The model ideal number of children is 4 for ages 15-29 and 30-44 in the urban area; 4 for the younger women (15-29) and 5 for women aged 30-44 in the rural area. Comparing these data with similar data in the United States,15 it is seen that in the latter case, 2 children in 1941 and 3 in 1945 are the modal ideal number of children. More than 90 per cent of the American women take 1 to 4 children as their ideal number but in the Philippines, women who take this as their ideal number accounted for only 49.3-70.5 per cent in the urban and as low as 36.5-60.7 per cent in the rural area. Women who take 5 or more children as their ideal number are only 10 percent in the United States; taking all women in the Philippines, those who take this size as their ideal amounted to 29.1-50.6 per cent with 39.0-63.5 per cent for urban and rural areas, respectively.

Summary

This paper describes, on the whole, the fertility pattern of the ever-married women in the urban and rural areas and

their attitude with respect to what is the ideal number of children an ever-married woman should have. It notes that the fertility in the Philippines compared with that of some industrially advanced countries is very high. This study also shows that with regard to all ages and with those whose fertility period was completed, the urban ever-married women are less fertile than their rural counterparts. It points out that the age of marriage which has an influence on the size of children can help decrease the number of children born to an ever-married woman. Increasing the age of marriage would shorten the child-bearing period of the woman and thus the probability of having a small number of children is greater.

The study further reveals that in the urban and rural areas, the ever-married women before completing their fertility period were not in favor of a large number of children and this has been expressed more strongly among the rural ever-married women. There is substantial evidence that a keen desire to limit the number of children was being felt by women in all sectors of the population.

Some Socio-Economic Correlates of Completed Family Size, 1960

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The number of children born to married women is known to be related to their social and economic characteristics. Differences in family size with respect to selected factors have been analyzed previously using data obtained from the 1956 and 1958 rounds of the

Philippine Statistical Survey of Households.¹ The present paper summarizes the findings of an on-going study of a 0.5 per cent sample of households enu-

¹⁵ Paul H. Landis and Paul K. Hatt, *Population Problems* (2d ed.; New York: American Book Co., 1954).

¹ See M. B. Concepcion, "Fertility Differences Among Married Women in the Philippines," University of Chicago, 1963.

merated in 1960 in the nine chartered cities and eleven provinces of Eastern and Western Visayas.

The 1960 Population Census schedule contained entries regarding the number of children ever born to married women during the period of marriage and descriptive data permitting classification of women according to demographic and socio-economic characteristics. The idea was to assess the level and the trend of fertility on the national scale and also to study the socio-economic differences in family size.

The fertility or number of children ever born alive to any married woman will vary directly with the age of the woman if she is still in her reproductive period, between 15-44 years of age. Failure to control age, therefore, would tend to obscure the impact of the various factors in fertility with which we deal. In view of this consideration, this report only examines the data for women aged 45 years and over—that is, who are presumed to have completed their fertile periods.

In this paper, the method of single or multiple classification has been used to compare cumulative fertility ratios and patterns in the Visayas. In addition, the method of expected cases developed by Westergaard² was applied in the analysis of the importance and independence of three selected factors in fertility, namely, education, occupation, and age at marriage.

Considering the fact that in many municipalities the *poblacion* hardly differs from the *barrio* with respect to

the degree of urbanization, only the areas of chartered cities are defined as urban for our purpose while the remaining areas constitute the rural sector. To minimize the effects of area delineation, the cities are kept separate whenever possible from the rest of the provincial areas, and the results by place-of-residence are presented in two categories: urban and rural.

Education of the Wife

The highest grade of school completed was asked of all persons enumerated in the 1960 Census of Popula-This item refers to the highest tion. grade or year completed in the regular system of education on the elementary, high school, or collegiate level. elementary course covers both the sevenyear as well as the six-year elementary course provided for in the Educational Act of 1940. The number of years of college work completed takes into consideration post-graduate work and college courses requiring more than four years for completion.

