

The Effect of Women's Status and Roman Catholicism on Fertility of Catholic Women in Thailand

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Introduction

In Thailand, Catholics is a minority that comprises approximately 0.5% or 250,000 of 62 million Thai population in year 2000 (Catholic Commission on Mass Media, 2000). Despite fertility decline of the Thai population during the past three decades (1970-1990), Muslims and Christians still have higher fertility rates than the general population. In 1984 the mean number of children ever born of all Muslim was 3.4 while of Buddhist was 2.8. (Kamnuansilpa and Chamratrithirong, 1985) In 1990, it was found that 42.6 percent of Muslim and 34.3 percent of Christian women had children ever born that is higher than 27.3 percent of Buddhist women (NSO, 1990). National family planning program was attributed to the success of reducing fertility rate among married couples during 1970-1990 but it is not known whether the program is effecting the fertility behavior of all minorities in the country.

Catholics in Thailand live together with majority Thai Buddhist without conflict. They can share way of living and work with general population. Thai people see that the way of living of Catholics is not different from of the general population (National Catholic Survey Office, 1974). However Catholics keep their identity by practicing religious activities according the Catholic's tradition and teaching. One relevant teaching that directly effects women is the teaching of the Church on birth regulation that allow only natural birth control and pronatalism.

In Thailand natural birth control caused double birth control failures when compared to modern contraceptives (Chamratrithirong et al., 1997). With the teaching of the Church Catholic women in Thailand may face some problems such as birth

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control failures and have many children born to them. Since little is known about Catholic population in Thailand this study help in providing demographic knowledge especially on contraceptive knowledge, attitude, practice and problems of Catholic women. The appropriate family planning services and health care will be provided to them and to all groups of the population in Thailand especially those who believe in pronatalism such as Muslim, Karen and other hill tribe groups.

Objective

This study aims to investigate the relationship between characteristics and status of Catholic women and Catholicism on fertility behavior of married Catholic women in Thailand.

The study is based on the Theory of Freedman (1961-1962 cited in Mahadevan, Reddy and Naida, 1986), on The Sociology of Human Fertility which suggested that fertility analysis should include many social factors and that there are complex relationships between factors. The fertility of each community depends on the social norms of the community. Therefore the number of children varies according to the goals of each society. Some significant factors related to fertility are way of living, the division of work within the family and other functions of family members that related to women's status and fertility. Moreover the communication and cooperation of spouses on contraceptive use are also related to fertility (Freedman, 1961-1962).

It has been argued that religions can shape fertility through creating norms about reproduction. If the religion strongly promotes a doctrine that directly or indirectly affects fertility. Most of research related to this issue has been related to Roman Catholicism, which has allowed only natural contraceptive methods and supports large family sizes. Findings have varied among areas. This suggests that relationship between religion and fertility may be influenced by other factors in society and differences of religious characteristics in each society.

In this study, the factors related to fertility are emphasized on general characteristics that are age and age at first marriage, education, women's father education of and wealth of household, status of women which included spousal communication and decision-making in family, finally religiosity that included belief in Church authority, religion of husband, years in Catholic school and Church attendance.

Women's general Characteristics

In Thailand as well as in many other countries, persons gain specific rights such as marriage rights, with age. Women in Thailand have the right to legally marry at age of 18 and can legally vote at the same age. This means that they achieve their rights according to their age not by reason of their intellectual ability or maturity. Catholic women are similar to all Thai citizens that are now exposed to the wider Thai society and have received the benefits from modernization such as formal education, communication and infrastructure. With the benefit gained with age they probably accept modern fertility behavior. Navachinda (1989) found that the mean number of desired family size increased with age. Siripirom (1976) and Boodsayasakul (1977) (cited in Aksornkool, 1980) indicated a positive relationship between age and family size preferences among Thai women. The findings indicate that age of women has a strong influence on ideal family size, suggesting the tendency of older women to desire a larger family size. Saibua (1979) also found that the number of children ever born and the desire for additional children increased when the age of women increased.

