

## **Adolescent Reproductive Health: The Role of Agency and Autonomy**

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### **INTRODUCTION**

The world is experiencing the largest cohort of adolescents in its history, and there are about 1 billion youngsters in this age group, most of whom belong to the developing countries. Worldwide, the adolescent age group is gaining prominence for researchers, policy-makers and donors. This issue is more important for Pakistan where about one-third of 150 million Pakistanis are in the age range of 10–24 years [Pakistan Census Organisation (2001)].

In Pakistan, the fertility transition has just begun [Sathar and Casterline (1998)], and we will have the largest cohort of young people in next five years. With a TFR of 4.1 which represents a significant decline in fertility in the past two decades for about two children [Pakistan (2003)], still we have a large population base. Nearly 33 percent of the population is aged 10–24, and ready to enter marriage and childbearing. Adolescents represents as a “bulge” in the population pyramid of Pakistan that will have serious implications at a variety of levels.

Literature available on population and demographics, suggests that productive and reproductive actions of younger people will shape the size, health, and prosperity of the world’s future population. Despite rising trend in contraceptive use, rising age at marriage etc. the population will keep on increasing in absolute numbers, just due to the sheer pressure of the population momentum. Also the population moment our adolescent carry will offset the decline in population growth rates.

The paper explores the linkages of such reproductive health outcomes as early marriage and contraceptive intention, desegregated by age, gender, socio-economic status, locality and province, and aims to provide essential information on predicting early marriage in Pakistan. Moreover the role of autonomy, agency and mobility will also be analysed to see if there if these factors play any role in determining the most important transition of a young person, that is marriage. It will also highlight the future demand for fertility control by analysing future intentions of Pakistani youth to use family planning. Results of this paper depict the socioeconomic and regional diversity in adolescents reproductive health across Pakistan and can be used to form youth policy and programmes in Pakistan.

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## DATA AND METHODS

The data for this paper is mainly taken from the nationally representative survey on Adolescent and Youth in Pakistan, conducted by the Population Council in 2001-2002, in all the four provinces of Pakistan. The purpose of the survey was to explore the context and experience of the transition to adulthood, including education, employment, marriage, and family initiation, to provide the government, donors, nongovernmental organisations, and other partners and stakeholders with the evidence needed to develop appropriate policies and programmes that address the unique and diverse needs of Pakistan's young people.

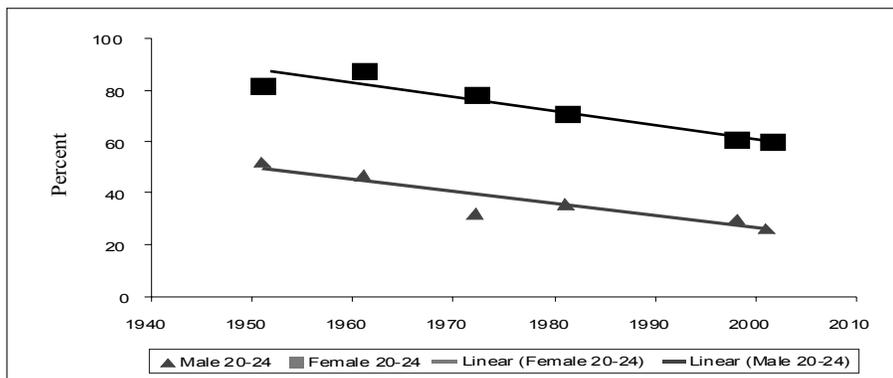
The sample was drawn with assistance from the Federal Bureau of Statistics (FBS), based on the sampling frame of the 1998 Census in Pakistan. A total of 6,585 households and 8,074 young people were interviewed from 254 communities.<sup>2</sup> Respondents included adolescents (15–19 years); youth (20–24 years); responsible adults (parents, spouses of young persons, and other relatives) in the household where young interviewees lived; and key informants in the community. Data from young people were collected on the topics of education, work, marriage, fertility, daily time use and major events in life (retrospective till the age of 5). The adults provided information on household possessions, and other aspects of young people's lives.

