# Innovative Issues and Approaches in Social Sciences

IIASS is a double blind peer review academic journal published 3 times yearly (January, May, September) covering different social sciences: political science, sociology, economy, public administration, law, management, communication science, psychology and education.

IIASS has started as a SIdip – Slovenian Association for Innovative Political Science journal and is now being published in the name of CEOs d.o.o. by Zalozba Vega (publishing house).

# DETERMINANTS OF EARLY MARRIAGE AND MODEL OF MATURING MARRIAGE AGE POLICY: A CASE IN JAMBI PROVINCE, INDONESIA

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## Abstract
This study aims to analyze factors affecting early marriages and to formulate a model of maturing marriage age policy in Jambi Province, Indonesia. Using binary logistic model and interpretive structural modeling, we found that: firstly, factors affecting women's decision to get married early could come from both individual and their parents charateristics. Secondly, the appropriate model for maturing marriage age policy involved six main elements of the system. Those are objectives, institutions, needs, constraints, community involvement, and assessment benchmarks. We come to the conclusion that maturing marriage age is not only determined by individual characteristics, but also other factors.

**Keywords**: age at first marriage, early marriage, maturing marriage age; reproductive health

## Introduction
Jambi Province is one of regions in Indonesia that has relatively high population growth. The population of Jambi Province increased by an average of 2.55 percent per year during the period 2000-2010, higher than the Indonesian population growth (1.48 percent per year).

There are three components of population growth. Those are fertility, mortality, and migration. However, in the context of policies and efforts to reduce population growth rate in a region, fertility is the most decisive and most likely to be implemented. Referring to Indonesian Population Census 2010, total fertility rate (TFR) of Jambi Province was 2.51, higher than national's rate (2, 41) (BPS, 2014).

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There are several factors of high fertility in Jambi Province. One of them are low median age at first marriage in this region been as the dominant factor. According to Indonesia Demographic and Health Survey (IDHS) in 2012 explained that is, median age at first marriage in Jambi Province was 19.3 years old, placed Jambi Province into the second lowest of 33 provinces in Indonesia (BKKBN, 2014).

Its large proportion of early marriage in Jambi Province causes low median age at first marriage. According to the data from Susenas (Survei Sosial Ekonomi Nasional – National Socio-Economic Survey) in 2015, more than a third (39.82%) of total female in couple of childbearing age were married at young age (under 20 years old). It has an impact to the large number of pregnancies at an early age in Jambi Province. The 2012 IHDS data shows that ASFR for 15-19 years old has come to 75, which is higher than national rate of 48 (BKKBN, 2014). Pregnancy at an early age has several risks affecting the increase of maternal mortality rate and infant mortality rate, and the decline of women's reproductive health. UNICEF (2007) noted that early marriage has also profound physical, intellectual psychological impacts on young girls affected. Therefore, besides impacting on high fertility, low median age at first marriage will affects other aspects related to population and family in Jambi Province.

It is important to study about early marriage in Jambi Province. The main objectives of this study specifically are; (1) to analyze the effect of social, economic, and cultural factors on early marriage in Jambi Province; (2) to explore a model of policy on maturing marriage age (MMA) in Jambi Province.

This paper is divided into several sections. The first section is an introduction outlined the importance and the purpose of the study. The second section is the literature review, which aims to find the factors affecting age at first marriage theoretically and based on the results of previous studies. The third section is a research method that describes the population, the sample, the data and data collection, and its analytical instruments. The fourth section is the result and discussion. Those describes the social, economic, and cultural characteristics: comparation between women early and mature marriages; second subsection is factors affecting the age at first marriage and third subsection is the policy-making for MMA. The last section of this paper is the conclusions and implications of the results of this study.

**Literature review**
Harton and Chester (2004) said that marriage is an approved social pattern in which at least two individuals form a family. Russel (1958) argue that "marriage differs, of course, from other sex relations by the fact that it is a legal institution. It is also in most communities a religious institution, but it is the legal aspect which is essential". In Indonesia, referring to Law No. 1 Year 1974 in regards to marriage states that marriage is "physical and spiritual bond between a man and a woman as a couple with the objective of forming a happy and everlasting family in the name of God".

Age at first marriage is the age at which woman first legally and biologically married. The concept of age at first marriage came up when Bogue (1969) introduced the grouping of age at first marriage in four classifications: 1) Age at first marriage under 18 years old, called child marriage; 2) Age at first marriage at 18 – 19 years old, called early marriage; 3) Age at first marriage 20 – 21 years old, called marriage at maturity; 4) Age at first marriage above 22 years old, called late age at marriage.