The prevalence of contraceptive use among women who married later is usually higher than those who married at earlier ages. (McDonald, 1984 cited in UN,1987). In the United States, there is a clear relationship between age at marriage and the number of children born to women. It was found that the younger the bride, the more children she expected to have in her marriage (Veevers, 1973 cited in Weeks, n.d.). Saibua (1979) used an economic framework to explore factors related to the fertility of women aged 15-49 in rural and urban areas in Thailand. Women's age at first marriage was found to have a strong negative and significant impact on fertility both in rural and urban areas. Thai women have a significant role in selecting their spouses,

which may lead to an increasing age at marriage. It was found that the singulate mean age of marriage of Thai women was 22.8, 23.5 and 24.1 in 1980, 1990 and 2000, respectively (NSO,1980, 1990, 2000).

Higher education for women can work indirectly to reduce fertility in at least three ways. First, by delaying marriage. Second, by reducing desired family size by stimulating women's interest in higher level of living and in work outside the home. Third, by enabling couples to do actual reproduction according to their desire (Mueller, 1993). In Catholic countries such as Brazil, Martine (1996) found that women age 45-54 with no schooling reported an average of 7 live births while those with four years of schooling reported 4.6 births, and those with ten years of schooling report three or fewer births.

In Thailand, Navachinda (1989) found that increases in women's education is related to a decrease of desired family size. Changes in the mean desired family size were strongly related to changes in women's education. The findings indicate a negative relationship between women's education and their desired family size.

Father's education gives effect to fertility of women. In Pakistan, children of low education and unskilled fathers were more likely to have lower education than children of high education fathers (Sathar et al.,1988). In the Philippines, Johnson and Burton (1987) suggested that in order to estimate the net effects of religion on the desired number of sons and daughters, it was necessary to control the effects of other related social and economic factors. In Thailand, traditionally the social ranking of female depended on their ties to men. In childhood, a girl's status was determined by her father's position in society as indeed a boy's status was. But a boy was expected to find his own level in society as soon as he grew up and became independent. This was not so for women (Navachinda, 1989).

Household wealth is also a proxy index of a couple's income and the status of women. Many findings show a relationship between household wealth and fertility. Soothipong (1995) found a positive relationship between household wealth and fertility

among the Karen in the northern provinces of Thailand. Karen who had higher household wealth had more children than others. This was due to problem of malnutrition among the poor Karen that caused late menarche and early menopause, therefore their reproductive period is shorter than others.

This study considered material possessions only as a proxy for modern behavior and measured it in terms of assets owned by families. The value of assets owned was calculated by the sum of the number of items owned and the corresponding prices of the possessions such as television, bicycle, motorcycle, radio, refrigerator, rice cooker, car.

In this study, age, age at marriage, education, women's father education and wealth of household are used as general characteristics to explain variation of number of children ever born. It is hypothesized that women at older age are more likely to have more children than the younger ones. Women who married at younger age are more likely to have more children than women who married at older age. Women who have higher education and higher education of father are more likely to have fewer children than women who have lower education and lower father's education. Women who have higher level of household wealth are more likely to have fewer children than women with lower level of household wealth.

Women's status

Spousal communication reflects the relationship of couple and their equality. The communication between spouses especially on fertility may help them practice more effective birth control. It was found that the absence of close bonds between spouses and communication on matters relating to sexuality and contraception was a potential constraint to the practice of contraception (Bulatao, 1984 and Beckman, 1983, cited in Jejeebhoy, 1995).

Married couples who communicate with one another about sex, family size desires, and birth planning, have more empathy with their partner's feelings, a desire for

fewer children and more effective contraceptive use (Rainwater, 1965; Hollerbach, 1980). According to Chayovan et al. (1995), Thai women make decisions in various family matters. Thai couples talk mostly about their daily expenses and events that occur in their local communities. The number of children desired and contraceptive use is secondary topics in their daily communication. Spousal communication had little negative effect on the number of children ever born and desired number of children among the Thais.

Decision-making in the family has been used as an indicator of the status of women. The decision making of women in family matters, especially in terms of contraceptive use and number of children desired, reflects their autonomy.

The study of Lloyd (1991) showed that when women were unable to determine the timing of births or their family size, they lose ability to plan other aspects of their lives. Normally Thai women make decisions on family matters. Chovoyan et al. (1995) found that women have higher decision-making power than do men in family matters. But the finding indicated a weak relationship between decision-making in the family and the number of children ever born and desire for more children. This was possibly a result of the measurement of the indicator and the construction of women's status index.

In this study in the year 2000, spousal communication and decision-making index is constructed. It is hypothesized that women with high spousal communication and more decision-making will have fewer children.