Together with data on the number of children born alive to each married woman, marital fertility by level of education classified by residence at the time of enumeration could be determined. Table 1 records the mean number of children born per married woman in the different educational levels.

Urban wives were, as a group, more highly educated than their rural sisters. Attention is drawn to the high proportion (53 per cent) of rural women aged 45-64 who have had no education at all, in contrast to only 38 per cent in these age groups residing in the cities of West and East Visayas.

Within each residential group the amount of schooling decreased with advancing age of the wife. For all groups there is a notable increase in the age distribution of women with no education. The data indicate that in spite of

² In the Westergaard analysis, the first step involves the computation of fertility ratios (average number of children borne by evermarried women) for subgroups of each factor under consideration. Index numbers are then calculated by expressing the fertility ratio in each subgroup of the population as a per cent of the corresponding ratio for the total population. The analysis consists in comparing these indexes of fertility differences with a set of differences resulting when one or more factors are controlled.

TABLE 1
FERTILITY RATIOS OF WOMEN 45-64 YEARS OLD BY AGE GROUP AND BY LEVEL OF EDUCATION COMPLETED: URBAN AND RURAL VISAYAS, 1960^a

	AGE GROUP						
Residence and Level of Schooling	Total			45-54		55-64	
	Distribution of Women		Average No. of	Distribu- tion of	Average No. of	Distribu- tion of	Average No. of
	Number	Per Cent	Children per Woman	Women (Per Cent)	Children per Woman	Women (Per Cent)	Children per Woman
VISAYAS				-			
Total	327,400	100.0	6.2	66.8	6.3	33.2	6.2
College 1-4 or more	6,000	100.0	$\overline{5.0}$	93.3	4.8	6.7	8.0
High School 1-4	16,600	100.0	5.6	77.1	5.9	22.9	4.8
Grades 5-7	31,400	100.0	6.3	79.6	6.3	20.4	6.5
Grades 1-4	104,800	100.0	6.6	70.8	6.7	29.2	6.4
No Schooling URBAN	168,600	100.0	6.1	60.0	6.2	40.0	6.1
Total	29,200	100.0	6.2	71.9	6.2	28.1	6.0
College 1-4 or more	800	100.0	$\overline{2.8}$	100.0	2.8	·	·
High School 1-4	4,400	100.0	5.5	77.3	6.0	22.7	3.8
Grades 5-7	4,800	100.0	6.7	87.5	6.5	12.5	8.0
Grades 1-4	8,000	100.0	7.4	72.5	7.6	27.5	6.9
No Schooling RURAL	11,200	100.0	5.6	60.7	5.4	39.3	5.7
Total	298,200	100.0	6.3	66.3	6.3	33.7	6.2
College 1-4 or more	5,200	100.0	5.3	$\overline{92.3}$	$\overline{5.1}$	7.7	8.0
High School 1-4	12,200	100.0	5.7	77.0	5.8	23.0	5.1
Grades 5-7	26,600	100.0	6.3	78.2	6.2	21.8	6.3
Grades 1-4	96,800	100.0	6.5	70.7	6.6	29.3	6.4
No Schooling	157,400	100.0	6.2	60.0	6.2	40.0	6.1

^a In this table, as well as in the others that follow, care must be taken to interpret the results owing to small frequencies in some of the cells. A figure of 10,000 represents 50 sample cases.

the reduction in illiteracy over the years, much remains to be done to improve the educational attainment of both urban and rural women.

A picture of the association between children born per married woman and the amount of schooling she received typical of the inverse with educational status in each of the place-of-residence groups. men who reported having gone to college had about one child less (5.0) on the average than persons with no shooling (6.1), or those with primary school education alone (6.6). Similarly, women finishing high school had on the average one-eighth less the number of children than those completing seven vears of elementary school education (6.3).

