

# **FACTORS INFLUENCING FERTILITY PREFERENCES OF CURRENTLY MARRIED MEN IN KENYA**

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## **Introduction**

In recent decades fertility has declined at a rapid pace in a majority of developing countries including Kenya. Kenya's population size has grown from 5.4 million in 1948 to 38.6 million in 2009 with the total fertility rate ranging between 4.9 in 2003 and 4.6 in 2008/9 revealing a stall in fertility. Studies have shown that fertility preference can be useful as an indicator of the direction that future fertility may take. Studies have also documented a significant effect of men's preference in regard to the family matters which may eclipse women's preference for the family decision-making. Understanding the fertility preference of married men in Kenya is of paramount importance given the effect it has on future fertility when the preferences are implemented. It is also important to family planning programmes because it helps determine the need for contraception, whether for spacing or limiting births, and the extent of unwanted and mistimed pregnancies.

The main objective of this study was to determine the factors that influence fertility preference of currently married men in Kenya. Specifically, the sought to establish the effects of socio-demographic, socio-economic and socio-cultural factors on fertility preference of currently married men in Kenya.

Data for this study was obtained from a sample of 1,757 married men aged 15-54 years who were asked questions on various topics including fertility preference and more specifically their desire to have additional children during the 2008/9 Kenya Demographic and Health Survey. The analysis employed Pullum (1980) conceptual framework in which the dependent variable was desire for additional children (dichotomized as 1 'desire' and 0 'Non-desire') whereas the study variables were age, number of living children, education, place of residence, wealth index, region, occupation, type of marriage and number of living sons.

The results revealed that about 57 percent of currently married men in Kenya are likely to desire additional children. The results also showed that, age, number of living children, education, place of residence, wealth index, region, occupation, type of marriage and number of living sons were all significantly associated with the desire for additional children. A

multivariate analysis indicated that age, number of living children, education, region, occupation, type of marriage and number of living sons were significant factors associated with the desire for additional children at 0.001, 0.01 and 0.05 significance level.

This study recommends that education for men should be emphasized because education was discovered to have a significant negative effect on the fertility preference. Promotion of information that creates awareness on the value of children irrespective of sex should be focused upon so as to minimize son preference. Policies that aim at integrating population into development should be encouraged so as to foster socio-economic development in all the regions and hence minimize the regional disparities as it relates to fertility preferences. In terms of research, further studies, both qualitative and quantitative, to be carried out in order to explore the socio-cultural and religious beliefs, norms and attitudes of men in regards to the value of children.

### **Problem Statement**

Fertility preferences are potentially important in shaping the fertility of the society as future fertility behavior will most likely be affected by the currently observed fertility preferences (Ayehu, 1998). Although reproduction related goals and decisions are done by a couple, studies and surveys on fertility indicate that fertility preferences differ among husbands and wives with husbands' preference being higher than that of their wives. A study done on 18 developing countries using Demographic and Health Survey data showed substantial differences between the preference of spouses, with significant variations between countries and regions (Bankole and Singh, 1998). In explanations of fertility extremes, or of the discrepancies between desired and actual fertility, the effect of partners' holding different preferences have tended to be overlooked (Adamchak and Adebayo, 1985).

Statistics show that male literacy rate in many developing countries (including Kenya) is higher than that of females (Bankole and Olaleye, 1993). High literacy level has been known to have an inverse effect on fertility and hence fertility desires. It is however surprising that for the Kenyan case, men desire more children compared to women, which raises an interesting research gap.

According to Adamchak and Adebayo (1985) men in Africa dominate and control many of the structural, behavioural, and cultural dimensions of the family and its fertility processes. In

Kenya however, studies on fertility measures including that of fertility preference have focused mainly on women. Fertility desires expressed by the male counterparts remains largely unknown. Research on how men form opinions about family size, fertility and family planning and how they can be influenced is required since the women's view may not reflect that of men. Given that men are the dominant decision-makers in the African families, it is important that their preference and reproductive behaviours are explored. This could help in explaining the causes of fertility transition and fertility stalling as observed in Kenya. Despite all the improvements in fertility levels both actual and preferred, there is still need to control the population of Kenya to a manageable level bearing in mind the scarce resources

This study intended therefore to look at the demographic, socio-cultural, and socio-economic factors that influence fertility preference of married men in Kenya.