## FINDINGS

### Marriage and Childbearing

In the context of Pakistan, puberty, marriage, and childbearing have very strong associations as one follows the other, with very little time in between, especially for females. Over the past 50 years, the percent of young men and women aged 20–24 who are married has declined steadily (Figure 1). Whereas in 1951, 52

**Fig. 1. Trends in Percent Married for Males and Females Aged 20–24.**



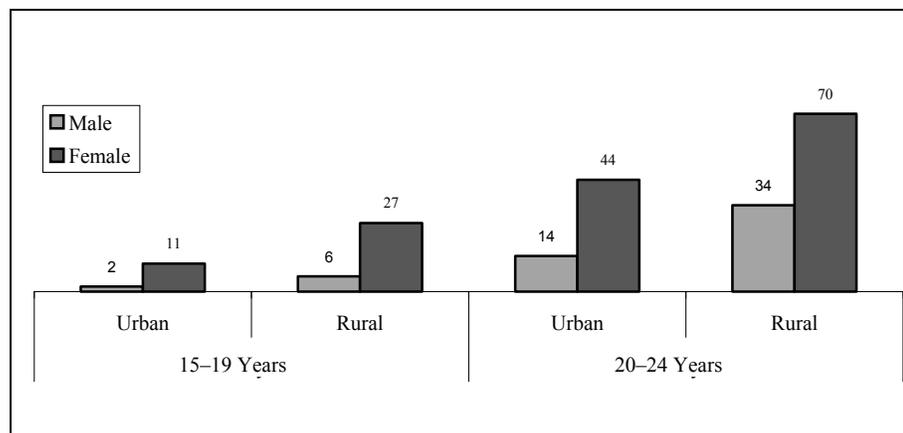
Source: Durrant (2000) and Population Council (2003).

<sup>1</sup>Adolescents and youth were interviewed from 4,530 households.

percent of males, and 82 percent of females were married, declining since and coming down to 27 percent of males and 63 percent of females in 2001.

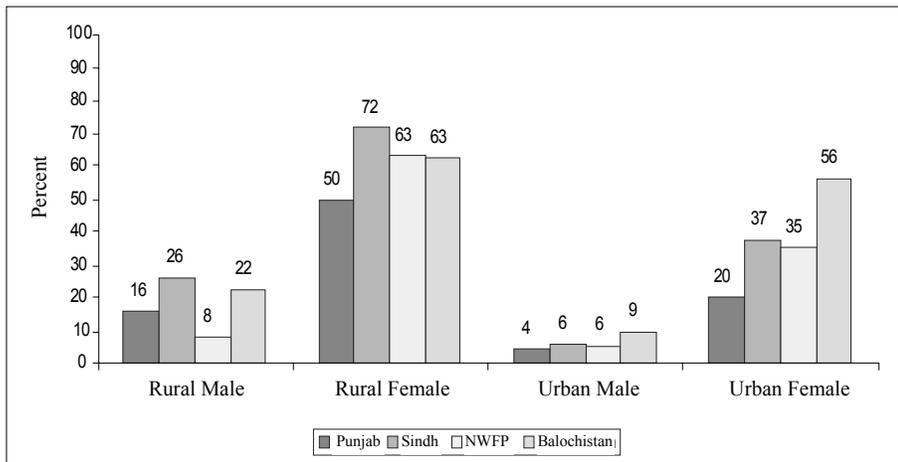
Aside from gender, residence is another important factor in deciding the timing of marriage, for both males and females. In the AYP, a quarter of rural females and a little less than a tenth of rural adolescent males were ever married, whereas this proportion is just one tenth of urban females and just 2 percent males, in urban areas. The trend follows at the later years and, we find that about three quarters of the females in rural areas and a third of the males are ever married, compared to 44 and 15 percent of urban females and males (Figure 2).

**Fig. 2. Percent of Ever-married Young People, by Age, Sex, and Residence.**

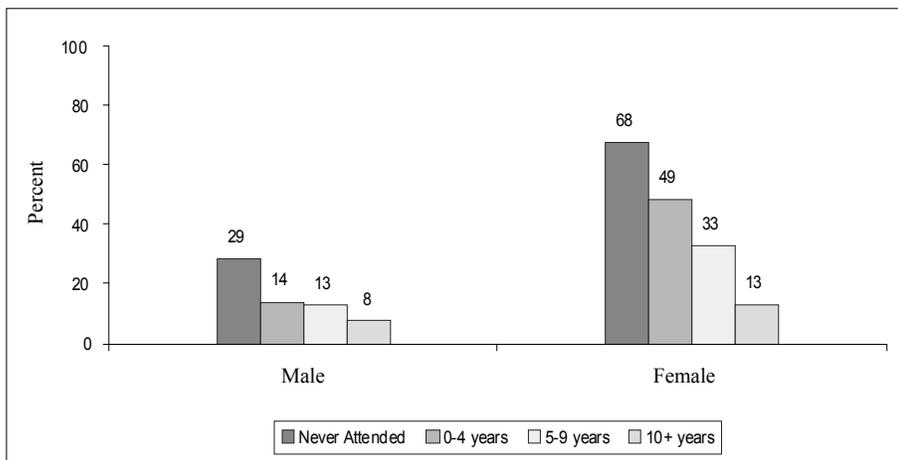


A better picture of early marriage can be obtained if we take the cohort which was 20-24 years old at the time of the survey and analyse the timing of marriage. In this sample, 14 percent of men and 50 percent of women married before the age of 20 [Population Council (2003)]. Among the females who are currently in the age group of 20-24, more than half percent of the rural and a quarter of urban residents were married before the age of 20, whereas, one-fifth of the males from rural areas and just five percent in urban areas were married before age 20 [Population Council (2003)].

