How Do Different Education Levels of Couples Affect Marriage?

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ABSTRACT

In the real world, the number of couples with different levels of education is on the rise, so it is important to look at the consequences on marriage. To do the research, the tool we use is Stata. We set two regression lines: the first one tests the correlation between divorce, separation, and couples with different levels of education, and the second one tests whether the husband with a higher education level has different extent effect on causing the divorce and separation compared to the situation that wife has higher education level. From the results, we have two main findings. Firstly, there is a positive relationship between different education levels of couples and divorce, separation. Secondly, if the wife has a higher education level than the husband, there is a higher probability of divorce, separation. In the end, we give a further discussion on results to try to explain such phenomenon.

Keywords: *different education levels, marriage, divorce, separation, living apart together, couples*

1. INTRODUCTION

Men's marrying up has become a gradually increasing and unavoidable trend in the modern society. According to the Institute for family studies research [1], the percentage of husbands who are less educated than their wives in the US had steadily risen from 7.1% in 1960 to 15.9% in 1990, and eventually reached 25.3% in 2015. Meanwhile, the percentage of couples with different education levels grew from 41.5% to 49.8%--almost half of the couples have different education levels. The sex ratio of 101 male to 100 female around the world [2] that are currently enrolled in higher education is 56.6% for young women but only 44.1% for men [3]. Additionally, Sweeney's research illustrates a positive relationship between education and first marriage [4]; Torr said that higher educated women are more likely to have marriages overall [5]. Hence, the probability for wives that have higher education level within a couple is gradually growing higher. Education, as a life-changing process, has various benefits and can shape people with better lifestyle and mentality. Thus, couples with different education levels may have completely different marriage experiences. So, it is important to investigate the effect of different education levels of couples during their marriage. In addition, situations like divorce or living apart together have negative effects on children's mental health; Children having such experiences are more likely

to meet difficulties in their lives and get significant harms in both their psychological development and life satisfaction. Therefore, we will also focus on whether the different level of education is a key fact leading to divorce or separation.

2. METHOD

The data set is from the National Longitudinal Survey of Youth (NLSY), and Professor Patricia Anderson collected it mainly for investigating the relationship between alcohol consumption and the labour market. It includes outcomes from the labour market, data from alcohol consumption, and assorted demographics of individuals in each of 2 years--1989 and 1994. However, in this paper, we will mainly focus on the variables describing individuals' parents' education levels and whom they lived with while they were 14 years old. In order to investigate the relationship between living separately or divorce and their parents' education level, we set two regression lines.

On the first regression line, the dependent variable we use is status1, a dummy variable that is equal to 1 if the individual lived with one of their parents at the age of 14, and it equals 0 if the individual lived with both of his parents or lived alone at the age of 14. Since the dependent variable is a dummy variable, we use logistic regression. The first independent variable we utilize is

hvsib, which tracks the number of siblings an individual has; the second is race3, a dummy variable equals to 1 if the person is black and equals zero otherwise. The third variable is sam, which is also a dummy variable equals 1 when their parents have the same level of education. The lasts two variables are dadwork and momwork, which are both dummy variables that equal 1 if the individual's father or mother worked when the individual was 14 and equal 0 if the individuals have no clues of their parents' jobs. The main independent variable is sam. We use it instead of analysing the variables separately since factors that lead to different marriage conditions like separation are bilateral. So, single variable for either father's or mother's education level has tiny or zero effect on marriage. It is impossible to judge whether a marriage has potential issues just by a bachelor's degree or a junior high school diploma of the husband.

The tool we use is Stata. As we can see, the likelihood ratio chi-square of 2391.6 with a p-value of 0 tells us that our model as a whole fit significantly better than a model with no observations. In table 1, the p-value with a 95% confidence interval of the sam's coefficient is 0, so we can say the coefficient of sam is significantly different from 0. For every 1 unit change in sam, the log odds of status1 increases by 0. 7188428. In order to find the probabilities of couples with the same education level and different education levels on separation, we use the margins command. From table2, there is a 25% probability for sam equals to 0 when couples have different education levels to meet a situation of living separately, while 19% when couples with the same education level. Therefore, couples with different education levels are more likely to live separately.