### **Scope and Limitation of the Study**

This study utilizes data drawn from the Kenya Demographic and Health Survey 2008-09. The study focused on data collected from the men's questionnaire, which yielded a sample of a sample of 1,757 married men aged between 15-54 who were interviewed on various topics including fertility preference.

Fertility preference in this study was measured in terms of "desire for additional children". This measure can indicate future reproductive behaviour provided that the required family planning services are available, affordable, and accessible to allow people to realize their fertility preferences. Other measures in the fertility decision making process like ideal family size, how soon to have another child, etc. were not considered. Given the likelihood that fertility preference is not static (that is what you prefer today may not be the same in the near future), this study made an assumption the desire for the married men to have an additional child as stated during the interview, remains fixed.

The study had a number of limitations. One, given that Demographic and Health Surveys employ a sample population, biases like age misreporting and response errors are likely to affect the findings of the study. However data quality checks were conducted to ensure that the data collected was appropriate for use. Two, attitudinal variables that are important in analyzing the situation related to fertility preference such as value of children and attitude towards women's

status could not be analyzed since the study employed secondary data which was more quantitative than qualitative. Three, the study is specific on the men's fertility preference despite the fact that fertility decision-making is a process involving a couple. This is justified since the study also focuses on the determinants of fertility preferences of married men leaving out the single men and as previously stated, husbands play a greater role as far as decision making is concerned on all issues including fertility intentions..

## **Operationalization of the Variables**

The dependent variable for this study was men's fertility preference. Independent variables included: socio-demographic, socio-cultural and socio-economic factors. The operational definitions of the variables are as explained below.

### **Dependent Variable**

Fertility preference was measured by the "Desire for additional children". In the 2008-09 KDHS men questionnaire, the questions were framed separately depending on whether one's wife was pregnant or not. Questions included "Would you like to have (a/another) child, or would you prefer not to have any (more) children?" to the respondent whose wife/partner is not pregnant, and "After the child(ren) you and your (wife(wives)/partner(s)) are expecting now, would you like to have another child, or would you prefer not to have any more children?" to the respondent whose wife (wives)/partner(s) is pregnant.

The responses given were all alphanumeric and were later dichotomized so that all responses indicating "desire for more children irrespective of the timing were recorded as 1, otherwise 0.

### **Independent Variables**

#### ***Type of Place of Residence***

This is a dichotomous variable coded as 1 for the urban and 0 for the rural.

#### ***Region***

This variable measures which part of the country the respondent residence belongs. During the interview, the responses were recorded and classified into 8 categories, namely: 1=Central,

2=Coast, 3=Eastern, 4=Nyanza, 5=Rift-valley, 6=Western and 7=North-Eastern. Nairobi is the reference category.

### ***Number of living Children***

This variable refers to the number of living children (both sons and daughters) who are at home and elsewhere. In this study the variable is categorized into none, 1- 2, 3-4 and 5 or more children.

### ***Education***

This is a variable that measures the level of education that the respondent has completed. It is categorized into three groups: no education, primary, secondary +. The dummies are created as follows: Primary education equals 1 and 0 otherwise, Secondary education equals 1 and 0 otherwise, Higher education 1 and 0 otherwise, and No education equals to reference category.

### ***Age***

This particular variable measures the respondent's age in complete years. It is categorized into 4 age groups, that is, 15-24, 25-34, 35-44, 45-54. The dummies are as follows: 15-24 years equals 1 and 0 otherwise, 25-34 years equals 1 and 0 otherwise, 35-44 years equals 1 and 0 otherwise, and 45-54 years equals to reference category

### ***Number of Living Sons***

This variable refers to the number of living sons both at home and/or elsewhere a man has fathered. It serves as a proxy for the sex preference of children. On the basis of literature review, it is assumed that in developing countries (including Kenya), son preference is much stronger compared to daughter preference (Dahl, 2004; Moretti, 2008, Rahman et al., 1992). The assumption therefore is that in a situation where a man has not fathered a son, he will continue with the childbearing process until a son is born. This variable is categorized into: none, 1-2, 3-4 and 5 or more sons. The reference category consists of men who do not have a living son.

