

Neighborhood Disadvantage and Violence against Woman in South Sumatra Province, Indonesia

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As a global problem that relates to the Sustainable Development Goals (SDGs), violence against woman (VAW) also exist in Indonesia. Although many Indonesian scholars gives attention to VAW, the current knowledge still ignores the relationship between the neighborhood and VAW. This study investigates the influence of neighborhood disadvantage and social disorder on the likelihood of violence against woman (VAW) in South Sumatra, Indonesia. Data from PODES 2018 census (*Potensi Desa* or Village Potential) for South Sumatra Province were analyzed using logistic regression techniques. Fifteen independent variables have identified as a covariate of the incidence of VAW at the neighborhood level (Y). Five independent variables are representing neighborhood disadvantage and ten independent variables representing social disorder. The result shows that the final model of logistic regression can estimate VAW (Y) as much as 11% significantly, $X^2(6) = 68.03, p < 0.01$. All independent variables have a positive association with VAW (Y) and contribute to Y as follows: 455% (combustion/ X_9), 348% (corruption/ X_{14}), 152% (drug/ X_{10}), 114% (riverbank settlement/ X_2), 102% (theft/ X_5), and 76.9% (fraud/ X_7). They have different level of significance as follows: $p < 0.01$ (X_{10}, X_9, X_2), $p < 0.05$ (X_5 and X_{14}), and $p < 0.10$ (X_7). These findings suggest South Sumatra Province (SSP) to introduce a new incentive to the farmers so that they do not depend on fire in land clearing, continue the ongoing efforts to eradicate corruption, cooperating with a broad community to eliminate the criminal act, and improve the quality of the welfare of the population through various development programs.

Keywords: *gender equality; Indonesia; neighborhood; SDGs; village census; violence; woman.*

Violence against woman (VAW) is a global public issue. In 2019, according to the United Nations of Economic and Social Council (The United Nations of Economic and Social Council, 2019), eighteen percent of women and girls between the ages of 15 and 49 encountered physical and sexual

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Contribution of Authors:

1. The first author is the leader of the research team and provides the initial idea, theoretical framework, formulating the research question
2. The second author contributes to collect, review, and analyze literature review on neighborhood disadvantage and domestic violence.
3. The third author contributes to download, prepare, analyze, and interpreting the quantitative data using STATA 15.

violence from their partners in the preceding 12 months. It explains why the United Nations (UN) decides to achieve gender equality as one of the Sustainable Development Goals (SDGs). The UN has targeted to eradicate all forms of violence against women and girls, including trafficking and sexual and other forms of exploitation, in public and private domains. This target has two indicators. *First*, reducing the proportion of women and girls aged 15 years and older who have experienced physical, sexual or psychological violence by an existing or former intimate partner in the preceding 12 months, violence and age. *Second*, decreasing the proportion of women and girls aged 15 years and older who have experienced sexual violence by persons other than a close partner in the preceding 12 months, age, and place of occurrence (United Nations, (2019). The essence of these indicators is VAW.

Like the global situation, Indonesia has a severe problem of VAW. In 2017, according to the United Nations Population Fund (UNFPA), 2 out of 5 (41%) Indonesian women have experienced various type of VAW (physical, sexual, emotional, and economic violence) in her lifetime and 16% had experienced VAW last year (Hulupi, 2017). In 2019, the National Commission on Violence Against Woman (*Komisi Nasional Anti Kekerasan Terhadap Perempuan* or *KOMNAS Perempuan*) reported that there were 408.706 VAW cases in Indonesia. The composition of VAW in Indonesia based on incident location as follows: personal sphere (71% or 9.637 cases), the community/public domain (28% or 3,915), the state sphere (0.1% or 16). In the personal sphere, various VAW has experienced by Indonesian women such as physical violence (41% or 3.927 cases), sexual violence (31% or 2.988), psychological violence (17% or 1.658 cases), and economic violence (11% or 1.064 cases). In the community/public domain, the kind of VAW is sexual abuse (29.01% or 1.136 cases), rape (19.46% or 762 cases), and sexual harassment (10.06% or 394 cases), intercourse violence (3.98% or 156 cases).