Table 1. First regression line

status1	OR.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
hvsib	.751	.048	-4.43	0	.662	.853	***
race3	1.508	.107	5.79	0	1.312	1.733	***
sam: base 0	1	.	.	.	.	.	
1	.719	.046	-5.14	0	.634	.815	***
momwork: base 0	1	.	.	.	.	.	
1	1.381	.09	4.98	0	1.216	1.569	***
dadwork: base 0	1	.	.	.	.	.	
1	.06	.004	-41.96	0	.053	.069	***
Constant	2.463	.199	11.15	0	2.102	2.885	***

Mean dependent var	0.271	SD dependent var		0.444	
Pseudo r-squared	0.274	Number of obs		7475	
Chi-square	2391.648	Prob > chi2		0.000	
Akaike crit. (AIC)	6347.522	Bayesian crit. (BIC)		6389.038	

*** *p<.01, ** p<.05, * p<.1*

Table 2. Result of margins command for first regression line

Adjusted predictions   Number of obs   =   7,475
Model VCE   : OIM
Expression : Pr(status1), predict()

		Delta-method				
	Margin	Std.Err.	z	P>z	[95%Conf.	Interval]
sam						
0	0.252	0.009	28.870	0.000	0.235	0.269
1	0.195	0.007	26.840	0.000	0.181	0.210

To dig it deeper, when sam equals to 0, we separate the situation into two categories--father has a higher education level or mother has a higher education level. In that case, we want to find which situation tends to cause a higher divorce and separation rate between father with higher education level and mother with a higher education level. So, we run a second regression line. In the second regression line, we keep the same independent variables except changing the sam to ddidp3, a dummy variable that equals one if father has a higher education level and equals zero if mother has a higher education level. Since ddidp3 can further illustrate the situation when sam is one, we discard sam and only use ddidp3 instead. As we can see from table3, the likelihood ratio chi-square is 1157.62, and the p-value is also 0. So, the independent variables we use can generally explain status1 better than an empty model. The p-value for the coefficient of ddidp3 is 0.008, slightly higher than 0, but under 95% confidence interval, the result is still significantly different from 0. We also use margins command to see the predicted probability of different marital status and marriage life under different occasions when father has higher education level than mother or the opposite. From the result shown in table4, the probability of separation during marriage when father has a higher education level is 25% while it is 30% when changing to mother. So, we can judge out that when mother has a higher education level, there is a higher likelihood for separation between couples.

Table 3. Second regression line

status1	OR.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
hvsib	.805	.073	-2.39	.017	.673	.962	**
race3	1.453	.146	3.72	0	1.194	1.77	***
momwork: base 0	1	.	.	.	.	.	
1	1.32	.12	3.05	.002	1.104	1.578	***
dadwork: base 0	1	.	.	.	.	.	
1	.067	.006	-28.45	0	.056	.081	***
ddidp3: base 0	1	.	.	.	.	.	
1	.774	.074	-2.67	.008	.642	.935	***
Constant	2.552	.281	8.49	0	2.056	3.168	***

Mean dependent var	0.316	SD dependent var		0.465
Pseudo r-squared	0.268	Number of obs		3458
Chi-square	1157.622	Prob > chi2		0.000
Akaike crit. (AIC)	3170.662	Bayesian crit. (BIC)		3207.553

*** p<.01, ** p<.05, * p<.1

Table 4. Result of margins command for second regression line

Adjusted predictions   Number of obs   =   3,458
Model VCE   : OIM
Expression : Pr(status1), predict()

	Margin	Std.Err.	z	P>z	[95%Conf.	Interval]
			Delta-method			
ddidp3						
0	0.297	0.013	23.740	0.000	0.273	0.322
1	0.247	0.014	18.080	0.000	0.220	0.274

