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Article

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Changes in Attitude toward Intimate Partner Violence in Rapidly Developing Countries: The Case of Indonesia

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Abstract: Male-perpetrated intimate partner violence (IPV) is a severe human rights violation that negatively affects women's well-being worldwide. Although many studies have examined the factors influencing IPV, few have investigated the changes in attitudes toward IPV during rapid economic growth. Therefore, this study aimed to clarify changes in attitudes toward husband-on-wife violence by gender, from 2007 to 2017, using individual data from the Indonesia Demographic and Health Surveys. The estimation results revealed that, despite being more accepting of IPV, young women, women living in rural areas other than Java and Bali, and women belonging to lower social classes have significantly increased their negative attitudes toward IPV over the past decade. Although negative attitudes toward IPV have increased significantly among men living in eastern Indonesia, men in their teens, 20s, and 30s and those living in Sumatra have become more accepting of IPV. This suggests that the overall awareness of IPV resistance among men has not increased. The acceptance of IPV is more prevalent among employed women in the middle and lower socioeconomic strata than among their unemployed counterparts. However, the reverse trend has become clearer among women in the upper strata over the past decade.

Keywords: intimate partner violence; Indonesia; bivariate ordered probit regression; Demographic and Health Survey

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1. Introduction

Male-perpetrated intimate partner violence (IPV), such as physical, sexual, and emotional abuse and controlling behavior (WHO 2012), is a severe human rights violation that negatively affects women's well-being worldwide. According to the World Health Organization (WHO 2021), 27% and 13% of married or partnered women aged 15 years and older have experienced violence from a current or former spouse or intimate partner at some point in their lifetime and in the past 12 months, respectively. These statistics indicate that a considerable number of women experience IPV.

Therefore, numerous studies on IPV have been conducted, particularly in developing countries where IPV is more prevalent than in economically advanced countries (Kaya and Cook 2010). These studies have demonstrated that IPV largely affects the well-being of both women and children. For example, Khan and Islam (2018) and Sasaki et al. (2023) found that women with negative attitudes toward IPV were more likely to access healthcare services and provide better feeding practices for their infants and young children. Other studies have revealed that maternal experiences of IPV result in inadequate prenatal care (Testa et al. 2023); adverse birth outcomes such as miscarriage, abortion, pregnancy termination, and preterm birth (Ghatak and Dutta 2023; Khan et al. 2019); an increased risk of depressive symptoms (Silva-Burga et al. 2022) and postpartum depression (Gebrekristos et al. 2023); and an increased occurrence of mental disorders (Giacomini et al. 2023). Moreover, it has been indicated that children of women who have experienced IPV are more likely to face poor health (Burke et al. 2008; Luo et al. 2022), high mortality rates under the age of five (Åsling-Monemi et al. 2003), low immunization rates and a high likelihood of future

immunodeficiencies (Sabarwal et al. 2012), a high risk of having a lower weight-for-age score owing to undernutrition (Sethuraman et al. 2006), and difficult temperament-related characteristics (Burke et al. 2008). Akter and Chindarkar (2019) stated that maternal vulnerability to IPV hinders children's human capital formation, such as school attainment and test scores. Julio et al. (2023) indicated that maternal exposure to physical violence and controlling behavior by an intimate partner affects children's physical development and cognitive abilities. In addition, if women were exposed to interparental violence in childhood, they are more likely to justify IPV later in life (Aboagye et al. 2023) and become victims of violence perpetrated by their intimate partners (Hindin et al. 2008; Solanke 2018). Furthermore, several empirical studies have revealed a significant relationship between women's positive attitudes toward male-perpetrated IPV and the likelihood of being a victim of IPV caused by their husbands or partners (Benebo et al. 2018; Khawaja et al. 2008; Shaikh 2022; Solanke 2018; Tlapek 2015).

Although many studies have focused on the detrimental effects of male-perpetrated IPV on women and children, men's attitudes toward IPV have been overlooked. Benebo et al. (2018) indicated the importance of studying men's attitudes toward IPV to acquire a comprehensive understanding of IPV based on their analysis that men's resistance to IPV was a stronger predictor of IPV risk than women's negative attitudes toward IPV. However, most IPV studies have focused on women's perceptions of resistance and the prevalence of violence, and few have examined the factors influencing men's perceptions of IPV. If discrimination against women generated via long-standing patriarchal cultures and practices in male-dominated societies, as described in feminist theory (Bell and Naugle 2008; Kelly 2011; Lawson 2012; Sunmola et al. 2021), is a factor leading to IPV (Prandstetter et al. 2023), it is necessary to examine the attitudes of men who have lived in such cultures. Furthermore, according to the modernization theory (Kaya and Cook 2010; Martinez and Khalil 2017), attitudes toward IPV have become more resistant to social and economic development. However, few studies have explored how attitudes toward IPV have changed over time. Therefore, more research is required on men's attitudes toward IPV and intertemporal comparisons between the genders to facilitate an increase in women's empowerment.

