# The Impact of Working Mother for Additional Household Income toward Criminality on Children

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## Abstract

This study aims to find out how the impact of working mothers on crime in children, as well as the factors that influence it. The analysis was carried out using cross section data in 2016. The National Socio-Economic Survey (Susenas) data is used in this study and as a sample is the household that has a mother and child where a mother can be categorized as working and not working. To know the impact of working mothers on crime in children is used the Probit model. The results of this study explain that there is no significant relationship between working mothers on the probability of children becoming victims of crime.
**Keywords:** crime in children; probit model; working mother

## Introduction

Modern times is associated as a form of women's emancipation by Mrs. R.A Kartini where women have the same rights as men in achieving education and work. Married women have the freedom to work as long as family business is not neglected. According to Sakernas data in 2015, half of married women lived as wives and mothers are working mothers. Factors that encourage mothers to work are because they have higher education and want to develop themselves to increase their own income to meet the household needs.

Shechtman and Neuman (1998) explain that women's access to enter the labor market can be seen from the husband's income. In addition, the tendency of women to participate in the workforce is based on some conditions like the higher reservation wages and family time. According to Hubbard (2012). There are two effect of wages to supply of labor namely substitution and income effect. An increase in real wage, the substitution effect will lead you to supply more hours of labor, while income effect leads you to supply fewer hours of labor. So the response of wage increase will depend on which tendency is strongest for you. In case of working mothers, if wages for non-household work exceed the reservation wage, then women will tend to participate in the labor market.

The main purpose of a woman who already has a husband and child is to provide welfare to the family, especially the welfare of children through attention, free time, and education for children. Some mothers think that a mother's place is at home taking care of the family, and some mothers also have belief that by working, mothers can get additional income for household needs. Mothers who work do not mean that they are not responsible about their own children because mothers who work also have free time to be used with children in quality. So, working or not working is a dilemma choice for some women, especially those who are married and have children in the household.

Reynold, Fernald, and Behran (2017) explained that mothers who work do not have a bad influence on child development. On the other hand, there is a negative stigma given to working mothers who have children but are too busy with their work. The negative stigma arising from working mothers is the lack of attention and supervision that children get due to the time spent on working so that it affects the child's behavior and growth.

With the mother's time spent a lot outside the home to work, it will have an impact on parenting. Mistakes in parenting can cause crime against children. Vander Ven and Cullen (2004) explained that mothers who often work beyond normal working hours and spend more time outside the home will tend to have more children who are involved in crime, especially in adolescence. Conversely, on the

contrary, mothers who work according to normal working hours and can share their time well with their children, it has no effect on child crime.

Cook (2014) explains that mothers who work able to reduce criminality on children, because when the mother work and have higher education, she tends to have quality time for their children, and will provide better education to children about what things should be doneor not. From education view, when a mother has a toddler, working mothers will also choose to provide facilities to children by entrusting their children to the Day care. With the program, mothers do not need to worry about their children.

Recently, the criminality on children has increased on some provinces in Indonesia. According to data from Criminal Statistics, in 2015 the number of children who were victims of crime in Indonesia was still very large. But this number is smaller compared to victims of crimes that occur to the adult population. The largest number of victims of crime in children were in West Java (44,048 children), Central Java (22,849), and East Java (18,108).

The type of crime that occurs on children is in the form of theft, persecution, theft by violence, sexual violence, and others. Children become targets who are susceptible to crime, especially sexual violence who are dependent on adults. According to the Indonesian Child Protection Commission (KPAI) in 2015, 62 percent of children victims of crime were due to cases of sexual violence, but this value was lower compared to 2014. The decrease number of child becomes victim shows the important role of parents, especially mothers in educating and caring for children from the threat of crime. The important role of mother is giving more attention and supervision to children in their growth period is one of the factors in reducing crime that occurs in children.

Research about the relationship between working mothers on crimes in children has not been widely done. Generally, various literatures have discussed a lot about the relationship between mothers working on children's health and the formation of behavior towards children. One of them is research conducted by (Menaghan and Parcel, 1991). In this research, it conclude that there is a negative impact of the mother who works on children's behavior. They also explained that maternal working hours did not affect children aged 4 to 6 years and aged 10 to 14 years on children's behavior.

