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Research Paper

The Effect of Education on Happiness, Self-Acceptance, and Family Harmony

Empirical Evidence from Indonesia

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Abstract

Education plays a crucial role in determining the quality of life through economic returns and subjective well-being. However, almost no previous research has examined how education affects subjective well-being indicators beyond happiness. To address this gap, this study used Ordinary Least Squares and the Ordered Probit technique to investigate the effect of education on happiness, self-acceptance, and family harmony. Using the recent microdata from Statistics Indonesia in 2021 the empirical results reveal that education positively affects happiness, self-acceptance, and family harmony. The effect of education remained statistically significant even after incorporating socioeconomic and individual characteristics such as income, gender, age, marital status, home ownership, household size, area classification, health status, and leisure time. The result of this study highlights that individuals with higher levels of education reported higher happiness, greater self-acceptance, and higher satisfaction with family harmony than those with lower levels of education. Although more than half of the magnitude of the education effect decreases after incorporating socioeconomic and individual characteristics variables, the direct effect of education remained significant on happiness, self-acceptance, and family harmony.

Keywords: Education; Happiness; Self-Acceptance; Family Harmony; Ordered Probit

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1. Introduction

Numerous researchers have examined the connection between education and life satisfaction or subjective well-being (Clark & Oswald, 1996; Cuñado & de Gracia, 2012; Kristoffersen, 2018; Nikolaev, 2018; Powdthavee et al., 2015; Ruiu & Ruiu, 2019). Education, as broadly considered, plays a pivotal role in improving the quality of life. In general, a higher level of education can lead to a higher level of income and increasing personal life satisfaction or subjective well-being (Blanchflower & Oswald, 2004; Easterlin, 2001; Michalos, 2007). Chen (2012) and Oreopoulos & Salvanes (2011) contend that education is essential in several life factors, more than just monetary indicators represented by income.

A study conducted by Oreopoulos and Salvanes (2011) regarding nonpecuniary benefits of schooling found that education was a key predictor of employment status, health level, and becoming more attractive in a marriage market. These three indicators play an indispensable role in determining an individual's happiness. Beyond the aforementioned non-monetary benefits, Chen (2012) finds that higher education will create broader social networks and better employment opportunities. People have a higher chance of obtaining a sufficient income and potentially increasing their happiness through more extensive networking. In addition, higher education provides skills that could be useful in the labor market and thereby escape poverty by enhancing households' social, occupational, and economic mobility (Maclean et al., 2018; Tilak, 2007). Furthermore, providing quality education is one of the Sustainable Development Goals 2030 (SDGs) Agenda, related to goal 4 (United Nations, 2015).

In the case of Indonesia, people with a higher level of education (postgraduate degree) tend to have a higher happiness index than people with a lower level of education (Statistics Indonesia, 2021a). This condition consistently occurred in 2017 and 2021. According to data from Statistics Indonesia (2021a), individuals with postgraduate degrees, including master's and doctoral degrees, had a happiness index (measured on a scale of 0-100) that is 15.22 points higher than individuals who had never attended school. Meanwhile, the Happiness Index 2017 shows that the population with a postgraduate degree obtained 13.03 points higher than those who never attended school. According to this empirical evidence, higher levels of education seem to be associated with a higher happiness index because highly educated people value their personal satisfaction higher than social life satisfaction (Ibid, 2021a).

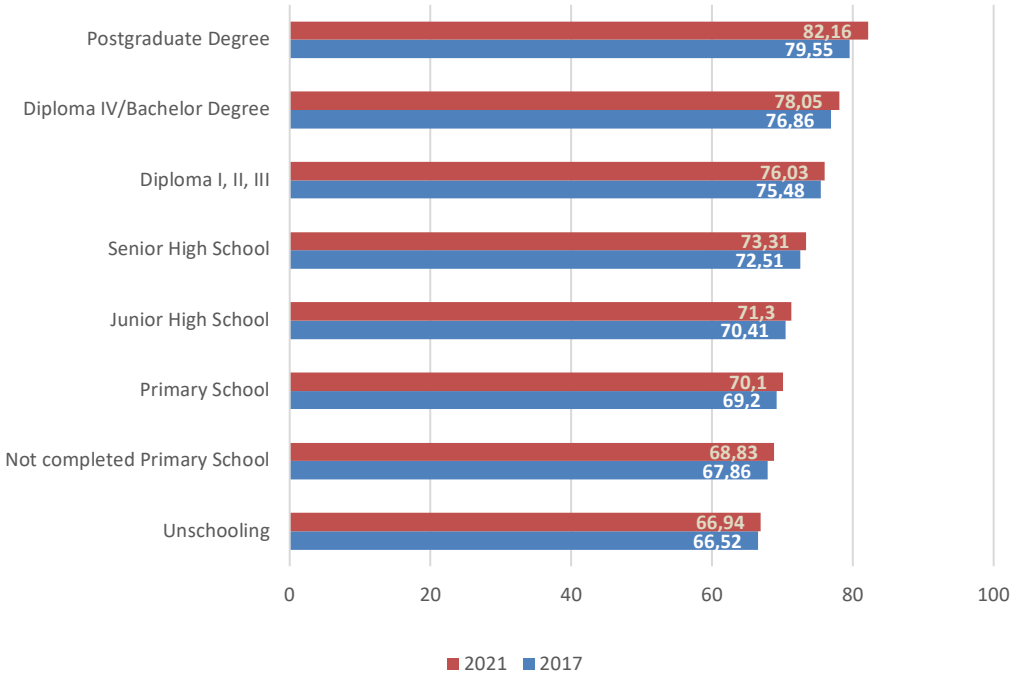

Figure 1. Happiness Index in 2017 and 2021, According to Education Background

Source: Statistics Indonesia (2021a)

However, prior studies that revealed the link between education and happiness level or life satisfaction varied extensively. It generated mixed results, either positive (*e.g.,* Chen, 2012 and Cuñado & de Gracia, 2012) or negative (*e.g.,* Clark & Oswald, 1996), and inconsistent depending on what mechanisms education affects happiness (*e.g.,* Kristoffersen, 2018 and Powdthavee et al., 2015). Therefore, this research aims to fill the gap by analyzing the effect of education on happiness based on empirical evidence from Indonesia.

When examining the relationship between education and happiness levels in Indonesia, there is a fundamental question about the extent to which education affects happiness or life satisfaction. However, life satisfaction is only one of the three dimensions measured in the Happiness Level Measurement Survey 2021 conducted by Statistics Indonesia. The other two dimensions examined by Statistics Indonesia were the meaning of life (eudaimonia) and family harmony. These two dimensions are interesting to explore using quantitative methods with a large number of observations because they are typically investigated through a psychological approach (e.g., Deci & Ryan, 2008; Szentagotai & David, 2013). Ryff (1989) stated that out of the six dimensions of eudaimonia, self-acceptance is the primary factor in capturing how a person defines the meaning of life. Additionally, family harmony is one of the elements of subjective well-being that aims to acquire a happiness level based on family satisfaction (Statistics Indonesia, 2021a).

