7 years after 1990, among middle class age gap is 7.1 years before 1970, 6.1 years in between 1970-1990 and 5.6 years after 1990, among the rich class it is 6.7 years before 1970 and 5.4 years after 1990. Decline in mean age gap is quite faster among the middle class couples.

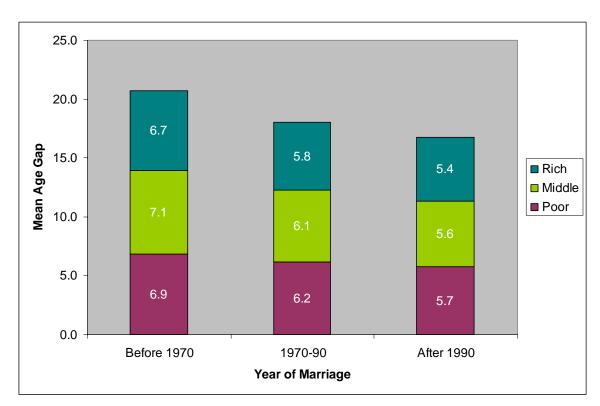


Fig 3: Mean age gap among the couples in India by wealth and year of marriage

Fig 4 shows the mean age gap among the couples by occupation and year of marriage. Among the entire occupational categories age gap declines over the years. Decline is 1.1 year among couples where husbands are engaged in primary sector, 0.9 year among couples where husbands are engaged in secondary occupation, 1.0 years where husbands are engaged in tertiary sector. Decline is highest among the couples where husband is engaged in other sector.

Fig 5 shows the mean age gap among the couples by regions of India and year of marriage. Among the various regions, age gap has declined over the time. Decline is highest in the North-East (1.6 year) followed by South (1.4 year) and North (1 year).

Fig 4: Mean age gap among the couples in India by occupation and year of marriage