The research discussed by Sampson and Laub (1993) explains that there is a positive relationship between working mothers on crime in children due to lack of supervision provided by mothers. Meanwhile, other studies explain that there is no relationship between working mothers and child crime, (Broidy and Agnew, 1997; Hillman and Sawilowsky, 1991).

Ven and Cullen (2004) explained that working mothers who spare their time between work and family, especially time for children is not related to the crime faced by children. Research conducted by Corman et al (2017) explains that the incentives of working mothers lead to a reduction in the number of crimes against children, this is influenced because mothers who work have incentives / income by not ignoring free time to be given to children so as to improve welfare children, and child crime rates have decreased.

Based on some of the literature studies above, taking into account that this study will adopt from research conducted by Ven and Cullen (2004), where they only focus on teenagers. Therefore the author wants to do further research by expanding the age of children who are victims of crime. That is the impact of working mothers on crime in children.

## Methods

The data used in this study is secondary data from the National Socio-Economic Survey (Susenas) in Indonesia at the year 2016 by using cross section data. Dependent variables in this study are Y (1 = Children who are victims of crime, 0 = children who are not victims of crime. The independent variable is working mothers. In this study, it focuses on the impact of working mothers on crimininality faced by children.

The criteria for working mothers in this study are the data of all working and non-working mothers who have children aged 0-17 years in the household. To estimate the impact of the working mothers on the probability of crime on children is using Probit model. Estimates made to determine

the probability of crime against children can be seen from the main variables, namely working mothers.

**Using Probit model to estimate the probability of crime against children**

The methods that use to see the impact of working mothers on the probability of crime againts children in Indonesia is using probit model. This model is used to modeling the results of dichotomous or binary variables.

In general, the latent variables from the probit model (Wooldridge, 2012) are as follows:

$$y * \text{tj} = \beta j + xt\beta j + etj, \ y = 1 \ [y * > 0] \tag{1}$$

where: $y * \text{tj}$ is a latent variable, xt is an independent variable, and etj is an error term that is normally distributed. Notation 1 [y *> 0] to determine the results of binary variables. Function 1 [y *> 0] is also an indicator function, if the value 1 is correct and value 0 is wrong. Therefore, y is 1 if y *> 0 and y is 0 if y * ≤0.

In estimating the relationship between variables X and Y, this study will estimate the dependent variable with the probit model. Variable Y is a child variable, with the decision whether children become victims of crime (Y = 1) or children who are not victims of crime (Y = 0). Then the results of the stages using the probit model can be expressed in the form of:

$\alpha o = \{y1 = 0\}$ = Probability of a children who are not victim of crime
$\alpha 1 = \{y1 = 1\}$ = Probability of children who are victims of crime. (2)

By looking at the results of the equation above, the latent variable for the probit model in stage j is:

$$\begin{cases} 1, & y_{j,i} > 0 \\ 0, & y_{j,i} \text{ other} \end{cases} \tag{3}$$

General specification model using latent variables:

$$y^{*}_{1,i} = x_{1,i}\beta_1 + \varepsilon_{1,i} \qquad i = 1,2,3,.....,n \tag{4}$$

where: y * * 1, I is a latent variable that shows the probability of being a victim of crime and not a victim of crime. X1, I is an independent variable that affects the probability of the variable y1i. β1 is a vector of parameters to be estimated, ε1 is the standard error term that is normally distributed. For parameter estimation, the probability for some of the options above is determined as follows:

$$\Pr(\alpha_o) = \Pr(y_1 = 0) = \Pr(\varepsilon_{1,i} \leq - x_{1,i}\beta_1) = \phi_1(-x_{1,i}\,\beta_1)$$
$$\Pr(\alpha_1) = \Pr(y_1 = 1) = \Pr(\varepsilon_{1,i} > - x_{1,i}\beta_1) = \phi_1(x_{1,i}\,\beta_1) \tag{5}$$

where, $\phi1$ is a function of the standard normal distribution, β1 is a vector of parameters that will be estimated, and ϱ is the correlation coefficient.