Religiosity

Faithfulness to God of individual Catholics is difficult to interpret and measure, but their relationship to the Catholic Church and community can be measured by their participation in religious activities.

The findings and above theories lead to the conceptualization that in Thailand Catholic women are expected to express their belief in God and their obedience towards the Church through their religious activities that include 1) Mass attendance 2) Catholic socialization in Catholic school 3) Religion of husband 4) Belief in Church authority

Catholics who attend mass often have more chance to hear the teaching of the Church, especially related to pronatalism, from priests and other Catholics friends. Mosher and Goldscheider(1984) found that in United States Protestant women who attend Church services more frequently had higher fertility than those who attend less often. Among Catholics, regular church attendance is associated with a higher proportion not having sexual intercourse than among other religious. Catholics who attend Church more regularly are less likely to use contraceptive methods. The effects of church attendance among Catholics seem to increase the use of male contraceptives and reduce the use of female contraceptives, perhaps reflecting the greater effects of religious belief on the role of women (Goldscheider and Mosher,1991). This was probably due to other socio-economic effects on reproductive behavior of women rather than religious factors. In contrast in United States, Sander (1992) found that Church attendance was unrelated to number of children ever born.

In this study, a Church attendance index, which measures frequency of Church attendance within the previous six months is one indicator of religiosity of married Catholic women. It is hypothesized that married Catholic women who attend Church more will have more children because they are more likely to hear more about the teaching of the Church on pronatalism at mass.

Many findings indicated that years in Catholic school positively associated with fertility of Catholic women. Such as the study of Johnson (n.d. cited in Sander, 1992) has shown that the number of years of education at a Catholic college or university is positively associated with high fertility and a pronatalist effect. The lack of Catholic education among Mexican Americans, particularly at the high school and college level, may contribute to the minimal effects of religion on family size among Catholics (Alvirez,1973). In contrast, Goldscheider and Mosher (1991) found that

Catholic religious school does not have an effect on contraceptive patterns. Those who attended Catholic school are not very different from those who had no religious schooling, except for the general Catholic effect of having lower levels of female sterilization (21 per cent of those with some exposure to Catholic school compared to 30 per cent for those with no religious schooling).

In this study, Catholic education is an index of religiosity and it is measured by years of education of Catholic women in Catholic schools. It is hypothesized that women with more years in Catholic school would have more children because in Catholic school they are more likely to be trained Catholic norm and pronatalism from Catholic school.

Sander (1992) found that the Religion of husband had a relationship with fertility. Those women with a husband who was currently a practicing Catholic had higher fertility, while those with a husband with a Catholic upbringing also had higher fertility than women whose husband was not Catholic. His study showed that the number of children ever born was affected when either Religion of husband or the wife's religion was used in the analysis. The Religion of husband is an index of religiosity of married Catholic women in this study. It is hypothesized that married Catholic women with Catholic husbands would have a higher number of children ever born than others with Buddhist husbands or husbands of other religions. Catholic couples are more likely to practice pronatalism better than the mix-marriage couples because they are taught and share each other the same teaching.

Conformity on the teaching of the Church on birth regulation is related to belief in Church authority. Westoff and Jones (1977), directly measured conformity with Church teachings through the percentage of women who never used any form of contraception or used the rhythm method only. Almost all U.S. Catholic women married after 1966-1970 abandoned Church teaching on birth control by the time that they have been married 10 years. Only 12 percent of the Catholics born in 1971-1975 conformed to Church teaching during the first five years of marriage.

In this study, the conformity with the Church on birth regulations is indirectly measured through the expressed belief in the Church hierarchy. This serves as an index of religiosity of Catholic women. It is hypothesized that married Catholic women with a high degree of belief in Church authority would be more likely to believe the teachings of the Church on birth regulation and pronatalism therefore they would be likely to have more children than women with lower levels of religiosity. This is because belief in Pope, Bishop and priest is closely related to belief in their teaching. Goldscheider and Uhlenberg (1969) also found a higher number of children born to American Catholic population due to better education, more church affiliated or training in Catholic related schools. Therefore religiosity factor in this study included belief in Church authority, years in Catholic school, religion of husband and Church attendance.

With the concepts mention above the explained variables in this study are age, age at first marriage, education, women's father education, wealth of household, spousal communication, decision-making in family, Church authority, years in Catholic school, religion of husband and Church attendance.