Over the past 40 years, considerable research has explored the determinant of happiness or subjective well-being. Most of these studies were related to education and happiness (Michalos, 2007; Chen, 2012; Cuñado & de Gracia, 2012; Powdthavee et al., 2015; Kristoffersen, 2018; Nikolaev, 2018). However, these studies did not look at how education affects self-acceptance and family harmony using rigorous econometric technique. Research regarding self-acceptance and family harmony was so scarce due to the limitation of literature review in prior studies, particularly examining the effect of education on self-acceptance and family harmony using quantitative methods with a large number of observations. Therefore, this study aimed to investigate the effect of education on happiness, self-acceptance, and family harmony in Indonesia in 2021, using high-quality microdata from Statistics Indonesia as a case study.

2. Methods

2.1 Data Source

This paper employs data from the "Survey Pengukuran Tingkat Kebahagiaan (SPTK) 2021," which is a survey conducted to measure the level of happiness in Indonesia in 2021. This data comprises enrichment in various non-standard economic variables such as happiness, eudaimonia, affection, and family harmony, which have not been extensively investigated in prior studies. The survey was conducted by Statistics Indonesia, a cross-sectional data covering 34 Indonesian provinces with 75,000 households. Household samples in this survey were selected from 7,500 census blocks that became part of the National Socioeconomic Survey (SUSENAS) 2021 (Statistics Indonesia, 2021a).

2.2 Method

Using an ordinal scale, this research used the Ordinary Least Squares (OLS) regression followed by ordered probit regression to interpret the effect of education on the three dependent variables in the survey questionnaire (happiness, self-acceptance, and family harmony). SPTK 2021 measurement followed the Gallup World Poll approach that aimed to calculate the World Happiness Report, where the calculation used a ladder scale with categories ranging from 0 to 10. To analyze the effect of education on happiness level, self-acceptance, and family harmony in Indonesia, the regression equations using the OLS method, modified and developed from happiness studies by Blanchflower (2020) and Ngoo et al. (2015), can be expressed as follows:

$$HL_i = \alpha_0 + \alpha_1 Educ_i + \beta X_i + \gamma E_i + \delta H_i + \sigma L_i + \varepsilon_i \quad (1)$$

$$SA_i = \alpha_0 + \alpha_1 Educ_i + \beta X_i + \gamma E_i + \delta H_i + \sigma L_i + \varepsilon_i \quad (2)$$

$$FH_i = \alpha_0 + \alpha_1 Educ_i + \beta X_i + \gamma E_i + \delta H_i + \sigma L_i + \varepsilon_i \quad (3)$$

Where HL_i, SA_i, FH_i are the dependent variables in each regression equation denoting the happiness level for individual *i* in equation (1), self-acceptance for individual *i* in equation (2), and family harmony for individual *i* in equation (3). Meanwhile, the explanatory variables are $Educ_i$ demonstrates the highest education level completed by an individual. X denotes demographic characteristics consisting of gender, age, age squared, marital status, household size, and area classification. *E* indicates economic characteristics such as income and home ownership status. *H* depicts perceived health status and *L* indicates leisure time per week. All the variables were obtained from the questionnaire of the Happiness Level Measurement Survey 2021 (see Appendix 1).

This study also used an ordered probit regression to examine the effect of education and other explanatory variables on the probability of happiness, degree of self-acceptance, and family harmony. The dependent variables were originally ordinal, ranging from 0 to 10 but were divided into three categories for each dependent variable to simplify the interpretation of the regression results. The three threshold levels were determined to represent the group who perceived happiness, self-acceptance, and family harmony as lower than the average (score 0—7), the median group (score 8), and the group with subjective well-being above the average (score 9—10). These three categories also divided observations in this study into three equal proportions. According to Greene (2018), y_n^* is assumed unobserved. In this study, y_n^* is perceived happiness level, self-acceptance, and family harmony. Thus, the ordered probit of the observed choice y_n is:

$$\begin{aligned} y_n &= 1 \ if \quad y_n^* \leq \mu_1 \\ &= 2 \ if \ \mu_1 < y_n^* \leq \mu_2 \\ &= 3 \ if \ \mu_2 < y_n^* \leq \mu_3 \\ &\quad . \\ &= J \ \ if \quad \mu_{J-1} < y_n^* \end{aligned}$$

For j = {1,2,3}, there are two cutting points or threshold values, $\mu_1 \ and \ \mu_2$. Technically, these three dependent variables are divided into three categories as follows:

Table 1. Categorization of Each Dependent Variable

Score	Name of category		
	Happiness Level (HL_i)	**Self-Acceptance (SA_i)**	**Family Harmony (FH_i)**
0—7	"notsohappy"	""lowself-acceptance"	"lowestfamilyharmony"
8	"happy"	"goodself-acceptance"	"goodfamilyharmony"
9—10	"happiest"	"highestself-acceptance"	"highestfamilyharmony"

Source: Author's Calculation (2022)

Where: 1) The answer ranged from 0 (very unhappy) to 10 (extremely happy) for HL_i.
2) The answer ranged from 0 (very incapable) to 10 (very capable) for SA_i.
3) The answer ranged from 0 (not satisfied at all) to 10 (very satisfied) for FH_i.

2.3 Summary Statistics

The data consists of 74,684 respondents who were the head of the household or spouses of the household head. The respondents comprise 48.9 percent of males (36,540 people) and 51.1 percent of females (38,144 people) over 34 provinces in Indonesia scattered across 7,500 census blocks. Thus, Statistics Indonesia conducted systematic random sampling in this survey to overcome selection bias. The youngest respondent was 14 years old, and the oldest respondent was 98 years old, with a mean of 47.43 years. The mean of education was 4.007, indicating that, on average, the highest education level completed by the respondents was junior high school. This data is consistent with the mean years of

schooling for the whole population in Indonesia, which was 8.97 years in 2021 (Statistics Indonesia, 2021b).

This study divided marital status into three categories, single, married, and divorced. The dummy variables for marital status were married and divorced, while 'single' was the baseline category. In this data set, about 81.3 percent of the respondents were married (60,685 people), 16.3 percent were divorced (12,189 people), and the remaining were singles. On average, each household has 3.775 or almost four people. Meanwhile, the maximum number of household members who lived in the same house was 19 in 2021. The mean of the region variable is 0.431, indicating that 43.1 percent of the respondents (32,182 people) lived in urban areas, while the remaining 56.9 percent lived in rural areas.

Table 2. Summary Statistics of Variable Used in the Model

Variable	Obs	Mean	Std. Dev.	Min	Max
Happiness Level (HL)	74,684	7.761	1.333	0	10
Self-Acceptance (SA)	74,684	7.652	1.269	0	10
Family Harmony (FH)	74,684	8.326	1.242	0	10
gender	74,684	0.489	0.5	0	1
age	74,684	47.43	13.5	14	98
educ	74,684	4.007	1.956	1	10
married	74,684	0.813	0.39	0	1
divorced	74,684	0.163	0.37	0	1
householdsize	74,684	3.775	1.654	1	19
region	74,684	0.431	0.495	0	1
income	53,383	3.311	1.346	1	5
work	74,684	0.715	0.452	0	1
homestatus	74,684	0.847	0.36	0	1
healthstatus	74,684	7.651	1.496	0	10
leisure	74,684	26.467	16.12	0	98

Source: Happiness Level Measurement Survey 2021, Author's Calculation (2022)

The mean of the nominal income was 3.311, indicating that, on average, income earned by the respondents was between Rp 1.500,001 - Rp 2.500,000 (€96.5-€160.69) per month (category 3 income). The observations of the income variable only consisted of 53,383 respondents since 21,301 respondents reported being unemployed. The distribution of income earned by the respondents is presented in Table 3. To analyze happiness level, self-acceptance, and family harmony for all employed and unemployed respondents, a new category was made in the 'income' variable for unemployed respondents with no income as category 6. Thus, the observations of the income variable were reverted to 74,684 respondents.