Based on the description above, the empirical model of the probit model equation for children aged 10-17 years used in this study is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_5 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \mu \tag{6}$$

Y: Victims of crime againts children
X1 = working mother
X2 = age of child
X3 = sex of child
X4 = mother's working hours
X5 = mother's age
X6 = years of schooling

X7 = father's working hours
X8 = father's age
X9 = father's working hours
X10 = years of schooling
X11 = region
μ = error term

## Results

In estimating the effect of working mothers on the probability of crime against children in Indonesia, this study uses the probit model method. The estimation results of the equation are explained in table 1.1.

In the estimation results of the empirical equation with the probit model method can be seen through the marginal effects value. In the results of the empirical equation, when we see from the dummy variable, the sex and regional type variables, they have a positive and significant effect on the probability of crime against children, which indicates a greater percentage probability of an increase in crime in children. Conversely, when viewed from the continuing variable, the child age variable and maternal working hours have a positive and significant effect on the probability of the crime against children, which indicates that the addition of these variables will increase the probability of children being victims of crime.

In table 1.1, it explained about continue variable namely variable years of schooling of mothers, father's working hours, and father's age. The result of the study tells that it has negative and significant influence on the probability of children being victims. it means that the addition of these variables will reduce the probability of children becoming victims of crime.

Table 1 The probability of crimes against children

| Variable | dy/dx | Standard Error |
|---|---|---|
| Working mother | 0,0003 | 0.0477 |
| Age of child | 0,0624*** | 0.0039 |
| Sex of child | 0,0500* | 0.0282 |
| Mother's working hours | 0,0032*** | 0.0009 |
| Mother's age | 0,0015 | 0.0035 |
| Years of schooling (mother's) | -0,0100*** | 0.0033 |
| Father's age | -0.0107 | 0.0839 |
| Father's working hours | -0.0018** | 0.0008 |
| Father's age | -0.0126*** | 0.0032 |
| Years of schooling (father's) | 0.0038 | 0.0032 |
| Region | 0.1559*** | 0.0308 |
| ---------------------------------- | | |
| Number of obs | 297446 | |
| Prob > chi2 | 408.79 | |
| Pseudo R2 | 0.0000 | |
| Log likelihood | 0.0528 | |

Notes :: ***) Significant at $\alpha$ = 1%, **) Significant at $\alpha$ = 5%, *) Significant at $\alpha$ = 10%

From table 1, we see that the estimation result of variables of working mothers do not affect the probability of crime against children. Because when the mother works, the mother has an alternative to leave her children to the child care (day care) center while the she goes to works. In addition, most of the mothers who work also leave their children to their parents or mother-in-law where under this condition their children are more controlled. Working mothers generally have a higher education,

where they are aware of the health, safety and development of children. This result is also strengthened by research conducted by Reynold, Fernald, and Behran (2017), they explain that mothers who work do not have a bad influence on children's development, meaning that mothers who work do not affect the occurrence of crime to children.

The variable of children age has a positive and significant effect on the probability of crime against children. It means that, as the child aged, the probability of children becoming victims of crime increases by 6.24 percent. Older children need a lot of socialization with their parents so they understand what to do and what not to do to avoid crime. Dr. Amy Linn, a psychologist from Wayne State University, explained that one of the causes of older children who are vulnerable to being victims of crime is because of the habits of children holding cell phones. Crimes that can occur to a child who owns a cell phone is not just a kind of robbery and theft of the cell phone used by the child, but there are other crimes that can trigger the child to use the cell phone as a crime of sexual harassment.

Child sex variable has a positive and significant effect on the probability of children becoming victims of crime. It means that children with male gender have a greater probability of 5 percent are vulnerable to being victims of crime compared to females. This shows that males are often out of the house, playing with friends on the same age, so the number of males who are victims of crime is greater than females. In general, the crime that occurs in children is greater when children are outside the home than at home.

The variable of working hours of mothers has a positive and significant effect on the probability of children being victims of crime. It means that, when the mothers is working more that normal hours ,every additional 1 hour the mothers spent during the working hours, it increases the probability of children becoming victims of crime by 0.03 percent. This can be caused by the mother's working hours spent a lot of time outside the home than in the home which makes children is not under control of the mothers, so that the activities carried out by children are less controlled.