The previous research shows various findings of the origin of VAW. Some Indonesian researchers have identified several factors that contribute to VAW such as economic factors (i.e., household economy, financial issues, the work of offender, woman's economic dependence, poverty), cultural factors (i.e., patriarchal system, ideology of family, cultural norms), and social factors (i.e., alcohol, polygamy, quality of social relations with the offender, time with family, man's perspective on masculinity, the demographic and personal characteristics of the husband, woman agency) (Aisyah, 2012, pp. 48–75; Aisyah & Parker, 2014, pp. 205–223; Arifianti et al., 2017, pp. 83–89; Gusliana, 2010, pp. 80–93; Hayati et al., 2014, pp. 1–13; Hayati et al., 2011, p. 52; Misa, 2013; Nilan et al., 2014, pp. 869–888; Nur Hayati et al., 2013, p. 18894; Parker, 2016, pp. 7–26; Riyani & Parker, 2018, pp. 92–99; Rofiah, 2017, pp. 31–44; Venning, 2010, pp. 397–416), and political factors (i.e., the dynamics of actors involved in VAW governance, policy and service integration, and budgeting (MAMPU, 2015). However, these studies tend to ignore neighborhood variables for understanding VAW in Indonesia. This research begins to address these gaps and try to examine the relationship between neighborhood disadvantage and VAW.

Normatively, the term of VAW first appeared in the resolution of the General Assembly of the United Nations (UN) Number A/RES/48/104 on the Declaration on the Elimination of Violence against Women in 1994. This document defines VAW as any act that results in or is likely to result in, physical, sexual, or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life (United Nations, 1994, pp. 9–14). Six theories try to explain this phenomenon: social learning theory (SLT), gender and

masculinity theory (GMT), feminism theory (FT), biological theory (BT), psychological theory (PT), and ecological theory (ET). According to SLT, VAW is the result of imitating the actions of others in a particular social setting. Learning resources can be family members or individuals in the broader social environment (for example, community, organization, community). When someone is exposed to a VAW in childhood (for example, just looking at or becomes a victim), then he tends to use acts of violence in every development of his age.

Like SLT, GMT argues that VAW is a product of socialization about the role of gender in specific cultures that occur during childhood and support the domination and control of men over women. VAW is a vehicle for men to express the hegemony of masculinity towards women who are trapped in a gender-biased division of labor. This theory also sees violence against women as competition for social status between men in expressing their masculinity. Because of differences in access to resources between men, not all men can show their masculinity. In this situation, marginal men will construct violence differently from men who have a higher social class. Marginal men who are unable to express their masculinity in legitimate ways tend to construct aggressive forms of violence. Unlike SLT and GMT, FT understands VAW as a product of a patriarchal system that creates and perpetuates gender injustice (unfair power relations between men and women) in all aspects of social life. This patriarchal system has two components: social structure and ideology. Social structure refers to institutionalized social relations in various social institutions such as family, law, religion, education, and health. In contrast, ideology refers to the beliefs and views of many people who accept and support a patriarchal system as natural and good for the whole society.

The biological perspective focused on genetic, congenital, and organic causes of the development of violent and aggressive behavior. The psychological perspective focuses on various psychological factors that affect the individual perpetrator or the target or victim such as psychopathology, personality disorders, attachment needs, anger/hostility, substance and alcohol abuse, low self-esteem and individual abilities (excessive or weak assertiveness, communication difficulties, and poor problem-solving skills). Finally, ecological theory that explaining VAW caused by the various factors (i.e., economy, social, institutional, political, culture, and so on) at the different level (individual, relationship, community, and society) (Ali & Naylor, 2013a, pp. 373–382, 2013b, pp. 611–619).

The World Health Organization (WHO) divides VAW into three types: violence against oneself, violence between people, and collective violence. Violence against oneself consists of suicidal behavior and self-harming behavior. Violence between people can occur at two levels: family level and community level. At the family level, violence can take the form of violence against children, spouses, and parents. At the community level, violence can be done by acquaintances or strangers, while collective violence can occur in the realm of social, political, and economic life. All forms of violence can lead to physical violence, sexual violence (except suicide and self-harm), psychological violence, and other derivative violence (World Health Organization, 2002).

Furthermore, the term neighborhood refers to 'the people living near one another in particular place' (Anonymous, 2019b) or 'the area surrounding a particular place, person, or object' (Anonymous, 2019a). In the neighborhood, the people are close to each other. Meeting, talking, and doing stuff together is simple for neighbors. People generally have some social variables in common: level of revenue, type of job, ethnic resemblance, lifestyle, and sometimes religious affiliation.

