THE IMPACT OF WOMEN'S STATUS ON FERTILITY: CASE OF THE REPUBLIC OF MACEDONIA

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ABSTRACT

This study employs variables such as women's education and women's work status to explain the nature of the relationship between women's status and fertility in the Republic of Macedonia. Descriptive analysis and multiple regression analysis was applied to study the relationship between Cumulative fertility (CEB) as the dependent variable and the women's status. The general hypothesis is that demographic characteristics of the population, and their socio-cultural setting that implicate tradition, and norms associated with some aspect of modernization like education, and modern–sector employment, occupation and so on, show a big importance in creating the fertility behavior. Women's education is negatively correlated with fertility. Examination of fertility by women's working status shows an excess of the MCEB among non-working women over that among working women. An examination of the statistical analysis (output ordinary least square) showed that there was a negative and significant relationship between education and children ever born. Women's

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working status has less important influence on the number of children ever born.

Key words: women's status, fertility, contraceptive use, education, labour force, linear regression, OLS

1. INTRODUCTION

As a result of the International Conference on Population and Development (ICPD), held in Cairo in 1994, and with growing activism and influence of women's rights advocates around the world, the situation of women has moved to the forefront of both national and international population policy debates. Namely, the governments participating during the mentioned conference agreed that population policies should address social development beyond family planning and enhancing individual health of woman and her rights. The simple assertion was that raising the "status" of women will result in control births.

Demographic research usually employs variables such as women's education and women's work status to explain the nature of the relationship between women's status and both fertility and childbearing control. A negative correlation has been found between the education of women and fertility and between women's employment and lower birth rates. Investigation from the United Nations, the U.S. National Academy of Sciences, the Population Council and others show that throughout the world, more education is associated with smaller family size, increased of modern contraceptive use, and improved of child care. In a number of less developed countries women with no education have about twice the number of children as women with ten or more years of school. (UN 1997). Besides, employment enables women to spend less time on child care and more on work and could improve ability to reducing the number of unanticipated pregnancies.

The importance of studying the relationship between women's status and fertility and family planning in the Republic of Macedonia is based on the

fact that so far no studies have dealt with the women's status related to fertility in our country. Therefore, its contribution might provide a greater understanding differentials in fertility by status of women as measured by education and working status. Besides, this study could help in the policies that address population issues related to the fertility. It is also important to mention that the gap in the natural increase among ethnic groups in the Republic of Macedonia, from 1994 to 2002 ranges between 0.01 percent among Serbs to 23.3 percent among Roma This rate was 0.2 percent among Macedonians, 15.4 among the Albanian, and 1.41 percent among the Turks. (UNDP 2004: 31-32). These facts lead to a different approach in adopting population policies, with respect to cultural values and way of life of the individuals in this multicultural country.

The main objectives of this study are:
1. Examining the levels of fertility and knowledge and practices of family planning methods.
2. Analyzing the relations between status of women and fertility and family planning.
3. Raising some policy implications depending on the study's results.

The primary data source for this study comes from the survey that was carried out on a nationally representative sample at urban and rural households to estimate national levels of selected indicators. In this survey 962 married or ever married women, aged 15-49 years, were interviewed.

Empirical part of this article is supported by the secondary data source. The main sources of the data for this study come from the Census' data from the Statistical Office of the Republic of Macedonia (Census of population, households and dwelling, 1994 and 2002), and Data from the Vital Register of the Statistical Office of the Republic of Macedonia. Additional data source come from the available research and analysis.

2. THEORETICAL BACKGROUND

Many researchers have been devoted to studying the relationship between the "status" of women, as measured by education and employment, and their fertility behavior.

Freedman strongly advocated the role of education and literacy on reducing fertility. He attributed the effect of education and literacy on fertility reduction to the involvement of the population with the ideas and institutions of a large modern culture. Freedman cited Taiwan as an example of a country where education and contacts with mass media were more closely related to actual family planning practice than were occupation, income and rural-urban background of women (Freedman et all. 1963).

Blake, argued that employment of women outside the home constitutes one of the most likely sources of a desire for small families. She referred to census data from Western Europe and the United States to indicate that an inverse relationship between labour force participation of married women and their family size existed for many years. Blake advocated women's employment outside the home as an example for the type of policies that should be implemented to reduce fertility in developing countries (Blake 1971).