The variable of years of school mothers has a negative and significant effect on the probability of children being victims of crime. it means that every additional year of mother's education, it will reduce the probability of children becoming victims of crime by 0.1 percent. This can be explained because educated mothers will tend to give the best attention and facilities to children, she tends to be more understand about their children needs. So that mothers are aware of the growth and development of their children, and will do some preventives action to avoid crime happen to their children. In addition, mothers with relatively fewer working hours, will use their time well for child development.

Variable of father's working hours has a negative and significant effect on the probability of children becoming victims of crime. It means that an increase of 1 hour in father's working hours will reduce the probability of children to be victims by 0.05 percent. This can be explained because when the number of father's working hours increases due to the increase in household income, the father gives full employment rights to the father, so the father chooses to increase his working hours, and the mother accompanied the child to play at home as long as the father works. So the mothers will have quality time with their children, taking care of their children, have full control to their children then the criminality against children can be reduced.

The variable of father's age has a negative and significant effect on the probability of a child being a victim of crime outside the home compared to inside the home, meaning that each addition of 1 year of father's age reduces the probability of children becoming victims of outside crime by 1.26 percent. This may be due to the increasing age of the father, the better the future of the child so that the father will be more concerned about child safety.

The variable that has a positive and significant effect on the probability of crime in children is regional type variables, meaning that, children who live in urban areas will have a probability of being a victim of crime greater than 15.59 percent when compared to children living in the rural areas. This can be explained because children in urban areas develop physically faster than children living in rural areas. In addition, the relatively larger number of urban population with various types of

characters has led to an increase in cases of crimes that occur in children. Finally, for the variables of mother's age, father's work, and years of schooling the father does not affect the probability of the occurrence of crime in children.

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## Conclusion

This study aims to find out how the impact of working mothers on victims of crime against children, as well as the factors that influence it. The results in this study explain that when we see from the dummy variable, the sex and regional type variables have a positive and significant effect on the probability of crime against children. Conversely, when viewed from the continue variable, the variability of the child and the mother's working hours have a positive and significant effect on the probability of crime against children. The results also explain that from the continue variable with negative and significant effect on the probability of children who are victims of crime are variables of maternal years of schooling, father's working hours, and father's age.

## References

Broidy, L., and Agnew, R., (1997). Gender and Crime: A General Strain Theory Perspective. Journal of Research in Crime and Delinquency. Vol. 34 No. 3, 275-306.

Cook, C (2014)., Are working mothers helping to cut crime?. Policy editor, BBC Newsnight

Corman, H., et al (2017). Effects of Maternal Work Incentives on Youth Crime. *Labor Economics*. DOI: 10.1016/j.labeco.2017.09.005

Hilman. S. B., and Sawilowsky. S. S., (1991). Maternal Employment and Early Adoles cent Substance Abuse. *Adolescence*. 26: 829-837.

Menaghan, E. G. and T. L. Parcel. (1991). "Determining Children's Home Environments: The Impact of Maternal Characteristics and Current Occupational and Family Conditions." *Journal of Marriage and the Family* 53:417-31.

Reynolds. S., Fernald. L., and Behrman. J., (2017). Mothers' labor market choices and child development outcomes in chile. *SSM -Population Health.*

Sampson, Robert J., and Laub. J. H., (1993). *Crime in the Making:PathwaysandTurning Points through Life.* Cambridge, Mass.: Harvard UniversityPress.

Shechtman. G. S., and Neuman. S., (1998). The extra burden of moslem wives: clues from Israeli women's labor supply. *Economic Development and Culture Change.* 46 (3): 491-517

Vander Ven, T., and Cullen, F. T., (2004). The Impact of Maternal Employment Serious Youth Crime: Does the Quality of Working Conditions Matter?.*Crime & Delinquency,*Vol. 50 No. 2, 272-291.

Wooldrige, Jeffrey, M. (2012). *Introductory Econometrics: A Modern Approach 5th Edition.* Michigan State University.South-Western, Cengage Learning.