Furthermore, UNFPA (2014) defines early marriage as "any marriage carried out below the age of 18, before the girl is physically, physiologically, and psychologically ready to shoulder the responsibilities of marriage and childbearing." UNICEF (2005) characterizes early marriage as marriage carried out below the age of 18.

Some governmental organizations in Indonesia, such as National Commission of Women**,** and National Family Planning Board, also stated that the minimum age considered to be mature enough to marry is 21 years old. Based on these considerations, in this study, early marriage is defined as a marriage carried out by woman under 20 years old. The decision to carry out a marriage is affected by several social, economic, and cultural factors whether it is from individuals, families, and/or community as whole. Theoretically, those factors are:

**Education**
The higher one's educational attainment, the more knowledge he/she gets and comprehends, including all information about reproductive health, best marriage age, and the effect of having an early marriage. Though if one's educational attainment is low then there will be disconnection of knowledge and information and also less teen activities. Meltem et al. (2009) argue that the higher one's preference to study, the later he/she will get married. In accordance to that, Jin et al. (2005)

explained that education has a very important role to rise the age at first marriage by looking at the institutional effect of education itself.

Parents' educational attainment also has a relation to early marriage. Young adults with highly educated parents enter their first marriage (Sassler et al. 2009; Uecker and Stokes 2008) at a later age than young adults with relatively low-educated parents. The role of parents to the continuity of early marriage is basically inseparable to their knowledge linked to their educational attainment. In addition, parent's educational attainment will influence their comprehension about better family life. Parents with less understanding on family life see it will create better relationship, so they think marriage that is done earlier is the best solution.

### Main Activity (Employed or Unemployed)

Getting employed will have an effect on woman's age at first marriage (Assad and Sami, 2003). Proponents of 'new home economics theory hypothesize that, women's growing economic independence largely accounts for the rise in delayed marriage in industrialized societies (Blossfeld, 1995). Okech et al. (2011) explained that employed or unemployed will affect woman in determining her marriage age. Modernization theory argues that work opportunities  (also education) cause the postponement of marriage among women (Ochieng, 2016). Marriage requires well-preparation, especially in financial, so that in an effort to get a job, it will increase their age of marriage either directly or indirectly. Therefore, it is not only individual's employment status affecting their decision to postpone marriage but also their parents' employment status does.

### Economic Situation

One of the factors that make parents to marry off their children at young age in developing countries is poverty. Early marriage is more frequent among the poorest families (Hossain & Islam, 2013; Hoq 2013; Parsons et al. 2015). Poverty is denoted as both a cause and a consequence of early marriage (Maharjan et al. 2012).  They (parents) think that girls are an economic burden and marriage turns into an attempt to maintain their economic situation. In rural communities, early marriage occurs primarily in lower and middle-income families, which is more as a social form of division of roles and responsibilities from female's family to the husband.

### Culture and customs

The norms prevailing in society often encourage individual's motivation to behave and make decisions. Related to early marriage, Jackson and Smith (1999) expressed that an interrelated belief, that is, norms and

group values, leads to early marriage behavior.  Culture has been used to explain ethnic differences in the timing of marriage  and childbirth (Ikamari and Towett, 2007) and cultural tradition is a powerful force in early marriage.

Pujiastuti in Hanum (1997) explained that the custom of early marriage in Javanese society is roused by a strong effect of parents. It is related to the existing culture within the community where parents will marry off their children soon after getting first menstruation. The delay in marrying off their daughter may bring a disgrace to parents and relatives.

**Empirical Review**
The studies found that there are several socio-economic and cultural factors affecting early marriage. Puspitasari (2006) found the factors affecting early marriages in West Java Province, Indonesia. Those factors are poverty, self-factor either because of self-willing or films' or other media's impact, low education attainment of parents, and hereditary tradition. Envuladu et al. (2016) found  that in Nigeria, parents' low level of education, poverty, religion and place of residence were significant determining factors of early marriage in Plateau State. Family pressure and lack of finance for education were also key reasons for engaging in early marriage among the girls

Choe (2005) found that, in Nepal, there are three important factors associated with early marriage. Those factors are women's education, region of residence and ethnicity. Raymo (2003), assessed the impact of education on marriage in Japan and observed that educated girls were inclined to delay the timing of marriage because of employment opportunities.  Similarly, Ekawati (2008) found that early marriages in West Jawa Province, Indonesia were influenced by women's education and family income. The proportion of adolescent marriage declined in higher education levels, of which 90 percent of adolescent marriages occurred among those who don't go to school and 24 percent among those who graduated from junior high school or above. Furthermore, 83 percent of women in poor families married in their teens, much higher than those in wealthy families (46 percent).