Two salient points are demonstrated in Table 1: (1) Unschooled women in the two places of residence had lower fertility than those who received primary school instruction. The uneducated seem to exhibit a different family size pattern from that of the educated groups. Inasmuch as a substantial number of women in each place of residence

belonged to the unschooled group, this finding could mean that these same groups who did not possess the advantages of schooling or whom such facilities could not reach were also unable to enjoy the benefits of public health programmes. (2) The older group of rural wives whose education went no further than secondary school had a lower average number of children per woman than the corresponding women in the younger ages. It could be hypothesized that improvements in public health tend to increase fertility rather than depress it. There are also indications that the fertility of women in cities located in the Visayas are affected by the institution of public health programmes.

To test this hypothesis and to stabilize the ratios, the women in each place of residence were divided into three levels of education, viz, those finishing high school or higher, those who attained an elementary education, and those with less than five years of schooling. The age-specific fertility ratios exhibited by these three educational level groups within each place of residence are entered in Table 2 below.

Table 2

AGE-EDUCATION SPECIFIC FERTILITY RATIOS FOR WOMEN OF COMPLETED FERTILITY FOR EACH PLACE OF RESIDENCE:

VISAYAS, 1960

	AGE GROUP					
Residence and		45-54	55-64			
Education	No. of Women	No. of Children per Woman	No. of Women	No. of Children per Woman		
URBAN						
All Levels	21,000	6.2	8,200	6.0		
High School and over	4,200	6.2 5.4	1,000	3.8		
Grades 5-7	4,200	6.5	600	8.0		
Less than 5	12,600	6.4	6,600	6.1		

RURAL	302 000		700.400	0.0
All Levels	197,800	6.3	100,400	- <u>6.2</u>
High School and over	14,200	5.6	3,200	5.5
Grades 5-7	20,800	6.2	5,800	6.3
Less than 5	162,800	6.4	91,400	6.2

Excluding the women finishing elementary school in both places of residence, the prevailing pattern among the three educational level groups is that of lessening fertility for 55-64 age group. This seems to bear out the hypothesis that exposure of the younger age groups to better health conditions augment their fertility. The kinds of poor health prevalent during the reproductive period of the older age groups probably diminish-

ed their fertility, thus accounting for the lower number of children borne by women in this group.

The pattern of education differentials remained relatively unchanged when residence was held constant—that is, fertility decreased with increasing amounts of schooling (see the Westergaard indexes with residence controlled in Table 3).

Table 3 EDUCATIONAL LEVEL DIFFERENTIALS HOLDINGS RESIDENCE CONSTANT: EAST AND WEST VISAYAS TOTAL = 100

Age and Educational Level	Crude Fertility Ratios	Index Crude Ratios	Index Holding Residence Constant
Women 45-54 Years Old			
All Levels	6.3	100	100
College 1-4 and over	4.8	76	76
High School 1-4	5.9	93	94
Grades 5-7	· 6.3	100	100
Grades 1-4	6.7	106	106
No Schooling	6.2	98	98
Women 55-64 Years Old			
All Levels	6.2	100	100
College 1-4 and over	8.0	12 9	128
High School 1-4	4.8	77	78
Grades 5-7	6.5	105	· 105
Grades 1-4	6.4	103	104
No Schooling	6.1	98	98

Occupation of the Wife

Data on the line of work pursued by the wife was also gathered during the 1960 Census of Population. The occupations were classified according to the ten major groups recommended by the United Nations. To avoid the insufficient numbers falling in each of the subgroups several occupations were combined. For our purposes, professionals and clerks were classified as white collar workers. Proprietors and salesmen constitute a second group, while blue collar workers consist of manual, mining, transport, service and crafts workers. Farmers were treated as a separate category. The results of the grouping for each area of residence are included in Table 4.