The rate of experiencing IPV during one's lifetime in Southeast Asia is 21%, which is lower than the global average. However, despite the lower IPV rate, many countries in the region have high Gender Inequality Index (GII) scores, indicating that women have an inferior status. Indonesia had the highest GII score among the ten Southeast Asian countries in 2019 and is considered to have a low status for women in society. Therefore, further research is required to understand countries' attitudes toward IPV. This study aims to analyze attitudes toward IPV by gender in Indonesia, in 2007 and 2017, to identify changes in attitudes over a decade of rapid economic growth using individual data from a large sample survey.

2. Materials and Methods

2.1. Data Used

The study used primary data obtained from the 2007 and 2017 Indonesia Demographic and Health Surveys (IDHSs). The 2007 survey was conducted by Statistics Indonesia (*Badan Pusat Statistik*) with technical assistance from Macro International Inc. as part of the Demographic and Health Survey program (Statistics Indonesia and Macro International 2008). Similarly, the 2017 survey was conducted by Statistics Indonesia in collaboration with the National Population and Family Planning Board and the Ministry of Health of Indonesia (National Population and Family Planning Board et al. 2018). The IDHS periods for the 2007 and 2017 surveys were 25 June to 31 December 2007, and 24 July to 30 September 2017, respectively. A two-stage stratified random sampling method was used for the sample design, which selected 42,350 households in 2007 (1694 census blocks $\times$ 25 households) and 49,250 households (1970 census blocks $\times$ 25 households) in 2017. Households with individuals affiliated with the police force, those residing in nursing homes, those serving in the military, or those living in other institutional settings were excluded.

In the 2007 survey, one family member from each of the 40,701 households was asked general questions regarding their roster and family characteristics. Of the ever-married women aged 15–49 years and ever-married men aged 15–54 living in those households, 32,895 women and 8758 men participated in a more detailed survey regarding demographic and health questions. In the 2017 survey, one family member from each of the 47,963 households was asked a general question. Of the surveyed households, 38,045 married women aged 15–49 years and 10,009 married men aged 15–54 years participated in an individual survey. Our analysis focuses on cases in which ever-married women aged 15–49 years and ever-married men aged 15–54 years who participated in the individual survey were couples or partners. The study analyzed couples/partners who answered all the questions necessary for the data analysis, including 7758 couples in 2007 and 8818 couples in 2017.

2.2. Methodology

The dependent variable in this study was formed via a series of questions addressed to men and women separately. For example, "In your opinion, is a husband justified in hitting or beating his wife in the following situations: (1) she goes out without telling the husband, (2) she neglects the children, (3) she argues with the husband, (4) she refuses to have intercourse with the husband, (5) she burns the food." Women who are subjected to IPV may be "cowed into silence", and the most severely victimized women may be psychologically or physically unable to report negative attitudes toward IPV. It is presumed that the women who chose "Don't know" accept IPV the same as those who chose "Yes (justified)". This is likely also to be the case in Indonesia (Iskandar et al. 2015). Therefore, responses with "No (not justified)" were scored, whereas those with "Yes" or "Don't know" were not scored. The total number of responses that firmly disagreed was used to determine "the resistance attitude toward IPV to wife/partner," with the least resistance being 0 and the most resistance being 5.

Based on the limitations of the questions in the IDHSs and the results of previous studies on factors associated with attitudes toward and experiences of IPV against women, this study used respondents' attributes (age, education, and employment status), family attributes (number of family members and the seniority of the husband), couple attributes (polygamy and age of commencing cohabitation), and regional attributes (region and characteristics of residence) as independent variables. In addition, it examined the moderating effects using the interaction terms of the independent variables.

More specifically, the respondents' ages were categorized as teens, 20s, 30s, 40s, and 50s (men only). The respondents' educational attainment was measured in three categories: primary education or less, secondary education, and tertiary education. Women's employment status was a dichotomous variable (currently employed or not employed). The wealth quintiles, calculated in accordance with the standard procedure of the Demographic and Health Survey and provided in the IDHS datasets, had the following five categories: poorest, poorer, middle, richer, and richest. Family size was defined as the number of family members living together. The seniority of the husband was a binary variable: the oldest person in the household was the husband or the oldest person was not the husband. The age of commencing cohabitation was divided into four categories: when the wife and husband began living together, both the wife and husband/partner were in their teens; the wife was in her teens and the husband/partner was in his 20s and over; the wife was in her 20s and over and the husband/partner was in his teens; and both were in their 20s and over. Polygamy was a binary variable: the husband/partner had multiple wives/partners or only one wife/partner. Characteristics of residence were dichotomous variables: urban and rural. The regional dummy variable includes Sumatra, Java/Bali, and other regions.