However, as suggested by Yin (1982, p. 121), there is no universal definition of neighborhood. The boundary of the neighborhood depends on the inquiry. This article is understanding the neighborhood as a territory and a basic pattern of social organization that combines physical and social proximity (Carmon & Eizenberg, 2015, pp. 437–442). As an independent variable, the social and physical environment of neighborhoods can affect the life chances of the inhabitants beyond the consequences of their individual features (van Ham & Manley, 2012, pp. 55–60).

The significant role of neighborhoods influencing the social life is related to social disorganization theory that focused on “the effect of places.” According to this theory, social disorganization refers to the inability of a community to realize the shared goals and solve chronic problems (Kubrin & Weitzer, 2003, pp. 374–402). For example, poverty, residential mobility, ethnic heterogeneity, neighborhood disadvantage, social disorder, and weak social networks can diminish a neighborhood’s capacity to control the behavior of the people in public, and hence influence the quality of people well-being. Many prior kinds of research show robust relationships between neighborhood attribute and VAW, for example, level of trash (Kim et al., 2013, pp. 41–55), electrification (Fernández-Baldor et al., 2015, pp. 193–204), neighborhood problems (Daoud et al., 2017, pp. 648–665), physical isolation, distance and availability (Adler, 1996, pp. 463–466), ethnic heterogeneity, residential stability, collective efficacy, social ties, cultural norms, concentrated disadvantage (Pinchevsky & Wright, 2012, pp. 112–132), neighborhood disadvantage, residential instability (Benson et al, 2003, pp. 207–235; Lauritsen & Schaum, 2004, pp. 323–357; Miles-Doan, 1998, pp. 623–645), public disorder and crime (Gracia et al., 2014, pp. 866–882). In VAW literature, the existing study indicates that various type of violence may be related to neighborhood variables (Copp et al., 2015, pp. 59–72; Johnson et al., 2015, pp. 458–466; Kiss et al., 2012, pp. 1172–1179; Snowden, 2019, pp. 181–194).

However, in the context of Indonesia, there is a limited body of studies on the neighborhood and violence, particularly VAW, so that the more rigorous study is needed. This article examines two kinds of neighborhood attribute: neighborhood disadvantage and social disorder. In Indonesia, several attribute of resident area, for example settlement under SUTET (*Saluran Udara Tegangan Ekstra Tinggi* or Extra-high voltage airline, between 275 kV to 800 kV, used for long-distance electricity transmission), settlement on the riverbank, slums, a bum hangout, the existence of alienated tribe is the manifestation of neighborhood disadvantage. Furthermore, various kinds of crime in the neighborhood area, for example, theft, robbery, fraud, persecution, combustion, drug, gambling, murder, trafficking, corruption. Although neighborhood boundary is not the same as administrative or census boundary, this study used neighborhood data at the rural village (*desa*) and the urban village (*kelurahan*) level as a neighborhood boundary.

Method

As a social phenomenon, VAW could be analyzed using qualitative, quantitative, and mixed approaches. The cause and the incident of VAW can exist and occur at the level of individuals, social relations, communities, organizations, communities, or countries. This study could be classified as research that looking at VAW contributors and events at the community level. This study adopts a quantitative approach to analyze secondary data from government institutions, particularly the 2018 Village Potential Survey (*Survei Potensi Desa* or PODES) for South Sumatra Province, Indonesia, which was reported on a various attribute of neighborhood disadvantage and crime at the neighborhood

level. This study only focuses on one province, South Sumatra Province, because Indonesia is a heterogeneous society. Either as a place, space, or society, each region has a uniqueness because they have different resources, cultural values, geographical conditions, and so on. Even though statistically, methods make an opportunity to draw generalization, it is better if the study focused on one area so that the finding could be beneficial for local government (province government, district government, and village government) who have the authority to maintain their region. The number of PODES sample in South Sumatra Province is 3.262 villages, which consists of 2.876 (88.17%) rural village (*desa*) and (11.83%) urban village (*kelurahan*). The officer of Central Bureau of Statistic (*Badan Pusat Statistik* or BPS) collects the PODES data using face to face interview with the village government officers (i.e., village head, village secretary, or village government apparatus). Data analysis is carried out in two stages: bivariate analysis (cross-tabulation) and multivariate analysis (logistic regression), using STATA 15. Only the independent variable that has $p < 0.25$ during the bivariate analysis will include in multivariate analysis (Hosmer & Lemeshow, 2000, p. 91). Table 1 shows a summary of the research variable in this study.

