THE EFFECT OF RELIGIOSITY ON FERTILITY:

A CASE OF THE MUSLIMS IN SOUTHERN PHILIPPINES

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DECLARATION

Except where otherwise indicated
this thesis is my own work.

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ABSTRACT

This study is an investigation of the effect of religiosity on fertility among the adherents of Islam, specifically on the three Muslim ethnic groups in southern Philippines, the Sama of Tawi-Tawi, the Yakan of Basilan and the Tausug of Sulu. The data are derived from the KAP Survey Among Muslim Couples in Region IX (Western Mindanao), 1981 conducted by the Western Mindanao State University.

The findings from the analysis confirmed the general hypothesis that the greater the degree of religious commitment or religiosity the higher the fertility. Muslim couples who scored higher on the religiosity index exhibited higher fertility (as measured by mean number of children ever born) and had larger family size ideals than did those who scored lower. An inverted U-shaped association was shown between religiosity and number of family planning methods known.

The positive relationship between religiosity and fertility was shown by both cross-tabulation and multiple classification analysis (MCA) even after controlling for some demographic and socio-economic factors. However, religiosity was not as strong a predictor of the three fertility-related variables used in this study in comparison to other determinants of fertility. Education was the most important predictor followed by husband's occupation and ethnicity.

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CHAPTER 1

INTRODUCTION

Religion is considered to be one of the various aspects of socio-cultural environment affecting fertility. In many developed countries religious identification is a key variable influencing fertility behaviour. Mounting concern with high rates of population growth in the developing world has led to increased interest in the extent to which religious values may affect efforts to reduce fertility levels. This has resulted in a significant number of studies of the doctrines of various religious groups and their attitudes toward fertility.

Islam and Roman Catholicism have been identified by these studies as "high fertility" religions because they stress pronatalist values. However, critics have pointed out that these studies have not dealt with relationships between religious doctrine and fertility behaviour but focused on the linkages between religious denomination and fertility, and there is as yet no empirical evidence to support the relationships between particular religious doctrines, as distinct from denominations, and fertility behaviour. As Chamie (1981:75) found in a study in Lebanon,

reliance on the official church doctrines and theology of a religion to measure or indicate the fertility behaviour of its adherents can be misleading since intrafaith comparisons of fertility differentials were as large as or larger than those obtained from interfaith comparisons.

In a review of studies of the social and economic correlates of fertility, Loewenthal and David (1972) concluded that while much more work needs to be done in the developing world to show whether the strength of religious adherence or religiosity affects fertility or not, the findings in the developed countries strongly suggest that a person's particular faith is less important than his religious commitment. The present study therefore is an attempt, albeit limited, to contribute to the study of the effect of religiosity on fertility behaviour in a developing country. The method used is an analysis of fertility and religiosity variables among three Muslim groups in the southern Philippines: the Sama, Yakan, and Tausug. Specifically, this study will test the hypothesis that the greater the religiosity or strength of religious commitment of an individual, the higher the fertility.

As the literature review below shows, there is a dearth of information on this subject in Muslim societies, and this, unfortunately, is also true in the Philippines. This study, therefore, will not only contribute to the limited studies on Muslim fertility in the Philippines but, hopefully, will also shed some light on the effect of religiosity on fertility among Muslim societies.

The study is organised into six chapters. The first chapter deals with the theoretical background of the study which discusses the literature review and related studies in the Philippines. Chapter 2 presents the demographic, social and economic characteristics of Southern Philippines (which is defined here as Western Mindanao) the religious belief and practices, and the historical and current circumstances of the Muslims in the Philippines. The third chapter discusses the data and methodology, including its limitations, and demographic, social and economic characteristics of the respondents. Chapter 4 shows the religious characteristics, and the ethnic differences in terms of fertility, ideal family size and knowledge of family planning among the three Muslim groups. Multiple Classification Analysis (MCA) is used in the fifth chapter to determine the effect of religiosity and other demographic and socio-economic variables on the number of children ever born, ideal family size preferences and knowledge of contraceptive methods. The final chapter summarises the findings of the study and proposes recommendations for future research on religiosity and its effect on Islamic fertility. It also looks at the necessity of evolving different policies and strategies, including family planning programs, for different ethnic groups with different needs and expectations, even though they happen to belong to the same religion.

It should be stressed that this study deals directly with the fertility of three Muslim ethnic groups. The

relationship of fertility to religious commitment, (which is referred to in this study as "religiosity" for the sake of brevity although others used the term "religiousness") is pursued to determine which is the more important variable determining fertility: ethnicity, religiosity or some other factor. MCA is used for this exercise. However, the religiosity measure is not as comprehensive as possible because it was not the focus of the survey which gathered these data. Therefore because of this limitation, the religiosity findings in this study should not be taken as indicative of the actual "Muslimness" or religious adherence to Islam of the Sama, Yakan and Tausug Muslims in the southern Philippines.

1.1 Review of Literature

The debate concerning the influence of religion on the fertility behaviour of its adherents has generated several empirical studies which have come up with a mass of contradictory findings and conclusions (Goldscheider, 1971; Chamie, 1981). Some investigators have found that adherents of a particular religious group on average have and want more children than those of another group (Stoeckel, 1968; Freedman, et al., 1961; Jones and Nortman, 1968; United Nations, 1973). However, other studies of the same groups have discovered no significant differences when several social and demographic characteristics are matched, or if such differences do exist, they are explained by differentials in the social and demographic characteristics

of the adherents rather than by their religious affiliation (Aitken and Stoeckel, 1971; Rele and Kanitkar, 1977; Petersen, 1969). Still others assert that under certain conditions, the insecurities associated with the minority status of one religious group may either raise or depress fertility compared with the levels of the majority group (Day, 1968; Goldscheider and Uhlenberg, 1969; Kennedy, 1973; Ritchey, 1975; Goldstein, 1970).

These contradictory findings have produced various theories to account for the differences and trends in the fertility of different religious groups. There are several recognized major theories or hypotheses and each tries to explain how religion can influence fertility differentials. These hypotheses are called the particularised theology hypothesis, the characteristics hypothesis, and the minority group status hypothesis.

Briefly, the particularised theology hypothesis contends that religious differentials in fertility are due to differences in church doctrines or ideology on fertility control and family size. Accordingly, religious groups whose ideologies prohibit the use of contraception and emphasise the value of large family size should demonstrate higher fertility than groups whose ideologies permit contraception and do not stress the importance of large family size (Freedman, et al., 1961; Lenski, 1961). The characteristics hypothesis, in contrast, argues that religious fertility differentials are simply the result of

differences in the demographic, social, and economic variables. If the attributes of the groups were controlled or standardised, this hypothesis maintains, the religious fertility differentials would become negligible (Petersen, 969; Goldscheider, 1971). On the other hand, the minority group status hypothesis postulates that under certain conditions, the insecurities associated with the minority status of one religious group may either raise or depress fertility compared to majority levels. "... Where minority status is not accompanied by pronatalism, the minority's fertility tends to be the same, or else lower, in consequence of the individual pursuit of personal advancement" (Day, 1984:19).

Many studies have been conducted using these three hypotheses but the controversy concerning the influence of religion on fertility is far from resolved. According to Chamie (1981:80) none of the three popular hypotheses is entirely adequate to explain fertility differentials among religious groups. Empirically, there is evidence both in support of and against each of them.

According to a review of studies on the social and economic correlates of fertility cited earlier (Loewenthal and David, 1972) findings in the developed countries strongly suggest that a person's religious denomination is less important than his/her religious commitment in affecting fertility behaviour.

Chamie (1981), in his analysis of the fertility differentials of the Muslims and Christians in Lebanon, also pointed out that generalising from the official doctrines and theology of a religion to the fertility behaviour of its adherents tends to mislead one in ascertaining the extent of pronatalism among its members. He found that in some cases, intrafaith fertility comparisons yielded differentials that were as large or larger than those obtained from interfaith comparisons. "In the light of this evidence, to continue to speak of and to make decisions on the basis of simple Muslim-Christian differences is not only unreasonable, but also misleading" (Chamie, 1981:77).

Loewenthal and David (1972:71), updating survey evidence on the social and economic correlates of fertility, posit the hypothesis that the greater the religiosity or strength of religious adherence of a couple, the higher the fertility. The studies they reviewed generally confirmed this hypothesis, but there is a lack of consistency both in the strength of the relationship and in the indices used to measure religiosity.

The impact of religious education on fertility is often employed to explain the effect of religion on fertility. Hawthorn (1970) has stressed the importance of the degree of exposure to religious doctrine and has noted higher levels of fertility among better educated Catholics. In the United States research into fertility differentials by religious preference, and by degree of religious

commitment within the major sub-groups, has consistently documented the existence of large differentials in fertility. However, a strong relationship between the degree of religious commitment or religiosity and fertility differentials was noted among Catholic groups only. Freedman et al (1961) also concluded from their findings that for Catholic women who never attended college a positive relationship existed between the number of children expected or desired and the amount of education received in church-related schools.

Several studies which separated Protestants into denominational categories found preliminary evidence of differentials in fertility within Protestantism (Lenski, 1961; De Jong, 1965; Burch, 1966; Whelpton et al, 1966). Recently, Yoder (1980:282), in his analysis of the effect of religiosity on fertility among the major American religious groups, including Mormons and Jews, concluded that the general hypothesis of a positive effect of religiosity on wanted fertility has been substantiated both within and across groups.

Studies of religiosity and fertility in other parts of the world were reviewed by Loewenthal and David (1972). In Belgium it was found that fertility desires were directly related to the degree of Catholic "content" in education, when level of education was controlled. A direct relationship between fertility desires and status as a "practising" Catholic, as measured chiefly in terms of

church marriage, was also found. A similar finding for marital fertility on an aggregate level was reported in Portugal, where the religiosity measure was the percentage of the district population declared to be Catholic. In the Netherlands, current and expected family size were also found to be directly related to religiosity, which was measured in terms of religious education, church attendance and church marriage, for both Catholics and Protestants. Positive relationships between religiosity and fertility behaviour or attitudes (or negative correlations for contraceptive practice) in non-Catholic countries have also been noted in Finland, where religiosity was measured by the degree of religious commitment of the wife and wife's parents; and in Athens, where it was measured by acceptance of communion.

Though several studies have been conducted to determine the relationship of Islam to fertility, there seems to be a lack of research on the effect of religious adherence or religiosity on fertility behaviour. One study that tried to test the relationship of religiosity, measured in terms of religious education, to fertility, is Rachapaetayakom's (1983) study of the Muslims of Thailand. The results of her analysis indicated that women who have never attended religious school have higher fertility than those who had. When age was standardised, women who had attended religious schools for more than five years had much lower fertility than those who had not. Though the small number of cases of older women limited the examination of

their fertility behaviour, Rachapaetayakom concluded that there is a substantial inverse relation between religious schooling and fertility. These findings seem to run counter to the usual hypothesis of a positive relationship of religiosity and fertility. In the absence of an explanation from the author it can be surmised that religious education may not be a good measurement or indicator of Muslim religiosity or the hypothesis may not apply to Muslim fertility.

1.2 Related Studies in the Philippines

Research dealing with fertility differentials in the Philippines usually has been done in terms of national indices and, to a lesser extent, regional differentials. Most of the research has addressed the identification of variables which are correlates of marital fertility, notably socio-economic factors such as education, income, urban-rural residence and migration. More recent research has focused on timing of marriage, childbearing patterns, ethnicity differentials and other socio-economic dimensions. However, most of these demographic surveys are devoted to the dominant Christian population of the country. Even national surveys include too few Muslim respondents to enable estimation of parameters. This observation also holds true for the more recent Republic of the Philippines Fertility Survey conducted in 1978 as part of the international World Fertility Survey. Most other studies of the Muslims are anthropological in nature and

describe the different cultural and religious practices of various ethnic groups. Studies of the sociological aspects of these differences are usually based on very few samples and are limited to small areas such as a city or a village.

The limited number of studies reviewed below are either those that concern the fertility behaviour of the Muslims or those that have tried to link the effect of ethnicity or religiosity to fertility differentials. One study that attempted to test the effect of religiosity on the fertility behaviour of Muslims in the Philippines is Stinner and Mader's (1975) analysis of son preference among Filipino Muslims. This study, based on a nation-wide survey in 1972, focused on a subsample of 153 ever-married women aged 20-34 residing in rural households in Southern Philippines. The researchers tried to relate preferred sex of children to three independent variables: household economic status; female educational status; and religious integration or religiosity, as defined by the number of times respondents attend religious services per week. Their findings showed that higher religious integration and household economic status and lower female educational status are associated with larger family size preferences.

The effect of religiosity on fertility regulation was tested in a series of surveys conducted by the Institute of Philippine Culture among the Christian population (Lynch and Makil, 1971). This study showed that such measures of popular religiosity as attendance at mass and knowledge of

church doctrine are negatively related to acceptance of contraceptive practice among Filipino Catholics. However, whereas in earlier surveys Protestants were more accepting than Catholics, the latters' attitudes changed so rapidly that four years later there was little difference in attitudes to or acceptance of family planning.

Lacar (1974), utilizing students from four Protestant schools and eight Catholic universities, tested the generally and widely accepted proposition developed from studies in the United States and Europe that Catholics tend to prefer a larger family size and shun the use of chemical contraceptives. Lacar discovered that this proposition was not confirmed by his findings. Both Protestant and Catholic students preferred a similar number of children.

The 1973 National Demographic Survey covered 7,195 married women under 50 years old and belonging to seven ethnic groups, with Tagalogs the largest sample (2,289) and Muslims the smallest (194). Using these data Alfonso, Laya and Bulatao (1980) found that ethnicity, measured by language usage or religion, was an important determinant of children ever born and of family size preference, though not of contraceptive use or wife's age at first marriage. The effects of ethnicity remained after demographic variables and socio-economic status were controlled, and were at least of comparable magnitude to the effects of education, urban residence and income.

Balacuit (1982), in his study of the Maranao Muslims, discovered that religion is the most important reason why most Maranao couples do not practice fertility control. While political motivation was a major factor in Maranao fertility behaviour, it was not considered by the Maranaos as the most important determinant of their attitude and behaviour toward fertility control.

Ness (1979), in her assessment of the Philippine population program, observed that religion plays a contradictory role in the program. "At the level of policy decision the role has been negative and somewhat important. At implementation, religion has played a weak and negative role. At impact, in the area of mass acceptance of contraceptive behaviour, the role appears mildly positive" (Ness, 1979:32). Though speaking for the dominant Christian religion, Ness acknowledged the presence of Chinese and Muslim religious-ethnic minorities, but these types of particularistic distinctions have not been important factors in population policy decisions.

It can be seen from this review of literature that there is scanty information concerning the effect of religiosity on fertility in the developing countries. This is especially true for Islamic societies, including the Muslim communities in the Philippines. The object of this study is to contribute to the limited information available on the subject.

1.3 Research Objectives

The primary aim of this study is to test the hypothesis that the greater the religiosity or strength of religious commitment of an individual, the higher the fertility. It will also measure the effect of religiosity on fertility in relation to other demographic and socio-economic variables, namely: age, ethnicity, education and occupation.