Methodology

This study employs data collected using both quantitative and qualitative approaches. A sample survey provides information about demographic characteristics, fertility patterns, contraceptive use, religious affiliation, and women's status. In-depth interviews were conducted to provide more depth to the data obtained from the surveys. The in-depth interviews collected information on women's behavior, norms and attitudes towards religion, women's status and decision-making on fertility.

Design and Study Population

In the survey year 2000, study areas were selected from the most populous Catholic community, which is justified by number of Catholics registered with the Church in the Diocese. The Bangkok Archdiocese and Tharae Archdiocese were

selected. In each Archdiocese, one Cathedral/Church was drawn using the same criteria as that for selecting the Archdiocese. St.Peter's Church in Nakhonpathom and Tharae Cathedral in Sakonnakhon were chosen. A sub-district where the Cathedral/Church is located was drawn.

Because of the limitation of time and resources, the sampling frame covered both Catholic and non-Catholic population in addition with refusing and women were not at home at the time of interview, the sample of 600 households in each sub-district is drawn. Every village in the sub-district and every household in the village were included in the sampling frame. Households in each sub-district were systematic random sampling selected and one Catholic woman aged 15-49 in the sample household was selected by simple random sampling technique. At the end, 517 households in two Catholic communities were selected.

For qualitative study twelve persons were in-depth interviewed based on number of children and the use of contraceptive. There are seven women were interviewed. In addition three mothers of respondents who were over 60 years old and currently live with women were interviewed in order to get more detail on changes in Catholics' reproductive behavior among two generations. Two Catholic priests were in-depth interviewed to get the stance of Church at present.

Results

Fertility of Married Catholic Women

This study, there are 313 married Catholic women. The cumulative fertility measured with number of children ever born to married Catholic women age 15-49 is dependent variable. The finding shows that 294 or 93.9 percent of married women have 1 to 6 children ever born. 25.2% of them have 1 children ever born. 43.2% and 18.7% have 2 and 3 children. 8.5, 3.1 and 1.4 percent of women have 4,5,6 children ever born respectively. The mean number of children ever born is 2.2. This finding indicates that the mean number of children ever born of mother generation of women was 6.7.

Table 1: Average children ever born by characteristics and age groups

Characteristics	16-29	30-39	40-49	All ages
Age at first marriage				
14-19	1.85	2.46	3.26	2.54
20-24	1.37	1.81	2.92	2.17
25-36	-	1.58	2.07	1.77
Education				
Primary	1.81	2.09	2.92	2.40
Secondary	1.89	1.94	2.67	2.06
Tertiary	1.00	1.58	2.33	1.67
Education of women's father				
Primary	1.48	2.05	2.86	2.26
Secondary	2.00	1.75	1.50	1.80
Tertiary	2.40	1.70	2.67	2.04
Wealth of household				
Low	1.80	2.19	3.43	2.39
Average	1.72	2.02	3.05	2.27
High	1.40	1.81	2.59	2.11
Spousal communication				
Low	1.67	2.36	3.00	2.39
Average	1.78	1.88	3.00	2.31
High	1.56	1.92	2.73	2.73
Decision-making				
Low	1.33	1.43	2.43	1.82
Average	1.67	2.03	2.64	2.21
High	1.62	1.97	2.89	2.23
Belief in Church authority				
Low	1.00	1.33	2.00	1.40
Average	1.83	2.14	2.96	2.33
High	1.59	1.90	2.73	2.19
Religion of husband				
Non-Catholic	1.80	1.65	2.47	1.91
Catholic	1.53	2.06	2.88	2.29
Year in Catholic school				
0	1.74	1.86	2.55	2.00
1-4	0.50	2.21	3.05	2.64
5 up	1.52	1.76	2.52	1.92
Church attendance				
Less than once per month	1.76	1.86	2.86	2.13
Once and more per month	1.54	1.99	2.80	2.23

Mean number of children ever born (CEB)

The relationship of each independent variable and number of children ever born is analyzed by comparing mean of children ever born. The statistical significance of differentials among categories of independent variables and dependent variable is based on analysis of variance (see table 1). The findings indicate that characteristics of women, women's status and religiosity of women have no statistical significant effect on number of children ever born of women when comparing mean within the age group and characteristics of women. This is probably due to the number of samples in this study was limited therefore there was no variation in characteristics of women and number of children ever born. The other reason is probably married Catholic women in these two Catholic communities really have similar characteristics, status of women and religiosity that give similar effect to number of children. Moreover the new generations of Catholics is developed together with the general Thai. Thai people have limited their number of children to average number of children ever born of 2.00 (Charattrithirong et. al., 1997), therefore Catholics as part of general population tend to have the same number of children.