### ***Wealth Index***

Wealth index is based on household ownership of material possessions such as radio, television, telephone, refrigerator, bicycle, motorbike, and car. It also includes the housing quality, whether

the house has electricity, a finished floor, and a permanent roof. The assumption is that men in the higher wealth index are expected to have lower fertility preference.

### ***Occupation***

The variable measures respondent's type of work. The responses were categorized into 10 groups at the time of interview as no work, do not know, sales, household & domestic, services, skilled manual workers, unskilled manual workers, professionals (doctor, technical personnel and managers), agriculture self employed and agriculture workers. On the basis of the literature reviewed, it is assumed that people involved in agriculture works want more children compared to the people involved in other occupations (Odhiambo, 1997; Bankole et al., 1995). Therefore the respondents were grouped into 2 categories as 0 = agriculture and 1= others. Agriculture group includes agriculture self-employees and agriculture workers. Other group includes all the rest but excludes the group who answered “do not know”. The latter group is excluded from the total number as missing values.

### ***Type of Marriage***

This variable will measure the respondents' type of marriage (that is whether he is monogamous or polygamous). In this study the variable will be dichotomous such that 1 = monogamous and 0 = polygamous.

## Factors Associated with the Desire for Additional Children

### Basic Characteristics of the Study Population

**Table 1: Percentage Distribution of the study population according to the study Variables**

<b>Variables</b>	<b>Percent</b>	<b>N =1,757</b>
<b>Desire for additional children</b>		
Desires	56.29	989
Does not Desire	43.71	768
<b>Respondent's age</b>		
15-24	6.66	117
25-34	38.02	668
35-44	31.82	559
45-54	23.51	413
<b>No. of Living Children</b>		
0	6.26	110
1-2	33.30	585
3-4	31.47	553
5+	28.97	509
<b>Highest Education Level</b>		
No Education	9.45	166
Primary	48.15	846
Secondary +	42.40	745
<b>Region</b>		
Nairobi	13.38	235
Central	9.73	171
Coast	14.74	259
Eastern	11.84	208
Nyanza	15.48	272
Rift Valley	16.68	293
Western	11.16	196
North Eastern	7.00	123
<b>Wealth Index</b>		
Low	32.67	574
Medium	14.23	250
High	53.10	933
<b>Type of Place of Residence</b>		
Urban	35.46	623
Rural	64.54	1134
<b>Occupation</b>		
Agriculture	32.67	574
Other	67.33	1183
<b>Type of marriage</b>		
Monogamous	91.52	1608
Polygamous	8.48	149
<b>No. of Living Sons</b>		
0	20.49	360
1-2	53.73	944
3-4	18.95	333
5+	6.83	120

Table 1 above shows the percentage distribution of the study population in relation to the study variables. According to the results, majority of married men (56%) desire additional children. The results show that about 7 percent of married men are below the age of 25 years; about 38 percent are aged between 25-34 years; about 32 percent aged between 35-44 years and about 28 percent are aged between 45-54 years.

There is a small difference between the percentage of married men with 1-2, 3-4 or 5+ living children as represented by 33, 32 and 29 percent respectively. About 6 percent of them have no living children. Regionally, the distribution of the study population ranges between about 10 percent in Central and 17 percent in Rift Valley with the lowest percentage (7 percent) living in North eastern. Regarding type of place of residence, a majority of men reside in the rural areas. They represent a total of 65 percent while the remaining 35 percent reside in the rural area.

With regards to educational attainment, about 10 percent of married men have no education; almost half (48 percent) of them have primary education, 42 percent have secondary + education. From the results it is evident that a majority of married men have primary education.