Several factors associated with women's experiences of IPV in previous studies were not considered independent variables in this study. For instance, husbands' drinking habits, which are known to promote IPV (Shaikh 2022; Solanke 2018; Tlapek 2015), were not investigated in the IDHS questionnaire as most Indonesians do not consume alcohol

because of their religious beliefs. Exposure to interparent violence during childhood, which has been linked to IPV experiences and attitudes in adulthood (Aboagye et al. 2023; Hindin et al. 2008; Solanke 2018), was also excluded. Therefore, this aspect was not examined in the present study. Men's employment status was excluded because almost all men in Indonesia were employed or worked in their own businesses or farms.

We used a bivariate ordered probit regression model to identify factors affecting attitudes toward IPV among women. To measure "resistant attitudes toward IPV," we calculated the probability of responding with a "no" to all five scenarios and compared the results at two different points in time. We simultaneously estimated the parameters using a bivariate ordered probit regression model to eliminate biased effects caused by missing variables that may affect men's and women's attitudes toward IPV. This approach helped us estimate the standard errors more precisely. Additionally, since the IDHS used a complicated stratified two-stage random sampling technique, we applied Stata's "*svy*" and "*cmp*" (Roodman 2011) commands for parameter estimation.

3. Results

3.1. Changes in Attitudes toward IPV

Table 1 presents the distribution of "resistant attitude toward IPV" scores by gender and year before presenting the results of the bivariate ordered probit regression model. This table depicts the changes in the proportion of respondents with different scores between 2007 and 2017. The findings indicated that the percentage of female respondents with scores of 0 to 2, indicating considerably weak resistance to IPV, decreased from 10.8% to 7.0%, whereas for men, the percentage decreased from 4.6% to 2.8%. However, the percentage of respondents with scores of 3 and 4, indicating weak resistance to IPV, increased from 22.3% to 24.1% for women and 12.9% to 16.0% for men. Furthermore, the percentage of women with a score of 5, indicating complete resistance to IPV, increased from 66.9% to 68.9%, whereas for men, it decreased from 82.6% to 81.1%. These results suggest that women's negative attitudes toward IPV increased, whereas men did not demonstrate sufficient increase over time.

Table 1. The proportion of Scores for Attitude toward IPV [1].

Score	Women (Wife)		Men (Husband/Partner)	
	2007 (%)	2017 (%)	2007 (%)	2017 (%)
0	2.38	0.93	0.69	0.51
1	2.53	1.55	1.09	0.70
2	5.89	4.50	2.83	1.63
3	12.26	11.95	5.71	5.10
4	10.05	12.19	7.14	10.93
5	66.88	68.89	82.55	81.13
Total	100	100	100	100

[1] The weight-adjusted proportion of each score, calculated by the authors, is shown.

3.2. Factors Affecting Attitude toward IPV

Table 2 presents the estimation results of the bivariate ordered probit regression model. The tests for the null hypothesis that "all coefficients of independent variables are zero" were conducted for both men and women in 2007 and 2017, and they were rejected at the 1% significant level. In addition, the null hypothesis that "there is no correlation between the error terms in the estimated equations for men and women" was also rejected at the 1% level (the correlation coefficients for the error terms in 2007 and 2017 were 0.137 and 0.127, respectively), indicating that a bivariate ordered probit regression model can be applied to estimate the parameters for men and women simultaneously.

Table 2. Estimation results of the bivariate ordered probit regression.