Fertility in this study will be measured through the number of children ever born and ideal family size preferences. Knowledge of family planning, measured through awareness of contraceptive methods, will also be related to the demographic and socio-economic variables mentioned above. The other objectives of this study are:

1. To determine the fertility levels and differentials of the three Muslim ethnic groups.
2. To compare the family size ideals of these three ethnic groups, including those of husbands and wives.
3. To evaluate the levels of knowledge of contraceptive methods, both that of husbands compared to wives, and among the three Muslim groups.

To give a setting to the research problem background information on the Muslims in the Philippines, including their history, current political situation, socio-economic and demographic characteristics, and religious beliefs and practices will be presented in the next chapter.

CHAPTER 2

THE MUSLIMS IN THE PHILIPPINES

It has been stated with considerable justification that the Philippines is the least oriental country in the Orient. Although basically Malay in ethnic composition, Philippine culture has been enriched by contributions from China, Japan, Malaysia and other mainland Asian countries. Accessibility from the sea readily permitted early and modern contact with peoples of the West, among whom were the Spaniards and the Americans. Such contact served to alter and to add to the Asian base of the Filipinos. The Philippines is part of southeastern Asia, and yet it lies somewhat apart from the mainland (see Figure 2.1).

The Philippines is also popularly described as the only Christian country in Asia. Yet the population of the Philippines is not all Christian. Though constituting just a little over five per cent of the total population (Gowing, 1979:1), the Muslims are considered a small but significant minority group owing to their heavy concentration in certain parts of the country. In many provinces of Mindanao and the Sulu Archipelago the Muslims are the predominant population (see Figures 2.1 and 2.2). In fact, because of the present rebellion of the Muslims against the Philippine government, two of the 12 administrative regions of the country which contain sizeable Muslim populations have been declared as autonomous regions by the government. Although both regions

have a majority Christian population, the regional assemblies are chaired by Muslims, with some members being former rebel commanders of the Moro National Liberation Front. One of these two regions is Region IX or Western Mindanao where about 30 per cent of the population are classified as Muslims and where the three ethnic groups under consideration in this study are located (Table 2.1).

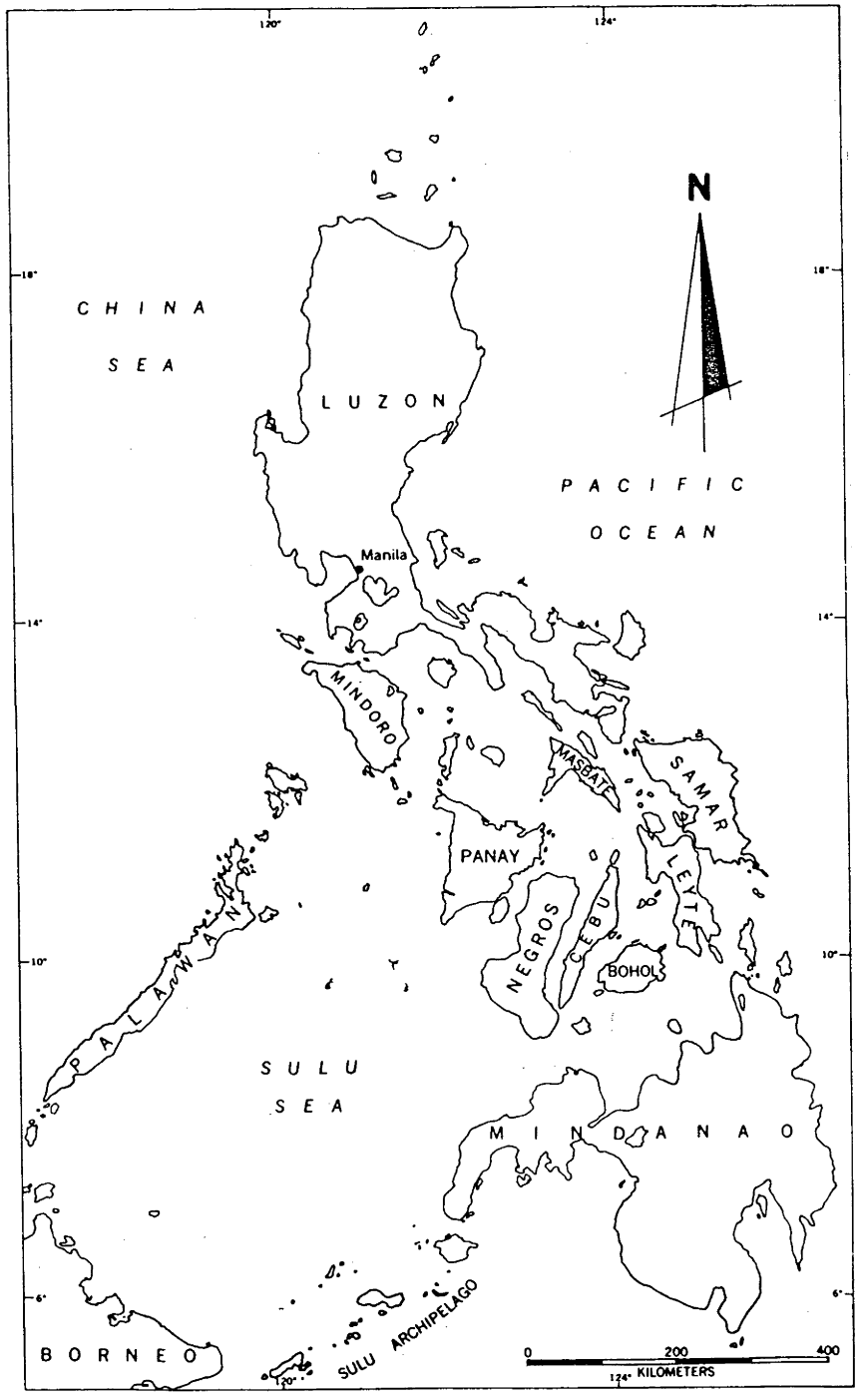
2.1 Geographical, Social and Demographic Characteristics of Southern Philippines

For the purpose of this study the Southern Philippines is defined as the area lying in the southwestern section of the country, which is popularly called "Western Mindanao" or, administratively, Region IX. This region is divided into five provinces and four cities. With a total land area of 1,868,510 hectares, Region IX is the smallest of the 12 regions in the country. It accounts for only 18 per cent of Mindanao's total land area and about six per cent of the country's total area. The population distribution by province and city is shown in Figure 2.3.

2.1.1 Population Size and Growth

According to one source the 1980 census recorded 2,444,558 people in Western Mindanao (Ecumenical Center for Development, nd:293) while another source reported that the population of this region, based on the same census, was 2,528,506 for the same year (Commission on Population, 1983). Because of these conflicting figures and the absence

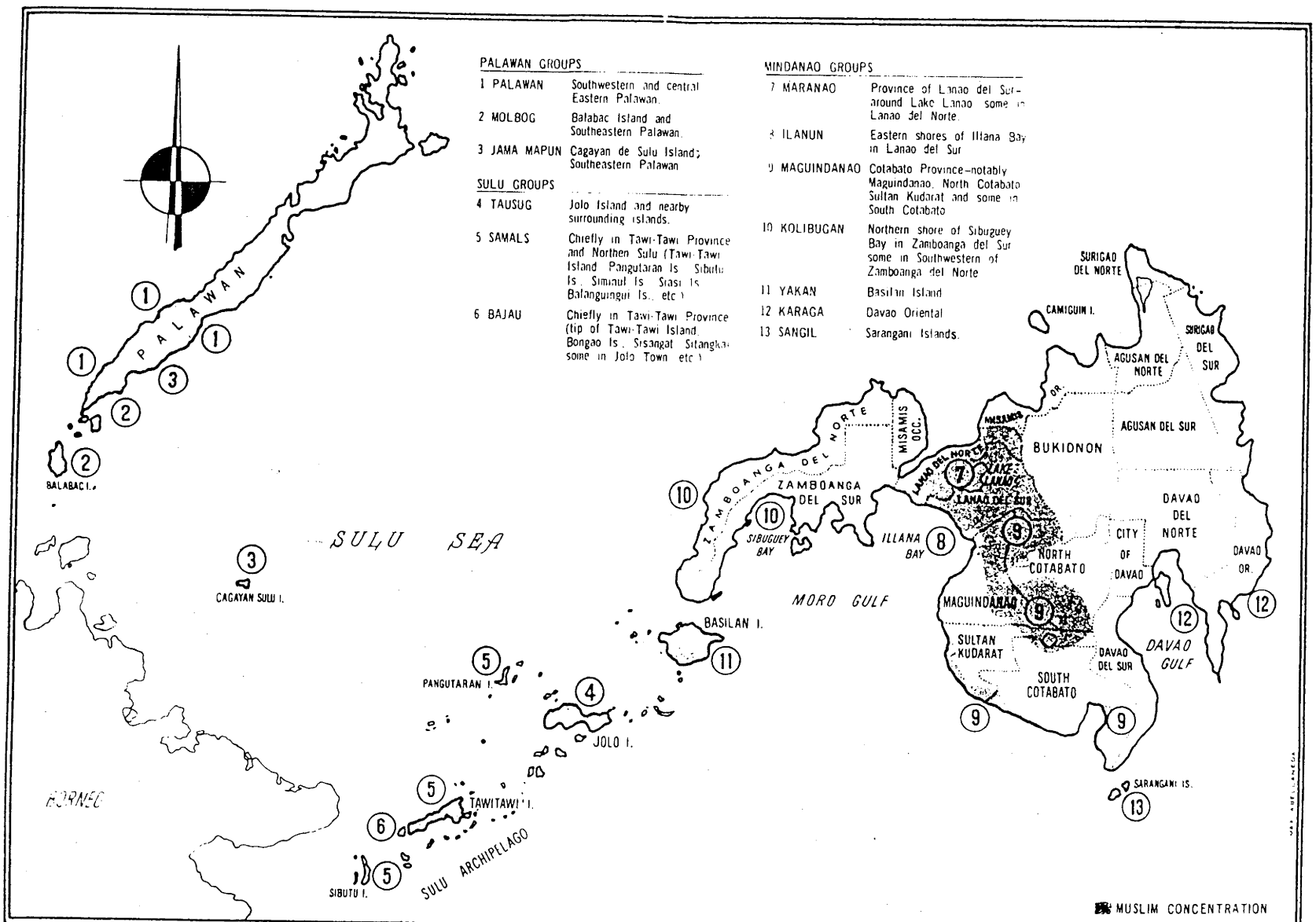
Figure 2.1
The Philippines



Source: Spoehr, 1973:16.

Figure 2.2

Distribution and Location of Muslims in the Philippines



Source: Saving, 1970

Table 2.1

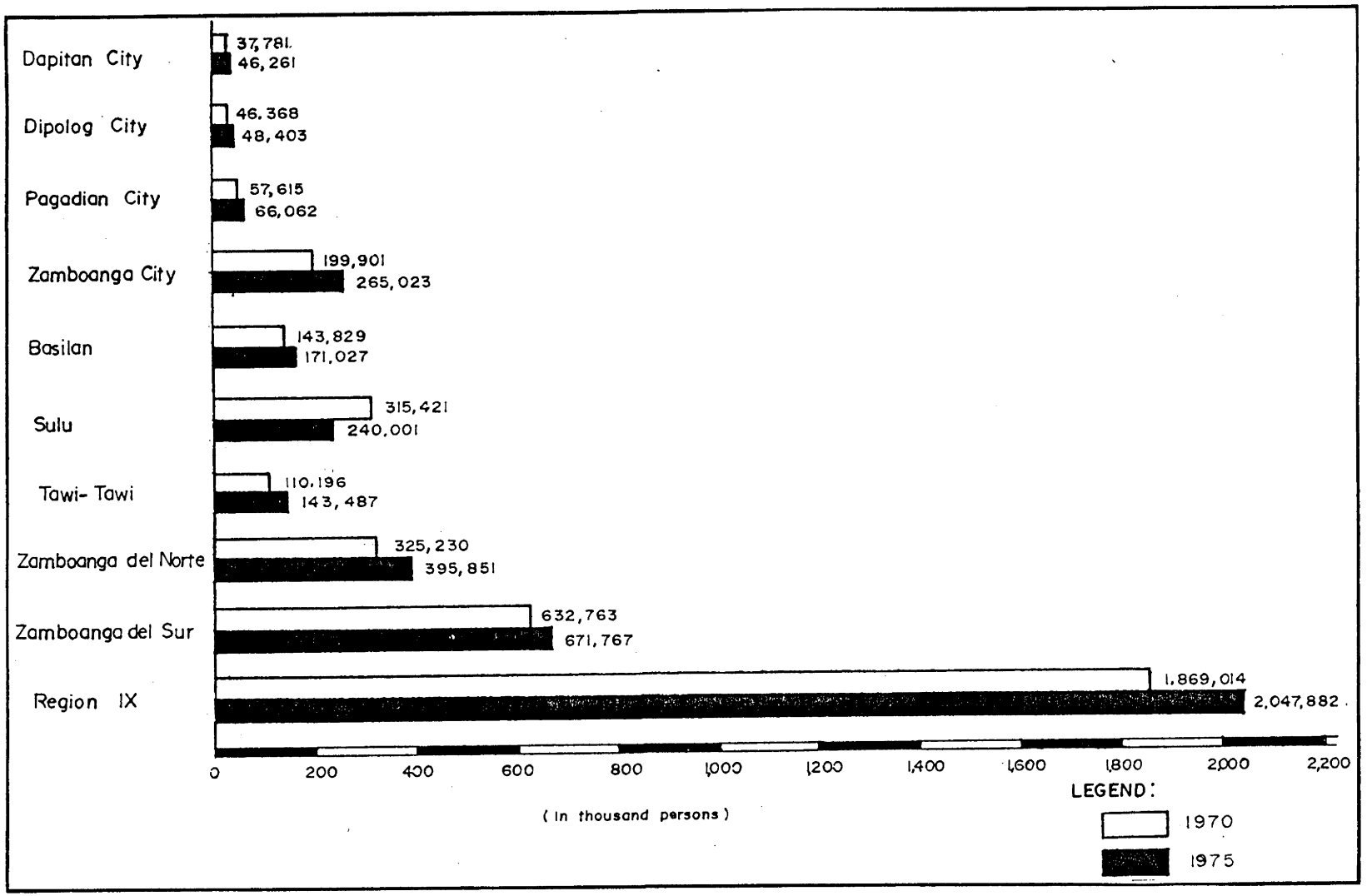
Ethnic Groups, by Province, Western Mindanao, 1975

	Zambo del Sur	Zambo del Norte	Sulu	Basilan	Tawi-Tawi	Region IX	Per Cent Distribution
Tausug	36,238	4,387	202,537	42,655	21,012	306,829	41.8
Sama	35,907	3,451	34,618	25,324	118,137	217,437	29.6
Subanon	59,633	75,276	-	-	-	134,909	18.4
Yakan	7,346	-	-	44,490	-	51,836	7.0
Maguindanao	13,277	3,044	-	-	-	16,321	2.2
Kalibugan	-	3,091	-	-	-	3,091	0.4
Badjao	-	-	98	2,815	-	2,913	0.4
Maranao	-	-	139	512	134	785	0.1
Jama-Mapun	-	-	-	-	636	636	0.1
Total	152,401	89,249	237,392	115,796	139,919	734,757	100.0

Source: National Economic and Development Authority, 1978:27

Figure 2.3

Population Distribution by Province and City,
Western Mindanao, 1970 and 1975



Source: National Economic and Development Authority, 1978:20

of tabulations for the other demographic and socio-economic indicators from the 1980 census, the census data of 1975 will be utilized in this study. Besides, the changes that have occurred during the five-year period may not be significant enough to alter the regional profile of Western Mindanao.