Initially, the data set only consisted of five categories of income based on the respondent's wage range who reported being employed in the last week (question number 601). Income category 1 refers to respondents who earned more than Rp. 4,000,000 per month (> €257). Category 2 is for those who earned Rp 2.500,001-Rp 4.000,000/month (€160.7-€257). Category 3 includes those who earned Rp 1.500,001-Rp 2.500,000/month (€96.5-€160.69), and Category 4 includes those who earned Rp 1.000,001-Rp 1.500,000/month (€64.3-€95.49). Lastly, category 5 is for those who earned smaller or equal to Rp 1,000,000/month (≤64.3 per month). The income category was divided into five categories of dummy variables based on the questionnaire of the Happiness Level Measurement Survey 2021 (Appendix 1), and those who did not work and had no income were treated as the baseline category.

Table 3. Income Distribution in SPTK 2021

Income Categories	Freq.	Percent	Cum.
Income1	6,581	12.33	12.33
income2	9,447	17.70	30.02
income3	11,582	21.70	51.72
income4	12,325	23.09	74.81
income5	13,448	25.19	100.00
Total	**53,383**	**100.00**	

Source: Happiness Level Measurement Survey 2021, Author's Calculation (2022)

Based on Table 2, the mean of the home status variable is 0.847, demonstrating that 84.7 percent of respondents (63,284 people) occupied their own house, and the remaining 15.3 percent did not. The mean of the health status variable is 7.65, indicating that, on average, the respondents were quite satisfied with their health condition since the answers ranged from 0 (not satisfied at all) to 10 (very satisfied).

3. Results and Discussions

3.1 OLS Analysis

This paper compared the empirical results using two different methods: the ordinary least squares (OLS) and the ordered probit technique. Table 4 columns (1), (2), and (3) are the narrow specification that only uses education variables on the right-hand side. On the other hand, Table 5 columns (4), (5), and (6) use all control variables encompassing demographic and economic characteristics, perceived health status, and leisure time as the explanatory variables using OLS.

According to the results from Tables 4 and 5, all dummy variables for the level of education had positive and significant effects on happiness levels, self-acceptance, and family harmony. The higher the level of education completed by the respondents, the higher the magnitude of the education coefficients. This result is consistent with the studies conducted by Blanchflower & Oswald (2004), Chen (2012), and Dolan et al. (2008), who found that people with a higher level of education tended to have a higher happiness level compared to people with a lower level of education. Overall, the coefficient of education variables in the narrow specification was twice as high as in the broad specification. This trend was observed across all levels of education's coefficient. Therefore, more than half of the education effect on happiness was away, accounting for other control variables in the broad specification.

Table 4. OLS Regression (Narrow Specification: Only Education Variable in the Models)

Variable	Coef.	p-value	Coef.	p-value	Coef.	p-value
	HL (1)		SA (2)		FH (3)	
notcompletedPS	0.192*** (0.026)	0.000	0.190*** (0.025)	0.000	0.202*** (0.024)	0.000
Primary School (PS)	0.315*** (0.024)	0.000	0.275*** (0.023)	0.000	0.365*** (0.022)	0.000
Junior High School (JHS)	0.404*** (0.025)	0.000	0.323*** (0.024)	0.000	0.442*** (0.023)	0.000
Senior High School (SHS)	0.546*** (0.024)	0.000	0.472*** (0.023)	0.000	0.603*** (0.023)	0.000
Diploma	0.772*** (0.039)	0.000	0.664*** (0.038)	0.000	0.769*** (0.037)	0.000
Bachelor	0.902*** (0.029)	0.000	0.792*** (0.027)	0.000	0.873*** (0.027)	0.000
Postgrad	1.203*** (0.068)	0.000	1.085*** (0.065)	0.000	1.048*** (0.064)	0.000
R-squared		0.026		0.021		0.028
N		74,684		74,684		74,684

Notes: Robust standard errors in parentheses; Dependent variable models: column (1) Happiness Level (HL), column (2) Self-Acceptance (SA), and column (3) Family Harmony (FH)
**** p<0.01, ** p<0.05, * p<0.1*

Source: Author's Calculation (2022)

According to regression results in the broad specification (Table 5), the coefficient of the males is negative toward happiness levels. This suggests that, on average, females tended to be happier than males. This finding corresponds with the gender identity hypothesis developed by Akerlof and Kranton (2000), who emphasizes a self-concept that perceives males should avoid household chores and earn more money than females. This condition makes males feel burdened and, simultaneously, feel triggered to work outside their house to increase their life satisfaction. Furthermore, if a man is married and becomes a household head, it can lead to lower levels of happiness compared to women.

In addition, the minimum point of the happiness level was calculated based on 74,684 observations following the calculation technique from Blanchflower (2020). After dividing the age coefficient by the age squared coefficient (see Table 5 column 4) multiplied by two to calculate the minimum of the quadratic in age by differentiating with respect to age, the turning point at which the happiness age begins to rise again is around the age of 45. This evidence supports Blanchflower and Oswald (2004, 2008) and Blanchflower (2020), who found that well-being forms a U-shape curve in age and reaches a minimum point when people are in their 40s. At the age of 40s, most people might feel stressed due to the unachievable ambitions of their youth. However, at a certain point in their 40s, most of them might learn to adapt to their superiority and shortcomings and become wiser (Blanchflower & Oswald, 2008); hence, after these circumstances, their happiness level starts to increase again.

Table 5. OLS Regression (Broad Specification: Education and All Other Control Variables)