Explanatory Variables	2007		2017	
	Women	**Men**	**Women**	**Men**
Respondent's age (reference: teens and 20s)				
30s	0.170 (0.080)	−0.005 (0.095)	0.128 (0.055)	−0.076 (0.086)
40s	0.229 (0.092)	0.105 (0.110)	0.187 (0.061)	0.083 (0.083)
50s		0.325 (0.129)		0.349 (0.122)
Respondent's education (reference: Primary)				
Secondary	−0.063 (0.051)	0.029 (0.060)	0.002 (0.041)	0.013 (0.044)
Tertiary	0.155 (0.106)	0.074 (0.112)	0.156 (0.062)	−0.047 (0.073)
Women's employment status				
Currently working	−0.207 (0.101)	−0.082 (0.084)	−0.215 (0.077)	−0.082 (0.087)
Wealth quintile (reference: Poorest)				
Poorer	−0.150 (0.112)	0.047 (0.093)	−0.143 (0.071)	0.054 (0.079)
Middle	−0.012 (0.134)	0.096 (0.126)	−0.089 (0.076)	0.094 (0.088)
Richer	−0.058 (0.128)	0.119 (0.138)	−0.120 (0.082)	−0.001 (0.092)
Richest	0.028 (0.144)	0.102 (0.151)	−0.069 (0.088)	0.161 (0.105)
Family size (number of persons)	−0.026 (0.013)	−0.023 (0.014)	0.002 (0.010)	−0.023 (0.010)
Seniority of husband				
Husband is the head	0.038 (0.051)	0.110 (0.054)	0.014 (0.039)	0.088 (0.046)
Age of starting cohabitation (reference: both above 20s)				
Wife: above 20s, Husband: teens	−0.357 (0.153)	−0.198 (0.124)	−0.084 (0.107)	−0.008 (0.114)
Wife: teens, Husband: above 20s	−0.014 (0.046)	−0.032 (0.053)	−0.104 (0.038)	−0.066 (0.041)
Wife: teens, Husband: teens	−0.091 (0.067)	−0.094 (0.075)	−0.144 (0.056)	−0.217 (0.063)
Polygamy (reference: No)				
Yes			−0.483(0.211)	−0.777 (0.226)
Characteristics of residence place (reference: urban)				
Rural	−0.124 (0.106)	−0.104 (0.132)	−0.163 (0.074)	−0.226 (0.113)
Region (reference: Java and Bali)				
Sumatra	−0.248 (0.115)	−0.299 (0.102)	−0.246 (0.061)	−0.266 (0.065)
Others	−0.354 (0.087)	−0.532 (0.093)	−0.405 (0.052)	−0.237 (0.067)
Wealth quintile × Women's employment status				
Poorer × Currently working	0.126 (0.125)	0.100 (0.124)	0.176 (0.099)	0.001 (0.111)
Middle × Currently working	0.155 (0.142)	0.033 (0.133)	0.056 (0.103)	0.011 (0.120)
Richer × Currently working	0.196 (0.148)	0.038 (0.140)	0.253 (0.104)	0.251 (0.118)
Richest × Currently working	0.216 (0.148)	0.161 (0.170)	0.238 (0.107)	0.098 (0.121)
Age × Characteristics of residence place				
30s × Rural	−0.013 (0.096)	0.109 (0.113)	−0.030 (0.074)	0.238 (0.105)
40s × Rural	0.146 (0.112)	0.014 (0.131)	0.068 (0.079)	0.308 (0.105)
50s × Rural		−0.166 (0.184)		0.040 (0.149)
Region × Characteristics of residence place				
Sumatra × Rural	−0.240 (0.115)	−0.014 (0.124)	−0.040 (0.088)	−0.098 (0.099)
Others × Rural	−0.013 (0.106)	0.076 (0.112)	0.109 (0.081)	0.095 (0.103)
Cut 1	−2.362 (0.160)	−2.702 (0.153)	−2.657 (0.102)	−2.796 (0.135)
Cut2	−2.020(0.158)	−2.322 (0.149)	−2.253 (0.097)	−2.465 (0.128)
Cut3	−1.583 (0.153)	−1.884 (0.140)	−1.748 (0.095)	−2.101 (0.124)
Cut4	−1.058 (0.152)	−1.448 (0.138)	−1.130 (0.092)	−1.584 (0.123)
Cut5	−0.744 (0.153)	−1.108 (0.141)	−0.729 (0.091)	−1.039 (0.123)
Correlation between error terms	0.137		0.127	

Notes: Authors' calculation. Figures in parentheses are standard errors.

The variables that demonstrated significant coefficients in the estimation for women (wives) in 2007 are as follows: "30s" ($\beta = 0.170$, $p < 0.05$) and "40s" ($\beta = 0.229$, $p < 0.05$) in

the dummy for respondent's age; "currently working" ($\beta = -0.207$, $p < 0.05$) in the dummy for women's employment status; the number of family members ($\beta = -0.026$, $p < 0.05$); "wife over 20s and husband in his teens" ($\beta = -0.357$, $p < 0.05$) in the dummy for the age of commencing cohabitation; "Sumatra" ($\beta = -0.248$, $p < 0.01$) and "Others" ($\beta = -0.354$, $p < 0.01$) in the regional dummy; and a cross term between the dummy for "rural" and "Sumatra" in the regional dummy ($\beta = -0.240$, $p < 0.05$).