In 1975 the population of Region IX was 2,047,882, about 4.9 per cent of the total Philippine population of approximately 42,071,000. The growth of the region's population during the period 1970-1975 represents an average annual growth rate of 1.8 per cent over the 1970 figure of 1,869,014. During the same period the country's population grew at an average annual rate of 2.8 per cent (Table 2.2). It should be noted that in 1970, the region's population represented approximately 5.1 per cent of the national total. This decrease in the region's share in the country's total population can largely be attributed to out-migration due to the armed conflict in the area during the early 1970s (National Economic and Development Authority (NEDA), 1978:17).

Western Mindanao has a far lower proportion of urban population than the country as a whole, only about 15 per cent compared to 32 per cent. The age structure of the region's population reveals a relatively young population with almost 46 per cent belonging to the 0-14 age group. The two Zamboanga provinces have the largest percentage in this age group while Sulu has the least. The economically productive age group (15-64 years old) constituted

Table 2.2

Population Size and Growth, Western Mindanao and Philippines, 1970 and 1975

	Intercensal Period (Figures in thousands) 1975	1970	Net Increase in 5 years (in per cent)	Annual Growth Rate (in per cent)
Western Mindanao (Region IX)	2,047	1,869	14.7	1.8
Philippines	42,071	36,684	9.6	2.8
Region IX/ Philippines (%)	4.9	5.1	-	-

Source: National Economic and Development Authority, 1978:18

52 per cent of the total regional population, and the 65 years old and over group about two per cent (Table 2.3). The sex ratio (male/female) in the region is 1.05 with Sulu at 1.02 and Zamboanga del Sur, 1.04; Basilan, 1.05; and Tawi-Tawi and Zamboanga del Monte both at 1.06 (NEDA, 1978:23).

Data on the fertility and mortality rates of the provinces of Western Mindanao were not encountered in the literature reviewed. However, according to NEDA (1978:29) during the ten year period from 1960 to 1970, the region's total fertility rate was 6.7 which is relatively higher than the average national total fertility rate of 5.9 reported for the same period.

2.1.2 Literacy Rate

In 1970, Region IX had the lowest literacy rate in the country at 65 per cent (Table 2.4). A comparison of literacy levels among the provinces within the region shows that the two Zamboanga provinces have relatively higher levels of literacy, while Sulu, which included Tawi-Tawi in this case, has the lowest literacy rate of only 41.8 per cent (NEDA, 1978:87).

Table 2.5 indicates that the numbers aged ten years and over who completed the elementary, high school and college levels were consistently higher in the larger provinces. Of the three Muslim provinces however, Sulu is

Table 2.3

Age Composition of the Population by Province, Western Mindanao 1975

Age Composition	Region IX	Basilan	Sulu	Tawi-Tawi	Zamboanga del Norte	Zamboanga del Sur
0-14 Years	940,598	78,576	100,532	64,237	229,389	467,864
15-65 Years	1,068,770	89,387	136,133	77,669	249,899	515,682
65 Years and over	38,514	3,064	3,336	1,581	11,227	19,306
Total	2,047,882	171,027	240,001	143,487	490,515	1,002,852
Per Cent Distribution						
0-14 Years	45.9	45.9	41.9	44.8	46.8	46.7
15-65 Years	52.2	52.3	56.7	54.1	50.1	51.4
65 years and over	1.9	1.8	1.4	1.1	2.3	1.9

Source: National Economic and Development Authority, 1978:23

Selected Social Indicators, Selected Years, Western Mindanao

	1970			1973	1976	Percentage of Households in 1970 without		
	(1) Literacy Rate[1]			(2) Life Expectancy[2] (In Years)	(3) Per Cent of Malnourished Children[3]	Safe Water Supply[4]	(4) Electricity[5]	Sanitary Toilet[6]
	Total	Urban	Rural					
Philippines	83.4	92.7	78.7	60.0	30.6	38.6	77.3	77.4
Region IX - Western Mindanao	65.5	82.4	62.0	60.6	31.9	71.2	92.1	90.9
Sulu	41.8	62.9	37.1	62.2	29.8	71.9	93.3	97.4
Zamboanga del Norte	72.7	89.9	69.4	61.2	26.7	76.8	96.1	83.0
Zamboanga del Sur	72.5	88.2	69.3	58.5	36.4	68.7	90.2	91.5

Notes:
1. Refers to the proportion of the population 10 years and over who can read and write a simple message in any language/dialect.
2. The average number of years an individual is expected to live.
3. Per cent of population of second and third degree malnourished children to the total child population.
4. Safe water supply sources are pipes, artesian wells and pumps; unsafe water supply sources are open wells, springs, rain water, lakes, rivers etc.
5. Lighting sources other than electricity are kerosene (gas), oil and others.
6. Sanitary facilities are flush and water-sealed; unsanitary facilities are antipolo/closed pits, and public toilets.

Source: National Economic and Development Authority, 1978:97

consistently ahead in terms of the number who completed the three respective educational levels, except at the elementary level where more completed sixth or seventh grade in Tawi-Tawi. However, if the corresponding total population of these three provinces is taken into account the differences are not significant (NEDA, 1978:87).

2.2 Population Distribution of the Moros

George (1980), writing about the present Muslim rebellion in the Philippines, aptly observed that the impression nurtured by most chronicles is that Muslims in Southern Philippines were one neat unit of history, developing together, staying together, and fighting their enemies together. Western writers probably believe this to be true, seeing in the label of Islam a practical if erroneous means to understand a confusion of exotic Asian tribes. Islamic scholars, on the other hand, have been led by their own ingrained sense of "dar-ul-Islam" or "Abode of Islam" to look at all Muslims as one, which is an expression of Islamic aspirations rather than a reflection of social realities (George, 1980:22).

The Muslim Filipinos, or Moros as they are generally known, are not one people, but are divided into different ethnic groups. There is some disagreement on the number of distinct Muslim groups. According to Mednick (1974:14), a Jesuit ethnographic map of 1887 named only six Moro groups; one anthropologist listed seven, and another source counted

Table 2.5

Highest Grade Completed, of Household Population 10 Years Old and Over, by Province, Western Mindanao, 1975

Highest grade completed and type of area	Basilan	Sulu	Tawi-Tawi	Zamboanga del Norte	Zamboanga del Sur	Region IX
Elementary						
1st - 3rd Grade	14,276	16,202	15,714	68,283	144,127	258,602
4th Grade	8,481	10,335	11,674	46,771	95,568	172,329
5th Grade	6,375	6,768	7,317	32,926	67,867	121,253
6th and 7th Grade	13,170	14,711	26,961	63,699	114,792	233,333
High School						
1st - 3rd Year	9,133	16,935	8,673	32,534	73,791	141,066
4th Year	4,104	6,781	3,437	12,753	28,596	55,671
College (No Degree)						
1st - 3rd	3,063	6,965	3,153	9,561	23,388	46,130
4th or Higher Year	523	1,254	690	1,299	4,506	8,272
Academic Degree Holder	1,566	2,787	1,525	7,231	15,793	28,902
Not Stated	2,854	1,253	4,197	6,835	14,915	36,054
Total	63,545	89,991	83,341	281,392	583,343	1,101,612

Source: National Economic and Development Authority, 1978:92

ten groups. The most current classification and that widely accepted by scholars is the work of Fox and Flory (1974), which identified thirteen ethno-linguistic groups as Muslims. The distribution, location and area of concentration of these thirteen Muslim ethnic groups in the Philippines are shown in Figure 2.2. A few of these groups have been considered less Islamized, such as the sea gypsies, the Badjao of Sulu, whose religious beliefs and practices are still largely animistic. However, Nimmo (1972:96) argued that it is misleading to call the Badjao "pagans" for Islamization continues steadily and is bringing about social and value changes among them.

The estimated size of the Muslim population in 1975 was 2,188,000 (Yambot et al., 1975:16). This is considerably below the figures of four or five million which some Moro groups (e.g. the Moro National Liberation Front or MNLF) claim, but it is also suggested that the official 1970 Philippine Census figure of 1,584,394 was too conservative. O'Shaughnessy (1975) pointed out that statistics on the total number of Muslims in the Philippines have never been more than rough approximations due to several factors. Among these factors were the disturbed political conditions of Muslim areas in 1970s, hostility of Muslims to government personnel, including census enumerators, and the mobility of some of the Moro population. Nonetheless, the 1970 Census did indicate that the rate of growth of the Muslim population has been slower than that of the Christian population. Economic disadvantage, social and political

upheaval and high infant mortality in areas without adequate health facilities partly explain this slower growth (Gowing, 1979:1).

The Moro population are found principally in the Southern Philippines: on the island of Mindanao, in the Sulu Archipelago and on the island of Palawan (see Figure 2.2). About 94 per cent of the estimated 2.2 million Muslims belong to the four major ethno-linguistic groups: the Maguindanao of the Cotabato region, the Maranao of the Lanao region, and the Tausug and Sama of Sulu. The thirteen Moro groups, their estimated population in 1975 and their principal locations are shown in Table 2.6.

2.3 Brief History and Current Political Situation of Muslims in Southern Philippines

The Muslim population of the Philippines take considerable pride in the fact that they have an older history as an identifiable community than any of the other Filipino people. They are well aware that at the time of the arrival of the Spaniards in the sixteenth century, Islamic sultanates were already in existence in the Philippines and provided the Moros with sufficient unity to effectively resist the invading Europeans. Indeed, Moros proudly point out that they have a much longer record of struggle against colonialism than the other inhabitants of the Archipelago. Despite the political and economic differences existing among and within the different Muslim groups, the Moros in the Philippines are united by their

Table 2.6

Estimated Population of Muslim Filipinos
By Ethnic Group, 1975

Ethnic Group	Estimated Size	Principal Location
1. Badjao (Samal Laut)	20,000	South Sulu
2. Ilanun (Iranun)	429,000	From Buldon and Parang, Maguindanao Province, north along the shores of Illana Bay in Lanao del Sur
3. Jama Mapun (Samal Cagayan)	15,000	Cagayan de Sulu
4. Kalagan (kin of Tagakaolo)	5,000	Davao Provinces, on shores of Davao Gulf
5. Kolibugan (Kalibugan)	4,000	Zamboanga del Sur
6. Maguindanao	674,000	Cotabato Region
7. Maranao (Malanao)	241,000	Lanao Region
8. Molbog (Melebuganon)	3,000	Balabac Island, Southern Palawan
9. Palawani (Muslim Pinalawan)	7,000	Southern Palawan
10. Samal (Sama'a, Sama)	202,000	Sulu Archipelago, mainly Tawi-Tawi
11. Sangil (Sangir)	3,000	Sarangani Island Group
12. Tausug (Sulus, Suluanos)	492,000	Sulu Archipelago, Jolo Island
13. Yakan	93,000	Basilan Island
Total	2,188,000	

Source: Yambot et al, 1975

religion. In the minds of Muslims it was, and still is, Islam that differentiates them from the rest of the Filipino community. Islam has become the source of identity.

The present crisis in Mindanao and Sulu has heightened further this basic unity of community identity, as evidenced

in the new respectability given by Muslims to the word "Moro", which was for a time repudiated by them as a pejorative term. Many Muslims now proudly refer to themselves as "Bangsa Moro" (Moro Nation) - something quite separate from the "Filipino Nation" (i.e. children of those who were subjugated by the soldiers of King Philip II of Spain). This label even overrides the ethnic distinctions between Tausug, Sama, Yakan, Maguindanao, Maranao and the other Muslim groups (Gowing and McAmis, 1974:x).

Generally the Moros have not recognized any existing government in the past, colonial or independent, except their own which was composed of the Sultanates. While the Spaniards were able to control the rest of the Philippines, they were not as successful in subjugating the Moros in the South. Spain was able to convert the people in the North to Christianity, but practically none of the Moros abandoned their religion. During the American regime, the Muslims gradually had to recognize the American presence, and their armed resistance diminished. Still they looked at themselves and the country in which they lived as separate entities. This attitude did not change during the Japanese occupation in the Philippines, or even after independence was granted by the United States in 1946 (Gowing, 1979).

In addition to their ingrained suspicion and resentment against the "Christian" government, other developments have helped to make the Moros more conscious of their Muslim identity. The resurgence of Islam and

concomitant politicization of the Muslims in the 1950s and 1960s was brought about by Moro scholars returning from universities in the Middle East. They identified themselves with the greater world of Islam and had become aware that many of their co-religionists exercised significant power elsewhere (Noble, 1982).

The shifting in the population balance in many areas predominantly inhabited by the Moros, which was aggravated further with accelerated Christian migration, resulted in the reduction of Muslim political representation. These developments, and the alleged discrimination they received from the Philippine bureaucracy and Filipino society in general as "second-class" Filipino citizens, led to the formation of several Muslim organizations. Among these was the Muslim Independence Movement (transformed later into Mindanao Independence Movement (MIM). Although disbanded by the government in 1970, its youth section, the Moro National Liberation Front (MNLF) has continued to struggle for MIM's aims and objectives. These have ranged initially from complete independence from the Philippines to a fully-fledged autonomy (Noble, 1983).

The declaration of Martial Law in 1972 provoked and increased Muslim resistance in their traditional areas of Mindanao and Sulu and produced a great measure of unity among Moro dissidents under the banner of MNLF in their confrontation with the Armed Forces of the Philippines (AFP). The intensity of the conflict increased and reached

its peak in the middle of the 1970s. At that time the MNLF seemed to be well-supplied and well-trained. The AFP were forced to respond by committing the bulk of their manpower and resources in the struggle against the MNLF to a fairly small geographical area of Western Mindanao and the Sulu Archipelago (McAmis, 1983:33).

This led the Philippine government to seek alternatives to a military solution with the institution of a pacification program that offered substantial rewards for the surrender of Muslim rebels. Developmental concerns were also initiated which included attempts to improve agriculture, education, electrification, health and infrastructure in Muslim areas. These efforts, together with diplomatic initiatives, especially with the Middle East countries, has abated the conflict in Southern Philippines.

2.4 Social Customs of Yakan, Sama and Tausug

Physically, the Muslim Filipinos are virtually indistinguishable from the Christian Filipinos. Anthropologists stress that except for those Filipinos who are of Chinese or Negrito aborigine stock, the Filipinos are racially one people. The thirteen Moro groups speak various languages or dialects, often the name of the group and of the language or dialect being the same. Some of the languages are so closely related as to be mutually intelligible. This is the case with the Maranao, Ilanun and Maguindanao languages which, taken together, virtually

constitute one Mindanao language. The dialects of the Yakan, Sama, Badjao and Jama Mapun are also closely related (Spoehr, 1973:23). There is however, no single Moro language or dialect which is understood by all the Muslim groups. In Sulu Archipelago, though the Tausug and Samal dialects are mutually unintelligible, the dominant Tausug is the lingua franca of the Yakan, Sama, Badjao and of course, Tausug.