Variable	Coef.	p-value	Coef.	p-value	Coef.	p-value
	HL		SA		FH	
	(4)		(5)		(6)	
notcompletedPS	0.103***	0.000	0.113***	0.000	0.085***	0.000
	(0.024)		(0.023)		(0.021)	
PS	0.140***	0.000	0.150***	0.000	0.137***	0.000
	(0.023)		(0.022)		(0.020)	
JHS	0.174***	0.000	0.172***	0.000	0.142***	0.000
	(0.024)		(0.023)		(0.021)	
SHS	0.258***	0.000	0.258***	0.000	0.248***	0.000
	(0.024)		(0.023)		(0.021)	
Diploma	0.360***	0.000	0.347***	0.000	0.323***	0.000
	(0.037)		(0.036)		(0.033)	
Bachelor	0.426***	0.000	0.415***	0.000	0.379***	0.000
	(0.028)		(0.027)		(0.025)	
Postgrad	0.610***	0.000	0.568***	0.000	0.476***	0.000
	(0.064)		(0.062)		(0.057)	
male	-0.172***	0.000	0.051***	0.000	-0.102***	0.000
	(0.010)		(0.010)		(0.009)	
age	-0.009***	0.000	0.011***	0.000	-0.004**	0.017
	(0.002)		(0.002)		(0.002)	
age_sq	.0001***	0.000	-.00002	0.323	.00008***	0.000
	(0.000)		(0.000)		(0.000)	
married	0.241***	0.000	0.046	0.012	0.384***	0.000
	(0.030)		(0.029)		(0.027)	
divorced	-0.052	0.109	-0.072**	0.020	0.090***	0.002
	(0.032)		(0.031)		(0.029)	
householdsize	0.015***	0.000	0.011***	0.000	0.038***	0.000
	(0.003)		(0.003)		(0.003)	
urban	-0.074***	0.000	0.010	0.30	-0.043***	0.000
	(0.010)		(0.009)		(0.009)	
income1	0.262***	0.000	0.195***	0.000	0.101***	0.000
	(0.019)		(0.018)		(0.017)	
income2	0.155***	0.000	0.116***	0.000	0.036**	0.013
	(0.016)		(0.016)		(0.015)	
income3	0.018	0.235	0.045***	0.002	0.012	0.382
	(0.015)		(0.015)		(0.014)	
income4	-0.083***	0.000	-0.006	0.693	-0.009	0.486
	(0.015)		(0.014)		(0.013)	
income5	-0.200***	0.000	0.064***	0.000	-0.046***	0.000
	(0.014)		(0.013)		(0.012)	
healthstatus7	0.419***	0.000	0.323***	0.000	0.298***	0.000
	(0.015)		(0.014)		(0.013)	
healthstatus8	0.813***	0.000	0.734***	0.000	0.775***	0.000
	(0.014)		(0.013)		(0.012)	
healthstatus9	1.233***	0.000	1.176***	0.000	1.338***	0.000
	(0.016)		(0.015)		(0.014)	
healthstatus10	1.751***	0.000	1.714***	0.000	1.924***	0.000
	(0.019)		(0.018)		(0.017)	
selfowned	0.162***	0.000	0.083***	0.000	0.035***	0.003
	(0.013)		(0.012)		(0.012)	
leisure	0.002***	0.000	0.003***	0.000	0.003***	0.000
	(0.000)		(0.000)		(0.000)	
R-squared		0.180		0.171		0.247
N		74,684		74,684		74,684

Notes: Robust standard errors in parentheses; Dependent variable models: column (4) Happiness Level (HL), column (5) Self Acceptance (SA), and column (6) Family Harmony (FH)

**** p<0.01, ** p<0.05, * p<0.1*

Source: Author's Calculation (2022)

The results from columns (2) and (5) above indicate that all dummy variables for the level of education had positive and significant effects on self-acceptance. The data analysis showed that respondents who completed a higher level of education tended to have a higher degree of self-acceptance compared to the mean value of self-acceptance, which was 7.652, ceteris paribus. This result validates the previous study by Schinkel (2015) that emphasized education should enable learners with a wide range of activities that create purpose in life. In other words, education should be able to develop various skills to acknowledge the value and contribution and, in the end, increase perceived self-acceptance.

Similar to the regression results when happiness level is the dependent variable, the coefficient of education variables in the narrow specification (Table 4 column 2) was almost twice higher than the broad specification in Table 5 column (5). Based on these empirical results, we can conclude that more than half of the education effect on self-acceptance was away after incorporating other control variables in the broad specification. Based on the regression results from columns (3) and (6) reveal that all dummy variables for the level of education had positive and significant effects on family harmony. According to the empirical findings in Tables 4 and 5, the higher the level of education completed by the respondents, the higher the level of family harmony they perceived compared to the mean value of family harmony, which is already high at 8.326. This result supports the study conducted by Herawati et al. (2020), who pointed out that highly educated people tend to have a higher understanding of family functioning; thus, they are expected to undertake family functioning well to strengthen family harmony.

3.2 Ordered Probit Analysis

3.2.1 Happiness Level

Initially, the three dependent variables were ordinal variables ranging from 0 to 10. To simplify the interpretation of the regression results, they were divided into three categories for each dependent variable. Columns (7a), (7b), and (7c) show estimations of the effect of education variables on the probability of being not-so-happy, happy, and happiest, respectively. When respondents had a diploma degree, they were 21.7 percent less likely to be in the not-so-happy category, 3.1 percent less likely to be in the happy category, and 24.8 percent more likely in the happiest category compared to those who never went to school. Overall, the higher level of education, the higher the probability they were in the happiest category (column 7c) compared to the baseline category, as can be seen from the magnitude of the education dummy variable.

There is a noticeable difference in the magnitude of the education variables between the narrow specification (Table 6) and the broad specification (Table 7). In the narrow specification, particularly in the not-so-happy (column 7a) and the happiest category (column 7c), the coefficient of education variables was almost twice higher compared to the education variables in columns (8a) and (8c) in the broad specification. This condition was also observed in the coefficient of all education levels. For example, in the narrow specification, respondents with bachelor's degrees were 25.4 percent less likely to be in the not-so-happy category, while they were 29.6 percent more likely in the happiest category than those who never went to school. In the broad specification, respondents with bachelor's degrees were 15.1 percent less likely to be in the not-so-happy category, while they were 15.1 percent more likely in the happiest category than the respondents who never went to school.

Table 6. Marginal Effects After Ordered Probit (Y=Happiness Level: Narrow Specification)

Happiness Level (HL)	dy/dx Pr(HL==7) "notsohappy" (7a)	P>|z|	dy/dx Pr(HL==8) "happy" (7b)	P>|z|	dy/dx Pr(HL==10) "happiest" (7c)	P>|z|
notcompletedPS	-0.055*** (0.008)	0.000	0.006*** (0.001)	0.000	0.049*** (0.008)	0.000
PS	-0.088*** (0.008)	0.000	0.010*** (0.001)	0.000	0.079*** (0.007)	0.000
JHS	-0.117*** (0.008)	0.000	0.007*** (0.001)	0.000	0.110*** (0.008)	0.000
SHS	-0.162*** (0.007)	0.000	0.009*** (0.001)	0.000	0.153*** (0.008)	0.000
Diploma	-0.217*** (0.009)	0.000	-0.031*** (0.005)	0.000	0.248*** (0.013)	0.000
Bachelor	-0.254*** (0.006)	0.000	-0.041*** (0.004)	0.000	0.296*** (0.010)	0.000
Postgrad	-0.300*** (0.009)	0.000	-0.110*** (0.013)	0.000	0.410*** (0.022)	0.000

*Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1*

Categorization: Pr(HL==7) "notsohappy", Pr(HL==8) "happy", Pr(HL==10) "happiest"

Source: Author's Calculation (2022)

After incorporating other control variables such as income, marital status, and health status (Table 7) using the ordered probit technique, almost half of the education variables' effect on happiness disappeared. This finding is similar to econometric results using the OLS method explained in the previous section. The comparison between respondents with bachelor's degrees and those at other levels of education was interpreted from the postgraduate coefficient in Table 7. People with a postgraduate degree were 20.3 percent less likely to be in the not-so-happy category, 2.9 percent less likely to be in the happy category, and 23.1 percent more likely to be in the happiest category compared to people who never went to school. The magnitude of the coefficient of each level of education suggests that education has a positive effect on happiness.

In terms of income, there was a basic threshold triggering people to be motivated to work with a certain income level. On average, the national minimum wage in Indonesia was Rp 2.672.371 per month (Statistics Indonesia, 2022). The province with the highest regional minimum wage was DKI Jakarta at Rp 4.276.350. In contrast, the province with the lowest regional minimum wage was DI Yogyakarta at Rp 1.704.608 (Ibid, 2022). According to the results in Table 7, there was a unique pattern plausible when explained and associated with the minimum wage. In detail, respondents in the income category 1 (>Rp 4.000.000) and income category 2 (Rp 2.500.001 – Rp 4.000.000) were 8.4 and 3.9 percent more likely to be in the happiest category compared to the baseline category (see Table 7 column 8c). Meanwhile, respondents in the income category 4 (Rp 1.000.001 – Rp 1.500.000) and category 5 (≤ Rp 1.000.000) were 3.4 and 4.8 percent less likely to be in the happiest category compared to unemployed respondents. These econometric results show that people who have a job and earn a monthly income are not necessarily always happier than those who do not work and have no income.