The variables that were found to have significant coefficients in the women's estimation in 2017 are as follows: "30s" ($\beta = 0.128$, $p < 0.05$) and "40s" ($\beta = 0.187$, $p < 0.01$) in the dummy for respondent's age; "tertiary education" ($\beta = 0.156$, $p < 0.05$) in the dummy for educational attainment; "currently working" ($\beta = -0.215$, $p < 0.01$) in the dummy for women's employment status; "poorer" ($\beta = -0.143$, $p < 0.05$) in the dummy for wealth quintile; "wife in her teens and husband over 20" ($\beta = -0.104$, $p < 0.01$) and "both wife and husband in their teens" ($\beta = -0.144$, $p < 0.05$) in the dummy for the age of commencing cohabitation; "plural wives/partners" ($\beta = -0.483$, $p < 0.05$) in the dummy for polygamy; the dummy for "rural" ($\beta = -0.163$, $p < 0.05$), "Sumatra" ($\beta = -0.246$, $p < 0.01$), and "Others" ($\beta = -0.405$, $p < 0.01$) in the regional dummy; and "richer" × "currently working" ($\beta = 0.253$, $p < 0.05$) and "richest" × "currently working" ($\beta = 0.238$, $p < 0.05$) in the cross term between dummies for household wealth quintile and women's employment status.

In the 2007 men's estimation, the variables that had significant coefficients are as follows: "50s" ($\beta = 0.325$, $p < 0.05$) in the dummy for the respondent's age; "Yes" ($\beta = 0.110$, $p < 0.05$) in the dummy for the seniority of the husband; and "Sumatra" ($\beta = -0.299$, $p < 0.01$) and "Others" ($\beta = -0.532$, $p < 0.01$) in the regional dummy.

In the men's estimation in 2017, several variables demonstrated significant coefficients. These variables include "50s" ($\beta = 0.349$, $p < 0.01$) in the dummy for the respondent's age; the number of family members ($\beta = -0.023$, $p < 0.05$); "both wife and husband in their teens" ($\beta = -0.217$, $p < 0.01$) in the dummy for the age of commencing cohabitation; "plural wives/partners" ($\beta = -0.777$, $p < 0.01$) in the dummy for polygamy; and the dummy for "rural" ($\beta = -0.226$, $p < 0.05$), "Sumatra" ($\beta = -0.266$, $p < 0.01$), and "Others" ($\beta = -0.237$, $p < 0.01$) in the regional dummy. Moreover, for the cross term between dummies for the household wealth quintile and women's employment status, "richer" × "currently working" ($\beta = 0.251$, $p < 0.05$), also demonstrated significant coefficients. Finally, in the cross term between dummies for residential characteristics and respondent's age, the variables "rural" × "30s" ($\beta = 0.238$, $p < 0.05$) and "rural" × "40s" ($\beta = 0.308$, $p < 0.01$) demonstrated significant coefficients.

The predicted probabilities of fully resistant attitudes toward domestic violence perpetrated by male partners are presented in Table 3. Attributes that have a higher predicted probability are considered to be more resistant to IPV. For example, when comparing women by age in 2007, the predicted probabilities were 61.7% of those in their teens and 20s, 67.4% of those in their 30s, and 72.7% of those in their 40s, suggesting that older women are more likely to resist IPV. Similarly, the following points can be drawn when comparing the predicted probabilities by attribute. Women who were more likely to be entirely resistant to IPV in 2007 and 2017 were older, more educated, and more affluent than their counterparts. Women were also more likely to have the most opposing attitudes toward IPV if they and their husbands/partners were both aged 20 years or older when they began living together. Conversely, women living in rural areas, those living in regions outside Java and Bali, and those with polygamous husbands were less likely to oppose IPV. The predicted probability of the interaction between women's employment and wealth quintiles indicates that employed women in the two lowest quintiles were less opposed to IPV than unemployed women. However, employed women in the highest quintile displayed more resistance to IPV than their unemployed counterparts. The predicted probabilities for men in 2007 and 2017 followed a trend similar to that for women.

Ultimately, we demonstrate changes in attitudes toward domestic violence perpetrated by intimate partners over the past decade. The predicted probabilities for women increased for almost all attributes, excluding the middle-class employed and rural women in their

40s, indicating a significant increase in their negative attitudes to IPV over the last ten years. In particular, women who have completed secondary education (3.0%); women in their teens/20s living in rural areas (2.6%); women living in rural areas of Sumatra and other regions outside Sumatra, Java, and Bali (7.8% and 2.8%, respectively); women who began living with their husbands/partners over the age of 20 (3.0% and 13.1%); women belonging to the lowest two wealth quintiles (3.3% and 4.7%); and employed women who belong to the "poorest", "poorer", and "richer" quintiles (3.3%, 5.3%, and 3.0%) indicated the most significant increases.