The results also illustrates that the distribution of married men by wealth index varies with the highest percentage (53 percent) being in the high wealth index; about 14 percent in the middle wealth index and about 33 percent in the low wealth index. In relation to occupation about 33 percent of married men work in the agriculture sector while 67 percent work outside agriculture. The percentage distribution of respondents by type of marriage shows that about 92 percent of married men in Kenya are monogamous type of marriage. This proportion is about 11 times that of the men in polygamous type of marriage which represents 8 percent. With respect to the number of living sons, a majority of married men in Kenya have 1-2 living sons. Apart from those having no living sons, the proportions of men with 3-4 and 5 or more living sons decrease. About 54 percent of all married men in Kenya had either 1- 2 living sons, 19 percent had 3-4 living sons and the lowest percentage (7 percent) is a proportion of respondents having at least 5 living sons. The proportion of married men who did not have living son constituted 21 percent of all married men.



## Differentials in the Desire for Additional Children

This section presents the results of the association between the outcome (Desire for Additional children) and explanatory variables (demographic, socio-economic and socio-cultural). The results showing the percentage distribution of currently married men's desire for additional children by their demographic, socio-economic and socio-cultural characteristics together with the chi-square test statistics are as illustrated in table 4.2.

### Demographic Factors

According to this study, the desire for additional children and age of the responded are significantly associated. It is noted that desire for additional children is inversely associated with age of married men. Approximately, 86 percent of married men who are below 25 years, desire to have additional children while about 27 percent of the respondents aged between 45-54 years desire to have additional children. The findings illustrate a significant inverse relationship between age and fertility. The relationship between the two variables is statistically significant at the 0.00 level of significance.

**Table 2 Percentage distribution of the Study Population according to the Desire for Additional Children and the selected variables**

Study Variables	Desire For Additional Children		
	Desires	Does not Desire	Total
<b>Respondent's age in Groups</b>			
15-24	86.3	13.7	117
25-34	74.0	26.0	668
35-44	51.2	48.8	559
45-54	26.2	73.8	413
$X^2 = 286.0; P = 0.00; df = 3$			
<b>No. of Living Children</b>			
0	93.6	6.4	110
1-2	76.4	23.6	585
3-4	45.6	54.4	553
5+	36.7	63.3	509
$X^2 = 263.5; P = 0.00; df = 3$			
<b>Highest Education Level</b>			
No Education	85.5	14.5	166
Primary	56.6	43.4	843
Secondary+	49.8	50.2	743
$X^2 = 70.5; P = 0.00; df = 2$			

**Percentage distribution of the Study Population according to the Desire for Additional Children and the selected variables (Continued)**

<b>Region of Residence</b>			
Nairobi	59.6	40.4	235
Central	37.4	62.6	171
Coast	64.5	35.5	259
Eastern	40.4	59.6	208
Nyanza	56.3	43.8	272
Rift Valley	54.6	45.4	293
Western	51.5	48.5	196
North Eastern	97.6	2.4	123
$X^2 = 141.5; P = 0.00; df = 7$			
<b>Wealth Index</b>			
Low	61.0	39.0	574
Medium	46.4	53.6	250
High	56.1	43.9	933
$X^2 = 15.1; P = 0.00; df = 2$			
<b>Type of Place of Residence</b>			
Urban	60.7	39.3	623
Rural	53.9	46.1	1134
$X^2 = 7.5; P = 0.01; df = 1$			
<b>Respondent's Occupation</b>			
Agriculture	50.5	49.5	574
Other	59.1	40.9	1183
$X^2 = 11.5; P = 0.00; df = 1$			
<b>Type of marriage</b>			
Monogamous	55.5	44.5	1608
Polygamous	64.4	35.6	149
$X^2 = 4.4; P = 0.04; df = 1$			
<b>Total No. of Living Sons</b>			
0	85.0	15.0	360
1-2	54.2	45.8	944
3-4	36.9	63.1	333
5+	40.0	60.0	120
$X^2 = 185.9; P = 0.00; df = 3$			

Note: Level of Significance: \* $P \leq 0.05$ ; \*\*  $P \leq 0.01$ ; \*\*\*  $P \leq 0.001$

The results clearly show that there is a significant association between desire for additional children and the number of living children. The association between the two variables is statistically significant at the 0.00 level of significance. The findings further illustrate that the association is inversely related and as expected, the more the number of living children one has, the lower the desire for additional children. The findings are also in line with the findings of other studies like Muganzi and Takona (1994). Although they were interested with the fertility

preference of women, this study confirms that the fertility preference of men in Kenya is significantly associated with the number of living children a man already has.