The influence of customs is found in a study carried out by Nasrullah et al. (2014)  in thir research in the urban slums of Lahore, Pakistan. A strong influence of culture and community perceptions, vary interpretation of religion, and protect family honor were some of the factors that might play an important role in the continuation of child marriage practice. Similar results were also found by Sandhu and Geethalaksmi (2017) in  Davangere, India, revealed that besides poor

socio-economic status being the major determinant (62%) for early marriages, 35% of mothers got married early due to cultural reasons which included religious and familial influences. Kamal et al. (2015), in their research in Bangladesh found that the variables identified as important determinants of child marriage are: education of women and their husbands, and women's jobs, place of residence and religion. Similar results were also found by Workineh et al. (2015) in Northwest Ethiopia. Variables like residence, family monthly income, perceived ideal marital age, knowledge of legal marital age and knowledge of someone who was accused of early marriage crime were all the variables effecting of early marriage practice.

**Research methods**
**Data Types and Sources**
The survey has been employed in this research**.** There are two types of primary data. Those are primary data from female respondents in couples of reproductive age and from relevant stakeholders. Stakeholders who were interviewed are officials at Regional Development Planning Board, demographic and women's empowerment institutions, and institutions related to religious affairs. Secondary data are also used other than primary data.

**Populations and Samples**
Population in this study were all women ever married at the age of 15 – 49 in Jambi Province, both of those who did first marriage in early age and as adult. The sampling methods used in the study were two-stage stratified sampling method. ***First stage,*** we chose three regencies (Bungo Regency, Merangin Regency and Tebo Regency) of eleven regencies/cities in Jambi Province. These regencies were chosen because they have the largest proportion of early marriage among other regencies/cities in Jambi Province. Furthermore, we chose three research locations in each selected regency: one urban community in the sub-district that became the capital of regency, one urban community and one village in another sub-district with the largest number of early marriage. ***Second stage***, selected 25 women who have been married at the age of 15 – 49 from each selected urban community/village. We used the proportional random sampling method based on the target population (categorized into two groups: women who got married early and women who got married late) in each of the selected urban community/village.

**Data Collection Instruments**
Data collection instruments in this study consist of: (1) Questionnaires for women who have been married at the age of 15 – 49, containing

questions related to individual (respondent), their parents, and family characteristics; (2) Structured questionnaires for stakeholder, containing questions related to stakeholder's opinion on early marriage phenomenon and various policy strategies for MMA.

## Analysis Methods

Descriptive statistics were used to analyze social, economic, and cultural characteristics between women early and mature marriages. In multivariate analysis, binary logistic regression model was used as following:

$$g(x_{ki}) = \beta_0 + \beta_{1.D1}X_{1.D1} + \beta_{1.D2}X_{1.D2} + \beta_{1.D3}X_{1.D3} + \beta_2 X_2 + \beta_3 X_3 +$$
$$\beta_4 X_4 + \beta_{5.D1}X_{5.D1} + \beta_{5.D2}X_{5.D2} + \beta_{5.D3}X_{5.D3} + \beta_6 X_6 +$$
$$\beta_{7.D1}X_{7.D1} + \beta_{7.D2}X_{7.D2} + \beta_8 X_8 + \beta_9 X_9 + \beta_{10}X_{10} + \beta_{11.D1}X_{11.D1} +$$
$$\beta_{11.D2}X_{11.D2} + e$$

where:

$g(x_{ki}) = \ln \dfrac{P(xi)}{1 - P(xi)}$ = logit = log ratio between probability of marriage at young age and probability of marriage at an adult age (0 = marriage at an adult age; 1 = early marriage)

$X_1 =$ Formal education of female respondent. This variable is formulated into three dummy variables (no schooling/Primary School dropout as base category).
$X_1.D_1$  1 = Primary School; 0 = other
$X_1.D_2$  1 = Junior High School; 0 = other
$X_1.D_3$  1 = Senior High School or above; 0 = other

$X_2 =$ Knowledge of female respondent on family planning (FP), MMA, and reproductive health (on a scale of 0 – 100)

$X_3 =$ Main activity (employed or unemployed) of female respondent before married (0=unemployed; 1=employed)

$X_4 =$ Main activity (employed or unemployed) of fiancé (husband) before married (0=unemployed; 1=employed)

$X_5 =$ Educational attainment of respondent's father or mother. In three dummy variables (no schooling/Primary School dropout as base category).
$X_5.D_1$  1 = Primary School; 0 = other
$X_5.D_2$  1 = Junior High School; 0 = other
$X_5.D_3$  1 = Senior High School or above; 0 = other

$X_6 =$ Main activity (employed or unemployed) of female respondent's parents (in dummy variables where: 0 = father or mother is unemployed; 1 = father or mother is employed)

$X_7 =$ Ethnic group or place of origin of female respondent's parents

categorized into 3 groups, those are Jambi Malay, Javanese, or other ethnic groups. This variable is formulated into two dummy variables (Jambi Malay as base category).