Factors effecting number of children ever born

In the multivariate analysis all variables which consist of women's general characteristics, women's status indices and religiosity indices are included in three multiple regression models. Women's general characteristics comprise age, age at first marriage, education, education of women's father and wealth of household. Women's status indices comprise the spousal communication index and decision-making index, and the religiosity indices comprise belief in Church authority, years in Catholic school, religion of husband and Church attendance. All variables are entered into model to jointly explain the variation in children ever born. Currently in Thai the compulsory level of national education program is grade 0-9. The years of education in this analysis is classified into two categories primary education (6 years or less) and secondary education (7 years and over). The education of women's fathers is entered as years of education.

Table 2: Multiple regression model of number of children ever born by selected characteristics (N=313)

Characteristics	Model 1	Model 2	Model 3
Women's characteristics			
- Age	.085***	.086***	.081***
- Age at first marriage	-.095***	-.095***	-.099***
- Education			
- primary ^{a)}	-	-	-
- secondary and over	-.187	-.194	-.308*
- Education of woman's father	-.007	-.008	.008
- Wealth of household	-.000	-.000	-.000
Women's status			
- Spousal communication	-	-.042	-.057
- Decision-making	-	-.016	-.025
Religiosity			
- Belief in Church authority	-	-	-.068
- Years in Catholic school	-	-	.147*
- Religion of husband	-	-	.137
- Church attendance	-	-	-.004
R²	0.377	0.378	0.397
Degree of freedom	5	7	11
Change in R²	-	.001	.018

Notes: 1. *** Significant at 0.001 level, * Significant at 0.05 level 2. ^{a)} Reference Category

Table 2 presents the results of multiple regression models of number of children ever born by women's characteristics, women's status and religiosity.

In Model 1, age and age at marriage of women are statistical significantly related to variation of number of children ever born. The other three general

characteristics education, education of women's father and wealth of household has no statistical significant effect on number of children ever born.

In Model 2, where women's status variables of spousal communication and decision-making in the family are added, the explained variance in number of children ever born increased from 37.7 percent in Model 1 to 37.8 percent in Model 2. However, spousal communication and decision-making are not statistical significantly related to number of children ever born.

In Model 3, when a set of religiosity variables of belief in Church authority, years in Catholic school, religion of husband and Church attendance are entered, an effect of education emerges and years in Catholic school shows statistically significant effect on number of children ever born. The explained variance in number of children ever born increased from 37.8 percent in Model 2 to 40.0 percent in Model 3 after the set of religiosity variables was entered.

Women's general characteristics

Age could be a proxy for marriage duration. Older married women have given birth to more children than the younger women. The finding indicates that age is positive and statistically significantly related to number of children ever born. When age of women increases 1 year, women have, on average, an additional 0.081 children (see table 2). Women at older ages are likely to have more children ever born. This finding supports the study of Soothipong (1995) and Saibua (1979) that age has strong impact on number of children ever born of women.

The mean age at first marriage of married Catholic women was 22.8, lower than that of the general Thai women of 24.1 in the same year (NSO, 2000 in press). In Thailand, age at first marriage was found to be associated with level of educational attainment (Knodel et al., 1984). Because of social economic development, the Thai government can extend the years of compulsory education to 9 years, therefore Thai women have more opportunity to continue their education. When women have higher

education and have more opportunity in work outside the home, they can develop their social and economic status and tend to support their children to have more education. Close relationship between Catholics within Catholic community may support earlier marriage because Catholic women have more chance to meet Catholic men especially at religious services. Data from in-depth interview shows this relationship.

"In our community we married each other among relatives and friends... There are only few family names in our Catholic community..." (woman aged 49 with 3 children)

Age at marriage of women is statistically significantly related to number of children ever born. When age at first marriage increases one year, the mean CEB decreases by 0.099 children.

