The Role of Parental Maltreatment and Parental Social Control on Self-Reported Violent Offending in Indonesia and the U.S.: Does Gender Make a Difference?

Stuti S. Kokkalera 1,*, Chris E. Marshall 2 and Ineke Haen Marshall 3

1 School of Criminology and Criminal Justice, College of Social Sciences and Humanities, Northeastern University, Boston, MA 02115, USA
2 School of Criminology and Criminal Justice, College of Public Affairs and Community Service, University of Nebraska Omaha, Omaha, NE 68182, USA; cmarshall@unomaha.edu
3 Department of Sociology and School of Criminology and Criminal Justice, College of Social Sciences and Humanities, Northeastern University, Boston, MA 02115, USA; i.marshall@northeastern.edu

* Correspondence: kokkalera.s@husky.neu.edu

Received: 2 March 2018; Accepted: 24 May 2018; Published: 26 May 2018

Abstract: In this article, we examine the role of parental maltreatment and parental social control in violent delinquency in two different countries: Indonesia and the U.S. but we go further by asking if gender makes a difference. We use a sample of Indonesian and U.S. youths from ISRD3 data, a self-reported survey instrument administered across multiple countries. We use logistic regressions to examine the associations between parental maltreatment, parental social control and self-reported violent delinquency and test whether gender and country modifies these associations. We find that both gender and country are significant predictors of violent delinquency. Further, there are differences between Indonesian and U.S. youths in terms of the predictors that are associated with violent delinquent offending. Specifically, parental maltreatment in the form of direct exposure to parental violence is a significant predictor for U.S. youths but not Indonesian youths whereas parental supervision is a significant deterrent of violent offending for both. We also find that girls are more likely to report violent offending than males when indirectly exposed to violence. Thus, our findings reiterate that both gender and context matter.

Keywords: parental maltreatment; parental social control; country; gender; violent offending; social learning; power-control; parental supervision

1. Introduction

The role of parental attachment in increasing social control to reduce the risk of delinquency has been an integral part of criminological research. However, a negative child-parent interaction also runs the risk of delinquent behavior that can persist in adulthood [1–3]. Hence, two factors related to the parent-child relationship can contribute to a child’s involvement in violent delinquency: parental maltreatment and low parental control. However, we also know that the gender difference in rates of crime involvement can vary across place [4]. Therefore, we are interested in examining how gender differences and the gender gap in delinquency are produced by comparing two different countries (the U.S. and Indonesia) with distinctive cultural understandings of parental maltreatment and parental social control.

We use data from a cross-national sample of American and Indonesian adolescents aged between 12 and 16 years from the International Self-Report Delinquency Survey (ISRD3) to test whether gender...
modifies the associations between parental maltreatment, parental social control and self-reported violent delinquency. We chose Indonesia because of some of the critical differences in that nation compared to the U.S. Indonesia is the fourth most populous country with one-third of its population of 240 million under the age of 18 years [5]. It is also the world’s third most populous democracy and largest Muslim-majority country [6]. Though Indonesia is home to over 250 different ethnic groups, Indonesians share similar cultural traits, a common national language and a collectivist ideology that permeates parenting styles and social control of children [7]. On the other hand, the U.S. can be described as a “melting pot” of diverse peoples “through assimilation, integration and intermarriage” [8]. Therefore, we identify a gap in the current research and ask: do different cultural understandings that produce gender differences modify the association between parental maltreatment and self-reported violent delinquency, and parental social control and self-reported violent delinquency?

1.1. Parental Maltreatment and Self-Reported Violent Delinquency

Numerous studies have explored the association between the parent-child relationship, including the role of parental maltreatment, and delinquent offending [9]. The World Health Organization (WHO) and the International Society for Prevention of Child Abuse and Neglect (ISPCAN) defines maltreatment as actions “resulting in actual or potential harm to the child’s health, development or dignity in the context of a relationship of responsibility, trust or power” [10]. This definition covers a wide range of actions including sexual abuse, emotional abuse, physical abuse and neglect but it does not include experiences involving exposure to intimate partner violence [9]. Drawing on this definition, we define parental maltreatment as actions involving parents or guardians that directly affect or cause harm to a child’s health and development. However, we expand our definition further to include two dimensions of parental maltreatment: (1) parental violence which involves any direct exposure to harmful physical acts and (2) inter-parental violence which involves any indirect exposure of violence, i.e., children witnessing violence between parents. Previous research has shown that Adverse Childhood Experiences (ACE) include different types of maltreatment such as abuse or neglect and/or witnessing violence between parents [11]. Exposure to domestic violence may not always result in child maltreatment but children can be harmed accidentally, intervene in a violent attack against a caretaker and experience further victimization when asked to remain silent about what they witness [12]. Moreover, studies have found that parents experiencing domestic violence are more likely to maltreat their children (see [12] for a review of studies). Thus, we focus on parental maltreatment because violence in the home seems to have the greatest impact on child development [13–15]. Though parents may feel that their influence as role models diminishes during adolescence as the influence of their child’s peers increases [16–18], parents continue to be important in adolescents’ lives [19,20]. Instances of neglect, abuse and parental criminality affect a parent’s ability to monitor their child’s behavior [21,22]. Previous research has shown that parental maltreatment is associated with future delinquent and violent acts [9–16]. For instance, harsh parental disciplinary techniques are associated with aggression which can increase the likelihood of delinquent acts [16]. Similarly, children with parents who have criminal involvement are more likely to engage in delinquent behavior than those whose parents have no criminal involvement [23]. Different forms of parental physical violence, in the form of child abuse, domestic violence between partners/spouses and a general atmosphere of hostility in the home are associated with violent offending [24–28].