TABLE 4

FERTILITY RATIOS OF WOMEN 45-64 YEARS OLD BY AGE GROUP AND BY OCCUPATION: URBAN AND RURAL VISAYAS, 1960

	AGE GROUP						
Residence and Occupation	Total			45-54		55-64	
	Distribution of Women		Average No. of	Distribu- tion of	Average No. of	Distribu- tion of	Average No. of
	Number	Per Cent	Children per Woman	Women (Per Cent)	Children per Woman	Women (Per Cent)	Children per Woman
VISAYAS							
Total	327,400	100.0	6.2	66.8	6.3	33.2	6.2
White Collar	242,800	100.0	6.3	66.5	6.4	33.5	6.0
Sales and Proprietors	15,000	100.0	5.8	76.0	5.7	24.0	6.3
Blue Collar Farmers	29,000 41,600	100.0 100.0	6.4 6.1	65.0 66.8	6.0 6.0	35.0 33.2	$\begin{array}{c} 7.0 \\ 6.2 \end{array}$
ranners	41,000	100.0	0.1	00.0	0.0	00.2	0.2
URBAN							
Total	29,200	100.0	6.2	71.9	6.2	28.1	6.0
White Collar	21,200	100.0	6.0	71.9 70.8	6.1	29.2	5.8
Sales and Proprietors	2,600	100.0	7.4	92.3	7.2	7.7	9.0
Blue Collar	3.400	100.0 100.0	6.6	58.8 80.0	6.3 5.4	41.2 20.0	7.1
Farmers	2,000	100.0	4.9	80.0	5.4	20.0	3.0
RURAL							
Total	298,200	100.0	6.3	66.3	6.3	33.7	6.2
White Collar	221,600	100.0	6.3	66.1	6.5	33.9	6.0
Sales and Proprietors	12.400	100.0	5.5	72.6	5.3	27.4	6.2
Blue Collar Farmers	24,600 39,600	100.0 100.0	6.3 6.1	65.9 66.2	6.0 6. 1	34. 1 33.8	7.0 6.3
r armers	03,000	100.0	<u> </u>		0.1	<u> </u>	U.U

Astonishingly, close to three-fourths of the married women were white collar workers with the highest concentration found in villages. Farming ranked next among rural wives, while their urban counterparts preferred blue collar occupations. Age distributions by occupations, presented in Table 4, disclose the participation rate for these women to be largely clustered at the younger ages (45-54).

In so classifying these groups the international recommendations were followed although there is considerable doubt as to the appropriateness of this treatment. In view of this classification, many village women who reported some dressmaking in the home were dubbed as designers and placed in the professional category. It is therefore not surprising to find among this occupational group, 45-54 years of age and of rural origin, fertility over and above all the others.

In the urban areas, the relationship between family size and occupation tends to be negative. Blue collar workers reported a greater number of children than white collar workers. the other hand, salesmen and proprietors declared more children than persons in either of these two occupations. of the former are operators of small businesses without paid employees especially the many sari-sari (assorted) stores which abound in the households. Farmers reported the lowest number of children per woman but the few farmers in the cities of the Visavas may not be representative of the farming occupation in general.

Controlling for residence did not result in any substantial reduction in the size of the occupation differentials among the women in each age group (see Table 5). The Westergaard indexes show that women aged 55-64 years reporting blue collar jobs beget the greatest number of children even if the influence of residence is removed.

TABLE 5

INDEX OF OCCUPATIONAL LEVEL DIFFERENTIALS HOLDING RESIDENCE CONSTANT: EAST AND WEST VISAYAS TOTAL = 100

Age and Occupation	Crude Fertility Ratios	Index Crude Ratios	Index Holding Residence Constant
Women 45-54 Years Old	A CONTRACTOR	4 (
All Levels	6.3	100	100
White Collar	6.4	102	102
Sales and Proprietors	5.7	90	91
Blue Collar	6.0	95	95
Farmers	6.0	95	96
Women 55-64 Years Old			
All Levels	6.2	100	100
White Collar	6.0	97	97
Sales and Proprietors	6.3	102	102
Blue Collar	7.0	113	114
Farmers	6.2	100	100

Age at First Marriage of the Women

Provision was made in the 1960 Population Census to collect information on age at first marriage of ever-married women in the sample.