Table 1*Summary of research variable*

Research variable	Measurement
<i>Dependent variable</i>	
VAW in community level (Y)	Has there been any rapes in this village in the past year? Answer option: yes (1) or no (0)
<i>Independent variable (X)</i>	
<i>Neighborhood disadvantage</i>	
Settlement under SUTET (X_1)	Are there settlements under SUTET in this village? Answer option: yes (1) or no (0)
Settlement on the riverbank (X_2)	Are there settlements on the riverbank in this village? Answer option: yes (1) or no (0)
Slums (X_3)	Are there slums in this village? Answer option: yes (1) or no (0)
A bum hangout (X_4)	Is there a bum hangout in this village? Answer option: yes (1) or no (0)
The existence of alienated tribe (X_5)	Are there alienated tribes in this village? Answer option: yes (1) or no (0)
<i>Social disorder</i>	
Theft (X_6)	Is there any incident of thefts in this village? Answer option: yes (1) or no (0)
Violent theft (X_7)	Is there any incident of violent thefts in this village? Answer option: yes (1) or no (0)
Fraud (X_8)	Is there any incident of fraud in this village? Answer option: yes (1) or no (0)
Persecution (X_9)	Is there any incident of persecution in this village? Answer option: yes (1) or no (0)
Combustion (X_{10})	Is there any incident of combustion in this village? Answer option: yes (1) or no (0)
Drug (X_{11})	Is there any incident of drug abuse in this village? Answer option: yes (1) or no (0)

Gambling (X_{12})	Is there any incident of gambling in this village? Answer option: yes (1) or no (0)
Murder (X_{13})	Is there any incident of murder in this village? Answer option: yes (1) or no (0)
Trafficking (X_{14})	Is there any incident of trafficking in this village? Answer option: yes (1) or no (0)
Corruption (X_{15})	Is there any incident of corruption in this village? Answer option: yes (1) or no (0)

Results

South Sumatra is one of the provinces in Indonesia. The total area of South Sumatra Province (SSP) is 86,700 km² and located at 1°- 4° South Latitude - 102°-106° East Longitude. The SSP has 17 district area, 239 sub-districts, and 3,248 villages (rural village: 2,862 villages); urban village: 386 villages). Until 2018, the population of SSP reached 8.3 million people (male: 4.2 million and female: 4.1 million) and the growth is as much as 0.01%. The population density in SSP attained 95.75 people/km². Palembang City, the capital of SSP, is the most dense area (4,519.05 people/km²), and Musi Rawas Utara District is the lowest dense area (32.53 people/km²). SSP has the workforce as much as 4.1 million people. Of this total labor force, the number of employed people reaches 3.9 million people, and unemployed people reaches 1.7 thousand people. The male labor force participation (83.41%) is higher than the female labor force (53.56%). However, the men unemployment rate (4.22%) does not differ greatly from women (4.24%). In 2019, SSP has the Gross Regional Domestic Product (GRDP) as much as Rp419.72 trillion (current price). Manufacturing (20.2%), agriculture (19.5%), and fishery (14.8%) have contributed significantly to GRDP of the SSP (BPS, 2019).

In 2018, 1.5% of the population of SSP had been the victims of crime. The crime total and the crime rate in the SSP has achieved 15,728 cases and 190 people respectively. The police data show that the SSP has domestic violence (522 cases), rape (90 cases), and molestation (130 cases) incident. The PODES data show that the SSP has 3.40% rape cases (BPS, 2019a). Moreover, according to KOMNAS Perempuan (2018), the SSP has 314 cases on VAW at all level (personal, community, and state). This data indicates that the SSP, like another region in Indonesia, has not become a safe space for a woman.

Furthermore, the respondent of this study is 3,248 villages (rural village: 2,862 villages); urban village: 386 villages) in SSP. The source of villager income comes from the agricultural sector (90.50%), trading (3.40%), service (3.46%), manufacturing industry (1.10%), mining and excavation (0.34%), and others (1.13%). All villages in SSP produce rubber (36.70%), paddy (25.66%), coffee (16.74%), and palm oil (6.99%). It indicates that the SSP has an attribute as plantation village and not agriculture village.