Cochran showed a strong correlation between the educational level of a woman and couples fertility. Cochran went further on assessing how education might influence women's personal attitudes and their roles in reproductive decision-making. The findings explained that women's education increased husband-wife communication, knowledge and improved attitudes to birth control. Thus education was found to be negatively related to fertility (Cochran 1979).

Yugoslavia Fertility Surveys conducted in 1970 and 1976, showed strong association between women's education and age at first marriage. More education indirectly affects fertility by delaying age at first marriage, reducing desired family size through stimulatory aspiration for higher standard of living, preparing women for employment especially in the formal sector and by

exposing women to new knowledge, attitudes and practices regarding contraceptive use (Breznik 1980).

Some analysis developed some models which showed the impact of schooling on the attitudes which eventually influenced girls' behavior. These included a model which assumes that schooling endows the girls with expounded awareness concerning their environment, and gives them a new kind of social interaction which results in good motherhood in the future. The self-development model assumes that schooling stimulates self-esteem, maternal skills and self-confidence which in the long run encourage women to influence the couple's fertility. So education is consider as a: 1) source of knowledge; 2) "vehicle" of socioeconomic development and 3) "transformer" of attitudes are consider as relevant dimension that have impact on reproductive desire and behavior (Martin and Juarez 1995).

In fact, educational attainment is linked to wealth and hence to the ability to "afford" more children but, more importantly, education is associated with greater perceived costs of children. Higher standard-of-living goals and higher educational aspirations for children usually lead to the decision to have a small family so that more resources can be allocated to each child.[7] Also, education raises the opportunity costs of children by enhancing women's opportunities to pursue wage-earning activities, which are likely to compete with domestic and childrearing responsibilities (Birdchal and Cohrane 1982).

As can be seen female level of education is a very important component of fertility analysis. Based on that, information about schooling are part of any demographic survey, and educational status is important exogenous variable to examine differentials of fertility, at each level – either macro or micro approach. At the macro level, education is important indicators of level of socio-economic development of any country, as well as factor of modernization in innovation diffusion theories (Cleland and Hobcraft 1985). At the micro level education is "catalizator" of transformation from big to small family size. Very often researchers are faced with the difficulties in collecting data about income, occupation or how to measure social status. In such an occasion education is

used as a factor of index of socioeconomic status, as well as an indicator of women's status in family and society (Mason 1984).

Referring to the relationship between fertility and women's status El-Deeb used the bivariate and multivariate analysis and based on the data resulted from 1991 Egyptian PAPChild Survey, she proved the strong negative relationship between fertility and women's educational level and women's participation in the labour force. The same study shows the substantial impact of women's status on current use of contraceptives, on selecting the highly effective method of family planning, on timing at first use of contraception, on the purpose of first use of contraceptives in favor of spacing rather than fertility termination and even on the intention to use family planning in the future. Further, the author has found that the positive impact of women's educational level on the proportion of current use of contraceptives is stronger and highly significant than that of women's work status, particularly in the urban areas of Egypt (El-Deeb 1993).

Sen, German and Chen suggested that effect of women's employment and reproduction had two implications, namely, women's autonomy and women's incompatibility between women's role as mothers and income earnings. The findings have shown that women's employment outside the home has potential to reduce family dependence on others. Work provides an alternative source of social identifying and support. It increases women's desire to delay marriage and to space or limit births. As gainful employment provides women with resource base, the relationship between work and reproduction choice is based on type of occupation and income a woman gains. Besides, this factor can create incompatibility between women's roles as mother's and as income earners (Sen, German and Chen 1994).

Data from the Hungarian Labour Force Survey, confirms that the presence of children considerably reduces the probability of employment among women. For young women (26-29 years) even one child in the household entails a big drop on the employment ratio (UNICEF 1999).

Studies of the World Fertility Survey on the relationship between the number of children and family and women's economic activities have led to

certain consistent findings. Data obtained from the Fertility and Family Survey in Poland 1997 confirm that women's employment either reduces the number of children or leads to a pattern of family formation that differs from that of non-active women. Data show that a large majority of women started working after finishing their education. Once a woman was married, her level of education was an important determinant of her employment status. Polish women typically stopped working after the birth of their first child and devoted themselves to their family. If they decided to take a job outside home again later on, this usually occurred when their younger child reached kindergarten age.