In this analysis, province adds another dimension of huge variation. Using the same cohort discussed above, rural Sindh emerges with the highest percentage of both females and males marrying before the age of 20, with 72 percent of females marrying by age 20 (Figure 3), followed by Balochistan. Within the provinces, residence poses even more dramatic results. For example, within Sindh, rural females twice as likely than their counter parts to be married before the age of 20. Whereas, in Punjab the urban/rural difference is even more stark for females (20 percent vs. 50 percent).

**Fig. 3. Percent of 20–24-Year Olds Who were Married before Age 20.**

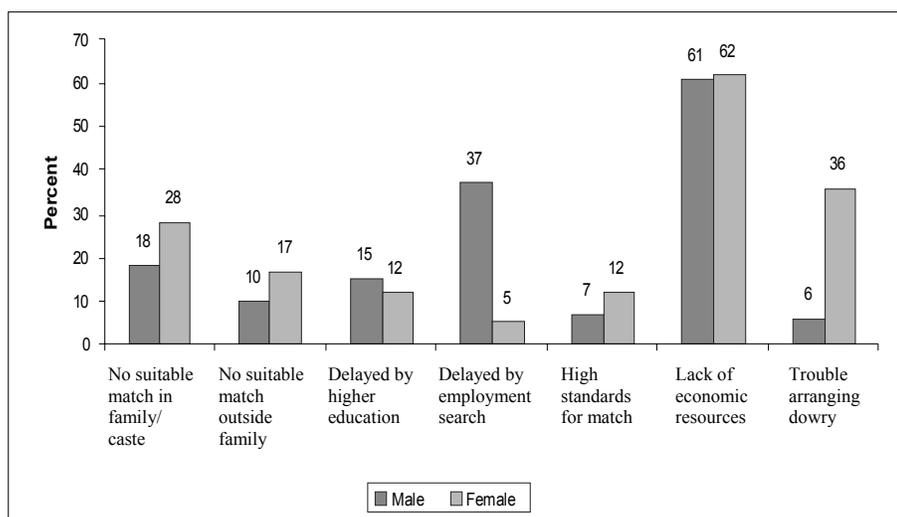
Education has a strong impact on the timing of marriage especially for females. Figure 4 shows the percent of those currently aged 20-24 who were married before age 20 by their educational status. Two thirds of rural and urban females who have no schooling were married in their teens. With additional years of education, the age at marriage increases significantly. For males, the difference is not as sharp, but those who have had no schooling are about three times more likely than those with ten years of education, to get married before the age of 20.

**Fig. 4. Percent of 20–24-Year Olds Who were Married before the Age of 20, by Education and Sex.**

### Reasons for Later Age at Marriage

With the rising age at marriage for both the genders, it is important to understand the causes and factors behind that. The survey provides us a rich set of data on the change. The household adults and young people, were both asked this question. Economic constraints emerge as the most important reason in this regard (Figure 5). The figure shows the lack of economic resources<sup>2</sup> was the primary reason cited for the delay of marriage for both males and females. Closely associated with this is difficulty in arranging dowry for females and having no jobs in the case of males.

**Fig. 5. Reasons for Later Marriage for Males and Females, as Reported by Household Survey Respondents.**

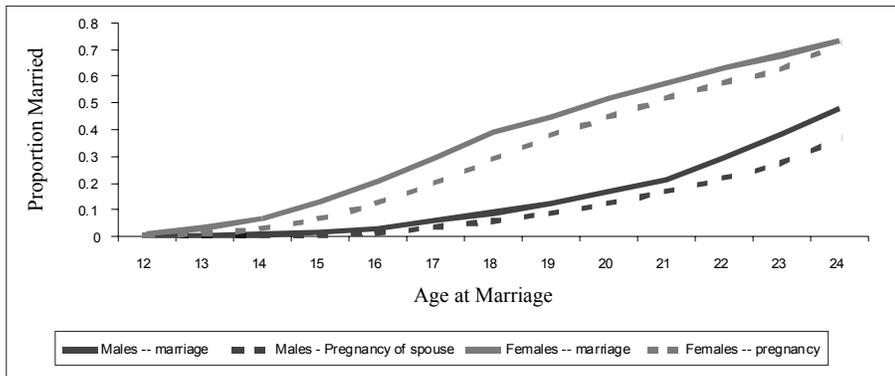


Note: Multiple responses were possible.