### **Socio-Economic Factors**

The findings of the study showed that respondent's education level is an important determinant of fertility preference. Education has a negative effect on the respondent's desire for additional child. Approximately, 86 percent of married men with no education desire additional children. This is nearly twice the proportion of the married men with higher education who desire additional children. Generally, about 56 percent of men with primary education and about 50 percent of those with secondary + education desire additional children. The association between education and desire for additional children is highly significant at 0.00 level of significance. This findings point out the fact that, educated men prefer small family sizes. Some of the reasons alluded to this is because educated men appreciate the financial implication of supporting large families, marry at a later age and are more likely to approve family planning as put forward by previous studies (Uche and Isiugo, 1994; Odu et al. 2005; DeRose et al. 2002; Ezeh et al., 1993)

The results reveal that almost all married men (98 percent) residing in North Eastern region desire additional children. The desire for addition children among married men in North Eastern region persisted despite controlling for the number of living children.. all married men having zero (0), 1-2, and 3-4 living children desire additional children, whereas about 95 percent of married men with 5 or more living children desire additional children. Less than half of married men living in Central and Eastern provinces desire additional children. The rest of the regions seem to have almost same proportions who desire additional children ranging from 52 percent in Western and 64 percent in Coast. The findings are consistent with previous studies done on fertility. Ekisa and Hinde (2006) found that fertility levels were higher in Coast and Western provinces while Kimondo (2003) discovered that, the highest proportion of married men desiring additional children resides in Coast province. Therefore, given the power that men have in relation to decision making, this study findings could explain why Coast Province have higher fertility levels whereas Central province have lowest fertility levels as per the findings of Ekisa and Hinde (2006) and Kimondo (2003). However it is important to note that Kimondo was doing a comparative study between Coast and Central but not a study involving all the regions. The other reason which may be responsible for high fertility preference of married men in North

Eastern could be attributed to the fact that majority of them (about 48 percent) who were sampled for this study had no education compared to other regions.

Regarding the type of place of residence, it was expected that a larger proportion of men residing in the rural areas would desire to have additional children compared to their urban counterparts, but the opposite is true. Approximately, 61 percent of married men residing in the urban and 54 percent residing in the rural areas desire additional children. This study therefore refutes the hypothesis which states that 'men residing in urban areas are likely to have lower fertility preference compared to their rural counterparts'. In addition the results contrast with the findings from other related studies like Ekisa and Hinde (2006) and Islam et al. (1995). The association between the two variables is statistically significant at 0.01 level of significance.

From the findings of this study, about 61 percent of married men from the low wealth index, 46 percent from the medium wealth index and about 56 percent from the high wealth index desire additional children. Results of the chi-square analysis reveal that wealth index and desire for additional children are highly significant at 0.00 level of significance.

Concerning occupation, about 51 percent of married men whose occupation is agriculture desires additional children compare to 59 percent whose occupation is non-agriculture. It was expected that, married men whose occupation is non-agriculture are less likely to desire additional children compared to those in agriculture but the findings refutes it. According to previous studies, fertility preference of men of different occupational status vary due to the difference of knowledge and educational level and because of the fact that people in the agriculture may value children as 'old age support'. However the fact that men in the agriculture occupation desire fewer children compared to men in other categories, could be attributed to the limitation of the study in regard to the unequal distribution of married men in different categories of occupation. The results also contrast with the findings of other previous studies (Bankole et al., 1995; Islam et al., 1995), however they are consistent with the findings of Ali (2000) and Rokhsana (2001). The association between occupation and desire for additional children is highly statistically significant at 0.00 significance level.