Bivariate analysis

As shown in Table 2, the result of the bivariate analysis shows that all independent has a significant relationship with Y (VAW in community level), except slums (X_3). It means that slums (X_3) should be omitted from multivariate analysis using logistic regression. Table 2 shows all independent variable that ordered from largest to smallest based X^2 score. It guided the researcher in entering each independent variable one by one into the logistic regression formula. In this stage, if one

independent variable does not or lost significance ($p > 0.10$) with Y, then it should be omitted from the next model of logistic regression. All independent variable has a weak relationship with Y, ϕ or $\phi_i = 0.0 - 0.1$ (Acock, 2014, p. 131).

Table 2

Summary of bivariate analysis

No.	<i>Bivariate analysis</i>	χ^2	d f	p	ϕ
1.	Trafficking (X_{13}) and VAW in community level (Y)	63.60	1	0.01	0.13
2.	Corruption (X_{14}) and VAW in community level (Y)	48.43	1	0.01	0.12
3.	Drug (X_{10}) and VAW in community level (Y)	47.56	1	0.01	0.12
4.	Combustion (X_9) and VAW in community level (Y)	40.43	1	0.01	0.10
5.	Fraud (X_7) and VAW in community level (Y)	33.05	1	0.01	0.10
6.	Gambling (X_{11}) and VAW in community level (Y)	29.68	1	0.01	0.09
7.	Murder (X_{12}) and VAW in community level (Y)	24.14	1	0.01	0.08
8.	Violent theft (X_6) and VAW in community level (Y)	18.81	1	0.01	0.07
9.	Persecution (X_8) and VAW in community level (Y)	14.58	1	0.01	0.06
10.	Theft (X_5) and VAW in community level (Y)	14.45	1	0.01	0.06
11.	Settlement on the riverbank (X_2) and VAW in community level (Y)	11.55	1	0.01	0.06
12.	Settlement under SUTET (X_1) and VAW in community level (Y)	5.19	1	0.01	0.03
13.	A bum hangout (X_4) and VAW in community level (Y)	3.65	1	0.05	0.03
14.	Slums (X_3) and VAW in community level (Y)	0.52	1	0.46	0.01

Multivariate analysis

Logistic regression is carried out in 14 stages. The last stage (stage 14th) produce the final model of logistic regression (see Table 3). 8 independent variables are omitted from the final model because of its p -value > 0.1 due to the influence of other independent variables. For example, in stage 4th, X_{13} (trafficking) should be omitted from the logistic regression in stage 5th because the presence of X_9 (combustion) makes the statistical relationship between X_{13} (trafficking) and VAW (Y) is not significant. X_9 has changed p -value of X_{13} (trafficking) from 0.04 (stage 3rd) to 0.12 (stage 4th), $p > 0.1$. In stage 6th, X_{11} (gambling) does have a significant relationship with Y so that it should be omitted in the stage 7th. In stage 10th, X_6 (violent theft) has lost significant with VAW (Y) because of the effect of X_5 (theft) so that X_6 (violent theft) should be omitted from the logistic regression in stage 11th. In stage 12th, X_1 (settlement under SUTET) does not have a significant relationship with VAW (Y), so it should be omitted in the stage 13th. In stage 13th, X_4 (a bum hangout) does not have a significant relationship with VAW (Y), so it should be omitted in the final model. Shortly, the final model consists of 6 independent variables: corruption (X_{14}), drug (X_{10}), combustion (X_9), fraud (X_7), theft (X_5), and riverbank (X_2).