Table 7. Marginal Effects After Ordered Probit (Y=Happiness Level: Broad Specification)

Happiness Level (HL)	**dy/dx Pr(HL==7) "notsohappy" (8a)**	**P>|z|**	**dy/dx Pr(HL==8) "happy" (8b)**	**P>|z|**	**dy/dx Pr(HL==10) "happiest" (8c)**	**P>|z|**
notcompletedPS	-0.031*** (0.009)	0.000	0.005*** (0.001)	0.000	0.026*** (0.007)	0.000
PS	-0.040*** (0.008)	0.000	0.006*** (0.001)	0.000	0.034*** (0.007)	0.000
JHS	-0.054*** (0.008)	0.000	0.007*** (0.001)	0.000	0.046*** (0.008)	0.000
SHS	-0.084*** (0.008)	0.000	0.011*** (0.001)	0.000	0.073*** (0.008)	0.000
Diploma	-0.123*** (0.011)	0.000	0.002 (0.002)	0.254	0.121*** (0.013)	0.000
Bachelor	-0.151*** (0.008)	0.000	-0.000 (0.002)	0.971	0.151*** (0.010)	0.000
Postgrad	-0.203*** (0.016)	0.000	-0.029*** (0.009)	0.002	0.231*** (0.025)	0.000
male	0.054*** (0.004)	0.000	-0.010*** (0.001)	0.000	-0.044*** (0.003)	0.000
age	0.003*** (0.001)	0.000	-0.001*** (0.000)	0.000	-0.003*** (0.001)	0.000
age_sq	-0.000*** (0.000)	0.000	0.000*** (0.000)	0.000	0.000*** (0.000)	0.000
married	-0.082*** (0.011)	0.000	0.019*** (0.003)	0.000	0.063*** (0.008)	0.000
divorced	0.014 (0.012)	0.221	-0.003 (0.002)	0.247	-0.012 (0.009)	0.215
householdsize	-0.006*** (0.001)	0.000	0.001*** (0.000)	0.000	0.005*** (0.001)	0.000
urban	0.025*** (0.003)	0.000	-0.005*** (0.001)	0.000	-0.020*** (0.003)	0.000
income1	-0.091*** (0.006)	0.000	0.008*** (0.000)	0.000	0.084*** (0.006)	0.000
income2	-0.045*** (0.006)	0.000	0.006*** (0.001)	0.000	0.039*** (0.005)	0.000
income3	0.003 (0.005)	0.564	-0.001 (0.001)	0.569	-0.003 (0.004)	0.562
income4	0.043*** (0.005)	0.000	-0.009*** (0.001)	0.000	-0.034*** (0.004)	0.000
income5	0.062*** (0.005)	0.000	-0.014*** (0.001)	0.000	-0.048*** (0.004)	0.000
healthstatus7	-0.059*** (0.005)	0.000	0.008*** (0.001)	0.000	0.051*** (0.005)	0.000
healthstatus8	-0.216*** (0.005)	0.000	0.022*** (0.001)	0.000	0.195*** (0.004)	0.000
healthstatus9	-0.328*** (0.004)	0.000	-0.062*** (0.003)	0.000	0.391*** (0.006)	0.000
healthstatus10	-0.374*** (0.003)	0.000	-0.171*** (0.004)	0.000	0.546*** (0.006)	0.000
selfowned	-0.053*** (0.005)	0.000	0.012*** (0.001)	0.000	0.041*** (0.004)	0.000
leisure	-0.001*** (0.000)	0.000	0.000*** (0.000)	0.000	0.001*** (0.000)	0.000

*Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1*

Categorization: Pr(HL==7) "notsohappy", Pr(HL==8) "happy", Pr(HL==10) "happiest"

Source: Author's Calculation (2022)

The results from columns (8a), (8b), and (8c) in Table 7 demonstrate that gender affects one's happiness level. Male respondents were 5.4 percent more likely to be not-so-happy with their life, 1 percent less likely to be in the happy category, and 4.4 percent less likely to be in the happiest category compared to females. The effect of gender differential on happiness levels varies extensively across countries. In Indonesian case, men are less likely to be happy than women due to Indonesia's religious and cultural values, where a man commonly leads a household. A man is also responsible for working and meeting the family's needs. Hence, as a household head, a man has a greater responsibility to fulfill his family's livelihood, negatively influencing his happiness (Rahayu, 2016). Furthermore, Ngoo et al. (2015) found that in South Asia, women are facilitated to be empowered and can access a supportive environment to increase gender equality; women in developing countries tend to have higher life contentment than men.

Regarding the health factor, the empirical finding of health status in this study is as expected. The higher the health status of the respondents, the more likely they were to be in the highest level of happiness category. This finding aligns with Dolan et al. (2008), who reported a significant positive connection between subjective well-being with psychological and physical health. Based on home ownership status, the ordered probit results in Table 7 reveal that the self-owned coefficient had positive effects and was statistically significant on the probability of being in the happy and happiest categories. Specifically, respondents who lived in their own houses were 5.3 percent less likely in the not-so-happy category, 1.2 percent more likely to be in the happy category, and 4.1 percent more likely to be in the happiest category compared to the baseline category. These findings are consistent with Hu and Ye's (2020) study, which found that home ownership positively affects happiness.

In addition, according to empirical findings in Table 7, leisure time positively affected the probability of being in the happiest category. Leisure time improves happiness because most people will enjoy and relax when they spend their leisure time. However, highly educated people are more likely to be involved in more demanding and stressful jobs (Kristoffersen, 2018). They tend to have a higher responsibility related to their duty and need more working hours. Therefore, the effect of education is negative on leisure time as the indirect channel to happiness (Ibid, 2018).

3.2.2 Self-Acceptance

Using the ordered probit analysis, Table 8 shows the effect of education on self-acceptance, divided into three categories. Columns (9a), (9b), and (9c) depict estimations of the effect of education variables on the probability of having low self-acceptance, good self-acceptance, and highest self-acceptance, respectively. However, there is a notable contrast in the magnitude of education variables on self-acceptance between the narrow specification (Table 8) and the broad specification (Table 9). In the narrow specification, particularly in the highest self-acceptance category (column 9c), the coefficient of education variables was two third higher compared to the education variables in column (10c) in the broad specification. This phenomenon was observed in the respondents who did not complete primary school to respondents that had a diploma coefficient. Meanwhile, the coefficient of bachelor and postgraduate in the narrow specification was almost twice as high as their magnitude in the broad specification. Keeping all other factors constant, this suggests that the higher the level of education, the greater the effect of increasing the likelihood of individuals having the highest self-acceptance.