$X_7.D_1$   1 =Javanese; 0=other

$X_7.D_2$   1 =other ethnic groups (including multi-ethnic); 0=other

$X_8 =$   Total number of household members.

$X_9 =$   Proportion of household members who are employed to total number of household members.

$X_{10} =$   Location ( 0 = village; 1 = city)

$X_{11} =$   Regency, in two dummy variables (Tebo Regency as base category).

$X_{11}.D_1$ 1 =Bungo Regency; 0=other

$X_{11}.D_2$ 1 = Merangin Regency; 0=other

### Quantitative Model of Policy Making

To make this model of policy, the following steps are carried out: (1) Collecting expert opinion, especially management experts and public policy experts to determine the elements and sub-elements of model of policy related to a system in order to achieve the objective of MMA; (2) The results of the first phase are used as the basis for developing questionnaire instruments for structured interviews with related stakeholders especially in the field of social development planning, population, and religious affair; (3) Structured interview questionnaires are used to collect assessments from stakeholders in the context of correlation between sub-elements; (4) The results of structured interviews with stakeholders are analyzed through Interpretive Structural Modeling (ISM), and (5) Based on the analysis through ISM, the model of MMA policy is formulated in model system kind of form.

### Results and discussion

**Individual Characteristics: Women Early and Mature Marriages**
Individual characteristics include education, knowledge of FP, MMA**,** and Reproductive Health**,** and also main activity.

***Education.*** Education is one of factors affecting a person's decisions in their life. The higher the education the higher the ability of person on making better decisions. Low educational attainment or no schooling will encourage women to get married early. On the other hand, for women, higher educational attainment can provide better career opportunities and be a push factor to delay getting married early.

This research found that educational attainment of women getting married early is relatively low. Almost two-thirds (65.14 percent) of them

have completed less primary or primary education and only 4.59 percent have completed senior high school education and tertiary education (Diploma and Bachelor). It is different from women who married at an adult age. Although there are 29.31 percent of them have completed only less primary or primary education, more than half (56.90 percent) of them have completed senior high school education and tertiary education (university).

The low level of educational attainment is the impact of family poverty. It could be saw through the results of in-depth interviews with a parent: "due to their inadequate family income, he isn't able to afford paying his children's tuition fees on higher education and when someone proposes his daughter, he immediately approves."

***Knowledge about FP, MMA and Reproductive Health.*** Beside formal education, women's knowledge to FP, MMA and reproductive health allegedly also contributes to the decision to marry early or at adult age. The assessment of this knowledge is done by asking various questions including women's knowledge before marriage about the purpose of family planning, contraception methods, places offering family planning services, fertile period, best age to get married, minimum and maximum "safe" age to give birth, early marriage impacts, knowledge on HIV, AID, STIs (Sexually transmitted infections), and drugs. The range is between 0 and 100, from having no knowledge at all to knowing all of that.

The research found that knowledge of women before marriage about FP and family welfare, MMA, and reproductive health are still low, with an average score of 33.64. In other words, women's knowledge on the things mentioned earlier is only about one-third of the maximum score of 100.

Apart from that,this research also found that women getting married early have less knowledge about those things than women getting married at an adult age. The average score of knowledge of women getting early married is 23.01. From its frequency distribution, it shows that almost two-thirds (63.30 percent) of women getting married at young age have knowledge score less than 25, and only 3.67 percent have knowledge score above 50.

It is different compared to women who married at an adult age. The average score of knowledge reached 41.69 or almost twice the knowledge score of women getting married early. From the frequency distribution, it shows that only 23.28 percent of them have knowledge

score less than 25 and almost a third (30.17 percent) has the score above 50.

***Main Activity before Marriage.*** The status of employment in a society indicates the economic situation of community. The easiness of getting job or having job openings is an economic indicator of a region. Status of employment of a woman can bring the decision to postpone marriage. In relation to women's job opportunities, it appears that in general it is relatively low. The study found that women who worked before marriage is lower than 10 percent and most of them were unemployed (domestic affairs, finding job, etc as their main activity). In general, it also shows that job opportunities for women in Jambi Province are still relatively limited.

Although the numbers are relatively small, they are saw that there is a marked difference of employment status between women getting married early and those who married at an adult age. The women early married found only 2.75 percent were working before marriage. Furthermore, those who married at an adult age reached 14.66 percent.

**Characteristics of Parents and Family**
The analysis of characteristics of parents and families were consist of educational attainment of parents, main activity of parents and relatives/family, ethnic group of parents, and number of family members.