Table 3

Summary of logistic regression result

Stage	Variable	Model				Variable			
		X ²	df	p	Pseudo R2	b	z	p	%
1.	Trafficking (X ₁₃)	14.82	1	0.01	0.02	3.83	4.64	0.01	4518.8
2.	Trafficking (X ₁₃)	21.57	2	0.01	0.03	2.39	2.30	0.02	996.5
	Corruption (X ₁₄)					2.11	3.13	0.01	729.9
3.	Trafficking (X ₁₃)	54.13	3	0.01	0.07	2.08	1.97	0.04	702.4
	Corruption (X ₁₄)					1.54	2.23	0.02	368.3
	Drug (X ₁₀)					1.42	5.76	0.01	317.5
4.	Trafficking (X ₁₃)	63.62	4	0.01	0.09	1.75	1.53	0.12	481.0
	Corruption (X ₁₄)					1.39	1.91	0.05	304.3
	Drug (X ₁₀)					1.37	5.49	0.01	294.6
	Combustion (X ₉)					1.60	3.56	0.01	398.9
5.	Corruption (X ₁₄)	67.01	4	0.01	0.09	1.64	2.71	0.01	417.8
	Drug (X ₁₀)					1.23	4.72	0.01	242.7
	Combustion (X ₉)					1.52	3.38	0.01	357.8
	Fraud (X ₇)					0.75	2.49	0.01	113.1
6.	Corruption (X ₁₄)	68.32	5	0.01	0.09	1.58	2.60	0.01	388.7
	Drug (X ₁₀)					1.07	3.63	0.01	193.5
	Combustion (X ₉)					1.46	3.21	0.01	331.0
	Fraud (X ₇)					0.70	2.30	0.02	103.0
	Gambling (X ₁₁)					0.34	1.14	0.25	40.7
7.	Corruption (X ₁₄)	68.76	5	0.01	0.09	1.59	2.58	0.01	393.8
	Drug (X ₁₀)					1.20	4.60	0.01	233.5
	Combustion (X ₉)					1.48	3.26	0.01	341.0
	Fraud (X ₇)					0.72	2.36	0.01	105.5
	Murder (X ₁₂)					0.38	1.46	0.14	47.1
8.	Corruption (X ₁₄)	69.95	5	0.01	0.10	1.55	2.47	0.01	371.8
	Drug (X ₁₀)					1.18	4.49	0.01	225.8
	Combustion (X ₉)					1.53	3.37	0.01	363.4
	Fraud (X ₇)					0.63	2.03	0.04	89.1
	Theft (X ₆)					0.55	1.78	0.07	73.8
9.	Corruption (X ₁₄)	69.95	6	0.01	0.10	1.55	2.45	0.01	373.0
	Drug (X ₁₀)					1.18	4.48	0.01	226.1
	Combustion (X ₉)					1.53	3.36	0.01	363.9
	Fraud (X ₇)					0.64	1.94	0.05	89.7
	Violent theft (X ₆)					0.55	1.77	0.07	74.0
	Persecution (X ₈)					-0.01	-0.03	0.97	-1.3
10.	Corruption (X ₁₄)	73.21	6	0.01	0.10	1.56	2.50	0.01	378.5
	Drug (X ₁₀)					1.07	4.04	0.01	193.7
	Combustion (X ₉)					1.51	3.34	0.01	354.9
	Fraud (X ₇)					0.55	1.76	0.07	73.8
	Violent theft (X ₆)					0.46	1.51	0.13	59.8
	Theft (X ₅)					0.58	1.73	0.08	80.1

11.	Corruption (X_{14})	68.03	6	0.01	0.11	1.50	2.18	0.02	348.5
	Drug (X_{10})					0.92	3.28	0.01	152.0
	Combustion (X_9)					1.71	3.82	0.01	455.9
	Fraud (X_7)					0.57	1.73	0.08	76.9
	Theft (X_5)					0.70	1.99	0.04	102.0
	Riverbank settlement (X_2)					0.76	2.88	0.01	114.0
12.	Corruption (X_{14})	69.77	7	0.01	0.11	1.51	2.22	0.02	352.9
	Drug (X_{10})					0.89	3.18	0.01	145.6
	Combustion (X_9)					1.75	3.92	0.01	479.7
	Fraud (X_7)					0.55	1.68	0.09	73.5
	Theft (X_5)					0.68	1.94	0.05	98.8
	Riverbank settlement (X_2)					0.77	2.92	0.01	116.5
13.	SUTET settlement (X_1)	68.06	7	0.01	0.11	0.46	1.37	0.16	88.7
	Corruption (X_{14})					1.51	2.18	0.02	354.3
	Drug (X_{10})					0.92	3.29	0.01	152.5
	Combustion (X_9)					1.71	3.83	0.01	457.2
	Fraud (X_7)					0.56	1.73	0.08	76.7
	Theft (X_5)					0.70	2.00	0.45	102.3
	Riverbank settlement (X_2)					0.76	2.88	0.01	114.6
14.	A bum hangout (X_4)	68.03	6	0.01	0.11	-0.16	-0.14	0.88	-15.3
	Corruption (X_{14})					1.50	2.18	0.02	348.5
	Drug (X_{10})					0.92	3.28	0.01	152.0
	Combustion (X_9)					1.71	3.82	0.01	455.0
	Fraud (X_7)					0.57	1.73	0.08	76.9
	Theft (X_5)					0.70	1.99	0.04	102.0
Riverbank settlement (X_2)	0.76	2.88	0.01	114.0					