Higher education can work indirectly to reduce fertility in three ways. First, by delaying marriage. Second, by reducing desired family size by creating a higher level of living, Third, by exposing women to knowledge, attitudes and practices favorable to birth control, including a higher level of spousal communication that enables them to achieve their reproductive goals in line with their desires (LeVine et al., 1991). Education in this study has a significant and negative effect on the number of children ever born (see table 2). Women with a secondary school level of education have, on average, 0.308 less children than those with a primary school level of education. When women spend time and resources to develop their education and better their standards of living they tend to limit their number of children in order to maintain and improve their social and economic status. The in-depth interview suggests that the majority of Catholic women have low education due to their attitudes towards education and their way of living that does not depend much on education.

"Most Catholics do not like to study much...they like to do farm work or other business...in this way they can be in higher position as business owner not the employee" (aged 49 with 3 children).

Father's education is associated with education of their children, especially the daughter. In Thailand, traditionally both a boy and girl's status was determined by her father's position in society. But a girl depended on their father longer than a boy (Navachinda, 1989). Women who have father with higher education are likely to have higher education and higher social economic status. These women are likely to have fewer children. This study indicates that father's education has no significant association with the number of children ever born of women. This was probably because almost all-Catholic fathers have similar low levels of education. Therefore they probably have low social economic status and could not support their children to high education. Overall fathers of respondents have similar education to their daughters. Catholics has little improvement in education from the old generation to the young generation and the education of old generation has no effect on number of children of the young generation.

In Thailand, Soothipong (1995) found a positive relationship between wealth of household and number of children ever born of Karen women in the north of Thailand. Saibua (1979) considered that material possession was a proxy for modern behavior. It was expected that a negative relationship between material possessions and number of children ever born would be observed, but little relationship was found. The finding indicates that most Catholic women have similar common material assets in their households. The difference in material possessions in this study is only the possession of a car. Only half of women have a car in their households therefore the wealth difference was too small to have an effect on the number of children ever born.

Women's status

As mentioned earlier, spousal communication helps a wife and husband practice more effective birth control (Bulatao, 1984 and Beckman, 1983 cited in Jejeebhoy, 1995). A study in Nepal indicated that women who had communication with their husband had a lower number of children than women who had no communication. In Thailand, the study of Chayovan, Prachuabmoh and Wongsith (1995) found no significant effect of spousal communication and number of children

ever born. Probably Catholic women have similar level of spousal communication in all family matters that were focused on in this study. This finding indicates that spousal communication has no statistical significant effect on number of children ever born. It was found that almost all married Catholic women have a high level of spousal communication. Therefore the variation in communication was too small to show an effect on the number of children ever born. Data from in-depth interviews indicated their close relationship.

"I consulted my husband to have only two children, due to my poor health he agreed with me though he would like to have more children." (aged 33, 2 children)

Decision-making in the family is an important factor related to the number of children ever born. Freedman (1961-1962) suggested that the family structure variables that emphasize the division of work, decision-making and other functions of family members influenced fertility. But the power of women in decision-making in family matters probably differs according to culture and it may be difficult to measure. Chavoyan, Prachuabmoh and Wongsith (1995) found no significant effect of decision-making in family and number of children ever born in Thailand.

Complete decision-making authority of women is probably related to other aspect of religiosity or other social-economic factors. This finding indicates that overall decision-making in family matter among Catholic women is similar. Therefore the difference in decision-making has no statistically significant effect on number of children ever born. In Thailand, women can directly manage and make decisions on family matters. They seek advice or agreement from their husbands only on matters where a large amount of money involved (Yoddumnern et al, 1992). Catholic women, as part of Thai society, probably enjoy decision-making power, especially on contraceptives and number of children. Most tend to practice modern contraception and limit the number of their children to two, which is similar to that of the general Thai population. Spousal communication and decision-making is not statistically related to number of children ever born.

Religiosity

Religiosity is related to education of women. In Model 3 when religiosity factors are entered into the model education emerges as a statistically significant determinant of children ever born. This may be because the Catholic Church has organized Catholic schools for all Catholics and others. Therefore religious behavior is closely related to educational opportunities of women. Married Catholic women who have a high belief in Church authority, more frequent Church attendance, and more years in Catholic school are more likely to have higher levels of education. Because of their faith they probably have the opportunity to continue their education to a higher level in Catholic school with the support of Catholic priest.

