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EDUCATION AND THE LABOR FORCE PARTICIPATION OF MARRIED WOMEN: WEST MALAYSIA 1970

by

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A B S T R A C T

With West Malaysia as the empirical setting, this paper examines the effect of wife's education on her labor force participation holding husband's income, age, race, and location of residence constant. Using cross-sectional data drawn from the 1970 Post Enumeration Survey, the results are not unlike those found in the Philippines where below some income and education thresholds, the marginal effect of education is negative and is positive beyond. These observed results suggest that the conventional analysis of wife's labor force participation requires modification in a setting where incomes are below subsistence levels.

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1. Introduction

This paper reports the results of a cross-sectional analysis of the effects of education on the labor force participation of married women in West Malaysia.

Several empirical studies in MDCs show a consistently positive association between education and labor force participation of women (e.g. Cain 1966, Bowen and Finegan 1969). The standard explanation for this is that education raises the marginal productivity of her market time more than it does the time spent in nonmarket activities - this raises the opportunity cost of nonmarket hours, rendering it less attractive than time spent in market work. On the other hand, some studies done in LDCs show no clear-cut positive association between education and labor force participation. There is evidence that at very low income levels, the effect of a rise in the years of schooling on the labor force participation of married women is negative up to some education threshold (see, e.g., Encarnación 1973, Canlas and Encarnación 1977).

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The empirical evidence suggests that an analysis of the labor force behavior of females at low income levels requires a modification of the traditional explanations.

In this paper, an eclectic framework for analyzing labor force behavior of married women is presented: at low-income levels, we draw from a hypothesis, earlier expressed by Encarnación (1973), which posits a target-setting behavior on the part of the household; on the other side of the income distribution, the wife is assumed to be an optimizing economic agent.

The plan of this paper is as follows: section 2 discusses the theoretical framework; section 3 gives a broad view of poverty and income distribution in West Malaysia; section 4 presents the regression model, the data and estimation procedures; section 5 presents the results; section 6 concludes the study.

2. Theoretical Framework

At low income levels, say below subsistence levels, and with the wife's level of education typically low, her decision to work is closely associated with the husband's income. It depends particularly on the gap between his actual income and a target family income corresponding to a subsistence level of income. In this setting, it is reasonable to assume that the household's primary objective is to reach the subsistence level of income so that the wider the income gap, the more working hours the wife will put in so that at the given wage rate, the gap will

be narrowed; as the wife's wage rate increases at these low levels, her husband's income held constant, less working hours will be forthcoming from the wife with a diminution in her likelihood to work. If we assume the wage rate to be positively related to education, then we can observe a decreasing likelihood to work by the wife with a rise in schooling years at these low-income levels.

At these same levels, the husband's income will also have a negative effect on her likelihood to work. This seems clear since an increase in his income, all other things held constant, means a narrowing of the actual and the target income gap, causing a diminution in the wife's motivation to work.

On the other side of the income distribution, the wife's level of education and potential earnings are relatively higher. In this case, her motivation to work is less tied to the husband's income and it would be reasonable to assume that she is an optimizing economic agent (Above the threshold, the effect of YH will be negative in line with the usual income effect). Her constrained optimizing decision is associated with a shadow price of time - the latter reflecting the marginal valuation she places on nonmarket uses of her time. This shadow price of time may be a function of certain variables like age, education, children (see, e.g., Gronau 1973; Heckman 1974). At the same time, with her education and work experience, she commands a given market wage rate (see, e.g., Mincer 1975). The decision procedure may be described, thusly: If her market wage exceeds the shadow price of her time she works; otherwise, she will not. An increase in her years of schooling is expected to increase

the marginal productivity of her market time more than the shadow price of her time, with a consequent positive effect on her likelihood to work.

The hypothesis is this: There is a threshold value of education corresponding to some target level of income such that below the threshold, the effect of more years of schooling on labor force participation of women is negative and beyond the threshold, its effect will be positive.