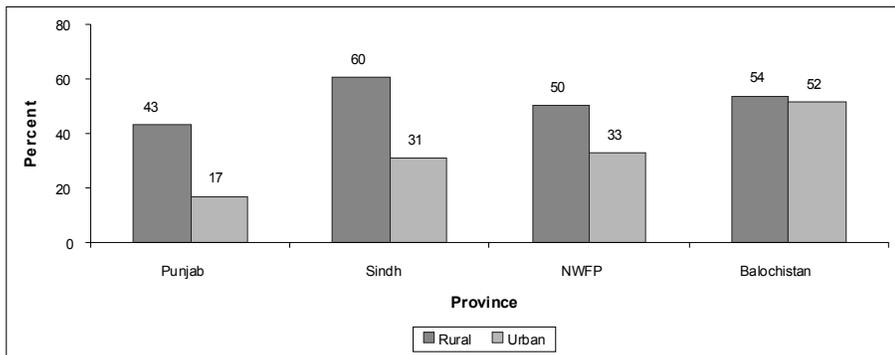
### Pregnancy and Childbearing

In Pakistan, sexual activity is mainly restricted within the domain of marital union, and hence the questions related to pregnancy and childbirth were asked only of ever-married females and males. Though age of marriage continues to increase in Pakistan, there has been no change in the pattern of childbearing which follows immediately after marriage (Figure 6). For females younger than 20, the time to childbirth is slightly longer than for older females.

<sup>2</sup>Lack of economic resources, denote not having enough resources to bear the expenses of marriage ceremony that requires plenty of money. It also refers to, having insufficient resources to transfer the bride price or other gifts to bride/her parents. (In areas where such customs are practiced.)

**Fig. 6. Percent Married and Percent First Pregnant, by Age.**

When we analyse the older cohort of 20-24 year old females for their timing of pregnancy, we again find huge provincial differences, as was depicted for marriage (Figure 7). Here about two thirds of rural females became pregnant before the age of 20 followed by Balochistan and NWFP, where it was about reported by half of the rural females. In urban areas, just 17 percent of females in Punjab, a little more than 30 percent in both Sindh and NWFP and about half, became pregnant in their teens. This has of course direct ramifications for adolescent reproductive health.

**Fig. 7. Percent of 20–24-Year Old Females Who were Pregnant before Age 20, by Current Residence.**

### Access to Antenatal Care<sup>3</sup> and Patterns of Delivery

In Pakistan, antenatal care and skilled assistance during delivery has yet a long way to go, especially in rural areas. Table 1 shows the use of antenatal care for

<sup>3</sup>For this survey, any consultation or checkup through a medical doctor, nurse, lady health visitor, lady health worker, village based family planning worker, or a trained birth attendant was considered as antenatal checkup, including dispensing of T T shots.

the first birth. Age-wise comparison shows that younger respondents have a lesser chance to receive any antenatal care. In Sindh, more than half of females aged 15-19 made a visit for antenatal care. However, among the older age group, over half in Sindh, NWFP, and Balochistan accessed such care. Not surprisingly, the use of these services increase with socio-economic class and is highest in urban areas, where service availability is the widest (Table 1).

Table 1  
Percent Who Received Any Antenatal Care for Their First Birth, of  
Those Ever Married Who had a Child

Category	15–19-Year Olds		20–24-Year Olds		N
	Male	Female	Male	Female	
Total	31.3	44.3	49.9	50.6	
<i>N</i>	35	293	194	986	1,507
<b>Province</b>					
Punjab	*	38.4	55.3	46.6	566
Sindh	*	54.8	49.9	55.0	504
NWFP	*	42.8	31.1	56.0	242
Balochistan	*	43.4	34.3	50.5	195
<i>N</i>	35	293	194	986	1,507
<b>SES</b>					
Low	*	34.1	30.1	30.7	421
Low-mid	*	40.9	54.4	36.0	361
High-mid	*	53.1	70.0	60.8	348
High	*	78.5	70.3	86.7	308
<i>N</i>	34	285	176	944	1,438
<b>Residence</b>					
Urban	*	70.9	66.4	77.9	432
Rural	*	40.3	47.6	44.6	1,075
<i>N</i>	35	293	194	986	1,507

\*Denominator < 30.