General Catholic School in Thailand provides Catechism teaching for Catholic students. Moreover other religious activities are organized such as celebrations of Christmas, Easter and Mass. The more years spent in Catholic school the higher the level of religiosity of Catholic students. However, at the primary school education level they may not be focused on the teaching of Church on birth regulation and the sacrament of marriage. This teaching is ordinarily provided for married couples and adults. But the longer time spent in Catholic school may influence Catholics in their selection of a Catholic mate, preference of Catholic community and number of children. Each extra year of study in a Catholic school was associated with additional 0.147 children. This finding suggests that Church organizations, such as Catholic schools, can effectively socialize Catholic student's Catholic identity.

Three-religiosity variables, belief in Church authority, religion of husband and Church attendance were not related to number of children ever born. Catholicism appears to have a stronger effect on men than women on contraceptive practice and number of children ever born. Women with Catholic husbands are likely to have more children than those with non-Catholic husbands (Sander, 1992, Johnson and Burton, 1986, and Perez, 2000). In Thai society, however, while the religion of husband may be related to other characteristics of women, it may not affect children ever born because of the low levels of fertility in Thai society. It may be that other factors such

modernization and other social economic factors are more likely to have a stronger effect on fertility than the religion of husband. In summary, in Thailand this study found that women with Catholic husbands and Buddhist husbands have a similar number of children

Belief in Church authority was found to be an important variable in the study of Westoff and Jones (1977) who concluded that birth control of Catholic women was negatively associated with their conformity with Catholic Church. The present study uses belief in Church authority as a proxy of belief in the teachings on pronatalism and the teachings of the Church on birth regulation. The findings indicate that belief in Church authority has no statistical significant effect on number of children ever born. This is probably due to the lack of active teaching of the church authorities on pronatalism and the teaching of the Church on birth regulation. According to Freedman (1961-1962), active practice and the good organization of Catholic Church can influence the fertility behavior of women. The doctrine that directly or indirectly affects fertility cannot spread without the active implementation of religious organization. In this study Catholic women have the highest belief in the Bishop, secondly the Pope and thirdly the priest. More than half of women have a high degree of belief in the authority of these three institutions. Belief in Church authority may effect other social, economic or religious characteristics of women but has little effect on number of children.

The Catholic Church provides services every day, but Catholics are obliged to attend mass only on Sunday. Catholics who attend mass often have more chance to hear the teaching of the church and the priest and friends in the community could strengthen their faith when they meet them Church. According to Mosher et al., (1984), Goldscheider and Mosher, (1991) Catholics who attend church services more frequently were less likely to use contraceptive methods and have higher fertility than others. It was found that Church attendance has no statistically significant effect on the number of children ever born. This finding support the study of Sander (1992) who found that Church attendance was unrelated to the number of children ever born.

This result may be due to a lack of teaching on pronatalism in the Catholic Church. Women who attend Church regularly are more likely to hear other moral teaching than pronatalism or the teaching of the Church on birth regulation. At present readings and scriptures used at mass are specified by the Vatican.

“We have several topics to teach them because today we follow the liturgy of universal Church...pronatalism and teaching on birth regulation was seldom focused on at mass” (a priest from St.Peter Church).

In contrast to the hypothesis of the study, women's status had no statistically significant effect on number of children ever born. Similarly, three religiosity indices have no statistical significant effect on number of children ever born. A religiosity index of years in Catholic school has a positive and statistical significant effect on number of children ever born.

The findings of the study suggest that Catholic women in Thailand freely limit the number of their children according to their socio-economic circumstances. Pronatalism and the teachings of the Church on birth regulation have little or no effect on their reproductive behavior. In summary, the result of the fitting of the regression model show that women's general characteristics of age, age at first marriage, education of women and years in Catholic school explained most of the variation in number of children ever born. Other characteristics of women could not explain variation in the number of children ever born. The R^2 of the model was 40 percent. Age and age at marriage, explained 38 percent of the variation of children ever born and the other independent variables explained 2 percent. Age and age at marriage show a significant impact on number of children because they are proxies of the reproductive span of women. Women at an older age and who married at a young age have, other things being equal, more children. Education also affects fertility. Women who studied for seven or more years had fewer children than those who spent less than seven years in school. Other independent variables, such as education of father, wealth of household, spousal communication, decision-making in family, church authority belief, religion of

husband and Church attendance has no statistically significant relationship with number of children ever born. One reason was the limited variation among women on these variables.

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