3. Income Distribution and Poverty in West Malaysia

As a background to the empirical analysis to follow, some facts pertinent to income distribution and aspects of poverty are presented in this section.

From 1957-1970, the change in income distribution showed an increasing pattern of inequality over time. There are studies showing that the richest 20 per cent of households increased their share from 49 to 55 per cent of the total income (see, e.g., Hirschman 1974). On the other hand, the lowest three-fifths saw their share of the total income reduced. The poorest one-fifth received only 4 per cent of total income. The "have-nots" not only became poorer in the relative sense (the gap between them and the "haves" has widened) but also in the absolute sense (their actual income is now less than before). To illustrate, the richest 5 per cent of households received 23.3 per cent of the income - this was more than all income received by the bottom 40 per cent of households. According to the 1967-68 Socio-

Economic Survey (S.E.S.), the household mean cash income was M$221 per month. Less than 30 per cent of the households were enjoying incomes above the mean. The pattern of household income distribution, summarized by L.L. Lian (1974) is shown in Table 1. In terms of racial breakdown, the mean and median incomes for the Malay household was only 62 per cent of the national average. The non-Malay households earned more than twice the income of Malay households and also displayed a lower extent of inequality compared to the urban sector. The lower income for the rural sector may be due to the underestimation of "income in kind" from the agricultural sector which further contributes to lessening the figures of low income earners. A detailed breakdown is shown in Table 2.

The average household income has increased between 1957 to 1970. The average household income in 1970 was M$271 per month. The increase is about 1.7 per cent over the 13-year period. It has been noted that households under study are not comparable - for instance, the 1957-58 average household income of M$217 per month was based on 4.8 persons per household, whereas in 1970, the average income was based on 5.5 persons (Hirschman 1974).

Poverty is still a very serious national problem in the country. Regrouping of the lowest 40.2 per cent of the population into household units implies that 36.5 per cent of households are in poverty (Anand 1977). These poor households are found in various communities with the majority of them (about 74 per cent of all poor households), found in the rural areas.

Table 1

Distribution of Income Group of Household

% of Households	% of Aggregate Income
Bottom Decile	1.1
2nd "	2.0
3rd "	3.4
4th "	3.9
5th "	6.7
6th "	6.9
7th "	7.6
8th "	11.3
9th "	16.2
Top "	40.9
Monthly mean Income	M$221
Monthly median Income	M$131
Gini Ratio	0.510

Source: L.L. Lian, "Income Distribution in West Malaysia," Income Distribution, Employment and Economic Development in Southeast and East Asia, papers and proceedings of the seminar sponsored jointly by the Japan Economic Research Center and the Council for Asian Manpower Studies, Dec. 16-20, 1974, Vol. 2, July 1975, p. 169.

Table 2

Distribution of Household Income by Sector

% of Households	Cumulated % of Aggregate Income	
	Urban	Rural
Bottom 10 per cent	1.6	-
Bottom 20 "	4.2	4.2
Bottom 30 "	9.4	8.1
Bottom 40 "	-	-
Bottom 50 "	20.0	-
Bottom 60 "	26.1	27.0
Bottom 70 "	34.9	39.3
Bottom 80 "	46.0	51.9
Bottom 90 "	61.0	65.8
Monthly mean Income	M$285	M$119
Monthly median Income	M$180	M$ 85
Gini Ratio	0.475	0.461

Source: L.L. Lian, "Income Distribution in West Malaysia," Income Distribution, Employment and Economic Development in Southeast and East Asia, papers and proceedings of the seminar sponsored jointly by the Japan Economic Research Center and the Council for Asian Manpower Studies, Dec. 16-20, 1974, Vol. 1, July 1975, p. 171.