For ten years, women's attitudes toward IPV increased in most attributes. However, men's attitudes towards IPV barely increased over the same period, and their opposing attitudes worsened for almost all attributes, except for a few exceptional cases. Men living in urban and rural areas of the "Other" region demonstrated some resistance to IPV (4.9% in urban and 7.1% in rural areas). Those whose wives were older than 20 years when they began living together in their teenage years also demonstrated some resistance (4.1%). Additionally, men in their 40s and 50s living in rural areas demonstrated some resistance (2.0% and 1.0%, respectively). Attitudes toward IPV worsened significantly among men with tertiary education (−4.1%); those in their teens/20s and 30s (both −3.5%); and particularly those in their 30s residing in urban areas (−3.2%), those in their teens/20s and 30s living in rural areas (−5.7% and −3.5%, respectively), those in urban Sumatra and Java (−3.0% and −3.1%, respectively), and those living in rural Sumatra (−4.1%). Additionally, men who themselves and whose spouses were both in their teenage years when they began living together demonstrated a decline of −4.6%.

Table 3. Predicted probability of negative attitudes toward IPV.

	Women			Men		
	2007 (%)	**2017 (%)**	**Change**	**2007 (%)**	**2017 (%)**	**Change**
Respondent's age						
Teens and 20s	0.617	0.645	0.028	0.804	0.768	−0.035
30s	0.674	0.690	0.015	0.820	0.785	−0.035
40s	0.727	0.723	−0.004	0.833	0.837	0.004
50s				0.856	0.863	0.007
Respondent's education						
Primary	0.675	0.682	0.008	0.821	0.810	−0.010
Secondary	0.653	0.683	0.030	0.828	0.814	−0.014
Tertiary	0.726	0.734	0.008	0.839	0.798	−0.041
Women's employment status						
Currently working	0.659	0.677	0.018	0.823	0.809	−0.014
Not working	0.684	0.702	0.018	0.828	0.812	−0.016
Wealth quintile						
Poorest	0.656	0.689	0.033	0.798	0.782	−0.016
Poorer	0.628	0.675	0.047	0.825	0.798	−0.027
Middle	0.683	0.669	−0.014	0.828	0.810	−0.018
Richer	0.675	0.698	0.023	0.834	0.820	−0.014
Richest	0.708	0.712	0.004	0.847	0.839	−0.008
Seniority of husband						
Husband is the head	0.678	0.692	0.014	0.843	0.825	−0.018
No	0.665	0.687	0.022	0.816	0.802	−0.014
Age of starting cohabitation						
both above 20s	0.678	0.708	0.030	0.833	0.824	−0.009
Wife: above 20s, Husband: teens	0.548	0.679	0.131	0.781	0.822	0.041
Wife: teens, Husband: above 20s	0.673	0.672	−0.001	0.825	0.806	−0.019
Wife: teens, Husband: teens	0.646	0.658	0.012	0.809	0.764	−0.046
Polygamy						
Yes		0.510			0.552	
No		0.689			0.812	

Table 3. *Cont.*

	Women			Men		
	2007 (%)	**2017 (%)**	**Change**	**2007 (%)**	**2017 (%)**	**Change**
Characteristics of residence place						
Urban	0.700	0.712	0.012	0.834	0.815	−0.019
Rural	0.651	0.667	0.016	0.819	0.808	−0.011
Region						
Jawa and Bali	0.720	0.730	0.010	0.864	0.839	−0.025
Sumatra	0.579	0.637	0.058	0.786	0.751	−0.035
Others	0.590	0.608	0.018	0.731	0.790	0.059
Wealth quintile × Women's employment status						
Poorest × Currently working	0.624	0.657	0.033	0.788	0.772	−0.016
Poorest × Not working	0.697	0.730	0.033	0.811	0.796	−0.015
Poorer × Currently working	0.615	0.669	0.053	0.827	0.788	−0.039
Poorest × Not working	0.645	0.682	0.038	0.823	0.810	−0.012
Middle × Currently working	0.675	0.645	−0.030	0.823	0.802	−0.021
Middle × Not working	0.693	0.701	0.008	0.835	0.821	−0.014
Richer × Currently working	0.673	0.703	0.030	0.830	0.839	0.009
Richer × Not working	0.677	0.690	0.014	0.840	0.795	−0.045
Richest × Currently working	0.709	0.715	0.006	0.854	0.841	−0.014
Richest × Not working	0.706	0.708	0.001	0.836	0.837	0.001
Age × Characteristics of residence place						
Teens and 20s × Urban	0.656	0.673	0.018	0.818	0.805	−0.012
Teens and 20s × Rural	0.592	0.618	0.026	0.794	0.737	−0.057
30s × Urban	0.714	0.717	0.003	0.816	0.784	−0.032
30s × Rural	0.650	0.664	0.015	0.821	0.786	−0.035
40s × Urban	0.734	0.736	0.003	0.843	0.827	−0.016
40s × Rural	0.724	0.709	−0.015	0.825	0.845	0.020
50s × Urban				0.889	0.885	−0.003
50s × Rural				0.835	0.845	0.010
Region × Characteristics of residence place						
Jawa and Bali × Urban	0.738	0.755	0.017	0.874	0.843	−0.031
Jawa and Bali × Rural	0.708	0.709	0.004	0.858	0.838	−0.020
Sumatra × Urban	0.653	0.673	0.020	0.802	0.772	−0.030
Sumatra × Rural	0.527	0.605	0.078	0.776	0.735	−0.041
Others × Urban	0.613	0.614	0.001	0.731	0.780	0.049
Others × Rural	0.574	0.602	0.028	0.730	0.801	0.071