***Education.*** The role of parents to the early marriage is inseparable from their educational attainment. Low level of educational attainment of parents will an encourage decision to immediately marry off their children despite being underage. This is relate to the low understanding and less knowledge of parents on the concept of adolescent girls and the negative impact of early marriage.

This research also found that the educational attainment of fathers of early women married is relatively low. There are only 4.59 percent of fathers of early women married who are graduated from senior high school and university. Meanwhile, it is five times higher in the proportion of fathers of women getting married at an adult age, namely 22.41 percent. In contrast, there are only 11.21 percent of women married at an adult age have fathers without schooling/less primary education, whereas there is 27.52 percent of women married early have fathers with no schooling/less primary education.

***Main Activity of Parents and Household Members.*** Main activity of parents is one of indicators to look at financial condition of the family.

Families with working parents will have better economic status than those who are unemployed parents. Therefore, daughters in families with unemployed parents are at greater risk of marriage at an earlier age than those having working parents.

Through in-depth interviews with parents and community leaders in research site found that parents' decision to marry off their girls at an early age due to their inability to provide higher education for their daughter, beside it's done for reducing economic burden. Sometimes, the daughter's self initiates to get married because she wants reducing economic burden of her parents.

This research revealed that there are 23.85 percent of women getting early married come from families with unemployed parents (fathers and mothers). The study of unemployed parents means that they are not working permanently, so there is no guaranteed income to meet family needs. This proportion is more than three times higher compared to women getting married at an adult age (only 7.76 percent).

The tendency to marry off young daughter to these low-income families was explore one of the parent's statements. *"I am a farm laborer and have no land of my own. I rarely have works. I have to marry off my daughter in order to reduce my burden, in the hope that my daughter's husband can help my family".*

Beside main activity of parents, the number of working household members can also be use as an indicator of the financial condition of the family. Based on that, a research shows that the average proportion of working household members in women getting married at an adult age tends to be higher than in those getting married early.

***Ethnic Group of Parents.*** Basically, ethnic group of parents is a picture of norms, values, and beliefs shared in the family. Therefore, it can be use as a cultural indicator of family that affect of the decision of family to marry off their daughter at a young age or at an adult age. As Pujiastuti mentioned in Hanum (1997) that the custom of child marriage in Javanese society is rouse of a strong effect of parents. So that many women who have teens already married.

More than half (51.11 percent) of the parents' ethnic group are Jambi Malay, followed by Javanese (36.00 percent) and others (Minangkabau, Batak, and Bugis) with a relatively small proportion (12.89 percent). The large proportion of Javanese is due to three research sites are main areas of migrants in Jambi Province. The placement of migrants in these

three regencies has been going on for quite some time, from 1940 through the colonization program. Today migrant residents (especially their descendants) are not only settling in former transmigration areas, but also in the outer regions.

Furthermore, based on the categories of age at first marriage, Jambi Malay parents tend to marry off their daughters at an early age compared to the Javanese parents and parents from other ethnic groups. There are 65.14 percent of women getting early married come from Jambi Malay parents, followed by Javanese parents of 31.19 percent and other ethnic groups of 3.67 percent.

***Number of Household Members.*** Some previous study indicate that the number of household members is related to the decision if the family in marrying off their child. Families with many household members tend to marry off their children at a relatively young age, in order to reduce the burden of family. Nevertheless, this study did not find the same. Based on this research, there is no difference in the number of household members between women getting married early and at an adult age

**Determinant of Early Marriage**
Overall Model Fit Test is explain in Table 1. Based on Omnibus Test of Model Coefficients, it's obtained Chi-Square value of 149.653 with significance (p) = 0.000. Thus, it is explain that independent variables affect the decisions and behavior of women getting married early or at an adult age. Based on Hosmer and Lemeshow test, Chi-Square value is 9.170 with p value = 0,328. Because Chi-square is not significant (p>0.05), it can be concluded that predicted probability is matched to observed probability.

Table 1 Overall Model Fit Test for Early Marriage model

|  | Chi-square | df | Sig. |
|---|---|---|---|
| *Omnibus Test of Model Coefficients* | 149,653 | 17 | .000 |
| *Hosmer and Lemeshow Test* | 9.170 | 8 | .328 |

The estimation of model coefficients and partial hypothesis testing of the model was given in Table 2. In relation to education at the time of marriage, there is no difference in the probability of marriage at young or adult age between primary school graduates ($X_{1.D1}$) and junior high school graduates (X1.D2), and women who without schooling or did not graduate from primary school. However, the coefficient of senior high school graduates (X1.D3) is negatively significant. It shows that women with higher education have a lower probability of doing early marriage

than those who without schooling or did not graduate from primary school. The odd ratio shows that women with higher education have a probability of 0.045 times lower to do early marriage than those who got no schooling or did not graduate from primary school.