Table 8. Marginal Effects After Ordered Probit (Y=Self-Acceptance: Narrow Specification)

Self-Acceptance (SA)	**dy/dx Pr(SA==7) "lowSA" (9a)**	**P>|z|**	**dy/dx Pr(SA==8) "goodSA" (9b)**	**P>|z|**	**dy/dx Pr(SA==10) "highestSA" (9c)**	**P>|z|**
notcompletedPS	-0.065*** (0.009)	0.000	0.015*** (0.002)	0.000	0.050*** (0.007)	0.000
PS	-0.086*** (0.008)	0.000	0.020*** (0.002)	0.000	0.065*** (0.006)	0.000
JHS	-0.100*** (0.008)	0.000	0.021*** (0.001)	0.000	0.079*** (0.007)	0.000

Table 8. Continued...

Self-Acceptance (SA)	dy/dx Pr(SA==7) "lowSA" (9a)	P>|z|	dy/dx Pr(SA==8) "goodSA" (9b)	P>|z|	dy/dx Pr(SA==10) "highestSA" (9c)	P>|z|
SHS	-0.147*** (0.008)	0.000	0.029*** (0.001)	0.000	0.119*** (0.007)	0.000
Diploma	-0.204*** (0.010)	0.000	0.008*** (0.003)	0.003	0.196*** (0.013)	0.000
Bachelor	-0.241*** (0.007)	0.000	0.005** (0.002)	0.027	0.236*** (0.010)	0.000
Postgrad	-0.303*** (0.012)	0.000	-0.048*** (0.011)	0.000	0.351*** (0.023)	0.000

*Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1*

Categorization: Pr(SA==7) "lowself-acceptance", Pr(SA==8) "goodself-acceptance", Pr(SA==10) "highestself-acceptance"

Source: Author's Calculation (2022)

Column (9c) shows that the respondents with a bachelor's degree were 23.6 percent more likely to feel the highest self-acceptance than those in the baseline category in the narrow specification. Meanwhile, in column (10c), the respondents with bachelor's degrees were only 13.2 percent more likely to feel the highest self-acceptance than those who never went to school. Therefore, after incorporating demographic and socioeconomic variables (Table 9), almost half of the education variables' effect on self-acceptance disappeared.

Table 9. Marginal Effects After Ordered Probit (Y=Self-Acceptance: Broad Specification)

Self-Acceptance (SA)	dy/dx Pr(SA==7) "lowSA" (10a)	P>|z|	dy/dx Pr(SA==8) "goodSA" (10b)	P>|z|	dy/dx Pr(SA==10) "highestSA" (10c)	P>|z|
notcompletedPS	-0.048*** (0.009)	0.000	0.013*** (0.002)	0.000	0.034*** (0.007)	0.000
PS	-0.058*** (0.009)	0.000	0.017*** (0.002)	0.000	0.041*** (0.006)	0.000
JHS	-0.067*** (0.009)	0.000	0.018*** (0.002)	0.000	0.049*** (0.007)	0.000
SHS	-0.097*** (0.009)	0.000	0.026*** (0.002)	0.000	0.072*** (0.007)	0.000
Diploma	-0.133*** (0.012)	0.000	0.023*** (0.001)	0.000	0.110*** (0.012)	0.000
Bachelor	-0.158*** (0.009)	0.000	0.025*** (0.001)	0.000	0.132*** (0.009)	0.000
Postgrad	-0.207*** (0.018)	0.000	0.011* (0.006)	0.061	0.196*** (0.023)	0.000
male	0.014*** (0.004)	0.000	-0.004*** (0.001)	0.000	-0.010*** (0.003)	0.000
age	-0.003*** (0.001)	0.000	0.001*** (0.000)	0.000	0.002*** (0.001)	0.000
age_sq	0.000 (0.000)	0.875	-0.000 (0.000)	0.875	-0.000 (0.000)	0.875
married	-0.007 (0.011)	0.543	0.002 (0.004)	0.548	0.005 (0.008)	0.540
divorced	0.025** (0.012)	0.043	-0.008* (0.004)	0.053	-0.016** (0.008)	0.038
householdsize	-0.005*** (0.001)	0.000	0.002*** (0.000)	0.000	0.004*** (0.001)	0.000
urban	0.001 (0.004)	0.743	-0.000 (0.001)	0.743	-0.001 (0.002)	0.743
income1	-0.075*** (0.007)	0.000	0.019*** (0.001)	0.000	0.056*** (0.006)	0.000

Table 9. Continued...

Self-Acceptance (SA)	dy/dx Pr(SA==7) "lowSA" (10a)	P>|z|	dy/dx Pr(SA==8) "goodSA" (10b)	P>|z|	dy/dx Pr(SA==10) "highestSA" (10c)	P>|z|
income2	-0.032*** (0.006)	0.000	0.009*** (0.002)	0.000	0.023*** (0.004)	0.000
income3	-0.004 (0.006)	0.463	0.001 (0.002)	0.459	0.003 (0.004)	0.465
income4	0.012** (0.006)	0.028	-0.004** (0.002)	0.032	-0.008** (0.004)	0.026
income5	0.012** (0.005)	0.018	-0.004** (0.002)	0.020	-0.008** (0.004)	0.016
healthstatus7	-0.018*** (0.006)	0.001	0.006*** (0.002)	0.001	0.013*** (0.004)	0.002
healthstatus8	-0.194*** (0.005)	0.000	0.050*** (0.001)	0.000	0.144*** (0.004)	0.000
healthstatus9	-0.343*** (0.004)	0.000	-0.003 (0.002)	0.239	0.346*** (0.006)	0.000
healthstatus10	-0.413*** (0.003)	0.000	-0.118*** (0.004)	0.000	0.530*** (0.006)	0.000
selfowned	-0.028*** (0.005)	0.000	0.009*** (0.002)	0.000	0.019*** (0.003)	0.000
leisure	-0.001*** (0.000)	0.000	0.000*** (0.000)	0.000	0.001*** (0.000)	0.000

*Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1*

Categorization: Pr(SA==7) "lowself-acceptance", Pr(SA==8) "goodself-acceptance", Pr(SA==10) "highestself-acceptance"

Source: Author's Calculation (2022)

Meanwhile, the respondents with a postgraduate degree were most likely to feel the highest self-acceptance compared to all other educational dummy variables. This finding is similar to the OLS results that the higher the level of education an individual completed, the more likely they had a higher self-acceptance than those in the baseline category. This result supports a study by Schinkel et al. (2016), who emphasized that the primary function of education is to stimulate curiosity and attentiveness. As a result, education helps people learn new knowledge, enhance capacities, and have a higher meaning of life and a higher degree of perceived self-acceptance.

According to the econometric result in Table 9, the most considerable magnitude comes from the coefficient of healthstatus10. This finding suggests that individuals who perceive themselves as having better health are more likely to experience the highest level of self-acceptance. This finding reinforces Dolan et al. (2008), which underlined health's importance in enhancing happiness. In addition, Szentagotai and David (2013) emphasized that self-acceptance is an inseparable part of happiness.

3.2.3 Family Harmony

Table 10 demonstrates estimations of the effect of education variables on the probability of being in the lowest family harmony (column 11a), good family harmony (column 11b), and highest family harmony category (column 11c). All dummies of education variables in the models had positive effects and were statistically significant on the probability of possessing the highest family harmony, see columns (11c) and (12c).