According to Gowing (1979:4), the unifying bond of Islam notwithstanding, the Moro groups differ among themselves almost as markedly as the Muslim population as a whole differs from the Christian population. The Moro groups differ in their subsistence patterns, and to some extent in their historical development and in the intensity of their contacts with the rest of the Philippines and the world. They also differ in their systems of social organization as well as in the extent of their Islamic acculturation, and in their customs, traditions and other aspects of culture. These differences, as well as similarities, will be discussed below for the three Muslim ethnic groups under consideration, namely: Sama, Yakan and Tausug.

The Tausug, Sama and Yakan people are found mostly in Sulu Archipelago, the southernmost part of the Philippines. The main island groups are the Basilan group, traditional home of the Yakan; the Jolo group, inhabited mostly by the Tausug; and the Tawi-Tawi group, where the different Samal speaking groups reside.

The Tausug have long been the politically dominant group in the archipelago. They were the first ethnic group in the Philippines to embrace Islam and, as Muslims, they established a powerful Islamic sultanate that dominated the Philippines prior to Spanish arrival. More importantly this group, unlike other Moros, has so successfully resisted all external influences that they have been able to maintain the province of Sulu as an overwhelmingly Muslim and pre-eminently Tausug territory until today, as shown in Table 2.1 (Moore, 1982:29).

Approximately 200,000 Tausug inhabit the province of Sulu. As reflected in Table 2.1 they are also found in other parts of Western Mindanao, including Basilan, Zamboanga del Sur and Tawi-Tawi. The Tausug are primarily farmers. They grow upland rice using a plow drawn by carabao (water buffalo) or cattle to till the fields. Intercropping with cassava, as well as corn and cereals, is common. Bananas are grown abundantly. Coconuts, abaca and coffee are grown as cash crops. The Tausug residing along the coast engage in fishing as well as farming. The settlement pattern of the interior of Jolo tends to be dispersed, but along the coast there are nucleated settlements ranging from small hamlets or villages to the larger poblaciones or town centres.

The Sama is one of several Samal speaking groups in the Philippines. The term Sama is used to refer to the predominant ethnic group in the province of Tawi-Tawi, to

differentiate them from other Samal groups like Yakan, Jama Mapun and Badjao (Jocano, 1983). Next to the Tausug in terms of numerical size they are found mostly in the islands of Tawi-Tawi and in other areas of Western Mindanao (see Table 2.1).

The Sama are mostly fishermen, although their widespread adoption of coconuts as a cash crop is evidence that they also practice agriculture if land is available (Spoehr, 1973:24). Some of them have specialised in certain crafts, like boat building, for which the Sama from the municipality of Sibutu are noted. The Sama mainly live in coastal villages with their houses clustered together and connected by catwalks of timber and bamboo. Some of them live on dry land and engage in a little agriculture to supplement their fishing livelihood (Gowing, 1979:92).

The traditional home of the Yakan is Basilan province. Numbering about 44,000 (see Table 2.1) the Yakan inhabit mainly the eastern half and northern part of the island. Like the Sibutu Sama, the Yakan are fine boat builders which suggests that they were once a sea-oriented people (Gowing 1979:91). Today, they are mostly growers of upland rice using plow and carabao and of root and tree crops. They have extensive plantings of coconuts as a cash crop and also raise peanuts for the same purpose (Spoehr, 1973:23). The settlement patterns of the Yakan are similar to those of the interior-dwelling Tausug. The Yakan prefer living in houses scattered among the fields, although they

cluster in the neighbourhood of a mosque (Wulff, 1974:247), like the Sama and the Tausug.

2.5 The Doctrines of Islam

The foundation of Islam is the Qur'an, God's Message revealed through the Prophet Muhammad. The Message enjoins submission to God's will. Hence the name of the religion based on the Message is Islam, connoting "submission". One who believes in Islam or surrenders to God's will is a Muslim. Essentially, the Qur'an is a set of general principles which contain the universal rules of human conduct at all times. These rules govern man's daily relations to his fellow beings, to society, and to Allah, his Creator. Islam, therefore, is not only a religion but also an ideology, a way of life with its own set of moral, ethical, and spiritual values (Sarangani, 1981:14).

Islam identifies six doctrines or articles of faith, incumbent upon believers: 1) Belief in Allah as the one and only God; 2) Belief in Muhammad and certain other prophets as messengers of Allah; 3) Belief in the Qur'an and certain other Scriptures as revelations from God; 4) Belief in Angels; 5) Belief in the Day of Judgement; and 6) Belief that the capacity for good or evil actions proceeds from the power, will or decree of Allah alone.

The basic teachings or the core of Islam are the five Pillars of Islam. The first pillar is shahadah or

profession of faith that "There is no God but Allah and Muhammad is the Messenger of Allah". This is considered the most basic of the pillars of Islam. The second pillar is salat or observance of the five daily prayers (at dawn, at mid-day, in mid-afternoon, immediately after sunset, and about two hours later). On Fridays believers, particularly males, are obliged to observe the Friday noon prayers in congregation in the mosque. The third pillar is almsgiving. There are two kinds of almsgiving: zakat or obligatory payment of annual religious tax, and sadakah or voluntary contribution. The amount of zakat ranges from one-fortieth to one-tenth of a Muslim's annual income while sadakah has no fixed amount; both can be paid or given in money or in kind and used for the welfare of the poor and for "the way of God". Fasting or saum is the fourth pillar of Islam which enjoins Muslims to abstain from taking any food from dawn to sunset during the entire month of Ramadan. Fasting is not required of the sick, the old, the very young, the pregnant and travellers. However, except for the old and the very young, they are expected to fast once they are in a position to do so, even after Ramadan. The fifth pillar is the hajj or pilgrimage to the holy city of Mecca. The performance of the pilgrimage is incumbent on all Muslims who possess the physical ability and are capable of venturing upon a journey to Mecca. They must, further, have sufficient means both for their passage and for the maintenance of their dependents during their absence.

2.6 Religious Practices of the Moros

How keen are the Sama, Yakan and Tausug in their practice of the five pillars of Islam? Ethnographic accounts suggest that in general, most Muslim Filipinos, like other Muslims around the world, do not fulfil these obligations completely, though many do. Over and above minimal compliance with a requirement for Muslim identity - i.e. profession of the faith - religious practices vary widely. For example, the Yakan are quite convinced that their religion is Islam though it may be obvious to an outsider than in Yakan religion many customs belonging to their pre-Islamic past are still retained side by side with Islamic practices. To the Yakan, however, these customs are as truly Islamic as those that are recognized as Muslim (Wulff, 1974:248).

Kiefer (1972:112) described the Tausug religion as a folk version of Islam which incorporates most of its major tenets yet maintains many features of ritual and belief which are either survivals of a time when the Tausug were not yet Muslim or else reworkings of orthodox Islamic ideas into a new and unique synthesis. Though the theological significance of the profession of faith lies in its uncompromising monotheism - the notion that God is indivisible, all-powerful and all-encompassing - in practice, the Tausug believe in lesser creatures such as "jin" and "saytan" or evil spirits which "somewhat reduce the impact of this monotheism, in much the same way that the

belief in saints does for Christianity, although in no case is the omnipotence of God ever seriously threatened" (Kiefer, 1972:119). This same observation may hold true for both the Yakan and Sama Muslims.

The performance of the five daily prayers among the three Muslim ethnic groups is not as rigid as it should be. According to Wulff (1974:249), among the Yakan "in general it can be said that the five daily prayers are not observed, not even by the imam (Islamic priest) and only few people attend the Friday service, though the attendance is better during the month of fasting". Similarly Kiefer (1972) observed that among the Tausug only the elderly make the effort to pray five times a day although most Tausug attend the communal Friday afternoon prayer in the mosque. Though it is not essential to perform the salat in a mosque, in most communities men living near the mosque usually attend the noon or sunset prayers. As is customary in Islam, Muslim Filipino women ordinarily perform the five daily prayers in their homes, but on Fridays some women go to the mosque for the assembly prayers. Custom requires that they place themselves at the back of the mosque or otherwise out of sight of the men (Gowing, 1979:61).

Unlike other Islamic countries such as Saudi Arabia, Egypt or Pakistan where zakat or almsgiving is considered a state tax and administered through religious foundations, there is no means of enforcement of this obligation in the Philippines. According to Gowing (1979:61), among the Moros

only the conscientiously religious people pay the zakat. Kiefer (1972:120) and Wulff (1974:250) indicate that the Tausug and Yakan customarily pay the zakat to the religious leaders at the mosque. Among rice producing areas the zakat is usually computed at ten per cent of the rice harvested and usually paid at the end of harvest. The Moros recognise that beyond the duty of the annual zakat it is meritorious to give voluntary alms (sadakah) to the needy as well as to religious leaders, and this is done especially at the end of the Ramadan.

Since the pilgrimage to Mecca is obligatory only to those who can afford it financially and physically, there are few Yakan, Sama and Tausag Muslims who undertake it. The few Muslims who have made a successful pilgrimage are usually accorded a high degree of prestige and respect.

This chapter has presented a brief version of the history, the religious beliefs and practices, and the social, economic and demographic aspects of the Muslims in the Philippines in general, and the three Moro groups, Sama, Yakan and Tausug, in particular. This background information was presented in order to give a better insight and understanding of the research area under investigation, which will be examined in the next chapters of this study.

CHAPTER 3

DATA AND METHODOLOGY

This chapter will discuss the objectives of the study, the source of data and methodology, including its limitations, and the demographic, social, economic and religiosity characteristics of the respondents.

3.1 Area of Study

The analysis of this study is based on data collected from the survey of Family Planning Knowledge, Attitudes and Practices of Muslim couples in Region IX (Western Mindanao). Funded by The Asia Foundation, the study was conducted by the Western Mindanao State University in Zamboanga City, with technical assistance from the Population Center Foundation.

The survey covered three provinces predominantly inhabited by Muslims in Western Mindanao, Basilan, Sulu and Tawi-Tawi. Basilan is mostly populated by the Yakan ethnic group, Sulu by the Tausug group, and Tawi-Tawi by the Sama.

3.2 Methodology

3.2.1 Sampling Procedure

Of the five provinces in Region IX, three were selected for the sample because their populations for the

most part were Muslims. In each of these provinces two municipalities were chosen by random sampling, and in each municipality, two barangay (villages) were selected, also by random sampling. Finally, 100 couples in each barangay were selected by systematic sampling with a random start from a master list of married couples which was maintained by the family planning outreach worker in that municipality. This resulted in a target sample of 600 couples, with 200 in each ethnic group. Substitution was made for couples when one partner or the other could not be interviewed. In polygamous marriages only one wife was interviewed. The final sample included 1,167 persons, 33 having been dropped because of coding errors.

The criteria for the selection of respondents were:

1. Married Muslim men and women aged 15 and above.
2. In a polygamous marriage, only one of the wives was interviewed. All wives were treated as though they were married to different men to give them an equal chance of being included in the sample.
3. Each respondent was married to another respondent in the survey. If one of a couple could not be interviewed that couple was dropped from the sample and another couple substituted.

3.2.2 Interview Instrument

The principal instrument used to gather the data for this study was an interview schedule comprising both

structured and open-ended items. The interview schedule was divided into: Block A - Respondent's identification; Block B - Respondent's characteristics; Block C - Respondent's awareness, knowledge, attitude and practice of family planning methods; Block D - Respondent's exposure and attitudes toward the population program; and Block E - The influence of religious leaders on the acceptability of the different family planning methods to the respondents.

Beside the principal investigators, a team of consultants developed and reviewed the interview schedule. It was submitted for review to Dr John Laing, population consultant at the University of the Philippines Population Institute, and other consultants from The Asia Foundation, Population Center Foundation and the Commission on Population. The schedule was translated and back-translated from the English version to the three dialects of the Muslim ethnic groups. The pre-testing of the interview schedule was done in areas inhabited by the same ethnic groups in Zamboanga City, the regional capital of Western Mindanao.

3.2.3 Data Gathering and Field Work

The data was gathered between April and August, 1981. The original survey was from April to June. However, the completed questionnaires from Tawi-Tawi for the Samal ethnic group were mislaid. Sent by the team leader through a relative to the research office of the Western Mindanao State University, the questionnaires never reached their

destination. After two months of waiting, one of the principal investigators went back to Tawi-Tawi and hired the same interviewers to re-survey the area (Bascar and Aguilar, 1982).

Three interview teams, each with five members who were natives of the place to which they were assigned, were organized to survey the three provinces. Before the interviewers were sent to the field they were trained in how to use the interview schedule and the techniques of interviewing. Supervision was done by the research team throughout the survey. Each team was visited at least twice during the period of data collection. Spot checking was carried out as early as possible to assess and resolve problems met by the interviewers in the field. The leader of each team was assigned the task of retrieving and editing the data before turning it over to the research staff based in Zamboanga City.

3.2.4 Limitations of the Data

One major drawback of the data is that the results from the survey cannot be strictly compared with other surveys. This is because of the sample scheme adopted: the samples were not self-weighting and therefore were not representative of the total population. In addition, the sample sizes selected were fixed and the proportion of each ethnic group in the sample is not the same as the proportion in the national Muslim population. Thus findings from the

present analysis cannot be generalized. Of the estimated thirteen Muslim ethno-linguistic groups in the Philippines, only three groups were covered in this study.

Another limitation of the survey is the absence of an urban-rural residence classification. Although this question was included in the questionnaire it was not coded. However, to this writer's knowledge, the survey areas were definitely more rural than urban.

One problem, the lack of an identification code for couples, makes it difficult to compare the responses of husbands and wives. A high non-response rate, from 62 per cent to 74 per cent, on the questions of "ever-use" and "current use" of contraceptive methods makes it almost impossible to analyse the findings on these topics.

Finally, measurement of the effect of religiosity on fertility was not the main objective of this survey. Thus, although there were questions about religiosity, these measures may not be sufficient to adequately categorize the respondents in the study as more or less religious.

3.3 Development of Religiosity Scales

The religiosity measures of this study are based on the questions concerning the practice of three of the five pillars of Islam; prayer, almsgiving and fasting. The profession of faith, the belief that there is no God but

Allah and Muhammad is His Messenger, was not investigated by the survey since it is widely believed that a simple profession of faith is sufficient for individuals to be considered Muslims (Ellen, 1983:56). Gowing (1975:288) stressed that in the final analysis, "the criterion of 'Muslimness' is psychological, not orthodoxy or orthopraxy". He pointed out that "like the Muslims in Ethiopia who may believe in a vast realm of spirits, they now believe in One God ... the only possible criterion is to know whether they themselves claim to be Muslims", which the Muslim Filipinos emphatically do.

A question on whether the respondent had undertaken the pilgrimage to Mecca was included in the survey. However, only about five per cent of the total respondents among the three ethnic groups have performed the hajj. For this reason, pilgrimage to Mecca as a religiosity measure was dropped.

The question on "prayer" was not quite the same as the performance of the second pillar of Islam which is the five daily prayers (see Appendix). Nonetheless, the question on "praying at the mosque" may still be a useful indicator of religiosity.