In Pakistan, most births take place at home, the AYP reports that 78 percent of the younger cohort and 70 percent of the older cohort of females had their first birth at home. Table 2 shows the proportion of births by type of attendants. The majority of all first births were conducted by a traditional attendant, like a *dai*. The younger females were more likely to have a traditional attendant (63 percent compared to 56 percent of the older females) and less likely to have a medically qualified person (like doctor, nurse etc.) as an attendant (24 percent compared to 32 percent).

Table 2

*Person Who Attended at First Birth, for all Ever Married Who have had a Child*

Birth Attendant	15–19-Year Olds		20–24-Year Olds	
	Male	Female	Male	Female
Relative/Friend	10.2	37.7	18.7	27.0
Traditional Attendant	81.2	63.2	56.1	56.2
Medical Person	19.4	23.8	29.6	31.9
<i>N</i>	35	292	194	985

*Note:* The three most cited answers included. Multiple responses possible.

### Contraceptive Use

Culturally, there is a strong demand to prove fertility right after marriage in Pakistan. And moreover, even the young people feel that a couple should have children as soon as possible, one they get married [Sultana and Hashmi (2003)]. Hence it was no surprise that a very small number of married young people are currently using any kind of contraceptive method.<sup>4</sup> Table 3 shows the overall trend of contraceptive use among adolescent and youth females, from various surveys. The AYP survey shows a consistent rise in the family planning usage from 2.6 to 5 percent for 15-19 year olds, and from 6.3 to 12.4 for 20-24 year olds.

Table 3

*Trends in Current Use of Any Family Planning Method  
(Currently Married Females)*

Age	PDHS 1990-91	PCPS 1994-95	PFFPS 1996-97	PRHFPS 2000-01	AYP 2001-02
15–19 Years	2.6	3.4	6.2	4.8	5.0
20–24 Years	6.3	10.1	9.9	14.8	12.4

*Sources:* NIPS (2001) and Population Council (2003).

While these figures are still low by international standards, it is heartening to note that a much higher percents of young people anticipate using contraception in the future. In fact, more than half of the currently married young people anticipate using contraceptives in future (Table not shown). The intention to use is highest in Punjab (64 percent), among those who have had 10 or more years of schooling (66 percent) and those belonging to the highest socio-economic strata (67 percent).

### Autonomy and Agency

Autonomy in this paper is determined by taking those young people gave their view on work, education or marriage during family discussions in these issues.

<sup>4</sup>The question about contraception was asked only of currently married young people.

Those who did not give their views on any are defined as having “no autonomy,” compared those who expressed their views on at least one aspect.

Agency is determined from the Adults view, they were asked (separately for boys and girls) that whether young people can make decisions about their work, education, marriage and life. Those who did not give agency to any of the aspects were considered to be giving “no agency” to the young people. Mobility was constructed on the basis of being able to visit own their own, at least 2 places, out of the 6 different selected places.<sup>5</sup>

For this paper, autonomy, agency and mobility were considered to be important explanatory variables determining various reproductive health outcomes of the young people. However, the initial analysis did not show any significant variations by the level of empowerment, agency and autonomy, in terms of determining their timings of marriage and intention to use a family planning method in future (Table 4). As discussed later in the next section, agency and autonomy has minimal role in explaining variation in age at marriage and future intention to use contraception. This could be explained by the fact that autonomy, mobility and agency are not direct factors affecting the lives of young people; rather they are also products of situations in which the young people live their lives.

### **Multivariate Results**

Results from the multivariate analysis are presented in Tables 5 and 6. The explanation of the variables are given in Appendix A. In terms of timing of marriage, education plays the most important role, especially in the case of females, when we control for other factors like residence, province, socio-economic class, autonomy and agency, and mother’s literacy. In the overall model, young people with no schooling at all are 5.5 times more likely than those who have had 10 or more years of schooling to be married before the age of 20. When segregated by gender, the results are even more dramatic, girls with no schooling are 8.2 times more likely than those who have had 10+ years schooling to be married early. The second most important factor which can explain the age at marriage is socio-economic class. Overall, young people from the lowest economic strata are twice as likely than the highest strata to be married before 20. When analysed by gender, SES seems to have a more of an impact on males. The odds of being married before 20 is about five times young higher for boys from the lowest class than of the highest class. This highlights the importance of economic background and schooling as important requisite for marriage for boys.

<sup>5</sup>There were 10 options in the original variable. The 6 places selected for this paper include neighbour, nearby shop, friends, relatives, nearby community, and nearby health outlet. The 4 options omitted are: school, sports ground, fields inside the village (rural respondents), and fields outside the village (rural respondents).