The final model can estimate VAW (Y) significantly as much as 11%, $X^2(6) = 68.03$, $p < 0.01$. All independent variables have a positive association with VAW (Y). Table 4 shows that combustion/ X_9 has the largest proportion (455%) to estimate Y, following by corruption/ X_{14} (348%), drug/ X_{10} (152%), riverbank/ X_2 (114%), theft/ X_5 (102), and fraud/ X_7 (76.9%). However, they have different level of significance as follows: $p < 0.01$ (X_{10} , X_9 , X_2), $p < 0.05$ (X_5 and X_{14}), and $p < 0.10$ (X_7) (see Table 4). The final model implicitly produces the attributes of a rural and urban neighborhood in South Sumatera Province that is vulnerable to VAW in the community level. It suggests that the rural and urban neighborhood that has an incidence of combustion, corruption, drug, theft, fraud, and riverbank settlement will have higher odds for VAW incidences. In the next section, the authors will elaborate on the theoretical and practical implication of this finding.

Table 4*The final model of logistic regression*

Independent variable (X)	Dependent variable (Y)
Corruption (X ₁₄)	1.501** (-0.687)
Drug (X ₁₀)	0.924*** (-0.281)
Combustion (X ₉)	1.715*** (-0.448)
Fraud (X ₇)	0.570* (-0.328)
Theft (X ₅)	0.703** (-0.352)
Riverbank settlement (X ₂)	0.761*** (-0.264)
Constant	-5.071*** (-0.332)
Observations	2,797

Standard errors in parentheses

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

Discussion

The findings of this study are fascinating because it relates to two public problems in Indonesia: combustion (X₉) and corruption (X₁₄). In South Sumatra Province, combustion refers to the burning forest area or agricultural land for land clearing. Since the haze disaster in 2014, the Government of Indonesia (GoI) and the Government of South Sumatra Province (GSPP) had prohibited farmers and plantation corporation from using fire as a method for land clearing. Both GoI and GSPP had decided that combustion is illegal and unlawful. The perpetrators of forest fires, small farmers or plantation corporation, can be arrested and put in prison. For the indigenous people of South Sumatra Province, using fire for land clearing is cultural practices that are legitimized by *Kitab Simbur Cahya* (codification of customary law in South Sumatra Province). Scientific debates about forest fires in Indonesia remains until today (Cattau et al., 2016, pp. 205-219; Cochrane, 2003, pp. 913-919; Syaufina, 2018, p. (Syaufina, 2018, pp. 109-121; Watts et al., 2019, pp. 1-15).

Despite the issue of whether combustion is illegal or not, the results of the study indicate that the villages where forest fires located have a higher risk for VAW. The more occurrences of forest fires, the higher the risk of women as victims of violence at the community level. As an environmental crime, a positive association between combustion and VAW support the previous findings showing a robust relationship between social disorder and VAW (Gracia et al., 2014, pp. 866-882; Pinchevsky & Wright, 2012, pp. 112-132). However, many researchers suggest that the farmers use fire for land clearing because it is an advantageous and economical technique (Brady, 1996, pp. 3-11; Ketterings

et al., 1999, pp. 157–169). In this regard, the author argues that the farmers preserve this technique due to the lack of resources to maintain their farming. In other words, forest fires are in a poor village. Because poverty is an attribute of neighborhood disadvantage, it can be concluded that the forest fires are the product of the neighborhood disadvantage, especially poverty. This argument supports the prior research that showing a significant relationship between poverty, as a neighborhood disadvantage, and VAW (Benson et al., 2003, pp. 207–235; Kiss et al., 2012, pp. 1172–1179; Miles-Doan, 1998, pp. 623–645). Thus, the root problems of VAW is not the incident of forest fires, but poverty in the economic term.

Corruption (X_{14}) is in the second place as the contributor of VAW at the community level. It can explain VAW (Y) as much as 348%. It implies that the village that has corruption case makes the odds as much as 348% to produce VAW. In contrast to combustion (X_9), corruption (X_{14}) is representing a social disorder in the village government institution. How do we rationalize the relationship between corruption and violence against women at the community level? We can answer this question using a simple illustration. For example, since 2014, all village government receives a cash transfer from the central government through village fund (*dana desa*) policy. The village fund is a budget of village government to finance various bottom-up development plans to solve or to achieve common goals. As a security problem, the village government could use this fund to prevent and strengthen neighborhood security to close the opportunity for rape. It can happen if the village government does not corrupt the village fund. Thus, corruption reduces the quality, competence, and performance of village governance to create a sense of security, strengthen community efficacy, and to protect vulnerable groups in village communities, including preventing rape incident.