To construct the religiosity scale the coding of the questions was reversed to give the most religious position the higher score. The "no" category on two questions was also recoded and given the score of zero. Taking into

consideration the distribution of the number of respondents, some of the categories in the questions were regrouped. In the case of fasting, four categories were developed with the "30-days" category retaining a separate category since it is the ultimate number of fasting days, and therefore the most religious. Overall, each respondent was given a religiosity score ranging from a minimum of zero to a maximum of seven points. The basis of the religiosity index was:

Praying at the mosque:

Daily	- 3 points
Every Friday	- 2
Some Fridays	- 1
Never	- 0

Number of fasting days observed:

30 days	- 3 points
20-29 days	- 2
Below 20 days	- 1
Never	- 0

Performed almsgiving:

Gave alms	- 1 point
Did not give alms	- 0

3.4 Construction of Family Planning Index

The Family Planning Index was based on the question "What contraceptive methods are you aware of?" Eleven family planning methods were listed in the interview

schedule (See Appendix). However, the results of this survey showed that only six methods were popular among the respondents: pill, IUD, condom, rhythm, female sterilisation and male sterilisation. The rest of the methods (withdrawal, abstinence, foam tablets, injectables and "other" methods) were least mentioned. For this reason, only the six most popular methods will be considered in the family planning index.

In order to form an additive scale for these six items measuring a respondent's generalized knowledge of family planning, one point was given for every method mentioned. The index ranges in value from six points, if all six methods are mentioned, to zero if no methods are mentioned.

3.5 Major Sample Characteristics

The major sample characteristics of the respondents are presented in Tables 3.1 and 3.2. The 1167 respondents were divided equally between the three ethnic groups: 34 per cent were Yakan (natives of Basilan province), 33 per cent were Tausug (natives of Sulu) and 32 per cent were Sama (natives of Tawi-Tawi). The ethnic identity of seven respondents could not be ascertained and they were included in the number of missing cases. While the original sampling plan was to interview the same number of husbands and wives in each ethnic group, errors during the process of data collection caused slight variations in numbers between ethnic groups and between husbands and wives (Bascar and Aguilar, 1982:22).

TABLE 3.1

Demographic characteristics of respondents
(Percentage distribution of respondents, by sex and ethnic group)

Characteristic	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
Distribution of respondents	32.5 (188)	34.4 (199)	33.2 (192)	32.2 (186)	34.9 (203)	33.0 (192)	100.1 (579)	100.1 (581)
Age in 1981								
15 - 19	1.6	7.0	8.9	0.0	1.0	2.1	5.9	1.0
20 - 24	14.9	18.6	15.3	7.5	13.8	14.1	16.3	11.9
25 - 29	28.2	22.1	36.3	12.9	19.2	21.9	28.8	18.1
30 - 34	21.3	17.1	14.2	20.4	19.2	21.9	17.5	20.5
35 - 39	21.8	12.1	12.6	26.9	15.3	15.1	15.4	18.9
40 - 44	7.4	11.1	10.0	11.8	15.8	15.1	9.5	14.3
45 and above	4.8	12.0	2.7	20.5	15.7	9.9	6.6	15.3
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	188	199	190	186	203	192	577	581
Median age	30.7	30.2	28.0	36.2	33.7	32.2	29.3	34.1
Mean Age	31.1	31.9	29.0	36.1	35.0	33.0	30.7	34.7

TABLE 3.1 (Continued)

Characteristic	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
Total Children Ever Born (CEB)								
0 - 1	23.4	13.9	22.9	22.1	12.4	23.4	20.0	19.2
2	17.1	18.7	10.6	15.1	20.0	10.9	15.5	15.4
3	16.0	8.6	15.6	18.0	7.6	15.4	13.3	13.5
4	14.9	11.2	12.8	13.4	12.4	13.7	12.9	13.2
5	9.7	11.2	9.5	9.9	14.1	11.4	10.2	11.8
6	8.0	11.8	11.2	9.9	10.3	9.7	10.4	10.0
7	6.3	7.0	3.4	7.0	10.8	2.9	5.5	7.0
8 or more	4.6	17.6	14.0	4.7	12.4	12.6	12.2	10.0
Total %	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.1
Number of respondents	175	187	179	172	185	175	541	532
Mean number of CEB	3.4	4.4	3.9	3.5	4.3	3.8	3.9	3.9
Number of deceased children								
0	95.5	50.5	69.4	94.8	54.6	74.4	71.5	73.8
1	3.4	25.8	17.8	4.0	21.9	14.4	15.8	13.8
2	0.6	8.6	6.1	0.6	9.7	5.6	5.2	5.5
3	0.0	8.6	3.3	0.0	8.2	2.8	4.1	3.8
4 or more	0.6	6.5	3.3	0.6	5.6	2.8	3.5	3.1
Total %	100.1	100.0	99.9	100.0	100.0	100.0	100.1	100.0
Number of respondents	177	186	180	173	196	180	543	549
Mean number of deceased children	0.1	0.9	0.5	0.1	0.9	0.4	0.5	0.5

TABLE 3.2

Socio-economic characteristics of respondents
(Percentage distribution of respondents, by sex and ethnic group)

Characteristic	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
Education (Completed level of Schooling)								
None	58.5	71.3	26.5	54.6	50.3	16.7	52.3	40.7
Primary	20.7	17.4	32.8	20.0	31.0	32.3	23.6	27.8
Secondary	17.6	8.7	14.8	14.1	15.7	19.4	13.6	16.4
Tertiary	3.2	2.6	25.9	11.4	3.0	31.7	10.5	15.1
Total %	100.0	100.0	100.0	100.1	100.0	100.1	100.0	100.0
Number of respondents	188	195	189	185	197	186	572	568
Occupation								
Not Working	95.2	85.4	73.7	1.1	4.9	34.0	84.7	13.2
Blue Collar	1.6	8.1	5.8	34.6	24.6	31.4	5.2	30.0
Farmers Fishermen	0.5	3.5	1.1	56.2	66.0	9.6	1.7	44.4
White Collar	2.7	3.0	19.5	8.1	4.4	25.0	8.3	12.3
Total %	100.0	100.0	100.1	100.0	99.9	100.0	99.9	99.9
Number of respondents	188	198	190	185	203	188	576	576
Total Family Income (in pesos)								
Less than 400	9.1	39.2	20.4	20.1	45.1	18.8	26.3	28.2
400 - 599	18.2	30.7	25.7	28.3	30.8	25.1	26.5	28.1
600 - 799	19.5	13.8	19.4	20.1	14.4	23.6	17.1	19.3
800 - 999	24.7	6.9	11.0	13.0	6.7	11.5	11.6	10.4
999 or more	28.6	9.5	23.6	18.5	3.1	20.9	18.6	14.0
Total %	100.1	100.1	100.1	100.0	100.1	99.9	100.1	100.0
Number of respondents	77	189	191	184	195	191	457	570
Mean Income	743.30	478.32	628.15	613.09	428.56	632.65	585.59	556.52

The data on the age of respondents are based on age last birthday. As in many developing countries where literacy rates are very low, the data on age are suspect. Thus, instead of relying on the date of birth which, understandably, many respondents could not remember or do not have any knowledge of, the data on age last birthday were used as a better estimate. More than 50 per cent of wives reported that they were below age 30, with the median being 29 years. The husbands were generally older, with a median age of 34 years. It is worth noting that 12 per cent of the Yakan wives belonged to ages 45 and above and supposedly had passed the age of child-bearing.

The Sama ethnic group reported the lowest mean number of children ever born (CEB): 3.4 and 3.5 for wives and husbands, respectively. The highest mean CEB were those of Yakan wives (4.4) and Yakan husbands (4.3) while the Tausug were intermediate at 3.9 and 3.8. It is significant that 18 per cent of Yakan wives and 14 per cent of Tausug women reported having eight or more children ever born but less than five per cent of Sama wives were so classified.

In terms of child mortality, almost 50 per cent of Yakan wives reported having child losses (with about 15 per cent reporting three or more children dead) compared to about 31 per cent of the Tausug and only about five per cent of the Sama. The mean child loss for the Yakan is almost one child to only half for the Tausug and almost none for the Sama. This is a rather surprising finding since the

health facilities (or the lack of them) were about the same in the three provinces. Two possible explanations could be offered for this unusual difference. First, the Sama ethnic group may be reluctant to report child loss since it may bring back painful memories. Second, the high rate of child mortality among the Yakan and the Tausug may be attributable to the large scale encounters between the government's armed forces and the Muslim secessionist group of the Moro National Liberation Front (MNLF) in the provinces of Sulu and Basilan during the 1970s.

Education levels were generally very low among the respondents. A majority of the wives and 41 per cent of the husbands had never received any formal schooling. The Tausug appears to be an exception, with 83 per cent of the husbands and 73 per cent of the wives having some schooling, and 32 per cent and 26 per cent respectively having reached tertiary education. The Yakan wives were the least educated with 71 per cent having "no-formal" education.

Despite the relatively higher levels of education for Tausug husbands, more than one third of them were reported as "not working", compared with 1.1 of Sama husbands and 4.9 of Yakan. One probable explanation for this is that these Tausug men could be students, since the category "not working" grouped housewives and students with those not currently having any occupation. Another finding which would also be linked to the higher education of this group was the relatively large number of Tausug husbands (25 per cent) and wives (20 per cent) in the "white collar"

category, which is composed of administrative, technical, professional and clerical workers. A majority of the Yakan and Sama husbands, but less than 10 per cent of the Tausug, were either fishermen or farmers, and about one-third of the husbands in each group were "blue collar" workers, which included skilled and semi-skilled workers and vendors.

Total family income was utilized in this analysis. The responses of the husbands should be given more weight, not only because they are the breadwinners, as indicated in the previous discussion, but also because of the variation in the answers given by husbands and wives, especially among the Sama ethnic group. Also, a large number of Sama wives did not offer information on income. The Yakan group seems to be the poorest in terms of earnings with more than 70 per cent of them belonging to the lowest two income categories (less than 400 and 400-599 pesos). The Tausug and the Sama earned a mean monthly income of more than 600 pesos (approximately 70 Australian dollars in 1981) while the Yakan reported mean incomes of 400 pesos. Surprisingly, though 34 per cent of the Tausug husbands were reportedly not working, they seemed to be receiving some income. One possible explanation for this could be that they were receiving money from their parents or relatives which they reported as income of their own.

These basic demographic, social and economic characteristics, together with ethnicity and the religiosity index, will be examined in relation to number of children

ever born, family size ideals, and knowledge of family planning through multiple classification analysis in Chapter 5. In the next chapter, religiosity characteristics and fertility differentials will be examined.

CHAPTER 4

RELIGIOSITY AND FERTILITY DIFFERENTIALS

The purpose of this chapter is two-fold. The first aim is to explain the religiosity characteristics of the three ethnic groups. The second is to show the differences between the three Muslim ethnic groups in terms of fertility, ideal family size preferences, and knowledge of family planning. Specifically, the fertility levels of the Yakan, Sama and Tausug wives will be measured through the number of children ever born (CEB). Family size ideals between husbands and wives and among the three groups will also be compared, as will knowledge of family planning methods.

4.1 Religiosity Characteristics

The three religiosity characteristics, described in Chapter 3, were utilized to measure the level of religiosity and its effect on children ever born, ideal family size preference, and knowledge of family planning methods. The religiosity characteristics were grouped together to construct an index of religiosity.

Tabulations of these variables and the constructed index are shown in Tables 4.1 and 4.2 respectively. About 87 per cent of the husbands had prayed at the mosque at least once in the preceding three months compared to 77 per cent of the wives, and more than one-fourth of the men

TABLE 4.1

Religiosity characteristics of respondents
(Percentage distribution of respondents, by sex and ethnic group)

Characteristic	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
Praying in Mosque								
Daily in past 3 months	11.0	14.0	12.1	26.5	18.5	32.3	12.4	25.7
Every Friday	53.6	73.6	48.4	52.4	67.2	53.2	58.4	57.7
Some Fridays per month	0.6	6.2	11.5	1.6	4.8	3.8	6.1	3.4
Never	34.8	6.2	28.0	19.5	9.5	10.8	23.1	13.2
Total %	100.0	100.0	100.0	100.0	100.0	100.1	100.0	100.0
Number of respondents	181	178	182	185	189	186	541	560
Number of days fasted								
0	35.0	6.6	3.8	21.1	7.0	3.7	14.8	10.4
1 - 9	3.3	4.6	9.7	0.5	2.5	2.1	5.8	1.7
10 - 19	45.9	17.3	24.7	16.2	8.0	8.5	29.0	10.8
20 - 29	8.2	23.9	34.9	16.8	11.4	13.2	22.4	13.7
30	7.6	47.7	26.9	45.4	71.1	72.5	27.9	63.3
Total %	100.0	100.1	100.0	100.0	100.0	100.0	99.9	99.9
Number of respondents	183	197	186	185	201	190	566	576
Mean number of fasting days for total sample	15.4	24.2	20.5	25.8	27.2	27.1	20.6	26.8
Mean number of fasting days (excluding those not fasting)	10.3	22.7	19.8	20.5	25.3	26.0	17.7	24.0
Giving Alms (Zakat)								
Yes	57.2	95.5	85.8	55.1	97.5	86.4	79.8	80.3
No	42.8	4.5	14.2	44.9	2.5	13.6	20.2	19.7
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	187	198	190	185	203	191	575	579

prayed daily in contrast to less than one-eighth of the women. This discrepancy is due to the fact that Muslim women are not obliged to pray at the mosque. In the Philippines and other Southeast Asian countries women usually participate in the communal prayer on Fridays and a great number perform daily prayers too, as evidenced by this survey. Moore (1981:125), in an anthropological study of Muslim women in Southern Philippines, observed that women attended communal mosque prayers, although "informants said that prayer at home was an acceptable alternative". Of the three groups, Yakan women seem to be more religious, even when compared to men. Only six per cent of Yakan wives had not prayed at the mosque during the preceding three months. Also, more Yakan women prayed daily and every Friday than their counterparts from the other two ethnic groups. Among husbands, more than 32 per cent of the Tausug performed daily prayers at the mosque, followed by the Sama (26 per cent) and Yakan (18 per cent). However, in terms of the Friday communal services the Yakan and the Tausug men were about the same at 86 per cent.

By number of days fasted, males seem to be more religious, with almost two-thirds claiming to observe the fast for a full 30 days compared to less than one-third of the females. The mean number of days fasted for the total sample was 24 for husbands and 18 for wives, and when calculated on the basis of only those who fasted (i.e. excluding those who did not fast) the means were 27 days for men and 21 days for women. A word of explanation is

necessary for this variation. Though fasting is obligatory for all Muslims, infants, the insane and the sick are exempt. According to Bruno (1973:157) persons who suffer from constant sickness, men and women too old to bear the hardship, and women who are pregnant, lactating, or menstruating are excused, but they should give away a poor man's food every day if this is within their means. They should, however, fast whenever they are relieved of their respective disabilities, even after the month of Ramadan.

About 48 per cent of the Yakan wives fasted for 30 full days. At the other extreme, more than one-third of the Sama women did not fast at all during the Ramadan season. Among husbands, Tausug and Yakan registered the highest percentage fasting for 30 days with more than 70 per cent compared to 45 per cent of the Sama men.