Table 10. Marginal Effects After Ordered Probit (Y=Family Harmony: Narrow Specification)

Family Harmony (FH)	dy/dx Pr(FH==7) "lowestFH" (11a)	P>|z|	dy/dx Pr(FH==8) "goodFH" (11b)	P>|z|	dy/dx Pr(FH==10) "highestFH" (11c)	P>|z|
notcompletedPS	-0.054*** (0.005)	0.000	-0.027*** (0.003)	0.000	0.080*** (0.009)	0.000
PS	-0.090*** (0.005)	0.000	-0.044*** (0.003)	0.000	0.134*** (0.008)	0.000
JHS	-0.108*** (0.005)	0.000	-0.065*** (0.004)	0.000	0.173*** (0.008)	0.000
SHS	-0.144*** (0.004)	0.000	-0.086*** (0.004)	0.000	0.230*** (0.008)	0.000
Diploma	-0.153*** (0.004)	0.000	-0.147*** (0.008)	0.000	0.300*** (0.012)	0.000
Bachelor	-0.174*** (0.003)	0.000	-0.166*** (0.005)	0.000	0.340*** (0.008)	0.000
Postgrad	-0.178*** (0.004)	0.000	-0.218*** (0.013)	0.000	0.396*** (0.016)	0.000

*Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1*

Categorization: Pr(FH==7) "lowestfamilyharmony", Pr(FH==8) "goodfamilyharmony", Pr(FH==10) "highestfamilyharmony"

Source: Author's Calculation (2022)

Similar to econometric results in happiness and self-acceptance, there was a noticeable discrepancy in the magnitude of the education variables between the narrow specification (Table 10) and the broad specification (Table 11). After incorporating demographic and socioeconomic variables, almost half of the education variables' effect on family harmony disappeared.

Take an example from the postgraduate coefficient to illustrate the difference between narrow and broad specifications. In the narrow specification, the postgraduate respondents were 39.6 percent more likely to be in the highest family harmony category. In contrast, in the broad specification, the probability of the respondents with a postgraduate degree being in the highest family harmony category was 26.3 percent higher than those who never went to school. These econometric results imply that education has an indirect effect on family harmony through other factors, income, health status, home ownership, leisure time, and other demographic variables in the broad specification.

The econometric results indicate that the higher the level of education, the higher the probability of the respondents being in the highest family harmony category compared to the baseline category. This is evident from the magnitude of the education dummy variable. This finding aligns with Sunarti's (2015) study, which highlighted that education positively affects family well-being and harmony through intermediaries like job and income stability. A higher level of education enables a person to enter wider labor market opportunities and is more likely to obtain permanent employment than a lower educated person; thus, they tend to have stable work and income certainty, which contributes to meeting the family's needs with ease. The effect of education on forming family harmony, however, may depend on cultural values and welfare systems (Mayer, 2001, as cited in Bordone, 2009). Patterson's (2002) research on family resilience also emphasizes that being involved in spirituality with family strengthens family resilience. This idea is relevant to Indonesia, where most families live in one household and participate in a cultural or spiritual activity with other family members' promoting greater family resilience and family harmony.

Table 11. Marginal Effects After Ordered Probit (Y=Family Harmony: Broad Specification)

Family Harmony (FH)	dy/dx Pr(FH==7) "lowestFH" (12a)	P>|z|	dy/dx Pr(FH==8) "goodFH" (12b)	P>|z|	dy/dx Pr(FH==10) "highestFH" (12c)	P>|z|
notcompletedPS	-0.027*** (0.005)	0.000	-0.019*** (0.004)	0.000	0.045*** (0.009)	0.000
PS	-0.038*** (0.005)	0.000	-0.026*** (0.004)	0.000	0.064*** (0.009)	0.000
JHS	-0.045*** (0.005)	0.000	-0.034*** (0.004)	0.000	0.079*** (0.009)	0.000
SHS	-0.070*** (0.005)	0.000	-0.054*** (0.004)	0.000	0.123*** (0.009)	0.000
Diploma	-0.085*** (0.005)	0.000	-0.089*** (0.009)	0.000	0.174*** (0.014)	0.000
Bachelor	-0.100*** (0.004)	0.000	-0.107*** (0.007)	0.000	0.207*** (0.011)	0.000
Postgrad	-0.113*** (0.007)	0.000	-0.150*** (0.018)	0.000	0.263*** (0.025)	0.000
male	0.022*** (0.002)	0.000	0.014*** (0.002)	0.000	-0.036*** (0.004)	0.000
age	0.001** (0.000)	0.035	0.001** (0.000)	0.035	-0.002** (0.001)	0.035
age_sq	-0.000*** (0.000)	0.000	-0.000*** (0.000)	0.000	0.000*** (0.000)	0.000
married	-0.122*** (0.009)	0.000	-0.046*** (0.002)	0.000	0.168*** (0.010)	0.000
divorced	-0.037*** (0.007)	0.000	-0.027*** (0.006)	0.000	0.065*** (0.012)	0.000
householdsize	-0.008*** (0.001)	0.000	-0.005*** (0.000)	0.000	0.013*** (0.001)	0.000
urban	0.010*** (0.002)	0.000	0.006*** (0.001)	0.000	-0.016*** (0.004)	0.000
income1	-0.027*** (0.004)	0.000	-0.019*** (0.003)	0.000	0.046*** (0.008)	0.000
income2	-0.007* (0.004)	0.052	-0.005* (0.003)	0.060	0.012* (0.006)	0.055
income3	-0.001 (0.004)	0.727	-0.001 (0.002)	0.728	0.002 (0.006)	0.727
income4	0.005 (0.004)	0.169	0.003 (0.002)	0.160	-0.008 (0.006)	0.165
income5	0.009** (0.003)	0.010	0.005** (0.002)	0.008	-0.014** (0.005)	0.009
healthstatus7	-0.032*** (0.003)	0.000	-0.022*** (0.002)	0.000	0.054*** (0.005)	0.000
healthstatus8	-0.159*** (0.003)	0.000	-0.125*** (0.003)	0.000	0.284*** (0.005)	0.000
healthstatus9	-0.212*** (0.002)	0.000	-0.310*** (0.003)	0.000	0.522*** (0.004)	0.000
healthstatus10	-0.203*** (0.002)	0.000	-0.381*** (0.003)	0.000	0.584*** (0.003)	0.000
selfowned	-0.010*** (0.003)	0.002	-0.006*** (0.002)	0.001	0.016*** (0.005)	0.001
leisure	-0.001*** (0.000)	0.000	-0.001*** (0.000)	0.000	0.001*** (0.000)	0.000

*Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1*

Categorization: Pr(FH==7) "lowestfamilyharmony", Pr(FH==8) "goodfamilyharmony", Pr(FH==10) "highestfamilyharmony"

Source: Author's Calculation (2022)

Columns (12a), (12b), and (12c) reveal that income level affected the perceived family harmony. The respondents earning more than Rp 4,000,000 per month (income category 1) were about 2.7 percent less likely in the lowest family harmony category and 1.9 percentage points less likely in the good family harmony category. On the other hand, they were 4.6 percent more likely in the highest family harmony category compared to the baseline category. These findings suggest that people with higher income levels were more likely to be in the highest family harmony category. This result also supports Sunarti's (2015) study, which pointed out the connection between education, work and income stability, family well-being, and family harmony.

The regression analysis shows that household size has a positive effect on family harmony. Keeping all other variables constant, the increase of one family member in a household decreases the likelihood of this family being in the lowest family harmony by 0.8 percent and being in the good family harmony by 0.5 percent and increases the likelihood of this family being in the highest family category by 1.3 percent.