In order to meet the stated objectives descriptive analysis of the impact of level of fertility and current practices on the family planning methods is done first, and uses the result of the multivariate analysis to explain the pure impact of women's status on the fertility in the Republic of Macedonia. Last part is devoted to brief summary and recommendations.

3. METHODOLOGY USED

The research methodology for the present study includes both descriptive analysis and multivariate analysis. Descriptive analysis was used in order to show the status of women, fertility level, as well as knowledge and practice of family planning in the country. To examine the net effect of the status of women on fertility, keeping all other variables that might influence the dependent variable (CEB) constant, an ordinary least squares regression analysis is applied. This method provides automatically precise estimates of the beta coefficients, which are the standardized regression coefficient when the variables are standardized. These coefficients measure the influence along each variable in the model, thus the degree of variation on a given effect is defined by each particular cause. This model provides us with the information about the net effect of the women education and women's working status on fertility.

3.1 Ordinary Least Square (OLS)

The regression equation would be in the following form:

$$Y = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \ldots\ldots\ldots \beta_k \chi_k + \varepsilon$$

Where Y is the dependent variable - Children Ever Born, and $\chi_1, \chi_2, \ldots\ldots \chi_k$ are the independent variables, β_0 is an intercept, and $\beta_1, \beta_2 \ldots\ldots \beta_k$ are coefficients representing the effect of number of children in the corresponding X variables, and ε is the error term.

In this study, eight independent variables are selected to estimate the coefficient of each variable of interest; categorical variables are transformed into a set of binary indicators. Table 1 represents the variables under study.

Table 1:
Definitions of the Variables

Name of Variable	Description and Categories
Dependent variable	
Children Ever Born	Number of Children Ever Born
Independent variables	
Duration of marriage (AFM)	In single years
Women's education	
	1 = Primary; 0 = Otherwise
	1 = Secondary; 0 = Otherwise
	1 = University ; 0 = Otherwise
Women's work status	0 = Never work for cash
	1 = Work for cash
Places of residence	0 = Rural
	1 = Urban
Ethnicity	0 = Others
	1 = Macedonian
Current use of Contraceptive methods	0 = Currently not using
	1 = Currently using
Level of child mortality	It is measured at the number of dead children to children ever born

4. WOMEN'S STATUS AND CURRENT FERTILITY

This section provides a descriptive analysis for the relationship between status of women and fertility and family planning in the country. Fertility is portrayed using measures for Cumulative fertility is measured by the number of Children Ever Born (CEB).

Fertility is not seen as a product of one single decision. It is a possible combined effect of numerous decisions with regard to the demographic, social,

economic, cultural, and behavioral factors. It could therefore differ from one society to another, and within the same society from one population subgroup to another.

Demographic characteristics of the population, and their socio-cultural setting that implicate tradition, and norms associated with some aspect of modernization like education, and modern-sector employment, occupation and so on, show a big importance in creating the fertility behavior. The hypothesis that these characteristics have influence on the individual attitudes and desires related to fertility are shown in a lot of studies related to demography (Caldwel 1982; Eeasterlien 1980). In the attempt to intricate links between technological progress and fertility stressed that the models of production have far-reaching effect on marriage patterns, gender relationship and reproduction (**Boserup 1990**).

One way to investigate this hypothesis in Macedonian context is to examine the fertility performance of population subgroups with different socio-economic attributes. The foregoing subsection provides descriptive analysis for the relationship between women's education and women's working status from one side and fertility from the other side in the country.

4.1 Women's Education

No doubt, that education is a variable with a great influence on fertility. Much has been written about the relationship between education and fertility. In explanation related to differences in fertility, behavior according to the educational level (Cochrane, 1979) emphasized the fact that education operates effectively at a certain level of social development. A society has expectation, and study prove that highly educated women are most likely to postpone motherhood (e.g. Blossfeld and Huinikin 1991; Liefbroer and Corijn 1999; Buber 2001; Lappegard and Rønsen 2004).