Information on household income shared among members is not easily obtainable. Assuming it is shared equally among all members and ranking individuals and households on the basis of their per capita household income, we come up with differences in levels of living across individuals and households. The mean income of individuals is estimated at M$50 per month and the inequality in their income, measured by the Gini coefficient is 0.498 where the bottom 40 per cent of individuals receive only 12.3 per cent of the total income while the top 5 per cent receive 28.5 per cent of the income. A breakdown by community groups shows that non-Malays (Chinese M$68 per month, Indian M$57 per month) receive twice as that received by Malays (M$34 per month) (see Anand 1977).

In less developed countries, the figure of 40 per cent as a cut-off point for the lowest x per cent has sometimes been suggested. For Malaysia, the per capita household income level which cuts off the bottom 40 per cent of the population from the rest is M$25 per month. And the percentage of individuals who fall below this level is 40.2 per cent, and 26.5 per cent for the households.

The distribution and incidence of poverty show the following features: (a) Households headed by females are more prone to poverty (44.9 per cent) than those headed by males (34.6 per cent); (b) The age group 20-29 is the least poverty-prone; (c) the incidence for poor households increases continuously with the number of children under age 15.

For the regional breakdown, the states of Kedah, Kelantan, Perlis and Trengganu altogether accounted for 41.5 per cent of poor households which are agriculturally based. Farmers and laborers contribute or display quite a high incidence of poverty. In the agricultural sector, 61.5 per cent and agricultural products, 46.2 per cent contribute for 75.1 per cent of all the poor households.

In terms of rural-urban breakdown, about 14 per cent of the households are in the urban areas while 86 per cent are in the rural areas. The total number of poor non-agricultural households increased from 89,500 in 1970 to 108,200 in 1975 or an average annual increase of 3.3 per cent as compared with 0.7 per cent increase among the poor households during the same period.

4. Regression Model, Data and Estimation Procedure

In this section, we present a regression model for the wife's labor force participation equation which adheres to the theoretical framework outlined in section 2. The specification was used by Encarnación (1973) and has been adopted in Canlas and Encarnación (1977).

We choose a target level of income and it corresponds to an absolute measure of poverty level in Malaysia. The poverty level is approximately M$1,500 per annum for a family of five (see Anand 1977). For this family size, the incidence of poverty is considered average. To capture the impact of a change in the gap between husband's income and

the target income at low income levels, we use the explanatory variable YHN = min (0, YH - FY*) and YHX = max (0, YH - FY*) where YH is husband's income and FY* = M$1.5 thousand. For any observation, YHN and YHX are either 0 or 1.

For the wife's education, we choose a threshold value of EW* corresponding to FY*. By running a regression for the wife's labor force participation, LPW, with a quadratic term for wife's education, EW, we get EW* which yields a relative minimum for LPW. This we found to be approximately equal to 1.9.

To complete the model, we included a set of dummy variables corresponding to the wife's age, { CNk } , a dummy variable for race, R, and geographic location,Loc. The list of variables and their notations are shown in Table 3.

The regression model is:

$$(1)\quad LPW = \beta_0 + \beta_1\, EWN + \beta_2\, EWX + \beta_3\, YHN + \beta_4\, YHX + \beta_5 \{ CNk \} + \beta_6\, R + \beta_7\, Loc + \varepsilon$$

where ε is the standard error term. In line with our hypothesis, we expect:

$$\beta_1 < 0,\ \beta_2 > 0,\ \beta_3 < 0,\ \beta_4 < 0.$$

The data is drawn from the Post Enumeration Survey (PES) of the 1970 Census. The survey is a selected sample of about 135,000 individuals

Table 3

Variables and Notations

CWk = 1 if the woman belongs to age-cohort k and 0 otherwise where k is coded as

- 4 = age 15-19
- 5 = age 20-24
- 6 = age 25-29
- 7 = age 30-34
- 8 = age 35-39
- 9 = age 40-44

EWk = 1 if the education level of the wife is k and 0 otherwise where k is coded as