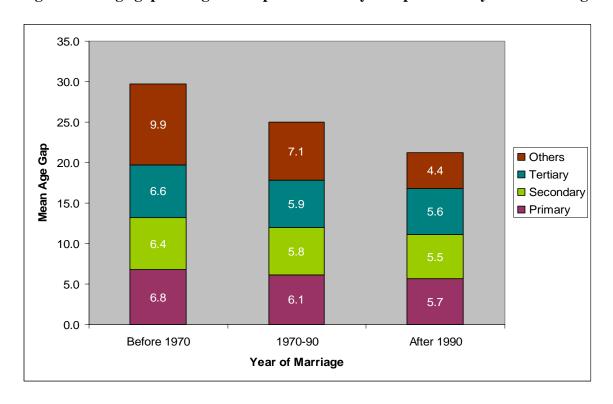


Fig 5: Mean age gap among the couples by regions of India and year of marriage

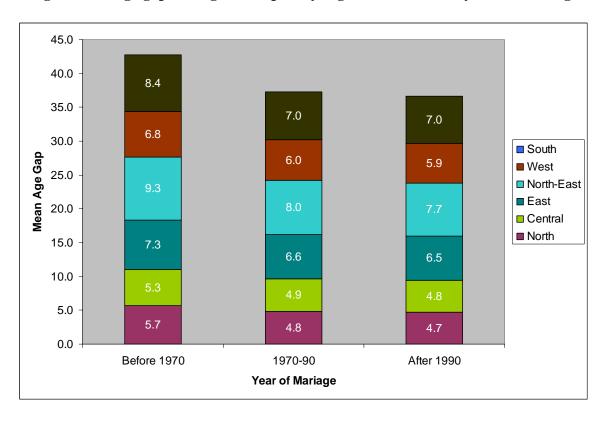


Fig 6: Mean age gap among the couples by stats of India and year of marriage

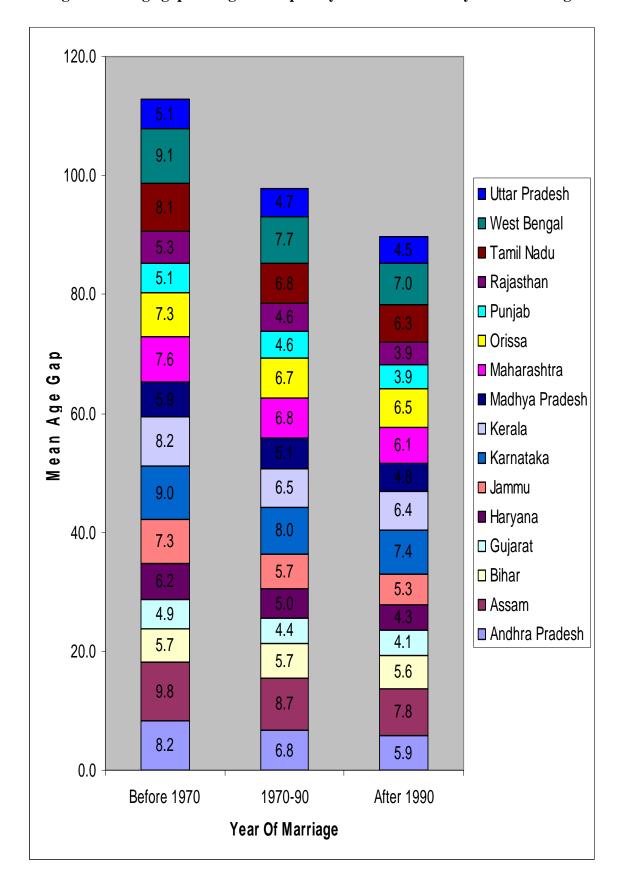


Fig 6 shows the mean age gap among the different states of India by year of marriage. Mean age gap has declined over the years in all the states but the decline is highest in the Andhra Pradesh (2.3 years) followed by West Bengal (2.1 year) and Jammu and Kashmir (2 years) and Assam (2 years). In Tamil Nadu mean age gap is 8.1 year before 1970 and 6.3 after 1990, in Rajasthan it is 5.3 years before 1970 and 3.9 years after 1990, in Maharashtra it is 7.6 years before 1970 and 6.1 years after 1990, in Kerala it is 8.2 years before 1970 and 6.4 years after 1990, in Karnataka it is 9 years before 1970 and 7.4 year after 1990 and in Haryana it is 6.2 years before 1970 and 4.3 after 1990. Decline is lowest in Bihar (0.1 year).

Summary and conclusion

It is found that in India the age difference among the couples has decreased over the period of time. The mean age gap has declined from 7 years during 1956-60 to 5.2 years during 2001-05. Gross domestic product shows negative correlation with mean age gap whereas female literacy and human development index show positive relation. Among the different states Assam (8 years) shows the highest age gap followed by Tripura (7.4 years) and Karnataka (7.3 years). The findings show that there is negative relationship between macro level development indictors and mean age gap among the couples. With development, the mean age gap between the couples is expected to decrease further. Age at marriage has negative effect on age gap between couples. As age at marriage increases, the age gap between couples declines. With the one year increase in year of marriage, age gap declines by .01 years. As compared to couples whose husbands are working in the primary sector, age gap is low among couples whose husbands are working in the secondary sector and high among the couples whose husbands are working in the tertiary sector. In case of wife's occupation, age gap is low among couples whose wife is working in either secondary sector or tertiary sector. Wealth has negative effect on age gap, as wealth increases age gap declines. The mean age gap among the couples in India declined over the time. It is 7 years during 1956-60, 6 years during 1976-80 and 5.2 years during 2001-05. Mean age gap has declined over the years in all the states but the decline is highest in the Andhra Pradesh (2.3 years) followed by West Bengal (2.1 year) and Jammu and Kashmir (2 years) and Assam (2 years).

Age is one of the most basic and important information collected in almost all demographic and health surveys. Most of the demographic researches on fertility, reproductive health and contraception focus on females of particular age group especially who are in their reproductive period. Most of the demographic indicators like fertility, contraception and mortality are estimated on the basis of reporting of the eligible female respondent. The available literature on the levels and trends of age difference among the couples is also scanty. Hence, this particular study is makes an attempt in exploring the extent of age difference and the change over time among the couples in India. The present study analyses the age difference among the husbands and wives on the basis of the reporting of the age of the couples by the wives by using a nationally representative sample size of the three rounds of National Family Health Survey. The decreasing age gap among the couples in India has some policy implications in terms of decision making regarding fertility, contraception and female autonomy. Hence, there is need for more research to find out how the age difference among the couples affects other demographic and health behavior of the couples.

References

Barbieri M. and Hertrich V., 2005, "Age difference between spouses and contraceptive practice in Sub-Saharan Africa", Vol. 60 (5&6).

Becker, Stan. 1996. Couples and reproductive health: a review of couple studies, Studies in Family Planning, Volume 27, Number 6, November/December 1996, pp. 291-306.

Casterline J.B., Williams L. and Mc.Donald P., 1986, "The age difference between spouses: Variation among developing countries", Population Studies, Vol. 40: 353-374.

Christine E. K., Donald E.M. and Dorothy J. W., 2002, "Sexual intercourse and the age difference between adolescent females and their romantic partners", Perspectives of sexual and reproductive health, Vol. 34(6): 304-309.

Das E., 1997, "Age difference, communication and current use of contraception among the married couple in Uttar Pradesh: a study based on NFHS data", Seminar Paper; International Institute for Population Sciences (IIPS).

International Institute for Population Sciences(IIPS) and Macro International, 2007, National Family Health Survey(NFHS-3), 2005-06, India, Volume 1, IIPS, Mumbai.

Ramachanndran S., Sureender S. and Subbiah A., 2002, "Age difference between spouses in the union territory of Pondicherry", Social Change Issues and Perspective, Journal of the Council for Social development, Vol. 32 (3&4).

Sharma V., 1994, "Age gap between the sexes at the time of marriage in India- An insight", Unpublished Seminar Paper; International Institute for Population Sciences (IIPS), Mumbai, India.

Sharma V., 2000, "Age gap between the couples in India", Unpublished Ph. D. thesis; International Institute for Population Sciences (IIPS), Mumbai, India.