About 80 per cent of the total sample said they gave the obligatory alms (zakat), but the Yakan ethnic group is clearly the most religious if this criterion is used. Over 95 per cent of Yakan couples performed this religious obligation, followed by the Tausug at 86 per cent and the Sama at about 56 per cent. Since the performance of obligatory alms is a joint responsibility of the couple, comparisons between husbands and wives may not be appropriate. Therefore, the percentage figures mentioned above are the couples' average for each ethnic group.

It seems clear that the Sama score relatively low in each of the three religiosity measures. They were

consistently the lowest in terms of frequency of praying at the mosque, number of fasting days observed, and the performance of the obligatory alms compared to the Yakan and Tausug. However, it is not easy to determine which of the latter two ethnic groups exhibited the highest level of religiosity. For this reason an index was constructed which combined the three religiosity measures to form the religiosity index.

4.2 Religiosity Differentials

In the religiosity index the scale ranges from 0 to 7. In Table 4.2 the scores were grouped as follows: 0 to 3 forms the "low" religiosity group, 4 and 5 and considered to be the "medium" religiosity level, and 6 and 7 are the "high" religiosity category. The table shows that the Yakan and Tausug husbands were almost identical in their religiosity scores. However, on average, the Yakan couples can be considered to be the more religious with mean scores of 5.4 for husbands and 5.1 for wives, while the means for the Tausug were 5.5 and 4.2. The Sama couples were relatively lower, especially the women who scored a mean religiosity of 2.9.

There is no ethnographic evidence to validate or negate these findings. The few studies available on the religious practices of the Muslims in the Philippines have been anthropological in nature and are focused on specific groups, like the Tausug or the Yakan. Comprehensive studies

TABLE 4.2

Religiosity Index of respondents
(Percentage distribution of respondents, by sex and ethnic group)

Characteristic	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
Index of religiosity (Range: 0-7)								
Low (0-3)	52.5	11.4	31.4	26.8	11.8	13.7	31.8	17.4
Medium (4-5)	36.7	39.8	46.3	32.2	18.7	19.1	40.9	23.3
High (6-7)	10.7	48.9	22.3	41.0	69.5	67.2	27.3	59.3
Total %	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	177	176	175	183	187	183	528	553
Mean index of religiosity	2.9	5.1	4.2	4.3	5.4	5.5	4.1	5.1

of the Sama of Tawi-Tawi, and in particular of their religious practices, were not found. One important observation from the review of literature is the absence of a comparative study of the religious practices of these three Muslim ethnic groups.

A major finding of this study that can be substantiated by existing studies is the degree of religiousness (or religiosity level) of the Yakan, Tausug and Sama Muslims. Table 4.2 shows that the mean religiosity score of each ethnic group is in the "medium" classification (4 to 5 scores) both by sex and across ethnic groups, except for Sama wives, whose mean religiosity score of 2.9 belongs to the "low" religiosity category. In the discussion of religious practices in Chapter 2, it was indicated that the religious practices of the Yakan, Sama and Tausug were similar to those of Muslims in other parts of the world. Apart from their belief in their Muslim identity, the practices they follow vary greatly. The Five Pillars of Islam - the doctrine of the unity of God whose divine apostle is Muhammad, the five daily prayers, the annual payment of the zakat religious tithe, the annual fast during the month of Ramadan, and the pilgrimage to Mecca - are practised to widely different extents, and the importance attached to each Pillar may vary from one place to another. It seems that compliance with the fundamental orthodox practice of these Five Pillars is rare.

The importance attached to each Pillar may be one possible explanation for the variation in the degree of

religious commitment or religiosity levels among the three ethnic groups. In the case of this study, the location and distance of the mosque may affect the frequency of praying in a mosque. As Gowing (1979:61) has pointed out in his observation of the religious practices of the Muslims in the Philippines, although it is not essential to perform the five daily prayers in a mosque, in most Muslim communities men living near the mosque will attend the noon or sunset prayers, and there is usually very good participation in the Friday noon communal prayers. And, as is customary in Islam, Muslim Filipino women ordinarily perform their prayers in their homes, although on Fridays some women do go to the mosque for the assembly prayers.

4.3 Ethnicity and Children Ever Born

Table 4.3 shows the mean number of children ever born for all women in this sample to be 3.9. The Sama wives exhibit the lowest fertility. The Tausug are intermediate with 3.9 and Yakan women the highest at a mean CEB of 4.4. These differences persist after standardization. Across all age groups Sama women display lower fertility compared to the other two ethnic groups, while the Yakan have a slightly higher mean CEB than the Tausug in all age groups, except the 35-39 category where the two groups are equal.

The CEB differences between groups were slight in the youngest (15-24) age group, but by age group 25-29 the Sama already had one child less than the other two groups. For

TABLE 4.3

Mean Children Ever Born Among
Married Couples by Sex, Age Group and Ethnic group)

Age Group	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
15 - 24	1.6(23)	1.9(46)	1.8(38)	1.6(11)	1.8(25)	1.6(24)	1.8(107)	1.7(60)
25 - 29	2.4(49)	3.5(42)	3.4(67)	2.3(21)	2.7(35)	2.9(40)	3.1(158)	2.7(96)
30 - 34	3.5(39)	5.1(32)	4.8(27)	2.3(33)	4.0(36)	4.1(39)	4.3(98)	3.5(108)
35 - 39	4.6(41)	5.3(23)	5.3(24)	3.7(48)	4.5(29)	4.2(26)	5.0(88)	4.1(103)
40 and above	5.2(23)	6.7(44)	6.4(22)	4.9(59)	6.4(60)	5.3(46)	6.2(89)	5.6(165)
Observed Mean	3.4(175)	4.4(187)	3.9(178)	3.5(172)	4.3(185)	3.8(175)	3.9(540)	3.9(532)
Standardized Mean	3.2	4.3	4.1	3.3	4.4	4.0	3.9	3.9

Note: Standard population is the total sample population for each sex

the oldest age group, above 40 (when childbearing is mostly completed), the Sama have on average 5.2 children, 1.2 to 1.5 less than the Tausug and Yakan women of the same age.

There are no existing studies available to validate these findings, nor do ethnographic studies indicate the factors that motivate these three Muslim ethnic groups to have many or few children. One of the aims of this study is to determine why these rather striking differences are found. One factor which will be considered is religiosity, and it should be remembered that the Sama women were found to have a lower score on the religiosity index used in this study.

4.4 Ethnicity and Ideal Family Size

The concept and measurement of family size preference is as diverse as the number of its proponents (see for example Rahman, 1983:1-7). In this discussion the question that measured ideal family size was: "What do you think is the best number of children for an average couple in this barangay (village)?" The question is concerned not with the personal ideal of the respondent but rather with the general ideal.

Table 4.4 reveals that the ideal family size preferences of the respondents ranged from three to six children with husbands having a slightly higher mean ideal family size (IFS) of 5.1 compared with 4.8 for wives, a

TABLE 4.4

Perceived Ideal Family Size Among
Married Couples By Sex and Ethnic Group

Number of perceived ideal family size	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
1	3.8	0.5	1.6	3.9	0.5	0.5	1.9	1.6
2	6.6	4.6	3.1	5.6	2.0	3.2	4.8	3.5
3	7.7	14.9	13.6	7.2	9.0	11.1	12.2	9.1
4	15.9	30.4	24.1	15.6	33.5	19.5	23.6	23.2
5	14.8	23.2	38.2	12.8	19.0	40.5	25.6	24.2
6	31.3	13.4	14.7	27.2	18.5	21.6	19.6	22.3
7	7.7	5.2	2.6	8.9	8.0	1.1	5.1	6.0
8 or more	12.1	7.7	2.1	18.9	9.5	2.6	7.2	10.2
Total %	99.9	99.9	100.0	100.1	100.0	100.1	100.0	100.1
Number of respondents	182	194	191	180	200	190	567	570
Mean perceived ideal family size	5.2	4.7	4.6	5.4	5.0	4.8	4.8	5.1

difference which is found in each of the three ethnic groups. Sama couples who had the lowest achieved fertility, had the highest mean IFS (more than five children) while the Tausug had the lowest at less than five. For both sexes the perceived ideal family size modes are six children for Sama, five for Tausug and four for Yakan couples. It is also worth pointing out that while the family size ideals of both Yakan and Tausug started tapering off after five children, over half of the Sama stated six children or more as the ideal.

Table 4.5 shows that for the whole sample, age, as expected, is closely related to family size ideals. The difference between the youngest age group (15-24) and the oldest group (40 and above) is quite marked, with the mean IFS of younger wives 4.0 and of older wives 5.5. The difference between the two age groups among husbands is about one child (4.5 compared to 5.7). This pattern is strongest among Sama and Yakan, but is less pronounced among the Tausug, particularly the husbands where there is little difference in mean IFS between the youngest and oldest respondents.

To verify the effect of age on ideal family size the mean IFS was standardized using the total sample population of each sex as the standard population of that sex for each ethnic group. The difference between husbands (5.1) and wives (4.8) remains the same after standardization. The variation of the mean IFS among ethnic groups still

TABLE 4.5

Mean Family Size Ideals Among
Married Couples by Sex, Age Group and Ethnic group)

Age Group	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
15 - 24	3.7(28)	3.9(50)	4.2(46)	4.1(14)	4.2(30)	4.9(31)	4.0(124)	4.5(75)
25 - 29	4.6(52)	4.6(44)	4.5(69)	4.6(23)	4.4(39)	4.5(40)	4.6(165)	4.5(102)
30 - 34	5.6(39)	4.8(33)	4.6(26)	5.0(37)	4.9(37)	4.7(42)	5.1(98)	4.9(116)
35 - 39	6.0(41)	4.7(22)	5.1(24)	5.7(49)	5.0(30)	4.9(29)	5.4(87)	5.3(108)
40 and above	5.9(22)	5.6(45)	5.0(24)	6.1(57)	5.9(64)	4.9(48)	5.5(91)	5.7(169)
Observed Mean	5.2(182)	4.7(194)	4.6(189)	5.4(190)	5.0(200)	4.8(190)	4.8(565)	5.1(570)
Standardized Mean	5.0	4.7	4.6	5.3	5.0	4.8	4.8	5.1

Note: Standard population is the total sample population for each sex

persisted even after standardization, but was reduced slightly for both sexes of the Sama couples and remained the same for the other two groups. The mean IFS was still highest among Sama and lowest among Tausug couples. It seems from this analysis that standardization for age affects mean ideal family size less than number of children ever born. It is worth noting at this point that the group with the lowest CEB (Sama) has a higher IFS in comparison with the other two ethnic groups.

Table 4.6 confirms the widely held notion that respondents with higher numbers of children ever born tend to report high ideal family size preference, either to justify their actual family size or because they believe that their present number of children is the ideal. This pattern is true for all ethnic groups of both sexes. However, those who have reached five children and above tend to have a lower ideal family size than their own. This is particularly true among the Yakan and Tausug wives, with the Tausug women who already have seven children and above having a mean ideal family size of only 4.9.

Controlling for age (Table 4.7), the pattern of women of higher parity (defined in terms of total number of children ever born) having a higher IFS still holds true. However, the younger women (15-29) tend to prefer smaller family sizes with a mean IFS of 4.3 compared to 5.0 for the older women (30 and above). This pattern is strongest among the Sama wives with younger women having 0-2 and 3-4

TABLE 4.6

Mean Ideal Family Size By
Number of Children Ever Born (CEB)
By Sex and Ethnic Group (All Ages)

Number of CEB	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
0 - 1	4.1(40)	3.8(26)	4.0(41)	4.4(38)	4.1(23)	4.2(41)	4.0(107)	4.2(102)
2	4.1(29)	3.7(35)	4.5(19)	4.2(26)	4.0(37)	4.6(19)	4.0(83)	4.2(82)
3	5.0(26)	3.8(16)	4.4(28)	5.0(31)	3.7(14)	4.7(26)	4.5(70)	4.6(71)
4	5.5(25)	4.6(20)	4.5(23)	5.3(22)	4.7(23)	4.7(23)	4.9(68)	5.0(68)
5	5.3(16)	4.9(21)	4.4(17)	5.4(16)	5.0(24)	4.7(20)	4.9(54)	5.0(60)
6	6.0(14)	5.0(20)	5.4(19)	5.9(17)	5.8(19)	5.5(17)	5.4(53)	5.6(53)
7 and above	5.9(19)	5.4(45)	4.9(31)	5.8(18)	5.7(43)	5.1(27)	5.3(95)	5.6(88)
Observed Mean	4.9(169)	4.5(183)	4.5(178)	5.0(168)	4.8(183)	4.7(173)	4.6(530)	4.8(524)

TABLE 4.7

Mean Ideal Family Size By
Number of Children Ever Born (CEB)
By Sex and Ethnic Group (Controlling for Age)

Number of CEB	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
a) Ages 15-29 only								
0-2	3.9(47)	3.8(55)	4.2(52)	4.3(23)	4.0(43)	4.6(36)	4.0(154)	4.3(102)
3-4	4.9(18)	4.1(18)	4.3(31)	4.8(6)	4.1(10)	4.7(19)	4.4(67)	4.6(35)
5 and above	5.7(3)	5.3(15)	4.8(22)	5.5(2)	5.0(7)	4.4(7)	5.0(40)	4.8(16)
Observed Mean	4.3(68)	4.1(88)	4.4(105)	4.5(31)	4.2(60)	4.6(62)	4.3(261)	4.4(153)
b) Ages 30 and above								
0-2	4.5(22)	3.5(6)	4.1(7)	4.3(41)	4.0(17)	4.0(24)	4.2(35)	4.1(82)
3-4	5.4(33)	4.4(18)	4.6(20)	5.2(47)	4.4(27)	4.5(30)	4.9(71)	4.8(104)
5 and above	6.8(46)	5.1(71)	5.0(45)	5.7(49)	5.5(79)	5.2(57)	5.3(162)	5.5(185)
Observed Mean	5.3(101)	4.9(95)	4.8(72)	5.1(137)	5.1(123)	4.7(111)	5.0(268)	5.0(371)

children preferring on average 0.5 children less than their older counterparts. The difference is more than 2 for those with five children and above (4.3 compared to 6.8). It is also worth pointing out that there are more Sama women with 0-2 children in the 30 years and above age group than Yakan and Tausug. This finding may be due to delayed marriage or it may be due to practice of birth spacing through traditional means of birth control such as retroflexion of the uterus to prevent implantation of the foetus which is considered common among Sama women, according to the observation of this writer.

4.5 Ethnicity and Knowledge of Family Planning

Family planning is measured in this study by the level of knowledge, as there was a very low response rate to questions on "ever-used" and "currently-using" specific family planning methods. The highest response rate for method ever-used was pill at about 12 per cent of the total sample with the other popular methods below four per cent: IUD 1.1 per cent; rhythm 3.4 per cent; condom 3.5 per cent; tubal ligation 0.9 per cent; and vasectomy 0.4 per cent. The response rate for questions on "currently-using" was much lower with pill practiced by only about five per cent of the respondents and the other methods insignificant at less than two per cent. The data on attitudes toward family planning are also defective due to the inconsistencies of responses between knowledge and attitudes. The data on personal approval or disapproval of the respondents of the six family planning methods show that the pill was

disapproved of by about 41 per cent of the sample, with 38 per cent approving and 20 per cent having "no opinion". The disapproval rate of the other five methods are: IUD 54 per cent; rhythm 46 per cent, condom 52 per cent; tubal ligation 66 per cent; and vasectomy 58 per cent. Yet, as shown in Table 4.8, a majority of the respondents said that they were not aware of any family planning methods. It is generally accepted that people who are supposedly not aware of something, including family planning methods, may not be in a position to give an honest opinion about their attitude to it.