Drug (X_{10}), theft (X_5), and fraud (X_7) is a manifestation of the social disorder. These variables can explain VAW (Y) as much as 152.0%, 102%, and 76.9% respectively. This finding is not surprising. Many scholars have been showing that various kinds of the social disorder have a positive association with VAW (Y) (Adler, 1996, pp. 463–466; Benson et al., 2003, pp. 207–235; Johnson et al., 2015, pp. 458–466; Laeheem, 2016, pp. 182–189; Lauritsen & Schaum, 2004, pp. 323–357; Venning, 2010, pp. 397–416). Like other countries in the world: drug, theft, and fraud are a criminal act in Indonesia and a part of street crime. It supports the idea that VAW is not solely the health problem, but also as a crime and security problem. Although several independent variables representing social disorder does not have a significant relationship, especially trafficking (X_{13}), gambling (X_{11}), murder (X_{12}), violent theft (X_6), and persecution (X_8), this study bring new evidence to understand VAW in Indonesia that ignores neighborhood variable.

Finally, riverbank settlement (X_2) is the only variable of neighborhood disadvantage that can estimate VAW (Y) as much as 114% significantly, $p < 0.01$. Another independent variable (SUTET settlement/ X_1 , a bum hangout/ X_4 , and slums/ X_3) does not have a significant relationship with VAW (Y). It is interesting to note that South Sumatra Province has ten main rivers that have many tributaries, branch, and stream. Also, Palembang, the capital of South Sumatra Province, has a long history as a maritime kingdom (Adam et al., 2019). In South Sumatra Province, the riverbank refers to a residential area of indigenous people. Before people recognize road and railway, they utilized a river as a mode of transportation. The river, then, was the starting point of the developmental resident area in South Sumatra Province. After transportation facilities turning to the road, the

villages along the riverbank were economically underdeveloped. They could no longer enjoy the economic benefits that were trickled due to the traffic of goods and services along the river. Consequently, the riverbank settlement (X_2) had transformed into a remote area that had deprived economically and contributed to VAW. This analysis supports the idea about the neighborhood effects as illustrated by a growing body of literature (Benson et al., 2003, pp. 207–235; Douglas et al., 2018, pp. 119–124; Pinchevsky & Wright, 2012, pp. 112–132; Sampson, Raudenbush, & Earls, 1997, pp. 918–924; Snowden, 2019, pp. 181–194).

Based on the findings, this study proposes policy recommendation to prevent and eradicate VAW at the community level, particularly in South Sumatra Province. *First*, combustion should not be interpreted as a kind of crime because small farmers use it as a method to open agricultural land. The provincial government should introduce a new incentive to farmers so that they do not depend on fire in land clearing. Empowering small farmers will decrease combustion and VAW at the community level because the farmer's household economy is getting better. *Second*, corruption is an indicator of a bad government. The government must continue the ongoing efforts to eradicate corruption. The lower level the corruption, the lower potential for VAW at the community level. However, the fundamental point of this research is that governance as an independent variable must be considered in analyzing VAW in Indonesia. *Third*, drug, fraud, and theft are a part of street crime. The police should be cooperating with a broad community to eliminate the criminal act. For example, the government could persuade village government to activate *Siskamling* (*Sistem Keamanan Lingkungan* or *Neighborhood Security System*) where people could use various quintessential technology for community policing (Barker, 1998, pp. 6–43). *Fourth*, changing the modes of transportation from the river to the road is a historical necessity. The riverbank residents could not be moved away. What the provincial government might do is to improve the quality of the welfare of the population through various development programs.

This research has both strengths and limitations. Among the strengths, the use of PODES data allows the researcher to analyze the contribution of neighborhood variables in the rural and urban area towards VAW at the community level. This analysis gives a new knowledge of VAW at the community level in Indonesia. Relatedly, the future research could use the final model of logistic regression produced by this study as a starting point to examine more neighborhood variable (i.e., community efficacy, ethnic heterogeneity, residential stability, social capital, concentrated disadvantage). As for limitations, the PODES does not have data at household and individual level so that it closes the possibility for researchers to analyze data using multi-level analysis (Copp et al., 2015, pp. 59–72). Some PODES data are not permitted by the government to be consumed by the public, including for research, thus limiting this research to making an initial logistic regression model.

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