- 0 = no schooling
- 1 = some years (standard I to V) and completed all years
- 2 = Form I, II, and III but no Lower Certificate of Education (L.C.E.)
- 3 = L.C.E., Form IV and V but no School Certificate
- 4 = School Certificate or its equivalent, Form VI, Lower and Upper but no Higher School Certificate (H.S.C.)
- 5 = Higher School Certificate
- 6 = University Graduate

EW* = wife's education threshold assumed equal to the coded value 1.9

EWN = min (0, EW-EW*)

EWX = max (0, EW-EW*)

LPW = 1 if the wife is in the labor force and 0 otherwise

Loc = 1 if the location of residence is urban and 0 if rural

YH = annual income of the husband, in thousand pesos

R = 1 if Malay and 0 if non-Malay

YHN = min (0, YH - 1.5)

YHX = max (0, YH - 1.5)

(or approximately 25,000 households) in Peninsular Malaysia and contains both economic and demographic information.

To estimate (1), we choose a subsample of nuclear households, consisting of a couple and unmarried children living with them, excluding parents of either spouse, wife's age is between 15-44 and married only once. The selection process yielded 6,075 observations of which 1,259 are urban and 4,816 are rural.

Ordinary least squares is used to estimate (1). Separate parameter estimates are made for the total, rural and urban samples. In an alternative specification for (1), we use a set of dummy variables { EWk } for the wife's education. The incidence of poverty differs for Malaysians and non-Malaysians, and we found it fitting to consider estimates of (1) by race.

5. Regression Results

The ordinary least squares (OLS) estimates of equation (1) for the total, rural and urban samples are shown in Table 4. For the total sample, the coefficients obtained are in line with the hypothesis. We obtain a negative and significant coefficient for EWN while for EWX, it is positive and significant. Below the threshold, the negative effect of an additional unit of schooling is approximately 10 per cent; above the threshold, the positive effect is about 20 per cent. The estimated coefficient of YHN and YHX are both negative and significant

Table 4

LPW Equations: Total

	TOTAL	RURAL	URBAN
Const.	0.1329	0.1544	-0.0460
CN5	0.0184 (0.622)	0.0125 (0.374)	0.0541 (0.906)
CN6	0.0509 (1.76)	0.0366 (1.11)	0.1184 (2.03)
CN7	0.0730 (2.53)	0.0620 (1.89)	0.1188 (2.04)
CN8	0.1027 (3.46)	0.0934 (2.74)	0.1463 (2.49)
CN9	0.0942 (3.14)	0.0914 (2.68)	0.1255 (2.11)
R	-0.0714 (-5.46)	-0.1015 (-6.31)	-0.0037 (-0.19)
EWN	-0.1167 (-6.36)	-0.1531 (-6.84)	0.0155 (0.58)
EWX	0.2005 (10.9)	0.1746 (6.41)	0.1906 (9.59)
YHN	-0.1803 (-13.4)	-0.1635 (-10.7)	-0.2662 (-8.28)
YHX	-0.0157 (-4.30)	-0.0299 (-5.62)	-0.0001 (0.03)
Loc	-0.1559 (-10.5)		
sample size	6,075	4,816	1,259
$\bar{R}^2$	0.0889	0.0624	0.1277
s.e.e.	0.4288	0.4517	0.3128
F-Value	54.8	33.1	19.4
s.d. (LPW)	0.4492	0.4665	0.3349

(t-values in parenthesis)

which are as expected. The magnitudes of the estimated parameters of YH support our hypothesis that at relatively higher income levels, the wife's motivation to work is less tied to the husband's income: the coefficient of YHN is -0.18 and -0.01 for YHX. The coefficients for the wife's age-cohort dummies increases from CN5 to CN8 and declines from CN8 to CN9. This is in line with previous empirical studies where age is shown to have a nonlinear effect on the wife's likelihood to work - increasing up to some level and decreasing at older ages. What appears confusing is the negative coefficient for location of residence. Typically, one would expect living in an urban area to be positively related to LPW, all other things held constant. It might be that in a setting which is predominantly agricultural, there are more work opportunities in rural than in urban areas. In this regard, a closer investigation of LPW by geographic location is warranted.