Notes: Authors' calculations.

4. Discussion

Using a bivariate ordered probit regression model and predicted probabilities for each attribute, we analyzed the factors influencing the increase in opposed attitudes toward domestic violence and changes in attitudes over ten years.

The results of the bivariate probit regression model estimation indicated that individuals living in rural areas outside Java and Bali were less likely to have opposing attitudes toward IPV. This outcome is consistent with earlier studies suggesting that people are more tolerant of domestic violence against women in rural areas (Tayyab et al. 2017; Tran et al. 2016; Yount and Li 2009) and areas outside the most economically prosperous Java (Putra et al. 2019). Moreover, our analysis revealed that men with more than one wife or partner were less likely to oppose IPV. The persistence of traditional and patriarchal norms in rural areas (Putra et al. 2019) and the tendency of men with multiple wives/partners to adhere to "traditional" male-dominated beliefs (Tlapek 2015) suggest that gender discrimination and inequality that have traditionally existed remain a contributing factor to the prevalence of IPV in rural areas. These results align with feminist theory.

As noted earlier, women living in rural Sumatra and other regions (outside Java and Bali) had a low probability of resisting IPV in 2007. However, it is noteworthy that a significant increase was observed in their attitudes toward resisting IPV over the past decade in these regions. Studies have revealed that higher levels of education can lead to increased negative attitudes toward IPV (Adu 2023; Gurmu and Endale 2017; Payton et al. 2019; Seidu et al. 2022; Stöckl et al. 2021; Tran et al. 2016). Based on the sample used to estimate the parameters, the data reveal that the tertiary completion rate increased slightly in rural Java and Bali from 4.6 percent in 2007 to 4.7 percent in 2017. However, rural Sumatra demonstrated a significant increase from 3.3 percent in 2007 to 10.4 percent in 2017. Similarly, the rural areas of other regions (excluding Java/Bali and Sumatra) demonstrated a considerable increase, from 4.0 percent in 2007 to 10.9 percent in 2017. Therefore, it is possible that increasing educational levels for women in the rural areas of Sumatra and other regions have led to more negative attitudes toward IPV.

The older the respondents, the more resistant they were to domestic violence. Previous studies have suggested that resistance to IPV increases with age among women (Gurmu and Endale 2017; Putra et al. 2019; Seidu et al. 2022; Tran et al. 2016), and men under the age of 29 years are less resistant to IPV (Khawaja et al. 2008). According to Gurmu and Endale (2017), young women tend to be more tolerant of violence from their husbands to maintain friendly relationships with their spouses and their families. As they age, they tend to acquire more independence and self-assurance, leading to decreased tolerance for IPV and a negative attitude toward it (Gurmu and Endale 2017; Seidu et al. 2022). Surprisingly, the relationship between age and IPV among men indicates that men in their teens, 20s, and 30s worsen their attitudes over the decade based on the predicted probabilities. Thus, our results are consistent with the fact that the older a man becomes, the more negative he becomes toward IPV; however, violence becomes more acceptable among the younger generation as women's education levels improve and they enter the workforce (Khawaja et al. 2008). Another reason why relatively young men in their teens, 20s, and 30s became more accepting of IPV over the decade cannot be explored using IDHS data alone. This may, in part, be related to the increasing dissemination of conservative Islamic views on the Internet, particularly among younger men. However, to explore this point, it is necessary to collect information on attitudes toward religion and IPV and to analyze the data carefully.