Table 4

*Percent of Adolescents Who are Married before 20 and Who Anticipate Using Contraception, by Various Socio-economic Characteristics*

Characteristics		Married before 20	N	Will Use FP in Future	N
Province	Punjab	31.1	1856	63.7	1161
	Sindh	42.5	876	42.0	702
	NWFP	42.5	397	57.4	281
	Balochistan	45.1	160	21.8	151
	Total	36.2	3290	53.5	2295
Residence	Rural	43.3	2356	52.0	1916
	Urban	18.2	933	61.3	379
	Total	36.2	3290	53.5	2295
Gender	Male	14.1	1231	44.8	437
	Female	49.5	2058	55.6	1858
	Total	36.2	3290	53.5	2295
Mother is Literate	Yes	14.4	394	52.6	2188
	No	39.2	2895	72.8	106
	Total	36.2	3290	53.5	2295
Level of Education in Years	No Schooling	60.9	1324	49.1	1420
	0-4 Years	34.0	364	58.5	285
	5-9 Years	22.0	836	59.6	401
	10&+ Years	10.0	765	66.2	189
	Total	36.2	3290	53.5	2295
Socio-economic Class	Low SES	55.4	699	42.1	723
	Low-mid SES	45.8	720	52.9	604
	High-mid SES	33.5	806	60.9	514
	High SES	17.1	916	67.4	354
	Total	36.4	3140	53.6	2195
Autonomy	Gives view in at least one aspect	33.3	2622	41.9	574
	No view at all	48.6	652	57.4	1721
	Total	36.4	3274	53.5	2295
Agency for Boy	Boy's agency (at least 1)	36.1	3061	36.7	180
	No agency	37.2	229	55.0	2115
	Total	36.2	3290	53.5	2295
Agency for Girl	Girl's agency (at least 1)	34.0	2260	45.9	787
	No agency	41.0	1030	57.5	1508
	Total	36.2	3290	53.5	2295
Mobility	Can go to more than 2 places alone	31.5	2137	53.0	1003
	Cannot go anywhere/2 places alone	46.2	1102	53.6	1279
	Total	36.5	3239	53.3	2282

Table 5  
*Odds Ratios for Being Married before the Age of 20  
 (20–24-Year-Old Young People)*

Variable	All		Male		Female	
	Significance	Exp(B)	Significance	Exp(B)	Significance	Exp(B)
FEMALE(1)	0.00	0.1957	Not a category		Not a category	
RURAL(1)	0.003	1.4739	0.202	1.487	0.032	1.380
PUNJAB(1)	0.147	0.7426	0.529	0.798	0.253	0.752
SINDH(1)	0.052	1.5103	0.216	1.562	0.150	1.456
NWFP(1)	0.977	1.0066	0.131	0.486	0.538	1.184
LVL0(1)	0.00	5.479	0.001	2.655	0.000	8.283
LVL1(1)	0.00	3.1361	0.222	1.498	0.000	4.724
LVL2(1)	0.00	2.1668	0.154	1.479	0.000	2.718
LOW(1)	0.00	2.4699	0.000	4.701	0.000	2.088
LOWMID(1)	0.00	1.9285	0.000	4.548	0.029	1.478
HIGHMID(1)	0.0106	1.439	0.029	2.285	0.146	1.262
MLIT(1)	0.6055	0.9095	0.380	0.618	0.811	1.049
AUT(1)	0.2603	1.1307	0.982	1.006	0.139	1.196
BOYA(1)	0.5579	1.1166	0.485	1.291	0.986	0.996
GIRLA(1)	0.6949	0.9599	0.246	0.792	0.700	1.048
Constant			0.000		0.000	
<b>N</b>	<b>3107</b>			<b>1202</b>		<b>1905</b>
Chi Square	978.963		121.575		446.785	
Significance	0.000		0.000		0.000	
Df	15		14		14	

In terms of intention of contraceptive usage, provincial differences are most stark, controlling for the same set of variables, with the addition of age and couple communication. Young married people from both Punjab and NWFP are about 4 times more likely to desire family planning usage in the future, compared to Balochistan. Level of schooling is not significant in this regard. Though very weak, it seems that autonomy, agency and couple communication all play some positive role in this regard. Young people who have some autonomy are 1.4 times more likely to show this desire than those with none. Similarly, the young people whose adults give some agency to their sons, are 1.7 times more likely than those who do not give any agency to their sons. And, those young couples who have discussed their fertility goals, are 2.6 times more likely to express this desire than those do not have such discussions. When the model was disaggregated by sex, the variations were not huge. However, the effect of economic class diminishes for girls.