### **Socio-Cultural factors**

The number of living sons that a married man has is significantly associated with the desire for additional children. The proportion of married men desiring more children was highest (85 percent) for those who reported having no living son. The desire for additional children

reduces as the number of living sons increase. The results reveal that even after a man has had 3 or 4 sons, he still desires additional children, however the proportion reduces. The findings are in conformity with other findings that there is preference for sons in most sub-Saharan African countries for economic and cultural reasons (Ogunjuyigbe, 2001; Gage-Brandon, 1993; Kishor 1991; Agarwal, 1994).

With respect to the type of marriage, the findings indicate that the type of marriage has a significant effect on the desire for additional children. It was found that polygamous men compared to monogamous men are more likely to desire additional children. About 65 percent polygamous men desire additional children compared to 56 percent monogamous men. The finding conforms with the hypothesis that 'monogamous men are likely to have lower fertility preference compared to polygamous men'. In addition, the results are consistent with related studies previously done (Ampofo 2000; Wakaranja, 1987; De Rose et al., 2002).

### **Results of Multivariate Analysis**

This section presents the results of logistic regression. Multivariate analysis involved the use of binary logistic regression to establish the factors that have a significant influence on the desire for additional children. This method of analysis was used so as to examine the net effects of the demographic, socio-economic and socio-cultural factors on the respondents' desire for additional children. Logistic regression analysis was done at three levels and the results presented in three models as shown in table 4.3

### **Correlates of the desire for additional children**

As illustrated in Table 4.3, out of the five socio-economic variables were introduced into the regression equation in Model I, two variables failed to be statistically significant with the desire for additional children. The variables include wealth index and place of residence. The three variables that were found to be significant with the desire for additional children include education, occupation and region, however the level of significance vary. For instance, with regards to education, a married man with primary education is 0.403 times less likely to desire additional children compared to those with no education. The results further reveal that a married man with secondary+ education selected at random will be 0.249 times less likely to desire additional children respectively compared to a married man with no education which was the

reference category. This finding can be explained by the fact that educated men tend to have smaller families because they appreciate the financial implication of supporting large families. In general, men who are educated tend to marry at a later age and tend to adopt the western culture which favors a small family size (Odu et al. 2005). Other studies that have conducted in line with this study (Sharma, 1988) confirm that education has a significant effect in the individual's fertility-related behaviour. The association between education (primary and secondary +) and the desire for additional children is highly significant at 0.00 level of significance. Hence the hypothesized association of desire for additional children with education is confirmed.

**Table 3: Logistic regression coefficients of the factors influencing the Desire for Additional Children**

Study Variables		Model I	Model II	Model III
		Odds Ratio	Odds Ratio	Odds Ratio
Education	No Education	1.000	1.000	1.000
	Primary	0.403***	0.196***	0.214***
	Secondary +	0.249***	0.102***	0.113***
Wealth Index	Low (ref)	1.000	1.000	1.000
	Medium	0.945	1.109	1.120
	High	1.086	0.835	0.825
Occupation	Agriculture (ref)	1.000	1.000	1.000
	Non Agriculture	0.789*	0.935	0.968
Place of Residence	Urban (ref)	1.000	1.000	1.000
	Rural	0.869	0.930	0.915
Region	Nairobi (ref)	1.000	1.000	1.000
	Central	0.429***	0.397***	0.379***
	Coast	1.146	1.560	1.554
	Eastern	0.466***	0.523*	0.51*
	Nyanza	0.964	1.178	1.039
	Rift Valley	0.810	0.885	0.857
	Western	0.765	0.956	0.934
	North Eastern	16.459***	30.307***	30.106***
Respondent's Age	45 - 54 (ref)		1.000	1.000
	15 - 24		5.761***	5.943***
	25 - 34		5.463***	5.327***
	35 - 44		3.086***	3.162***
No. of Living Children	0 (ref)		1.000	1.000
	1 - 2		0.234***	0.421*

	3 - 4		0.061***	0.132***
	5+		0.038***	0.082***
Type of Marriage	union(1)			2.743***
No. of Living Sons	0			1.000
	1 - 2			0.433***
	3 - 4			0.361***
	5+			0.314***

Note: Level of Significance: \*P≤0.05; \*\* P≤0.01; \*\*\* P≤0.001

Occupation was found to be a significant predictor that influenced the desire for additional children at 0.05 level of significance. From the results, married men who are working in the occupation other than agriculture are 0.789 times less likely to desire additional children compared to those involved in agriculture work. Thus the results confirm the hypothesis that men whose occupation is not in the category of agriculture are more likely to have lower fertility preference.