3. DISCUSSION

One of the essential findings of this study is that couples with different education levels have a higher probability of separation and divorce. There are several reasons to explain this phenomenon. First of all, People with different education levels do different kinds of work with different incomes. Highly educated people have a greater opportunity to obtain a high-income job [6], but a high-income work needs a longer working time. According to Peter Kuhn and Fernando Lozano research, the frequency of long working hours grew by 14.4 percentage points in the highest quintile of wage earners between 1979 and 2002 [7]. So, the highly educated person has less time to accompany their family compared with the lower educated one. Moreover, high education limits your career options since just a few positions will make sense for you [8]. So, sometimes working in a place far away from the home is an unavoidable consequence. Secondly, people with different education levels have different mentalities. Higher educated people have fewer negative emotions that they are less dissatisfied, worried, aggressive [9]. Moreover, Education promotes individuals' ability to control their own environment as well as an optimistic outlook on the future [10]. So, highly educated people may be unable to understand and empathize with lower educated people's negative attitudes and emotions towards life or difficulties. Such differences may trigger contradictions between couples; hence couples may eventually decide to live separately or even divorce. Additionally, Cummins mentioned that education could foster self-esteem, so the lower educated partner with lower self-confidence may feel insecure about their partner's support and love, which make them feel vulnerable in their relationship [11]. Also, they misjudge how much their spouse loves and cares for them and how favourably their partner sees them. Moreover, though they sacrifice as much as high self-esteem partners, low self-esteem people are more likely to regret the sacrifice they have made [12]. 'These doubts can influence mood, stress, and life satisfaction.' [13] Therefore, if the partners with higher self-esteem are unable to confront and understand their partners inner thought and real feelings, taking corresponding actions such as being considerate towards their partners, the marriage may be situated in temporary separate living or even divorce. On the other hand, separation can be a reasonable measure taken by couples while they are under fighting and cold, especially when they have children. Interparental conflict can cause emotional insecurity to their children, making them struggle to successfully manage their behaviour and emotions, maintain mental health, make friends, and do well at school [14]. To prevent their children from harm, parents should leave each other with some space.

In the second model, when the mother has a higher education level, there is a greater probability of living separately or divorce. We may use sexism to explain this phenomenon. Traditionally, for most families, husband is accepted as the decision-maker and have greater control power in the marriage by the marriage norms. In addition, in some places, people approve that wife should fully support their husband career even at the cost of sacrificing her job, and wife is responsible for raising their children and doing chores [15]. Besides these traditional views, Women are also hindered by gender discrimination while finding jobs, even they are well-educated. So, it is difficult for them to have a satisfying job, after they find one, there is a high opportunity cost for them to give up their work. Thus, they are more likely to violate the common norms of focusing on family affairs by sacrificing working hours or even the job. However, sometimes, the family status is determined by their economic income. Thus, when wife is well educated and earn more money than the husband, the traditional status in a family for a man as the decision-maker with stronger control power is negatively affected. So, such marriage begins with a potential problem as females seek husbands with abundant material wealth and males prefer their wives to be submissive, obedient and home-oriented. Therefore, a man with traditional views suffers from a family condition like this. Hence, on the bright side, the man may decide to work harder to narrow the income gap. On the bad side, without any communication or compromise, but sexism, the man may directly blame and force their wives to spend more time on family and support husbands' careers more. However, with mutual incomprehension and popular individual culture in the USA, conflicts between couples are unavoidable. Moreover, some husbands may choose to live separately or divorce just simply for protecting their sexism thought and pure traditional views. After moving away from their family and the pressure brought by their wives, they may regain the machismo and feel a sense of relief, and then feel brave to achieve something significant.

4. CONCLUSION

To sum up, this study firstly investigates the influence of couples with different education levels on marriage. We find that couples with different education levels have a higher probability to experience divorce or separation. Then according to the second model we notice that when wife has a higher education level than her husband, there is a higher probability of leading to divorce or separation. However, this study has some noteworthy limitations. Firstly, the variable status1 only records whether the individual at his or her age of 14 living with one of his or her parents. But we are unable to know when the individual lived with one of his or her parents, their parents just lived separately or divorced. So, we cannot specifically check the effect of couples with different education levels on separation or on divorce. Secondly,

the data was collected for investigating the effect of alcohol consumption on the labour market; so, there are inadequate variables and information to construct a regression line between status1 and sam or status1 and ddidp3. Besides these limitations, we know that couples with different education levels badly affect their marriage.

Meanwhile, the number of couples with different education levels are gradually increasing. So, it is important to stop this growing trend. In our opinion, we can solve the problem from the base that females have higher education participation levels compared to males. We believe that discrimination towards women finding a job causes this inequality. As most companies give preference to male workers, women facing the discrimination have a harder time to find a job. So, the heavy pressure promotes females to work harder and get higher degrees in order to increase their competitiveness and get into the high-skilled and irreplaceable work. Hence, society should eliminate the discrimination and give males and females an equal chance to find a job, which may raise the pressure and the bar for men to apply for a job. Therefore, they have to work harder than before and get a higher degree. The society will then attain parity in tertiary education, with equal levels of higher education participation, making it simpler for women to marry men with similar levels of education.

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