Table 2:

MCEB to Ever-married Women by Level of Education and Proxy Variables, RM, 2002

| Variables | Level of Education | | | |
	No&Primary	Secondary	University+	Total
	2.77 (301)	1.97(464)	1.76(197)	2.18(962)
Age of Woman				
15-24	1.23	1.02	1.0	1.12
25-34	2.99	1.86	1.43	2.03
35-44	3.11	2.62	1.09	2.82
45-49	4.58	2.84	2.14	3.13
Age at First Marriage				
<19	2.85	2.25	1.78	2.44
20-24	2.73.	2.07	1.81	2.18
25+	2.67	1.71	1.54	1.74
Contraceptive Use				
Yes	3.14	2.04	1.77	2.20
No	2.56	2.2	1.77	2.16
Abortion				
Yes	2.76	2.37	2.02	2.46
No	2.78	1.79	1.67	2.03

Source: Computed by the research using Survey, 2002

Note: Figures in parenthesis represent the number of cases

In the Macedonian' context education is found to be an important determinant of fertility in the country and is considered as one of the fundamental reasons for decreasing fertility it. In each stage of demographic transition, women with higher education had a relatively low fertility rate. (Breznik at all 1980)

Table 2 portrays prevailing fertility in terms of mean children ever born (MCEB) among women with different levels of education. Also the table contains information related to education impact on MCEB by age at first marriage, contraceptive use and induced abortion.

It is evident from the table that women's education is negatively correlated with fertility. Overall, the MCEB is estimate at 2.77 children per woman among illiterate and primary educated women, 1.97 among women who finished secondary school and 1.76 among university-educated women.

Controlling for age, fertility of the ever-married women increases as women become older at each of the educational categories. Expected, women with no education and women who finished primary school at the end of their reproductive period reported higher number of children (4.58 children) than those with secondary (2.84) and university and above education (2.14).

One of the reasons that education affects on the number of children is that years of schooling affect directly to age at marriage. It is almost accept that arranged and early marriage is incompatible with women's emancipation and education, even in the more traditional society. In Macedonian case educational differentials in discrepancy of age at first marriage (AFM) show predominance of women without education and primary education to marry earlier (62.5 percent), and with mean AFM of 19 years, than those with secondary and university and above education (21 and 25 years).

An indirect relation between fertility and age at first marriage, for women with different educational levels is present. Whereas, women who married for the first time at later ages possesses the lowest MCEB, and women with lower age at first marriage exhibits the highest MCEB. With no exception, women with higher level of education are more concentrated at lower parities and are more likely to cease child bearing earlier than those with lower educational attainment.

Schooling may directly affect fertility by giving information concerning the desirability of controlling births and the means appropriate to end. As regards to contraceptive use it is well known that the more education a wife or husband has, the more likely it is that the couple has used contraception, and planned their pregnancies.

The Macedonian study proofs the similar results. Based on the survey' data 2002, the proportion of women who reported use of any contraceptive method at the time of the survey is higher among university and above

educated women (72 percent), in comparison to secondary (55 percent) and no and primary educated women (35 percent). Existed differences in the mean level of this proxy variable between different levels of women's education show relative impact on fertility of the proximate variables. It is found that the MCEB is higher among non-educated and primary educated women (3.14 children) than those with secondary education (2.04) and university degree and above (1.77).

Among uneducated and primary educated group of women, the proportion of women who had abortion is 42%. It is smaller among secondary (31%) and university and above educated women (27%). According to table (4.9) the MCEB is 2.76 for uneducated and primary educated group of women, and slightly decreased to 2.33, and to 2.02 children among secondary and university women. Based on this information there is a moderate relation between fertility, and abortion practice for women with different levels of education.

Beside the direct effect of years of schooling on fertility, the indirect effect of the education on the fertility should not be neglected. Namely, levels of aspiration to control fertility in the first plane is determine by the differences on knowledge about modern techniques of birth control, access to these techniques, and willingness to use them together. Telling with other words, access to education also implies a mental opening to information and innovation. Literate women have a greater capacity to enter the labour market and to manage personal and professional destiny, and bring the individual into contact with alternative sets of peer-groups pressures. Further, women with higher education might have more interests unconnected with family life, and might be engaged in more roles outside the family, such as professional links etc. So, unplanned births are rare among them because they have a chance to obtain the knowledge, and also because such a situation would create violent conflict in their daily life, and threaten their whish to find a balance between their roles of partner, mother and professional. This variable is in a close association to the working status of women, which will be discussing under the coming title.