For these reasons, the analysis of family planning will be measured in terms of knowledge. Specifically, this measure is based on the following question: "What contraceptive methods are you aware of?" As explained earlier, an index was constructed to measure the respondent's generalized knowledge of family planning by giving one point for every method mentioned or a total of six points if a respondent was aware of all six popular methods. Likewise, a zero score was given to a respondent if he/she was not aware of any of the six methods.

Table 4.8 shows that the level of family planning knowledge of husbands and wives is almost the same with a mean number of family planning methods known of 1.5 and 1.4 respectively. Of the three ethnic groups, the Tausug exhibit the highest level of knowledge of family planning with a mean score of two compared to one method or less for the other two groups. For both sexes, more Tausug knew

TABLE 4.8

Percentage Distribution of Number of Family Planning Methods Known Among Married Couples by Sex and Ethnic Group

Number of Family Planning Methods Known	WIVES			HUSBANDS			TOTAL	
	Sama	Yakan	Tausug	Sama	Yakan	Tausug	Wives	Husbands
0	66.5	59.5	39.7	69.9	61.9	37.2	55.2	56.3
1 - 2	20.7	20.5	21.7	13.4	17.8	18.3	21.0	16.6
3 - 4	9.6	12.3	15.3	10.8	12.4	18.3	12.4	13.8
5 - 6	3.2	7.7	23.3	5.9	7.9	26.2	11.4	13.3
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	188	195	189	186	202	191	572	579
Mean number of Family Planning Methods aware of	0.8	1.1	2.2	0.9	1.2	2.4	1.4	1.5

"3-4" and "5-6" methods with more than twenty per cent of them knowing of more than four family planning methods, compared to only eight per cent or fewer of the Yakan and Sama. The factors that may affect the variation in family planning knowledge among these three ethnic groups will be examined through multiple classification analysis (MCA) in the next chapter.

From the preceding discussion on ethnic differences in fertility, ideal family size preferences and knowledge of family planning, some patterns and trends have emerged. The Sama women have the lowest number of children ever born and the Yakan the highest, but the Sama had a much larger ideal family size than the Tausug and Yakan. Among couples, husbands have larger family size ideals than their wives. By level of knowledge of family planning, the Tausug consistently exhibited a much higher level of knowledge than the other two ethnic groups. It should be noted that the Tausug were relatively the most educated of the three groups. It was also observed that a strong relationship existed between the number of children ever born and ideal family size where respondents with more CEB reported larger family size ideals and those with lower CEB reported lower IFS. However, the preference of a smaller family size was noted for some of those with more CEB (six and above).

These differences and variations with regard to fertility, family size ideals, and knowledge of family planning both among couples and among the three Muslim

ethnic groups may be influenced or explained by the level of education or type of occupation. Other variables such as age, ethnicity and religiosity may also have some influence. The effects of these variables in relation to the three fertility-related variables will be analysed through multiple classification analysis in Chapter 5.

CHAPTER 5

MULTIPLE CLASSIFICATION ANALYSIS

A recurring problem in this study is the presence of a quantitative dependent variable and two or more independent variables (which may be quantitative or qualitative), when the objective is to establish the relationships between the independent variables and the dependent variable. Of the various statistical techniques available to social scientists, multiple classification analysis (MCA) is one method that is not only suited for this type of problem, but also seems particularly appropriate given the issues being considered.

MCA is a technique for determining the relationships between a number of explanatory variables and a dependent variable within the context of an additive model (Andrews et al., 1973). It assesses simultaneously how several explanatory variables determine a dependent variable. This method permits the researcher to obtain (1) the net effects of each independent or "predictor" variable on the dependent variable (that is, the deviations of the mean of each "category" or class of each independent variable from the grand mean after adjusting for the effects of other predictors), and (2) the proportion of the variance in the dependent variable which is explained by all of the independent or predictor variables.

MCA offers several advantages over other statistical techniques: 1) analysis using nominal or ordinal-scaled variables becomes possible; 2) multicollinearity, or highly-correlated independent variables, is less of a problem; 3) non-linear relationships may be examined more easily, and 4) output is more readily understandable (Andrews et al., 1973). Some of the variables, such as ethnicity, education and occupation, are in fact measured at only the nominal level.

The statistics presented by MCA show how each independent variable or predictor is related to the dependent variable, both before and after adjusting for the effects of other predictors. Unadjusted deviations are simple deviations from the grand mean. Adjusted deviations are deviations from the grand mean, taking into account the effects of other variables. Eta is a measure of association similar to a simple correlation coefficient while beta is a measure of the independent contribution of each variable to the collective relationship established by the MCA model, after controlling for other variables in the model. In other words, beta is an indicator of the relative importance of independent variables in their joint explanation of the dependent variable. R-squared (R^2) is the ratio of the regression sum of squares to the total sum of squares and represents the proportion of the variance in the dependent variable explained by all the independent variables (Phillips, 1978).

Three fertility-related variables were chosen as dependent variables for the MCA. These were children ever born, ideal family size preference, and number of family planning methods known. Besides religiosity, the variables used as predictors were ethnicity, education, and occupation (or husbands' occupation when wives were the unit of analysis). Age was also used as a predictor for ideal family size and knowledge of contraceptive methods, and as a "covariate" for children ever born. The reason for using age as a covariate for CEB is that age is highly correlated with CEB, i.e. the older the woman the higher the CEB and the younger the woman the lower the CEB.

5.1 Effects on Children Ever Born

The unit of analysis for children ever born will be women only. Table 5.1 indicates that education is the most important of the four predictors, with the direction of the effect as expected: the widely accepted hypothesis of an inverse relationship between education and fertility is confirmed in this study. Before adjustments, the deviation from the grand mean was highest in the lowest education level category, which is "no schooling", and correspondingly decreased as the level of education increased. The exception was the highest education category where the mean number of CEB started increasing slightly. However, after adjustments, the inverse relationship of fertility and education were proven up to the highest level, which is tertiary education or collegiate level in this study.

Table 5.1

Multiple Classification Analysis of Children Ever Born Among Currently Married Women, Aged 15 and Above, using Age as a Covariate

Grand Mean = 4.31 Independent Variables	N	Deviations	Eta	Adjusted for Independents & Covariates Deviations	Beta
Ethnicity					
Sama	177	-0.42		-0.37	
Yakan	171	0.42		0.31	
Tausug	165	0.02		0.08	
			0.13		0.11
Education					
None	272	0.29		0.34	
Primary	118	-0.07		-0.09	
Secondary	70	-0.63		-0.53	
Tertiary	53	-0.48		-0.82	
			0.13		0.16
Husband's Occupation					
None	22	-0.59		-0.60	
Farmers/ Fishermen	243	-0.04		-0.21	
Blue Collar	182	-0.06		0.13	
White Collar	66	0.17		0.59	
			0.05		0.11
Religiosity					
Low	167	-0.19		-0.05	
Medium	208	-0.16		-0.15	
High	138	0.48		0.27	
			0.11		0.07
Multiple R squared					0.092
Multiple R					0.303

Note : 69 missing cases

The direction of the effect of husband's occupation on CEB was the opposite of that expected. Of the four categories used, the number of CEB was higher, both before and after adjustments, among the "white collar" category which is composed of professional, administrative, technical and clerical workers. The mean CEB was also consistently lower among those wives whose husbands were reported to be either "not working" or students. This unexpected finding may be due to the age of the wives. The women whose husbands were in the white collar category may be older while those whose husbands were in the not-working category may belong to younger age groups.

MCA confirmed the findings of ethnic variability of CEB shown in the cross-tabulations. The differences persisted even when other variables were controlled and with age as a covariate. The Sama were still the lowest in mean CEB and the Yakan the highest, with the Tausug between. However, the means in the MCA were slightly higher compared to the means from the cross-tabulation (Table 4.3). This variation may be due to the number of cases. In the cross-tabulation 540 cases were processed compared to 513 in MCA. Most of the "missing" cases were Yakan and Tausug wives.

Religiosity was a relatively weak factor as shown by the lower beta value for this variable. MCA did, however, confirm the hypothesis that religiosity and fertility were positively associated. The number of CEB increased

proportionally with the score on the scale of religiosity before adjustment. After controlling for other variables, the mean CEB in the medium religiosity group became slightly higher than in the low religiosity group, but the difference between the low religiosity and high religiosity groups was still quite marked. Overall, Table 5.1 indicates that CEB was weakly predicted by these independent variables or determinants with an R^2 of less than ten per cent.

5.2 The Effects on Ideal Family Size

Separate multiple classification analysis models were formulated for wives and husbands for the examination of the effects of predictor variables on ideal family size. The first reason for this is that sex was found to be a poor predictor of family size ideals in the original MCA model, in which sex was considered as an independent variable. Secondly, some variables were found to have varying effects on the family size ideals for each sex. Thirdly, it is necessary to have consistent or uniform independent variables so that their individual effects on the three fertility-related variables can be compared. The results of both models will be compared in order to determine variations between husbands and wives.

Like children ever born, ideal family size was poorly predicted by ethnicity, education, occupation and religiosity for both sexes with an R^2 of 0.06 for females and 0.05 for males (Tables 5.2 and 5.3). Ethnicity,

however, was an important determinant of family size ideals among wives in comparison to other predictors. Ethnic differences in IFS shown in the cross-tabulations persisted in the MCA with the Sama preferring larger families and the Tausug having a smaller IFS. This pattern is true for husbands and wives, both before and after adjustments. Like CEB, the mean IFS increased slightly in the MCA although the reason for the difference in the number of cases may explain the variation from the cross-tabulation.

Education also makes a large contribution as a predictor of IFS among males. Among women, this predictor came second, after ethnicity. Husbands' education was found to be inversely correlated with ideal family size in this study, particularly after other variables were controlled; the lowest level of education was associated with higher IFS and vice versa. Among wives, this inverse relationship was only confirmed up to the secondary level. Family size ideals increased from the lowest to the second highest education category, and then declined at the highest level. This non-linear relationship of education and IFS was also noted for CEB in other studies conducted in the Philippines (Alfonso, et al, 1980:53).

Husband's occupation seems to be positively associated with family size ideals. Women whose husbands were not working had smaller family size ideals while those in the other three categories had a higher IFS. After adjustments, women with husbands who were either farmers or fishermen had

Table 5.2

Multiple Classification Analysis of Ideal Family Size Among Currently Married Women, Aged 15 and Above

Grand Mean = 4.87				Adjusted for Independents & Covariates	
Independent Variables	N	Deviations	Eta	Deviations	Beta
Ethnicity					
Sama	177	0.33		0.45	
Yakan	171	-0.09		-0.20	
Tausug	165	-0.26		-0.28	
			0.16		0.21
Education					
None	272	0.17		0.18	
Primary	118	-0.09		-0.04	
Secondary	70	-0.41		-0.53	
Tertiary	53	-0.15		-0.15	
			0.13		0.15
Husband's Occupation					
None	22	-0.14		-0.07	
Farmers/ Fishermen	243	-0.02		-0.18	
Blue Collar	182	0.04		0.16	
White Collar	66	0.01		0.23	
			0.02		0.11
Religiosity					
Low	167	-0.09		-0.22	
Medium	208	-0.01		0.01	
High	138	0.13		0.25	
			0.05		0.11
Multiple R squared					0.060
Multiple R					0.244

Note : 69 missing cases

Table 5.3

Multiple Classification Analysis of Ideal Family Size Among Husbands

Grand Mean = 5.05				Adjusted for Independents & Covariates	
Independent Variables	N	Deviations	Eta	Deviations	Beta
Ethnicity					
Sama	181	0.23		0.23	
Yakan	181	-0.02		-0.04	
Tausug	171	-0.22		-0.20	
			0.12		0.12
Education					
None	221	0.23		0.26	
Primary	147	0.03		0.11	
Secondary	86	-0.34		-0.30	
Tertiary	81	-0.33		-0.59	
			0.16		0.16
Husband's Occupation					
None	66	0.04		0.21	
Farmers/ Fishermen	237	0.09		-0.14	
Blue Collar	165	-0.09		-0.09	
White Collar	67	-0.12		0.49	
			0.06		0.14
Religiosity					
Low	96	-0.14		-0.19	
Medium	121	0.28		0.23	
High	318	-0.06		-0.03	
			0.10		0.09
Multiple R squared					0.051
Multiple R					0.225

Note : 49 missing cases

a lower mean IFS followed closely by those with non-working husbands. Women married to white collar workers had a higher IFS, followed by women married to men with blue collar occupations. Among husbands, variability in family size ideals between occupational groups was very low, although white collar workers preferred a slightly smaller family and farmers and fishermen had a slightly higher IFS. After the controls for other variables were introduced, variations from the grand mean rose slightly with non-working husbands having a lower IFS and blue collar workers a higher IFS.

The eta and beta scores for the effect of religiosity on ideal family size were low for both husbands and wives. Like children ever born, family size ideals are also positively correlated with religiosity among wives. Their ideal family size preferences increased from the low religiosity level up to higher levels, both before and after adjustments. However, among husbands the mean IFS rose only from the low to medium religiosity level and then declined in the high level, although the mean difference between the low and high religiosity levels was still quite distinct.

The positive correlation between religiosity and family size ideals was confirmed by an earlier study of Muslim women in the Philippines in which religiosity, as defined by religious service attendance, was directly related to ideal family size. Those attending religious services once a week or more had a mean IFS of 4.9 compared

to 4.6 for those who attended less than once a week (Stinner and Madder, 1975:183).

5.3 Effects on Knowledge of Family Planning

In comparison to children ever born and family size ideals, knowledge of family planning (measured through the number of contraceptive methods known) was better predicted by the five determinants (which included age), with R^2 of 0.34 for males and 0.16 for females. Among the predictors, ethnicity contributed a beta of 0.11 for males and 0.15 for females in explaining knowledge of family planning (KFP). Earlier findings on ethnic variability remained the same with the Tausug having a higher level of KFP and the Sama a relatively lower level. Again, differences were noted between the results of the MCA and cross-tabulation. However, the increase (or decrease among Tausug males) in mean KFP may be due to the discrepancy in the number of cases processed.

Education was a fairly good predictor of family planning knowledge in this study, especially among women. Like CEB and IFS, education was also highly correlated with KFP. The higher the level of education the higher the level of knowledge of family planning and vice versa. This pattern is true for husbands and wives, both before and after adjustments.