Further, the results showed that region was a significant factor that influenced the desire for additional children. Out of all the regions introduced on the regression equation, Central, Eastern and North Eastern were found to be highly significant at 0.00 significance level. This means, a probability that a married man living in Central and Eastern selected at random would desire additional children is about 0.429 and 0.466 times less likely to desire additional children respectively compared to a married man living in Nairobi which was the reference category. Married men from North Eastern were 16.459 times more likely to desire additional children compared to married men from Nairobi. The results are as expected and are in conformity with the previous studies.

In Model II, the demographic variables (respondent's age and the number of living children) in addition to the socio-economic variables were introduced into the regression equation. The results showed that respondent's age was a significant predictor of the desire for additional children and the dummy variables 15-24; 25-34 and 35-44 age groups were found to be highly significant at 0.00 level of significance. Generally, the desire for additional children decreases as age increases. For instance, married men in the age groups 15-24; 25-34 and 35-44 were 5.761; 5.463 and 3.086 times more likely to desire additional children respectively compared to those in the 45-54 age-group which is the reference category.

Number of living children is another important variable that bears a significant association with the desire for additional children. The results illustrated that married men with 1-2; 3-4 and 5 or more living children are 0.234, 0.061 and 0.038 times less likely to desire additional children respectively compared to married men with no living children. From this finding, it is clearly illustrated that the desire for additional children decreases as the number of living children increase. Like age, all the dummy variables designating number of living children are highly significant at 0.00 level of significance. The results are as expected and are in conformity with the descriptive analysis of this study and other studies (Muganzi and Takona, 1994; Khan and Sirageldin, 1982; Kimondo 2003)

In this model, the results also revealed that the introduction of the demographic variables into the regression equation, does not markedly change the nature in which the socio-economic (Education, Region) variables affect the desire for additional children. For instance, with respect to education, married men with primary and secondary + are 0.196 and 0.102 times less likely to desire additional children compared to married men with no education. Similar to the effect of education on Model I, the dummy variables designating education remain highly significant at 0.00 level of significance. With regards to region, married men from Central and Eastern are 0.397 and 0.523 times less likely to desire additional children compared to married men from Nairobi. While married men from North Eastern are 30.307 times more likely to desire additional children compared to married men from Nairobi. In this model, the level of significance of Eastern is reduced to 0.05 significance level. Unlike Model I, the effect of occupation in Mode II ceases to be significant.

In the final model (Model III), the socio-cultural variables were introduced into the logistic regression equation. In this model, education, region, age and number of living children still remain significant predictors of desire for additional children. The study revealed a significant effect of type of marriage and desire for additional children. It showed type of marriage as significant at 0.00 level of significance. According to the findings of this study, polygamous men are 2.743 times more likely to desire additional children compared to monogamous men. Thus the hypothesized association of the desire for additional children with type of marriage is confirmed. This finding is also in conformity with other studies done in the developing countries (Ezeh et al., 1996; Blanc et al., 1996; WaKaranja 1987).



Finally, the results established a significant relationship between number of living sons that a man has and his desire for additional children. It was discovered that, a married man with 1-2 living sons is 0.433 times less likely to desire additional children compared to one with no living sons while a man who has 3-4 living sons is 0.361 times less likely to desire additional children compared to one who has no living son. The study further revealed that, a married man, having at least 5 living sons is 0.314 times less likely to desire additional children compared to a man with no living children. The general trend presented by this finding is that the more the number of living sons a married man has, the lower the desire for additional children. The association between the two variables is highly significant at 0.00 significance level. This finding is supported by literature from other studies that have revealed sons being preferred in the sub-Saharan African countries particularly for economic and cultural reasons (Ogunjuyigbe, 2001; Gage-Brandon, 1993; Kimondo 2003). It also conforms to the results from the descriptive analysis and as hypothesized; sex preference has an effect on the fertility preference.

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