Furthermore, their knowledge about FP, MMA and Reproductive Health (X2) also shows negatively significant effect. Women with more knowledge of those things will have lower probability doing early marriage.

Workers tend to postpone their marriage (a significant negative as X3 coefficient). They have a chance of 0.201 times lower to do early marriage than those who are not working. Nevertheless, there is no significant difference on main activity of future husbands.

Tabel 2  Model Estimation

| Variable | Coef. | S.E. | Wald | d.f | Sig. | Odds Ratio | Note |
|---|---|---|---|---|---|---|---|
| $X_1$ | | | 18,317 | 3 | ,000 | | Educational Attainment of Respondents |
| $X_1.D_1$ | ,250 | ,717 | ,121 | 1 | ,728 | 1,284 | Primary School |
| $X_1.D_2$ | ,333 | ,792 | ,177 | 1 | ,674 | 1,395 | Junior High School |
| $X_1.D_3$ | -3,097 | 1,042 | 8,835 | 1 | ,003 | ,045 | Senior High School and Above |
| $X_2$ | -,059 | ,017 | 11,400 | 1 | ,001 | ,943 | Knowledge about FP, MMA, and RH. |
| $X_3$ | -1,602 | ,969 | 2,732 | 1 | ,098 | ,201 | Main Activity of Respondents |
| $X_4$ | -,307 | ,595 | ,266 | 1 | ,606 | ,735 | Main Activity of Future Husbands |
| $X_5$ | | | 6,769 | 3 | ,080 | | Educational Attainment of Parents |
| $X_5.D_1$ | -,128 | ,603 | ,045 | 1 | ,831 | ,879 | Primary School |
| $X_5.D_2$ | -1,076 | ,848 | 1,612 | 1 | ,204 | ,341 | Junior High School |
| $X_5.D_3$ | -1,765 | ,847 | 4,342 | 1 | ,037 | ,171 | Senior High School and Above |
| $X_6$ | -1,377 | ,762 | 3,269 | 1 | ,071 | ,252 | Main Activity of Parents |
| $X_7$ | | | 9,713 | 2 | ,008 | | Ethnic Group of Parents |
| $X_7.D_1$ | ,852 | ,580 | 2,160 | 1 | ,142 | 2,345 | Javanese |
| $X_7.D_2$ | -2,081 | ,895 | 5,407 | 1 | ,020 | ,125 | Others |
| $X_8$ | ,098 | ,145 | ,460 | 1 | ,498 | 1,103 | Number of Household Members |
| $X_9$ | -3,062 | 1,827 | 2,809 | 1 | ,094 | ,047 | Working Household Members |
| $X_{10}$ | -,406 | ,491 | ,685 | 1 | ,408 | ,666 | Rural-Urban |
| $X_{11}$ | | | 17,172 | 2 | ,000 | | Regencies |
| $X_{11}.D_1$ | 2,118 | ,743 | 8,132 | 1 | ,004 | 8,312 | Bungo Regency |
| $X_{11}.D_2$ | -,928 | ,589 | 2,476 | 1 | ,116 | ,396 | Merangin Regency |
| Constanta | 4,295 | 1,318 | 10,616 | 1 | ,001 | 73,362 | |

There is no difference in the probability of getting early married or at an adult age between women with primary school graduate (X5.D1) and junior high school graduate (X5.D2) parents, and those with no schooling/primary school dropout parents. However, for senior high school and above (X5.D3), there is negatively significant difference. Women has high-educated parents that is 0.171 times more look likely to do early marriage than women whose parents got no schooling or without primary school.

Women who parents are working are 0.252 times lower to do early marriage than women with unemployed parents are. Likewise, women who come from families with a large proportion of working household members are 0.047 times more likely to get married at young age than women from families with a smaller proportion of household members.