Occupation registered the highest effect on KFP among males. The variability of occupation shows a consistent

Table 5.4

Multiple Classification Analysis of Number of Family Planning Methods Known Among Currently Married Women, Aged 15 and Above

Grand Mean = 1.61 Independent Variables	N	Deviations	Eta	Adjusted for Independents & Covariates Deviations	Beta
Ethnicity					
Sama	177	-0.80		-0.71	
Yakan	171	-0.14		0.33	
Tausug	164	1.01		0.42	
			0.22		0.15
Education					
None	272	-0.75		-0.63	
Primary	117	-0.40		-0.49	
Secondary	70	1.40		1.49	
Tertiary	53	2.86		2.35	
			0.35		0.31
Husband's Occupation					
None	22	0.12		-0.23	
Farmers/ Fishermen	243	-0.60		-0.08	
Blue Collar	181	0.18		0.00	
White Collar	66	1.68		0.37	
			0.22		0.04
Religiosity					
Low	166	-0.51		-0.21	
Medium	208	0.49		0.39	
High	138	-0.12		-0.33	
			0.13		0.10
Age Group					
15-24	113	-0.18		-0.22	
25-29	140	0.19		-0.03	
30-34	87	0.23		0.16	
35-39	84	0.15		0.33	
40 & above	88	-0.44		-0.14	
			0.07		0.06
Multiple R squared					0.158
Multiple R					0.396

Note : 70 missing cases

Table 5.5

Multiple Classification Analysis of Number of Family Planning Methods Known Among Husbands

Grand Mean = 1.41				Adjusted for Independents & Covariates	
Independent Variables	N	Deviations	Eta	Deviations	Beta
Ethnicity					
Sama	181	-0.66		-0.39	
Yakan	181	-0.24		0.26	
Tausug	171	0.94		0.14	
			0.26		0.11
Education					
None	221	-0.99		-0.56	
Primary	147	-0.48		-0.19	
Secondary	86	0.86		0.89	
Tertiary	81	2.66		0.95	
			0.50		0.25
Occupation					
None	66	0.03		-0.05	
Farmers/ Fishermen	237	-0.80		-0.50	
Blue Collar	165	-0.28		-0.29	
White Collar	67	3.49		2.53	
			0.53		0.38
Religiosity					
Low	96	-0.48		-0.05	
Medium	121	0.10		0.29	
High	318	0.11		-0.09	
			0.09		0.06
Age Group					
15-24	69	-0.51		-0.40	
25-29	93	0.21		0.09	
30-34	112	0.27		0.06	
35-39	103	0.00		0.02	
40 & above	159	-0.09		0.07	
			0.09		0.06
Multiple R squared					0.339
Multiple R					0.583

Note : 49 missing cases

pattern for both sexes (before and after adjustments). A much higher level of family planning knowledge was noted for white collar professions and a much lower KFP among farmers and fishermen. However, among the wives, this pattern was not rigid, particularly after controls were introduced.

Religiosity is also a weak predictor of number of family planning methods known, as is the case for CEB and IFS. A semblance of a pattern could be noted between religiosity and KFP. It seems that low religiosity is associated with lower knowledge of family planning while higher KFP can be observed among the medium religiosity level. This pattern is true for both wives and husbands, before and after adjustments.

Age was included as a predictor of family planning knowledge. The results of the analysis showed that this variable is a poor predictor of KFP, like religiosity. Among wives, those in the younger age group (15-24) and older (40 and above) registered the least number of contraceptive methods known, and among husbands, the younger age group (15-24) also scored the lowest level of family planning knowledge, both before and after adjustments. Overall, for both males and females, there is a positive association between knowledge of family planning and education, occupation (status), and age, and an inverted-U shaped association with religiosity. There are some exceptions, but this is the general picture of MCA results for KFP.

This chapter has examined the effects of other variables in relation to the three fertility-related variables. MCA has confirmed the inverse relationships of education with CEB and IFS and its positive correlation with knowledge of family planning methods. Occupation was also found to be highly correlated with KFP among males. Age did not make any significant contribution to KFP but was very useful as a covariate of CEB since age is highly correlated with CEB.

In this chapter MCA has also confirmed the results of the cross-tabulations of ethnic differences and number of children ever born, ideal family size preferences and family planning methods known. The Sama had the lowest CEB but higher family size ideals, and had relatively low knowledge of popular methods of contraception. The Tausug had a lower ideal family size and knew more methods than the other two groups. The Yakan, on the other hand, had the highest number of children ever born and a slightly higher ideal family size than the Tausug, and knew of more contraceptive methods than the Sama. The differences between the sexes were also confirmed by MCA with wives preferring a smaller family size and husbands knowing more family planning methods.

Finally, the hypothesis of a positive association between religiosity and fertility was confirmed by MCA. Children ever born and ideal family size were higher with higher levels of religiosity and correspondingly lower with

lower religiosity. To a large extent, direct relationships were also established between knowledge of family planning and religiosity. The low and high religiosity levels were associated with a small number of contraceptive methods known while medium religiosity level was related to higher number of family planning methods known.

CHAPTER 6

SUMMARY AND CONCLUSION

This study began with a review of literature on the effect of religiosity on fertility. Although the literature review indicates many links between the degree of religiosity and fertility, especially in Christianity and Judaism, this could not be said in the case of Islam. There is almost a total absence of studies investigating the effect of religiosity on fertility among Muslims.

The study then attempted to apply to Muslim communities in the Philippines the general hypothesis that the greater the strength of religious adherence or religiosity of a person, the higher the fertility. Specifically, it set forth three objectives: 1) to determine the fertility levels and differentials of the three Muslim ethnic groups; 2) to compare the family size ideals of these three ethnic groups, including those of husbands and wives, and 3) to find out the levels of knowledge of contraceptive methods, both among husbands and wives, and among the three Muslim groups.

The data utilized for this study are from the 1981 Family Planning Knowledge, Attitudes, and Practice (KAP) Survey Among Muslim Couples in Region IX, conducted by the Western Mindanao State University in Zamboanga City, with a total sample size of 1,167.

The main finding of this study is that the hypothesized positive relation between religiosity and fertility was confirmed even after controlling for education, occupation, ethnicity and age. Muslim couples who score higher on a religiosity index exhibited higher fertility (as measured by mean number of children ever born) and had larger family size ideals than those who scored lower. On the other hand, an inverted U-shaped association was shown between religiosity and number of family planning methods known.

Education was found to be the most important predictor to children ever born, ideal family size and knowledge of family planning for both sexes. Ethnicity was a good determinant in relation to number of family planning methods known for both husbands and wives, and ideal family size for females. Occupation was also a good predictor for level of knowledge of family planning among males. Religiosity was found to be a weak determinant with any of the three dependent variables.

Among ethnic groups, it was found that Sama had lowest fertility and the Yakan the highest. The Sama had larger family size ideals with the Tausug lower. The Sama also scored lowest in level of knowledge of contraceptive methods, and the Tausug the highest. Between sexes, husbands had larger family size ideals than wives although they knew more methods of contraception than their spouses.

These contradictory findings may be due to those factors comprising differences in educational and occupational status. It was noted earlier that the Tausug are relatively the most educated in comparison to the other two groups. While the majority of the Yakan and Sama husbands were farmers and fishermen, less than ten per cent of the Tausug belonged to this category. More than one-fourth of Tausug men had "white-collar" occupational status although about one-third of them were also not working. The high level of knowledge of family planning and low family size ideals among the Tausug, and the low level of KFP and high IFS among Sama may be explained by their differences in education and occupation. The high CEB among the Yakan women may be attributed to their low educational status (71 per cent have "no schooling") and possibly lower income but the low CEB among Sama wives could not be explained by education since the Tausug were relatively more educated but had higher CEB. One possible explanation may be delayed marriage among the Sama ethnic group. It could also be that Sama wives are more likely to practice birth spacing through traditional means of birth control such as retroflexion of the uterus, a feature noted earlier in Chapter 4, Section 4.4.

Multiple classification analysis confirmed the inverse relationship between education and children ever born and family size ideals. CEB and IFS decreased correspondingly from the lowest to the next education category, and to a large extent, up to the highest level. Likewise, a positive correlation was found between education and knowledge of

family planning methods. Although occupation was not a good predictor for the three dependent variables (except KFP for males), it showed a pattern in relation to number of family planning methods known among the respondents in this study, i.e. occupational levels were positively correlated with number of contraceptive methods known. White collar workers, composed of professional, technical, administrative and clerical occupations, knew more contraceptive methods than farmers, fishermen, labourers and vendors (although those "not working", possibly students, had the next highest knowledge of contraceptive method). It can be concluded here that there is a correlation between education and occupation on the one hand and knowledge of family planning on the other.

It is worth pointing out in this summary that MCA validated the cross-tabulations with regard to ethnic differences in terms of number of children ever born, ideal family size preferences, and knowledge of contraception. The results of the two statistical techniques varied, although this variation may be traced to the number of cases processed by these two techniques.

Some recommendations can be made from this study. Children ever born, ideal family size preference, and knowledge of family planning methods were not strongly predicted by the determinants utilized. This was due in part to the predictive model used, and may also have come about because other variables which may have greater

influence on these dependent variables (for example, age at first marriage, marital duration, length of breastfeeding, and so forth) were not measured in the survey and thus were not taken into consideration in this analysis. Future research regarding the fertility of the Muslim population of the Philippines should take this into consideration.

The case of religiosity is also worth considering. If it was a poor predictor of the fertility-related variables it may be possible that the religiosity measurements were not comprehensive. Additional indicators of religiosity, such as performance of five daily prayers (not necessarily in the mosque), religious education, knowledge of the Qu'ran, observance of dietary and other regulations, and performance of other religious obligations, should be incorporated into the index of religiosity. Likewise, a separate MCA model could be made to determine which religiosity measurements or characteristics are closely related to fertility. It should be noted that among Muslim women in Thailand, religiosity (measured through attendance at religious school) was found to be negatively correlated with fertility (Ratchapaetayakom, 1983).

One especially valuable lesson to be learned from this inquiry - and one which cannot be stressed too strongly - is the error in generalizing from the official doctrines and theology of a religion to the fertility behaviour of its adherents. As observed by one social scientist, researchers studying the effects of Islam on fertility, as well as

policy makers who base their decision-making on this research, have been more prone to commit this error than those examining the effects of Christianity or Judaism on fertility (Chamie, 1981). The findings in Lebanon, where intrafaith comparisons yielded fertility differentials that were as large or larger than those obtained from interfaith comparisons, are attested by the findings of this study. Although the three groups are Muslims, their fertility levels vary, their family size ideals differ, and their knowledge of family planning methods are not similar.

In the Philippines the Muslims are usually assumed to be an homogenous group, and thus a uniform set of policies and programs, including the population program, is formulated. Yet this study has pointed out that the three Muslim ethnic groups vary not only in their social, economic and religious characteristics but also in their demographic behaviour. Thus, different approaches and strategies should be developed to cater for each of the different ethnic groups depending upon their needs and expectations and level of development.

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APPENDIX

Excerpts of the Questions from the Interview Schedule "KAP Survey among Muslim Couples in Region IX"

B3 When were you born? _____ month / year

B4 When was your spouse born? _____ month / year

B5 How old were you on your last birthday? (COMPUTE AS OF LAST BIRTHDAY) _____years

B6 How old was your spouse on his/her last birthday? (COMPUTE AS OF LAST BIRTHDAY) _____years

B7 What type of ethnic group do you belong to?

_____ 1 Samal
_____ 2 Yakan
_____ 3 Maguindano
_____ 4 Maranao
_____ 5 Tausug
_____ 6 Other _____ (SPECIFY)

B8 What is the highest year of schooling that you have completed?

B9 What is the highest year of schooling that your spouse has completed?

Respondent		Spouse		
_____	0	_____	0	No Schooling
_____	1	_____	1	Grade I
_____	2	_____	2	Grade II
_____	3	_____	3	Grade III
_____	4	_____	4	Grade IV
_____	5	_____	5	Grade V
_____	6	_____	6	Grade VI
_____	7	_____	7	Some High School
_____	8	_____	8	High School Graduate
_____	9	_____	9	Vocational
_____	10	_____	10	Some College
_____	11	_____	11	College Graduate
_____	77	_____	77	Other

B10 What is your occupation? (WRITE DETAILED DESCRIPTION OF ALL OCCUPATION EXCEPT NONE)

B11 What is your spouse's occupation?

Respondent		Spouse		
_____	0	_____	0	None, housewife, student
_____	1	_____	1	Professional, technical
_____	2	_____	2	Proprietor, manager, administrator
_____	3	_____	3	White collar job
_____	4	_____	4	Farmer, fisherman, unskilled worker
_____	5	_____	5	Foreman, skilled & semi-skilled worker
_____	6	_____	6	Salesman/vendor
_____	7	_____	7	Other _____ (SPECIFY)

VERBATIM _____ (Respondent)

_____ (Spouse)

B12 What is your main source of income?

_____

How much do you earn monthly?

_____ pesos.

B13 Do you have other monthly sources of family income? (IF YES) How much do you get from this monthly?

Member of the Family	Source of Income	Amount
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total Family Income (ADD MAIN SOURCE OF INCOME AND OTHER SOURCES OF FAMILY INCOME) _____

B18 During the past 3 months, how many times did you pray at the mosque?

_____ 1 Daily
_____ 2 Every Friday
_____ 3 3 Fridays a month
_____ 4 2 Fridays a month
_____ 5 Never
_____ 7 Other _____ (SPECIFY)

B21 Did you perform the fast during Ramadan last year?

_____ Yes
_____ No

(IF YES) For how many days did you fast?

_____ days

B22 Did you give zakat last year?

_____ 1 Yes
_____ 2 No

B23 Have you performed the haj?

_____ 1 Yes
_____ 2 No

C2 How many living children do you have altogether including those staying elsewhere? (R's CHILDREN ONLY)

_____ child/children

C4 Have you ever had any child born alive but who later on died? (IF YES) How many?

_____ 0 None
_____ child/children

C5 Altogether, you have ___ child/children born alive, is this correct? (COMPARE RESPONSES IN C2 & C4 TO CHECK IF CONSISTENT)

_____ 0 None
_____ Miscarriage/s

C13 What do you think is the best no. of children for an average couple in a barangay?

_____ children

D1 What manner of contraceptive method are you aware of? (ENCIRCLE Y FOR YES AND N FOR NO IN COLUMN D1 OF CHART)

D2 Have you heard of _____? (NAME METHOD AND ENCIRCLE Y FOR YES AND N FOR NO IN D2 OF CHART)

D3 Have you ever tried using _____? (NAME METHOD AND ENCIRCLE Y FOR YES AND N FOR NO IN D3 OF CHART)

D4 Are you currently using _____? (NAME METHOD AND ENCIRCLE Y FOR YES AND N FOR NO IN D4 OF CHART)

Methods	Aware (D1)	Heard (D2)	Tried Using (D3)	Currently Using (D4)
1. Pills	Y N	Y N	Y N	Y N
2. IUD	Y N	Y N	Y N	Y N
3. Rhythm	Y N	Y N	Y N	Y N
4. Condom	Y N	Y N	Y N	Y N
5. Ligation	Y N	Y N	Y N	Y N
6. Vasectomy	Y N	Y N	Y N	Y N
7. Withdrawal	Y N	Y N	Y N	Y N
8. Abstinence	Y N	Y N	Y N	Y N
9. Foam Tablets	Y N	Y N	Y N	Y N
10. Injectables	Y N	Y N	Y N	Y N
11. Other methods (SPECIFY)	Y N	Y N	Y N	Y N