For rural households, the estimated coefficients of EWN, EWX, YHN and YHX conform with the expected signs and are all significant. For the urban case the coefficients of EWN and YHX are insignificant while EWX and YHN are in accord with the hypothesis. The positive effect of EWX is numerically larger for urban than rural. The negative effect of YHN is, in absolute terms, larger in urban than in rural areas. A possible explanation for this is that at low incomes, assumed correlated with low schooling years for the wife, the wife will find it more difficult to get employed in urban than in rural areas. In the latter, a woman with low schooling years can easily be hired as an agricultural hand. For both

rural and urban households, the effect of age is typical - increasing from CN5 to CN8 and decreasing from CN8 to CN9.

The adjusted coefficients of determination $\bar{R}^2$ are rather low. This may be due to the limitation of OLS estimation when dealing with a dependent variable involving only quantal responses. The F-values are, however, supportive of a linear relationship.

The results of estimating an alternative specification of equation (1) using a set of dummy variables for the wife's education, { EWk } , are shown in Table 5. Most of the estimated coefficients are not significantly different from zero (The advantage of showing nonlinearities by using a set of dummy variables is achieved but at a loss of some degress of freedom). Two dummy variables, EW0 and EW5, do not appear in the specification - EW0 has no observation while EW5 was chosen as the category dropped. For the total sample, we observe the coefficients decreasing from EW1 to EW2 and increasing from EW2 to EW6. For the rural case, we observe the same pattern except for the coefficient of EW6 which is lower than EW4. For the urban case, we observe a step-up effect from EW1 to EW6.

The parameter estimates of equation (1) for a sample of Malays are shown in Table 6. For the total sample, we obtain the expected signs of the coefficients for EWN and EWX. Both are significant. The estimated coefficient of YHN is negative, as expected, and significant; that of YHX is also negative but not significantly different from zero.

Table 5

LPW Equations

	TOTAL	RURAL	URBAN
Const.	0.3216	0.4569	-0.0803
CN5	0.0187 (0.63)	0.0115 (0.34)	0.0635 (1.07)
CN6	0.0496 (1.71)	0.0350 (1.06)	0.1202 (2.07)
CN7	0.0735 (2.55)	0.0624 (1.90)	0.1232 (2.13)
CN8	0.1043 (3.51)	0.0933 (2.75)	0.1535 (2.63)
CN9	0.0945 (3.15)	0.0911 (2.66)	0.1306 (2.21)
R	-0.0714 (-5.46)	-0.1017 (-6.32)	-0.0020 (-0.11)
EW1	-0.0836 (-0.55)	-0.1644 (-0.81)	0.0158 (0.09)
EW2	-0.1702 (-1.12)	-0.2867 (-1.41)	0.0481 (0.26)
EW3	0.0175 (0.11)	-0.0975 (-0.47)	0.2004 (1.08)
EW4	0.3247 (2.06)	0.1384 (0.65)	0.5205 (2.82)
EW6	0.3465 (1.42)	-0.0298 (-0.08)	0.6377 (2.51)
YHN	-0.1805 (-13.4)	-0.1642 (-10.8)	-0.2646 (-8.27)
YHX	-0.0162 (illegible)	-0.0304 (illegible)	-0.0006 (-0.15)
Loc	-0.1571 (-10.6)		
sample size	6,075	4,816	1,259
$\bar{R}^2$	0.0908	0.0628	0.1384
s.e.e.	0.4283	0.4516	0.3109
F-Value	44.30	25.81	16.55
s.d. (LPW)	0.4492	0.4665	0.3350

(t-values in parenthesis)