3.3 Discussion

Because education is inextricably linked to determining personal income, having a higher income would lead to greater happiness or subjective well-being. Education could alter not only economic indicators but also positively affect life satisfaction (Cuñado & de Gracia, 2012; Powdthavee et al., 2015). More profoundly, education affects happiness through various life domains. For example, several prior studies classified some aspects that determine happiness according to several life domains such as job opportunities, income, health, children, marital status, leisure time, and neighborhood (Blanchflower & Oswald, 2004; Kristoffersen, 2018; Nieboer et al., 2005; Nikolaev, 2018; Van Praag et al., 2003).

However, those prior studies found mixed evidence, either a positive or negative correlation between education and happiness. The mixed empirical findings on the correlation between education and individual happiness may be due to the common assumption that a higher level of education will lead to increased income. As a result, being unable to acquire these higher expectations could lead to a decline in subjective well-being (Clark & Oswald, 1996). The mixed results between the effect of education on subjective well-being could occur due to the difference in macro-level and individual-level determinants.

The econometric results in this study reveal that, on average, females are happier than males. This finding is consistent with the gender identity hypothesis proposed by Akerlof and Kranton (2000), which posits a self-concept that perceives males should avoid household chores and earn more money than females. This perspective makes males feel burdened and have a greater responsibility, making them less happy than females. The empirical findings also indicate that the effect of education and other control variables predispose happiness level, self-acceptance, and family harmony to approximately similar values. Specifically, the econometric results in this paper indicate that the two aspects of well-being, self-acceptance and family harmony, become derivatives of happiness. This finding is supported by prior studies that indicated a significant association between self-acceptance, positive emotions, and the essential element of happiness. Meanwhile, family harmony is associated with family resilience and family well-being. In the Indonesian context, being involved in a cultural or spiritual activity with other family members could increase family resilience and strengthen family harmony.

Conclusions

This study reveals that the effect of education on happiness, self-acceptance, and family harmony remained statistically significant even after incorporating socioeconomic and individual characteristics such as income, gender, marital status, home ownership, health status, and leisure time (the broad specification). Conversely, in the narrow specification model, only education variables were used to examine its effect on three dependent variables. Based on econometric results, highly educated people reported higher levels of happiness, self-acceptance, and satisfaction with family harmony than lower-educated people using OLS estimations and ordered probit techniques.

The findings highlight that the coefficient of education variables in the narrow specification was almost twice higher compared to the broad specification in all three dependent variables. Based on econometric results, more than half the magnitude of the education effect was away after incorporating

other control variables, yet the direct effect of education remained significant. This trend was also observed in all levels of education's coefficient. The indirect effect of education extended through the other control variables used in the broad specification. Additionally, married couples, household size, living in rural areas, having higher income, home ownership, better health status, and more leisure time reported a higher level of happiness, self-acceptance, and family harmony.

The findings also demonstrate that the effect of education on monetary variables such as income and home ownership does not necessarily have a significant effect on happiness, self-acceptance, and family harmony. Interestingly, the higher perception of health status has a greater effect on the likelihood of individuals experiencing high levels of happiness, self-acceptance, and family harmony. This finding reinforces Dolan et al.'s (2008) study, highlighting health's importance in enhancing happiness.

To reduce the educational gap among underprivileged children, the Indonesian government should implement policies that ensure they receive sufficient educational support from primary to tertiary levels. Thus, when the average years of schooling of the Indonesian population increase, it positively affects subjective well-being (non-monetary benefits) comprising happiness, self-acceptance, and family harmony as well as monetary benefits such as reducing income inequality.

Despite the large size of observations and the credibility of the data, the empirical findings from this study could not comprehensively capture happiness, self-acceptance, and family harmony over time because this study used a cross-section data set. The literature review on the relationship between education and self-acceptance and family harmony was also limited. Therefore, future research in this field should use panel data to solve the endogeneity problem and investigate the effect of education on happiness, self-acceptance, family harmony, and other subjective well-being dimensions over time.

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Appendix

Appendix 1. List of Questions in the Questionnaire of Happiness Level Measurement Survey 2021 for Each Variable Used in this Study

Dependent Variables	Question Numbers and Question Wording (Measurements and units at each answer)
EQUATION (1): HAPPINESS LEVEL (HL)	
Happiness Level	**1501**. Part XV. Happiness of Life **"How happy is (name) with life as a whole?"** Answer: Score 0 (very unhappy) up to 10 (extremely happy) Ordered probit categories: "notsohappy" (score 0-7), "happy" (score 8), and "happiest" (score 9-10)
EQUATION (2): SELF-ACCEPTANCE (SA)	
Self-Acceptance	**1412**. Part XIV. Eudaimonia: Self-Acceptance **"How capable (name) accept any conditions you are experienced?"** Answer: Score 0 (very incapable) up to 10 (very capable) Ordered probit categories: "lowself-acceptance" (score 0-7), "goodself-acceptance" (score 8), and "highestself-acceptance" (score 9-10)
EQUATION (3): FAMILY HARMONY (FH)	
Family Harmony	**802**. Part VIII. Family Harmony **"How satisfied is (name) with family harmony?"** Answer: Score 0 (not satisfied at all) up to 10 (very satisfied) Ordered probit categories: "lowestfamilyharmony" (score 0-7), "goodfamilyharmony" (score 8), and "highestfamilyharmony" (score 9-10)
Explanatory Variables	**Questions in the Questionnaire (Measurements and units at each answer)**
MAIN VARIABLE:	
Education	**501**. Part V. Education **"What is the highest education completed by (name)?"** Answer: Schooling completed by the respondent, using seven dummy variables, no school as the baseline category. (0=no school, 1=not completed primary school, 2= primary school, 3=junior high, 4=senior high, 5=one up to three years of diploma, 6=bachelor, and 7=postgraduate)
DEMOGRAPHIC CHARACTERISTICS:	
Gender	**B4K4**. Gender of the respondent (1=male, 0=female)
Age	**B4K5**. Age of the respondent (years)
Marital status	**B4K6**. Marital status of the respondent (1=single, 2=married, and 3=divorced), single as the baseline.
Household size	**201**. Total family members in one household (number of people living in one house)
Area classification	**105**. Area classification where the respondent lives (1=urban, 0=rural)
ECONOMIC CHARACTERISTICS:	
Income	**603**. Personal income that earned monthly, using five dummy variables, for those who not working as the baseline category. **"How much the average monthly income of (name) from all occupations/businesses in the past year?"** Income category 1: >Rp 4.000.000 (> €257)[1] Income 2: Rp 2.500.001 – Rp 4.000.000 (€160.7-€257) Income 3: Rp 1.500.001 – Rp 2.500.000 (€96.5-€160.69) Income 4: Rp 1.000.001 – Rp 1.500.000 (€64.3-€95.49) Income 5: ≤ Rp 1.000.000 (≤64.3 per month)
Home Ownership	**1201**. Residential building status/house status **"What is ownership status of the residential building which (name) is occupying?"** (1=own house, 0=otherwise)

[1] According to Bank Indonesia (2022), foreign exchange rates on transaction on June 16th 2022, 1 Euro is equal to 15,550 Indonesian Rupiah (Rp).

HEALTH INDICATOR:	
Health status	**708**. **"How satisfied is (name) with health?"** Perceived health status (scale 0-10) Answer: Score 0 (not satisfied at all) up to 10 (very satisfied)
LEISURE:	
Leisure time	**902A**. **"How many hours of free time does (name) usually have in one week?"** Answer: Leisure time in hour(s)