There is no difference in the probability of early marriage between Javanese and Jambi Malay groups, but there is a significant difference between other ethnic groups and Jambi Malay groups. Women whose parents are from other ethnic groups have 0.125 lower probability of early marriage than those with Jambi Malay parents.
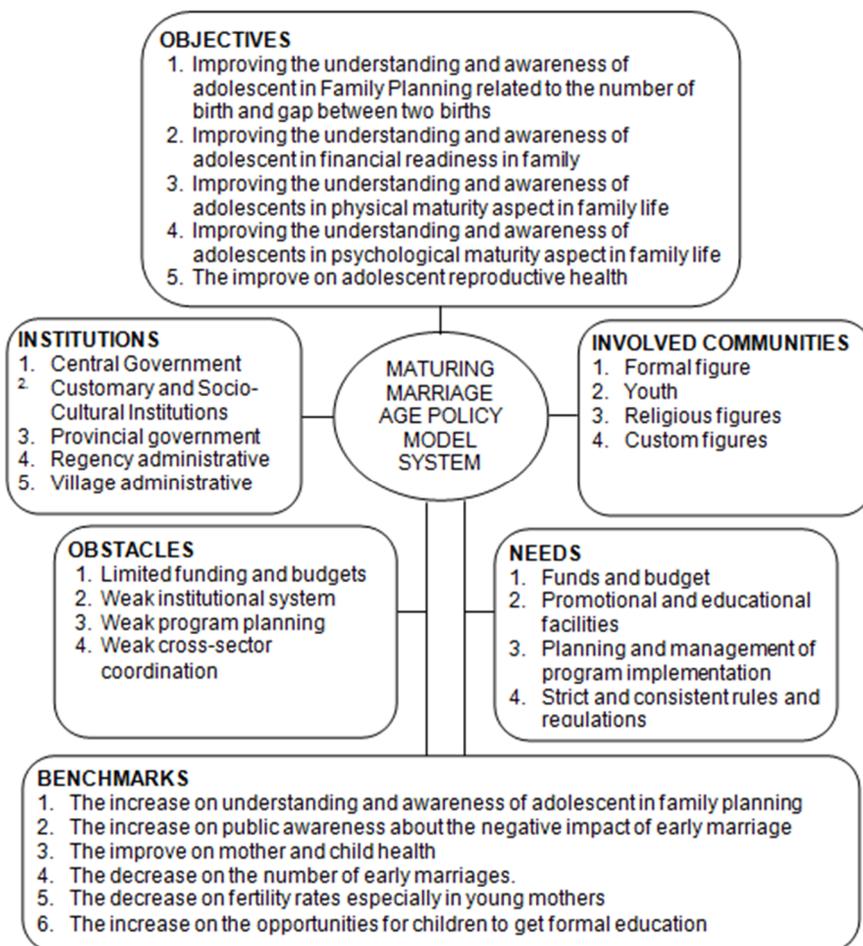
There is no difference in early marriage tendency in urban and rural women as long as the socioeconomic characteristics of individuals and their families are relatively similar. Nevertheless, based on regencies, there is a difference in the chance of early marriage in Bungo Regency with Tebo Regency (with a higher chance of 8,312 times). In contrast, there is no difference in the probability of early marriage between Merangin Regency and Tebo Regency.

**Maturing Marriage Age Model**
Based on stakeholder assessments and analysis conducted through ISM, MMA program in Jambi Province should be structure in a unified system involving six main elements namely the establishment of strict objectives, the involvement of the right institutions, proper allocation to the needs, overcome major obstacles, and the involvement of influential large communities. In addition, in evaluating activities, it is necessary to formulate the right benchmarks.

Furthermore, based on the structuring that has the major sub-elements in formulating MMA policy in Jambi Province has identified. The main sub-elements in the development of MMA policy model in Jambi Province are explain in Figure 1 below.

Figure 1   Main Sub-Elements in the Development of MMA Policy Model in Jambi Province

**OBJECTIVES**
1. Improving the understanding and awareness of adolescent in Family Planning related to the number of birth and gap between two births
2. Improving the understanding and awareness of adolescent in financial readiness in family
3. Improving the understanding and awareness of adolescents in physical maturity aspect in family life
4. Improving the understanding and awareness of adolescents in psychological maturity aspect in family life
5. The improve on adolescent reproductive health

**INSTITUTIONS**
1. Central Government
2. Customary and Socio-Cultural Institutions
3. Provincial government
4. Regency administrative
5. Village administrative

**MATURING MARRIAGE AGE POLICY MODEL SYSTEM**

**INVOLVED COMMUNITIES**
1. Formal figure
2. Youth
3. Religious figures
4. Custom figures

**OBSTACLES**
1. Limited funding and budgets
2. Weak institutional system
3. Weak program planning
4. Weak cross-sector coordination

**NEEDS**
1. Funds and budget
2. Promotional and educational facilities
3. Planning and management of program implementation
4. Strict and consistent rules and regulations

**BENCHMARKS**
1. The increase on understanding and awareness of adolescent in family planning
2. The increase on public awareness about the negative impact of early marriage
3. The improve on mother and child health
4. The decrease on the number of early marriages.
5. The decrease on fertility rates especially in young mothers
6. The increase on the opportunities for children to get formal education

The community will good receive MMA if the emphasis and socialization are direct through the five main objectives. They are improving the understanding and awareness of adolescent in FP related to the number of birth and gap between two births; improving the understanding and awareness of adolescents in financial readiness in family life; improving the understanding and awareness of adolescents in physical maturity aspect in family life; improving the understanding and awareness of adolescents about psychological maturity aspect in family life and improving adolescent reproductive health.