Table 6

*Odds Ratios for Expressing a Desire to Use a Family Planning Method  
in Future (All Married Young People)*

Variable	All		Male		Female	
	Significance	Exp(B)	Significance	Exp(B)	Significance	Exp(B)
AGE20_24(1)	0.2227	1.1327	0.937	0.980	0.137	1.182
FEMALE(1)	0.0033	0.6787	Not a category		Not a category	
RURAL(1)	0.2861	1.1782	0.779	0.907	0.245	1.224
PUNJAB(1)	0.00	4.1603	0.014	3.299	0.000	4.267
SINDH(1)	0.0004	2.2635	0.048	2.633	0.005	2.081
NWFP(1)	0.00	4.3636	0.169	2.263	0.000	4.750
LVL0(1)	0.2359	0.7794	0.052	0.489	0.926	0.975
LVL1(1)	0.9797	0.9941	0.696	0.859	0.544	1.201
LVL2(1)	0.6242	0.9008	0.710	1.137	0.850	0.949
LOW(1)	0.00	0.4641	0.150	0.551	0.000	0.416
LOWMID(1)	0.0015	0.5646	0.303	0.665	0.001	0.504
HIGHMID(1)	0.0345	0.6987	0.911	1.046	0.007	0.597
MLIT(1)	0.8183	1.061	0.229	2.796	0.966	1.012
AUT(1)	0.0023	1.4132	0.793	0.915	0.001	1.528
BOYA(1)	0.0056	1.7063	0.738	0.862	0.001	2.024
GIRLA(1)	0.3794	1.0993	0.083	1.522	0.962	1.006
H54(1)	0.00	2.6856	0.000	2.431	0.000	2.777
Constant	0.00		0.187		0.000	
<b>N</b>	<b>2065</b>			<b>399</b>		<b>1666</b>
Chi Square	360		65.417		301.009	
Significance	0.000		0.000		0.000	
Df	17		16		16	

### CONCLUSION

The previous analysis shows that there are wide variations in marriage, childbearing and fertility aspirations of young people across Pakistan. Dramatic differences can be seen by gender, province and residence for age at marriage, which is followed immediately by childbearing.

Age at marriage has increased significantly, all over Pakistan both for boys and girls, but still rural/urban differences still persist.<sup>6</sup> A rural adolescent female is about twice more likely than her urban counterpart to be married before the age of 20. The provincial differences are equally dramatic when disaggregated for residence. Overall, young people in Sindh are 1.5 times more likely than those of Balochistan to get married before 20. Adolescent marriage has a strong relationship

<sup>6</sup>The Singulate Mean Age at Marriage is 22 and 26 years for girls and boys, respectively [Pakistan (2002)].

with education and socio-economic class. Education has the largest impact for girls, as girls with no schooling are 8 times more likely than girls with matriculate or higher schooling to be married early. Similarly, the odds of a boy being married before 20 are 5 times for highest strata compared to the lowest economic group.

Childbearing is closely linked to marriage in Pakistan and a marriage is immediately followed by pregnancy [Gangadharan and Maitra (2001)]. In this context it is the desire to have a child immediately after marriage is also universal [Sultana and Hashmi (2003)]. In terms of antenatal care and place delivery the younger cohort is receiving less care for first births than the older cohort. Thus adolescent girls are more at risk of experiencing delivery and pregnancy related problems. Moreover, locality and province are important determinants in this regard, as most health services are concentrated in urban areas.

The survey found a small proportion of young married couples using contraceptive methods. But it is heartening to see that substantially greater proportion of young persons intend to use contraceptives in the future. Among the provinces, young couples from Punjab are most likely to express this desire. Couple communication has been found to be an important predictor of contraceptive use [Mahmood and Ringheim (1996)] and also has important bearing on the intentions as well. Here too, those couples who have discussed fertility desires are about 3 times more likely to show a positive intention to use in the future than those who did not have such discussion.

Autonomy, agency and mobility among young persons had very weak but nonetheless positive association with chances of a teenage marriage and the intention to use any family planning method in future.

### **RECOMMENDATIONS**

Adolescents and youth are a diverse group, hence it is imperative that policies and programmes dealing with them for their reproductive health must be designed to meet their specific needs and consider the various constraints they face, for example the sub strata of various groups to consider are boys vs. girls, married vs. unmarried, educated vs. uneducated. Moreover, these groups should be further segregated by province, locality and economic class. Most importantly, females and young people from the lowest income group should receive priority in all policies and programmes.