Over 40 per cent of married women reported having married before reaching 20 years of age. More than a third entered the married state in their early twenties. Notable were the greater proportion of city women who married at 15-19 years.

Crude fertility ratios listed in Table 6 show the negative relationship of fertility and age at marriage. The anticipated higher fertility ratios for younger women appear to be true for this factor with the exception of age groups over 20 for urban inhabitants, and the youngest age group (under 15) for rural villagers. This implies that the recently married have benefited from advances in health conditions, with the city dweller exposed earlier and longer than the barrio folk.

Westergaard indexes of age at marriage differentials are recorded in Table 7. The resulting indexes indicate that the residence factor is not important in reducing the size of the difference in fertility by age at marriage. The pattern of differences remained unchanged when residence was held constant.

Urban-Rural Differences

One of our concerns in this study has been to determine the extent to which the observed place-of-residence variances could be acounted for by differences in the composition or fertility performance of the married female population 45 year and older.

There were very slight differences in the marital fertility of women in urban and rural areas of the Visayas. Fertility ratios for wives aged 45-54 years in the rural sector were not much higher than corresponding ratios for the urban places. Married women 55-64 years old, located in villages throughout the Visayas, declared an average of 6.2 children per wife, a figure only 3 per cent over and above that for the cities' female inhabitants (6.0). The data suggest that the small city pattern of completed family size follows closely that of the remainder of the province. It may take a city like Manila to show a decided difference in fertility from that manifested in rural areas.

In order to analyze fully the residence differentials, the crude fertility ratios registered in Table 8 were indirectly standardized for education. The level of education attained by each married woman in the household and her occupa-. tional status was tabulated for the entire sample. Nevertheless, the latter was not used in the standardization process for it was feared that such a characteristic, causally related as it is to the urbanrural classification, would be misleading. The resulting pattern of differences surviving standardization would represent tentative conclusions relative to urban-rural differences.

Point differences in the crude fertility indexes refer to the degree to which non-city fertility exceeded city fertility. To the extent that the level of education explained the rural-urban differences, the size of the differences in the Westergaard indexes appearing in Column 3 of Table 8 would be smaller or disappear entirely.

A reduction in the size of fertility differences was encountered for both age groups of women of completed fertility. The conclusion would be that urban-rural fertility differences in the Visayas were ascribable to differences in the level of education.

TABLE 6
FERTILITY RATIOS OF WOMEN 45-64 YEARS OLD BY PRESENT AGE GROUP AND BY AGE AT FIRST MARRIAGE URBAN AND RURAL VISAYAS, 1960

	AGE GROUP						
7.1	,	Total		45	54		55 — 64
Residence and Age at Marriage	Distribut Wome		: Average No. of	Distribu- tion of	Average No. of	Distribu- tion of	Average No. of
	Number	Per Cent	Children per Woman	Women (Per Cent)	Children per Woman	Women (Per Cent)	Children per Woman
VISAYAS Fotal	327,400*	100.0	6.2	66.8	6.3	33.2	6.2
Under 15 15—19	12,400 121,400	100.0 100.0	8.8 7.4	61.3 63.4	8.6 7.6	38.7 36.6	$\frac{9.1}{7.2}$
20 — 24 25 — 29	117,200 46,800	·· 100.0 100.0	6. 1 4.9	68.8 68.8	6.2 5.0	$\frac{31.2}{31.2}$	5.8 4.8
30 — 34 35 and over	18,000 11,400	100.0 100.0	3.7 2.4	70.0 75.4	3.8 2.4	30.0 24.6	3.5 2.4
URBAN Fotal	29,200	100.0	6.2	_71.9_	6.2	_28.1_	6.0
Under 15 15 — 19	600 13,000	$100.0 \\ 100.0$	7.7 7.8	$100.0 \\ 64.6$	7.7 8.4	 3 5 .4	6.7
20 — 24 25 — 29	8,400 5,000	$100.0 \\ 100.0$	5.8 3.8	78.6 - 68.0	5.7 3.8	$\frac{21.4}{32.0}$	6.2 3.9
30 — 34 35 and over	1,400 800	$100.0 \\ 100.0$	3.4 1.5	$\frac{100.0}{75.0}$	3.4 0.3	25.0	5.0
RURAL Total	298,000	100.0	6.3	66.3	6.3	33.7	6.2
Under 15 15—19	11,800 108,400	100.0 100.0	8.8 7.4	59.3 63.3	8.6 7.5	40.7 36.7	9.1 7.2
20 — 24 25 — 29	108,800 41,800	100.0 100.0	6.1 5.0	68.0 68.9	6.3 5.1	32.0 31.1	5.7 4.9
30 — 34 35 and over	16,600 10,600	100.0 100.0	3.7 2.5	67.5 84.9	3.8 2.6	32.5 15.1	3.5 2.2