4.2 Women's working status

Relationship between women's working status and fertility has received considerable attention both theoretically and empirically. The involvement of women in the modern sector economy as full-time paid employees has for long been advances as one way to raise their social status and to decrease their excessive dependence on, an subordination to their male relatives. This in turn is expected to lead to lower fertility performance since they would be under less pro-natalist pressure from their family and kin-groups, and since child bearing and rearing would interfere with their newly acquired personal freedom and choice (Mcabe and Rozenweigh 1976; Oppong, 1983). Women's participation in the formal sector has been shown to reduce women's dependence on alternative sources of social identity and security; increase women's desire to delay age at marriage, motivate women to terminate unsatisfactory relationship, space and limit births (Dixon-Miller 1978).

The typical expected relationship that fertility exhibits lower level among working in comparison to non-working women is also applicable to Macedonian experience. The 2002 Survey results are presented in Table 3. Examination of fertility by women's working status shows an excess of the MCEB among non-working women over that among working women.

It is around half child (is 2.36 for non-working women and 1.91 for working women). In addition, the difference in MCEB between working and non-working women is higher when they are equated based on present age, (with exception at the younger broad age group 15-24), it reaches its peak of 1.27 children at the last age group (45-49).

Table 3:

MCEB to Ever-married Women by Working Experience and Proxy Variables, RM,2002

Variables	Working status		
	Non-working	Working	Total
	2.36(537)	1.91(364)	2.18 (962)
Age of Woman			
15-24	1.12	1.10	1.12
25-34	2.33	1.61	2.03
35-44	3.34	2.31	2.82
45-49	3.71	2.44	3.13
Age at First Marriage			
<19	2.47	2.30	2.44
20-24	2.35	1.96	2.18
25+	1.89	1.68	1.74
Contraceptive Use			
Yes	2.42	1.95	2.20
No	2.30	1.86	2.16
Abortion			
Yes	2.70	2.10	2.46
No	2.18	1.82	2.03

Source: Computed by the research using Survey, 2002;

Note: Figures in parenthesis represent the number of cases

As we mentioned before, the fertility averages are associated with the ages at first marriages. These variables show an inverse relation with women's working status. For instance, the MCEB for working women who married at the age group (<19) is 2.30, and it reduced to 2.68 for women who married at the older ages (25 years or more). The corresponding figures for non-working women are 2.47, and 1.89 children per woman.

The survey' data indicate a great difference in MCEB according to marriage experience due to women's working status, also. The mean AFM is

lower among working women (23 years) than among non-working women (20 years) and mean CEB is lower among working women (1.91 children) than non-working women (2.36 children) supports the idea of relating the effect of women's working status on age at first marriage, and in the same time its effect on fertility averages.

The percentage of women who are using contraceptives among working women is 61 percent, which is higher in comparison to percentage among non-working women (46 percent). The association between fertility and contraception among women with various working status exists. Based on the data in the table 7 working women who are using contraceptives have a MCEB of 1.95 children, and contrasted with 2.42 children for non-working women.

There is no association between the fertility averages and abortion for women in the various working status. For instance, non-working and working women are almost identical in the proportion of induced abortion (34percent and 33 percent), but differ greatly in fertility. As table 8 reported the mean children ever born among non-working women are 2.70 children and 2.10 among working women.

Sum up, reproductive role and the gainful employment outside the home of women are conflicts. This is especially in modern society, where women have to seek employment outside the home in order to contribute to the family income, what is difficult to reconcile with the care of small children. Explanation about this situation is in a close relation to the explanation present in the part of the study concerns the effect of the schooling of fertility. Working status and education of women together are considered as factors that show association with fertility, where education is found as more influential in the Macedonian context. It is accepted that this factor may be negotiated differently in a different place of residence or among different ethnicity, but still their influence on the number of children is remarkable.

4.3 Impact of women's status on fertility

The previous analysis has pointed out that education of women and their working status affect fertility. In this part of the study, a further step has been taken to identify the pure effect of women's status on fertility, keeping all other variables that might influence the dependent variable (CEB) constant. In light of this, to examine the net effect of women status on fertility an ordinary least squares regression analysis would be applied.

The results of the ordinary least squares regression analysis is presented in Table 4 which refers to the impact of women's status on fertility at the national level.