Since, marriage is followed by childbearing, being married before the age of 20 means a young person would become an adolescent parent. Early child bearing does not effect just the individual women, but can also negatively effect the society as a whole [Singh (1998)]. Hence, younger husbands and wives, especially those married before the age of 20, should receive counselling on delaying their first birth. Programmes on couple counselling at the time of marriage, in the lines of Iran and Bangladesh could have a very significant affect on delaying the transition to parenthood.

Intention to use family planning is high, but to further lower the total fertility rates, it is important to keep in mind the segment of younger people, in the family planning programme. They ought to be targeted as a separate group. It appears that there is a mismatch between their desired family size, which is about 2 [Population Council (2003)] and the intention to use contraceptives. While the campaign about awareness of small family size advantages appears to have succeeded, the equivalent has not happened to affect the means to curtail families, among young people.

Programmes should target parents in order to improve communication with young people regarding family health issues especially girls, as parents are the strongest source of information for young people [Faizunnisa and Haque (2002)]. Though the current analysis does not show this, but schools/teachers can play an important role in imparting RH knowledge to young people. To address the needs of young boys, community programmes should target peer group networks to reach boys especially those who are not in school, as they are more influenced by their peers [Faizunnisa and Haque (2002)]. It is also important to impart life skills training to the young people, so that they have the necessary skills to negotiate with parents and later with their spouses regarding their reproductive health problems.

## Appendix A

### *Explanation of the Variables Used in Models*

Variable	Description
AGE20_24(1)	Current age 20-24 = 1, 15-19 years = 0
RURAL(1)	Rural = 1, Urban = 0
PUNJAB(1)	Punjab = 1, else = 0
SINDH(1)	Sindh = 1, else = 0
NWFP(1)	NWFP = 1, else = 0
Balochistan	Omitted
LVL0(1)	Never attended school = 1, else = 0
LVL1(1)	Passed 0-4 classes = 1, else = 0
LVL2(1)	Passed 5-9 classes = 1, else = 0
Above Secondary	Omitted
LOW(1)	Lowest socioeconomic status = 1, else = 0
LOWMID(1)	Low-middle socioeconomic status = 1, else = 0
HIGHMID(1)	High-middle socioeconomic status = 1, else = 0
Highest SES	Omitted
MLIT(1)	Mother is literate = 1, Not literate = 0
AUT(1)	Autonomy index took part in discussion on either education/work/marriage (any or all) = 1, else = 0
H54(1)	Ever discusses how many children to have with spouse = 1, else = 0
Adult/Parental Attitude BOYA(1)	Parents think boys can decide on education/work/marriage/ life = 1, else = 0
GIRLA(1)	Parents think girls can decide on education/work/ marriage /life = 1, else = 0

## REFERENCES

- Durrant, L. Durrant (2000) Adolescent Girls and Boys in Pakistan: Opportunities and Constraints in the Transition to Adulthood. Islamabad: Population Council. (Research Report No. 12.)
- Faizunnisa, A., and M. Haque (2002) Seeking Reproductive Health Knowledge in Pakistan: Mapping the Networks of Communication for Youth. Poster presented in the 2nd Asia Pacific Reproductive Sexual Health Conference on "Reproductive Health and Rights in the Asia and Pacific," 6-10 October 2003, Bangkok.
- Gangadharan L., and P. Maitra (2001) The Effect of Education on the Timing of Marriage and First Birth in Pakistan. Australian National University, Canberra. ASARC, RSPAS, ANU. <http://eprints.anu.edu.au/archive/00001728/> (Technical Report Working Paper No. 2001-04.)
- Mahmood, Naushin, and Karin Ringheim (1996) Factors Affecting Contraceptive Use in Pakistan. *The Pakistan Development Review* 35:1, 1-22.
- National Institute of Population Studies (2001) *Pakistan Reproductive Health and Family Planning Survey 2000-01: Preliminary Report*. Islamabad: NIPS.
- Pakistan Census Organisation (2001) *Pakistan Census Report 1998*. Islamabad: Statistics Division.
- Pakistan, Government of (2003) *Pakistan Demographic Survey 2001*. Islamabad: Federal Bureau of Statistics.
- Population Council (2003) *Adolescents and Youth in Pakistan 2001-02: A Nationally Representative Survey*. Islamabad: Population Council.
- Sathar, Zeba A., and John B. Casterline (1998) The Onset of the Fertility Transition in Pakistan. *Population and Development Review* 24:4, 773-796.
- Singh, S. (1998) Adolescent Childbearing in Developing Countries: A Global Review. *Studies in Family Planning* 29:2, 117-136.
- Sultana, Munawar, and Ashfa Hashmi (2003) Family Building Intentions of Young People in Pakistan and Future Investment. Paper presented in the annual conference of Population Association of Pakistan, 9-11 December.