Table 6

LPW Equations: Malays

	TOTAL	RURAL	URBAN
Const.	0.0283	0.0279	-0.0765
CN5	0.0061 (0.18)	0.0001 (0.002)	0.0411 (0.55)
CN6	0.0516 (1.57)	0.0434 (1.21)	0.0906 (1.24)
CN7	0.0683 (2.09)	0.0578 (1.62)	0.1203 (1.64)
CN8	0.1032 (3.03)	0.0965 ( )	0.1205 (1.62)
CN9	0.1065 (3.12)	0.1072 (2.89)	0.0832 (1.08)
EWN	-0.1471 (-6.56)	-0.1712 (-6.72)	-0.0167 (-0.41)
EWX	0.2256 (7.94)	0.2414 (6.23)	0.1815 (5.64)
YHN	-0.1833 (-12.1)	-0.1666 (-10.1)	-0.3608 (-8.82)
YHX	-0.0087 (-1.54)	-0.0151 (-2.06)	0.0063 (0.91)
Loc	-0.1095 (-5.05)		
sample size	4,134	3,635	499
$\bar{R}^2$	0.0813	0.0626	0.1701
s.e.e.	0.4349	0.4482	0.3128
F-Value	37.59	27.98	12.34
s.d. (LPW)	0.4538	0.4629	0.3434

(t-values in parenthesis)

For rural Malays, the signs of the estimated coefficients of EWN, EWX, YHN and YHX are as hypothesized and all are significant. For the urban case, the signs of the coefficients of EWX and YHN are as expected and significant. For EWN and YHX, the coefficients are not significantly different from zero. A comparison of the magnitudes of the estimated coefficients for the rural and urban cases shows the following features: (1) below the threshold, the negative effect of years of schooling is stronger for rural than for the urban households; (2) above the threshold, the positive effect of years of schooling is stronger for rural than for the urban case; (3) the negative effect of YHN is larger in urban than in rural areas.

The parameter estimates of equation (1) for non-Malays are shown in Table 7. For the total sample, the signs of EWN, EWX, YHN, and YHX are as expected. Except for EWN, all coefficients are significantly different from zero. For the rural case, the estimated coefficients of EWN, EWX, YHN and YHX are as expected and significant. For the urban case, only the coefficient of EWX is significant. Comparing the estimated coefficients for rural and urban, we observe the following: (1) above the threshold, the positive effect of EW is stronger for urban than rural non-Malays; (2) the negative effect of YHN is stronger for rural than urban.

The estimates of the alternative specification of equation (1) for Malays and non-Malays are shown in Tables 8 and 9. For the Malays, the parameter estimates of { EWk } for the total and rural samples

Table 7

LPW Equations: Non-Malays

	TOTAL	RURAL	URBAN
Const.	0.2084	0.2113	-0.0151
CN5	0.0372 (0.55)	0.0332 (0.38)	0.0603 (0.58)
CN6	0.0347 (0.52)	-0.0029 (-0.03)	0.1379 (1.36)
CN7	0.0726 (1.09)	0.0617 (0.72)	0.1107 (1.10)
CN8	0.0884 (1.32)	0.0703 (0.82)	0.1623 (1.60)
CN9	0.0556 (0.82)	0.0245 (0.28)	0.1553 (1.52)
EWN	-0.0512 (-1.63)	-0.1119 (-2.37)	0.0429 (1.21)
EWX	0.6177 (6.81)	0.1118 (2.78)	0.1925 (7.54)
YHN	-0.2189 (-6.55)	-0.2189 (-5.13)	-0.0839 (-1.57)
YHX	-0.0194 (-4.07)	-0.0413 (-5.21)	-0.0047 (-0.98)
Loc	-0.1961 (-9.86)		
sample size	1,941	1,181	760
$\bar{R}^2$	0.1124	0.0708	0.1132
s.e.e.	0.4132	0.4591	0.3102
F-Value	25.57	10.99	11.77
s.d. (LPW)	0.4385	0.4763	0.3294

(t-values in parenthesis)