The achievement of these goals depends greatly on the involvement of key institutions with strong influence, namely central government,

customary and socio-cultural institutions, regency and village administrative. Other institutions do not need to create separated programs but simply use the influence of these key institutions. In order to raise the role of other institutions (besides these five institutions) can through efforts fostering and developing cross-sector coordination.

Full involvement of these key institutions is currently constrained primarily by the limited funding and budgets of program, weak institutional system, and weak program planning and weak cross-sector coordination in the implementation of MMA program.

Community involvement in program implementation is also a key factor for the success of the objectives. Four groups of community need to be giving special attention because of their great influence on other community, namely formal figure, youth, religious and custom leaders.

In terms of program's needs, there are four key needs: funds and budget, promotional and educational facilities, planning and management of program implementation strict and consistent rules and regulations.

Furthermore, six main benchmarks can be assessing of the success of the program. They are increase on understanding and awareness of adolescent in FP; increase on public awareness about the negative impact of early marriage; improve on mother and child health; decrease on the number of early marriage; decrease on fertility rates especially in young mothers and increase on the opportunities for children to get formal education.

The development of MMA policy model in Jambi Province recommended by taking into account the six main elements of the objectives, institutions, involved communities, constraints/obstacles, needs, and benchmarks of the activity. These six elements must be determined proportionally as a system to ensure the achievement of MMA policy objectives.

Furthermore, based on the relevance of the main sub-elements contained in each of those elements, it is recommended that three strategies of MMA policy are 1) program development strategy; 2) institutional development and implementation regulation strategy; 3) financing strategy.

The program development strategy is a strategy further directing MMA policy on the five main objectives as mentioned before. Therefore, the

forms of promotion, socialization and education, and other activities in MMA policy should be oriented to aspects directly related to the five main objectives.

Institutional development and implementation regulation strategy covers the following aspects: (1) Increasing on the availability of facilities, especially for promotion, socialization, and education; (2) The improvement on quality of planning and management of the implementation program. In order to improve the quality of planning and management of the implementation of this program, it needs the database that is capable of mapping comprehensively the phenomenon of early marriage at the administrative level of village; (3) Improving to institutional system and on the quality of human resources in the field who are directly responsible for promotional activities, socialization, and education; (4) Cross-sector coordination enhancement. In this coordination enhancement, it is necessary to establish an institution that becomes a forum. Not only institutional that becomes the member of this forum, but also it is also involving communities that have major affect the success of the program, and (5) Facilitate the preparation of supporting rules and policies at the regency/city level that are coordinated with provincial/national policies and regulations.

The financing strategy aim at increasing the budget of MMA program, through not only sector budgets, but also local budgets. This strategy could be employ if the cooperation and mutual understanding between sectors/institutions have been established.

**Conclusions, Implications and Limitations**
This study initiated by from the high fertility rate as a problem in Jambi Province, Indonesia, caused by the low median age at first marriage. In addition to the high fertility as the impact of it, low median age at first marriage also affects the number of pregnancies/births at a young age. It will then increase the maternal and infant mortality rate, and decrease women's reproductive health. Therefore, it is necessary to analyze the factors affecting age at first marriage in this province and the model of maturing marriage age policy.

The results of the study revealed that socio-economic and cultural factors that influence the decision of women getting early married or at a mature are individual is characteristics (education, knowledge of FP, MMA, reproductive health and main activity), then the other characteristic namely parents charateristics that is main activity, educational background, and ethnic group.

The research implications were the need of government efforts to improve the welfare of the community (especially in rural areas), improvement of education/knowledge and reconstruction of values in society towards the concept of marriage and better family life to reduce the phenomenon of marriage at young age. In practice, the policy should be based on three main strategies: (1) program development strategy, (2) institutional development and implementation regulation strategy and, 3) financing strategy.

This study has analyzed various socio-economic and cultural factors at the individual (women and their husband) levels, parents and family of the women. However, there are many factors, especially the characteristics of women's parents. They are their family, and their prospective husbands that have yet to be analyzed/covered. It is due to the limitation for the respondents of this study, which is only to women in fertile couples. Therefore, for further researchers, it is advisable to expand the respondent category for the study, not only to women, but also to their husband and parents. In addition, it is also necessary to consider cultural/environmental aspects as one of the factors affecting the age at first marriage.

**Acknowledgments**

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