The estimation results revealed that the acceptance of IPV is more prevalent among employed women than among their unemployed counterparts in the middle and lower socioeconomic strata. In contrast, the reverse relationship was found among women in the upper strata. This was also the case for men. The acceptance of IPV was more prevalent among men with employed spouses than among those with unemployed spouses in the middle and lower socioeconomic strata. In contrast, the reverse relationship was found among men in the upper strata. In addition, the trend of resistant attitudes toward IPV being more prevalent among employed women than their unemployed counterparts among upper-strata women has become clearer over the past decade. It is noteworthy that over the past decade, in the middle and lower strata, women have become more aware of resistance toward IPV, whereas the awareness of men has either remained stagnant or slightly decreased. Payton et al. (2019) indicated that conflicts over scarce resources in a household are more likely to occur in low-income groups. Moreover, several studies have found that the risk of IPV increases as women's income increases (Bulte and Lensink 2019) or as women are employed (Solanke 2018). Based on the results and these previous studies, although resource theory suggests that women's income increases their share of household resources, owing to their employment, and hence their empowerment, making them more resistant to IPV, conflicts over scarce resources in a household can arise over new resources women produce in lower and middle economic strata in a situation where women become more opposed to IPV but men do not.

This study found that women were more receptive to domestic violence than men were. Several other studies in Southeast and South Asia reported similar findings (Tayyab et al. 2017;

Tran et al. 2016). Tran et al. (2016) found that in countries with a high GII, women tend to be more accepting of IPV than men. Moreover, Tayyab et al. (2017) noted that an internalized patriarchal culture influences women's accepting attitudes toward domestic violence. It can be inferred that women are more accepting of IPV because of the low status of women in Indonesia and the traditional patriarchal culture. In addition, there has been no improvement in men's attitudes toward domestic violence since 2007. Rather, there has been a decrease in the predicted probability for many items. Considering that previous studies have noted that men use violence to secure their own dominance when their authority is undermined (Sunmola et al. 2021; Bulte and Lensink 2019), it can be inferred that in Indonesian society, where traditional culture persists as women's education levels and incomes increase, they believe that previously strong male dominance and dignity are undermined and are willing to use violence to maintain their status.

5. Conclusions

Using individual data from the 2007 and 2017 Indonesian Demographic and Health Surveys, this study aimed to analyze attitudes toward husband-on-wife violence by gender and to identify changes in attitudes over ten years. Men and women had similar characteristics, and those living in societies with more traditional cultures, such as those living in rural areas and outside Java and Bali, were more likely to accept domestic violence from intimate partners. In addition, a comparison of attitudes toward IPV between 2007 and 2017 revealed that women living in traditional societies demonstrated a remarkable increase in negative attitudes toward IPV. Other characteristics of the increase include households with lower economic levels and younger generations.

Alternatively, men's negative attitudes demonstrated minimal increase over the ten years, suggesting that they believed that their status was threatened as women's status increased, and their awareness of resisting domestic violence decreased. Furthermore, the findings suggest the need for an indirect approach to solving the problem of IPV by educating men to increase their awareness of domestic violence, rather than simply increasing women's education and income to improve their status.

Although this study provided valuable insights, it had several limitations. First, the cross-sectional nature of the IDHS data used in this study makes it impossible to compare changes in attitudes toward IPV for the same individual over time. Consequently, although we identified trends in attitudes toward IPV by region and country, we could not determine how individual attitudes changed in response to changes in social and economic conditions. Second, the study only examined factors that influence attitudes toward IPV by gender and did not investigate whether attitudes toward IPV are mutually influenced by men and women. Considering the concept of mutual determinism in social cognitive theory, which states that the behaviors of others and the environment interact to influence one's behaviors and perceptions, it is possible that husbands' awareness of IPV and the sociocultural customs of their place of residence influence women's perceptions of IPV. Finally, Indonesia's economy grew rapidly after 2017. The influence of religious elements, such as the *Hijrah* movement, which has become popular among young people since the 2010s, is also unknown. However, there has yet to be an examination of the impact of these changing socioeconomic conditions on attitudes toward IPV using the most recent survey data. Further research is required to examine the impact of these factors.

While our findings are preliminary, they could have significant administrative and policy implications if replicated. Therefore, further research on IPV is necessary to enhance women's empowerment in their homes. Data from the Demographic and Health Survey are often used to evaluate women's attitudes toward IPV. However, the standard questions used to assess these attitudes have limitations. A new survey module should be developed to better understand women's resistance to IPV. Furthermore, conducting qualitative analysis based on in-depth interviews with respondents, after building a trustful relationship with them, can help capture the inner voice of women who find it hard to speak out against IPV.

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Informed Consent Statement: The requirement for informed consent was waived because the secondary data used were publicly available, such that the raw data did not contain any personal information that would identify the participants.

Data Availability Statement: The raw data are publicly downloadable upon request from the DHS Program (https://dhsprogram.com/ (accessed on 15 December 2023)).

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