Table 8

LPW Equations: Malays

	TOTAL	RURAL	URBAN
Const.	0.510	0.0067	-0.0958
CN5	0.0075 (0.23)	0.0010 (0.03)	0.0495 (0.67)
CN6	0.0514 (1.57)	0.0428 (1.20)	0.0933 (1.29)
CN7	0.0692 (2.12)	0.0577 (1.62)	0.1297 (1.78)
CN8	0.1038 (3.05)	0.0966 (2.60)	0.1295 (1.75)
CN9	0.1074 (3.15)	0.1073 (2.89)	0.0924 (1.20)
EW1	0.1094 (0.43)	0.1755 (0.39)	0.0275 (0.12)
EW2	-0.0018 (-0.007)	0.0437 (0.097)	0.0352 (0.16)
EW3	0.2370 (0.92)	0.3267 (0.72)	0.1243 (0.53)
EW4	0.5152 (1.97)	0.5532 (1.20)	0.4968 (2.14)
EW6	0.9734 (2.45)	0.9497 (1.49)	1.0414 (2.73)
YHN	-0.1830 (-12.0)	-0.1663 (-10.1)	-0.3601 (-8.86)
YHX	-0.0095 (-1.67)	-0.0159 (-2.16)	0.0056 (0.80)
Loc	-0.1085 (-5.01)		
sample size	4,134	3,635	499
$\bar{R}^2$	0.0825	0.0627	0.1831
s.e.e.	0.4347	0.4482	0.3104
F-Value	29.58	21.27	10.30
s.d. (LPW)	0.4538	0.4629	0.3434

(t-values in parenthesis)

Table 9

LPW Equations: Non-Malays

	TOTAL	RURAL	URBAN
Const.	0.4354	0.5803	-0.0252
CN5	0.0350 (0.52)	0.0338 (0.39)	0.0595 (0.58)
CN6	0.0312 (0.47)	-0.0044 (-0.05)	0.1330 (1.31)
CN7	0.0721 (1.09)	0.0661 (0.78)	0.1034 (1.03)
CN8	0.0923 (1.39)	0.0744 (0.86)	0.1618 (1.60)
CN9	0.0545 (0.81)	0.0263 (0.30)	0.1505 (1.48)
EW1	-0.1806 (-0.96)	-0.2714 (-1.17)	-0.0245 (-0.08)
EW2	-0.2095 (-1.11)	-0.3568 (-1.52)	0.0304 (0.098)
EW3	-0.0915 (-0.47)	-0.3261 (-1.33)	0.1938 (0.612)
EW4	0.2410 (1.24)	-0.0121 (-0.05)	0.5016 (1.61)
EW6	-0.0295 (-0.09)	-0.8511 (-1.65)	0.4049 (1.07)
YHN	-0.2227 (-6.68)	-0.2244 (-5.26)	-0.0844 (-1.59)
YHX	-0.0197 (-4.14)	-0.0418 (-5.26)	-0.0048 (-0.99)
Loc	-0.1973 (-9.93)		
sample size	1,941	1,181	760
$\bar{R}^2$	0.1169	0.0738	0.1220
s.e.e.	0.4121	0.4583	0.3087
F-Value	20.7	8.84	9.97
s.d. (LPW)	0.4385	0.4763	0.3294

(t-values in parenthesis)

display the same pattern - decreasing from EW1 to EW2 and rising from EW2 to EW6. The urban case shows a step-up function. The pattern for non-Malay is less discernible.

6. Concluding Remarks

The findings of this paper point to the differential effects of years of schooling on the labor force participation of married women in West Malaysia below and above a certain threshold. These findings share a leitmotif with those found in the Philippines. In view of this, a question of a theoretical nature can be raised concerning adequacy of the traditional approach to explaining labor force participation of women in an LDC setting. We have sketched a framework which explicitly recognizes the presence of a threshold in choice and the facts appear to conform to the theory.

In the context of the current drive to involve women in development, our findings underscore the need to move majority of women to some education levels above the thresholds in order that the positive effects of increased years of schooling on market participation can be achieved.

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