Table 4:

Ordinary Least Squares (OLS) Regression Results for Determinants of Children Ever Born, RM, 2002

Variables	National level			
	Unstandardized B	Standard error	Standardized (beta) $\hat{\beta}$	Significant level
Duration of marriage	0.010	0.003	0.589	0.000
Women's education (primary)	-0.641	0.132	-0.223	0.000
Women's education (secondary	-0.844	0.137	-0.331	0.000
Women's education (university)	-0.897	0.149	-0.283	0.000
Women's work status (work/cash)	0.008	0.062	0.032	0.175
Place of residence	-0.263	0.058	-0.099	0.000
Child mortality	0.850	0.078	0.220	0.000
Current use of contraceptives	0.293	0.056	0.115	0.000
Ethnicity	-0.667	0.067	-0.249	0.000
R^2	0.629			

Source: Computed by the research using Survey, 2002

Note: b= unstandardized regression coefficient; β = standardized regression coefficient.

As presented in Table 8, R^2 is equal to 0.629, and this indicates that about 62.9 percent of the variation in CEB is accounted for by the combined effect of these selected variables. All of the independent variables are related to CEB in the expected direction.

Values of β represent the unstandardized regression coefficient, while standardized Beta values represent the relative importance of the independent variables in determining the number of Children Ever Born. The net effect of each of the exogenous variables on the response variable (CEB) obtained by using OLS regression techniques is discussed as follows:

Education of Women

Data of the present study shows that, as education of mother increases, the number of children ever born decreases. According to the results presented in Table (4), there is a negative and statistically significant relationship between education of mother and the number of children ever born. Regarding the unstandardized coefficient, an increase in education of women by one year in higher education helps in decreasing the number of CEB by slightly more than two third (b= -0.641) of a live birth. Also, an increase in secondary education of women by one year, as well as by university will decrease the number of CEB by more than four fifth of a live birth (b= -0.844 for secondary, and b= -0.897 for university). This effect is significant at 99% level. Looking at the standardized coefficient education at both levels (secondary and university) has a strong negative effect on the (β=-0.223; β=-0.331; β=0.283) on children ever born and it is a strong explanatory variable concerning its effect on fertility.

Working Status of Women

The results show that women who worked for cash, had the lower fertility, but working women do not have significant effect on reducing fertility (b"""""""" than that of non-working women. Also, this effect is not statistical significant. In regard to the standardized coefficient (β =-0.031) working status has a relatively negative effect on the children ever born.

Contraceptive Use

Other sides of effect on fertility include these of *contraceptives use* assume a positive relationship with number of children ever born. The explanation for such relationship regarding this variable is that contraceptive users tend to adopt contraception after they had at least one child. The standard coefficient β=0.115 indicates that contraceptive use has strong and positive effect on children ever born at level 99%.

Duration of Marriage

There is a positive relationship between duration of marriage and children ever born. From the OLS analysis it can be noticed that an increase in marriage duration by one year causes for an increase in CEB by les than one tenth (b=0.01 live birth. The value of standardized coefficient (β= 0.589) indicates that duration of marriage is an important contributor to the change in CEB.

Place of Residence

As expected, urban place of residence associated with lower fertility demonstrate a high and negative effect on CEB. Women who live in urban areas reduce the number of CEB for more than one quarter (b=-0.263) of live births, compared with that of rural residents. The standard coefficient (β= -0.099) shows that this variable has a contribution in explaining change in the depended variable CEB at 0.01 level.

Child Mortality

Child mortality has positive association with CEB. This mode of relationship might be described by the fact that child death increases the number of live births motivated by substitute and insurance effects. The data of table 8 shows that death of one child increases CEB by about less than one child (b=0.850). It is statistically significant at the level 95%.

Ethnicity

There is a significant negative relationship between fertility and children ever born. The standard coefficient (β = -0.249) indicates that ethnicity has a negative relationship at 0.01 level. Results show that Macedonian women affect on the decreasing level of fertility at about three-quarters (b=-0.667) of CEB as compared with that of other ethnic groups in the country.

In general, from what has been discussed so far, the results of OLS analysis suggest that factors such as women education, ethnicity and child death has greater impact on fertility in Macedonian. Working status do not show the great influence, and less is duration of marriage.

5. CONCLUSION

In this study, analysis has been done to examine the relationship between status of women and fertility in the Republic of Macedonia.