^{*} Includes 200 women whose age marriage is unknown.

TABLE 7

INDEX OF AGE AT MARRIAGE DIFFERENTIALS HOLDING RESIDENCE CONSTANT: EAST AND WEST VISAYAS TOTAL = 100

Present Age and Age at Marriage	Crude Fertility Ratios	Index Crude Ratios	Index Holding Residence Constant
Women 45-54 Years Old		a	
All Levels	6.3	100	100
Under 15	8.6	137	136
15—19	7.6	121	121
20 — 24	6.2	98	99
25 — 29	5.0	79	79
30 — 34	3.8	60	60
35 and over	2.4	38	39
Women 55-64 Years Old		-	
All Levels	6.2	100	100
Under 15	9.1	147	147
15—19	7.2	116	116
20-24	5.8	94	93
25 — 29	4.8	77	77
30 — 34	3.5	56	56
35 and over	2.4	39	39

TABLE 8

INDEX OF PLACE OF RESIDENCE DIFFERENTIALS HOLDING EDUCATIONAL LEVEL CONSTANT: VISAYAS TOTAL = 100

Present Age	Crude	Index	Index Holding
and	Fertility	Crude	Residence
Residence	Ratios	Ratios	Constant
Women 45-54 Years Old Total Urban Rural Women 55-64 Years Old	6.3	100	100
	6.2	98	100
	6.3	100	100
Total Urban Rural	6.2	100	100
	6.0	97	99
	6.2	100	100

Summary

The size and pattern of fertility differences seems surprisingly stable. With few exceptions the same patterns were noted in both age groups of women. Moreover, the pronounced trend of a greater number of children borne by younger women (45-54 years of age) implied that public health improvements at the outset tend to increase, rather than

depress, fertility. The influences of residence and the three factors considered in this study appear to have operated rather independently.

In general, the influence of the selected factors in fertility within each place of residence has operated in a somewhat similar fashion. Our data seem to confirm the general findings in Western countries and to this extent, we may be nearer the establishment of the inverse relationship between fertility and education as a widespread feature of most populations. There is also some evidence of the expected fertility declines with proximity to urbanization.

For women of completed fertility, the widest differences in family size were reported for age-at-marriage groups. An increase of 20 years in the age at first marriage was associated with a decline of about 5 in the number of children ever born to women past their fertile period. Implicit in this statement is the fact that a four-year delay in marriage would mean producing one child less for wives who marry beyond fifteen years of age and who have uncontrolled fertility during the interval.

Section 1

Outlook for the Future

Based on our findings in this study, we can venture to speculate on the future of completed family size in the Philippines. For urban dwellers we would expect a decline in the number of children with increasing education. Among married women in the rural areas, we would expect a further increase in the fertility differences between the educated rural wife and the unschooled married women.

Our findings do not suggest what the more distant future holds in store for differences in the completed family size of Filipino women. However, if urban influences were to filter gradually to the rural sectors, the latter may be expected to exhibit fertility declines not unlike those already observed for Metropolitan Manila.