Women's education is negatively correlated with fertility. The MCEB is estimated at 2.77 children per woman among illiterate and primary educated women, 1.97 among women who finished secondary school and 1.76 among university educated women. There is an indirect relation between fertility and age at first marriage, for women with different educational levels. Women with higher level of education are more concentrated at lower parities and are more likely to cease child bearing earlier than those with lower educational attainment. The proportion of women who reported use of any contraceptive method at the time of the survey is higher among university and above educated women (72%), in comparison to secondary (55%) and no and primary educated women 35%. It is found that the MCEB is higher among non-educated and primary educated women (3.14 children) than among those with secondary education (2.04) and university degree and above (1.77).

Examination of fertility by women's working status shows an excess of the MCEB among non-working women over that among working women. The difference is around half a child (is 2.36 for non-working women and 1.91 for

working women). The mean AFM is lower among working women (23) than among non-working women (20). The association between fertility and contraception among women with various working statutes exists. Working women who are using contraceptives have a MCEB of 1.95 children, contrasted with 2.42 children for non-working women.

An examination of the statistical analysis (output ordinary least square) showed that there was a negative and significant relationship between education and children ever born.

Women's working status was less important variable associated with depressing number of children ever born.

The Government of the Republic of Macedonia, in the process of adopting a population policy deal with the problem of the unequal reproduction of population. This problem leads the government to the double action: to increase fertility level in the part of the population where fertility level is bellow the level of replacement, and to decrease the same level among part of the population where fertility level is high above the level of replacement.

Based on the problems of this study and their immediate and underlying causes as identified in this analysis, some recommendations, related to the status of women (literacy level and employment opportunity) will be highlighted.

Levels of education are raising, among women in the country, but for population sub-group with no education or with lower level of education, the following recommendations could be raised.

1. To expand education for girls, parents should be convinced of the importance of their education. Considering the fact that primary education is compulsory and free, there is a need for a more resolute intervention of the governmental and non-governmental organizations regarding the issue of drop-outs of female students in the upper classes of primary education. As an instrument for heightening awareness face-to-face communication is very important in addition to radio and TV programs(local and national as well).

2. Providing lessons for illiterate women should be in the timing suitable for the target group. It is necessary to make some intervention in the schooling

curriculum, to be more attractive, interesting and closer to the target population.

3. This implies a need for training of the teaching staff in order to carry knowledge to the adult literacy classes.

4. Encouraging females to achieve schooling up till the secondary level is important since the results of the study indicate that the substantial impact of education on fertility is shown among secondary educated women.

5. Considering the fact that secondary education is not obligatory, the recommendation is to compensate families for the cost of education such as cost of schooling material, transportation and clothing. This can be done through a government program which could be supported by NGOs and financed by international organizations.

Levels of women's participation in labour force could be raised using some of the following activities at the governmental level.

1. Effort must be made for reconstructing the labour market including employment services, training and job creation programs related to non working women.

2. Effort must be made to eradicate unemployment among women through expanding the government and NGOs assistance to non working women to gain some skills needed in their community. These programs should be directed mainly to women.

3. Supporting the programs that provide micro credit – small low interest loans – that allow women to start their own small business is greatly essential. Experience has shown that women are good "credit risks" and repayment rates are high. These programs tend to increase women's participation in the economic category "self employed" and decrease the gender gap in the category of employers.

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ВЛИЈАНИЕТО НА СТАТУСОТ НА ЖЕНАТА ВРЗ ФЕТИЛИТЕТОТ: СЛУЧАЈ РЕПУБЛИКА МАКЕДОНИЈА

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АПСТРАКТ

Во овој труд со помош на варијаблите образованието на жената и нејзината работната активност се објаснуваат релациите помеѓу статусот на жената и фертилитетот во Република Македонија. Со помош на дескриптивна и регресиона анализа се објаснува поврзаноста на кумулативниот фертилитет, како зависна варијабла и статусот на жената како независна варијабла. Основната хипотеза е дека демографските белези на населението и нивните социо-културни карактеристики, како и нормите и традицијата, занимање имаат особено влијание врз фертилното однесување. Образованието на жената покажува негативна поврзаност со фертилитетот. Статистичката анализа покажува негативна и значајна поврзаност помеѓу образованието и бројот на живородени деца. Работниот статус покажува помала статистичка значителност.

Клучни зборови: статусот на жената, фертилитет, користење на контра-цепција, работна сила, линеарна регресија