As stated, we explore two aspects of parental maltreatment: (a) parents are violent with their own children, i.e., there is direct exposure to parental physical violence, or what we define as parental violence or (b) parents are violent towards their spouses/partners or strangers and children.

---

1 We exclude instances of sexual assault or sexual abuse by parents towards their children or sexual assault between parents because our data does not capture these instances.
witness such violence, i.e., there is indirect exposure to parental physical violence, or what we define as inter-parental violence. Several studies have provided support for the “cycle of violence” or intergenerational transmission of violence (see [13] for a review of studies). Exposure to parental violence, hostile parenting styles and parental neglect are risk factors for a child’s subsequent involvement in antisocial behaviors [29]. English, Widom and Branford [30] found that children with substantiated cases of abuse and neglect were 11 times more likely to be arrested for a violent crime as a juvenile. Children who experience corporal punishment that may not be abusive (e.g., spanking) are also more likely to view aggression as a strategy to resolve conflicts [31]. On the other hand, observed behavior can influence future behavior in the same way as direct experiences [32]. Children who repeatedly witness violence between their parents fail to differentiate between violent acts and normal behavior [33,34]. Children who witness such inter-parental violence are more likely to acquire pro-violent attitudes and imitate the same violent relationships of their parents in their own adolescent relationships [29,35]. Witnessing inter-parental violence plays a role in the use of violence even among emerging adults (i.e., those entering adulthood) [36].

While several theories have been used to explain how victimized children become violent offenders (see [13] for a review), we draw on concepts from learning theories. Learning theories are rooted in differential association theory and modern learning theory [37] where criminal behavior is understood as being enforced in a similar way as non-criminal behavior through the presence or absence of social stimuli. Ronald Akers’ social learning theory [38] has four concepts: (1) differential association or the manner in which individuals align themselves with beliefs and behaviors of those they associate with; (2) differential reinforcement which is “the balance of anticipated or actual rewards and punishments that follow or are consequences of behavior” [38] (p. 67); (3) imitation or modeling behavior of others and (4) definitions refers to the way an individual labels a particular act as being acceptable or unacceptable which can be within a broad range of behaviors characterized by general beliefs (such as moral codes) or specific beliefs which are marked by a person’s experience of certain specific acts. Akers’ social learning theory also argues that the impact of family and peers on an adolescent’s deviant attitudes is greater than adolescents’ attitude impacting family interactions [16]. In a similar vein, we draw on the family being the primary mode of contact through which children adapt certain behaviors [39]. Akers also added an additional dimension to social learning theory when he proposed a “Social Structure and Social Learning” model of crime (“SSSL”) [38]. Under the SSSL model of crime, general culture of social systems also shapes the behavior of individuals [40]. Therefore, based on previous research on intergenerational transmission of violence and social learning perspectives, we expect that:

**Hypothesis 1.** Children who are exposed to parental maltreatment (parental and inter-parental violence) are more likely to report involvement in violent delinquency (controlling for other factors).

The Role of Gender and Place on Parental Maltreatment

The association between parental maltreatment and self-reported violent delinquency can vary by both gender and place.

In terms of gender, males and females are differentially affected by exposure to parental violence resulting in differential rates of offending. Though predictors of male offending and female offending are similar, males are “differentially exposed” to the same conditions or “differentially affected” by exposure to criminogenic conditions [41]. Heimer and De Coster [42] in their reformulation of differential association theory argue that males and females are differentially exposed to pro-violent definitions, in part due to the differential internationalization of gender roles. Gender also plays a role in how exposure to violence affects subsequent behavior. Studies have shown that youths who witness violence behave in gender-typical ways [43] where males are more likely than females to justify violent behaviors [44]. However, previous research has also shown that females tend to be more negatively affected by changes in the parent-child relationship than males [45]. Some studies have
found that maltreatment increases the risk of delinquency among females but not among males [46–48]. Females are also more likely to exhibit aggressive behaviors as they get older [49,50]. At the same time, females are more likely to anticipate disapproval of delinquency from parents or peers than males [51]. Some studies have also found that exposure to violence did not vary by gender [52] but we expect that this may be due to the sample size, sample of respondents or race/ethnicity effects. Additionally, weaker parental attachment in same-sex parent-child pairs has a higher likelihood of delinquent behavior than cross-gender supportive behavior by parents [1]. Children and adolescents tend to identify with the same sex-parent and this in turn is a protective factor against delinquency [53,54]. Due to mixed results, we posit that:

Hypothesis 2. The association between parental maltreatment and self-reported violent delinquency will be different for females than for males.

In terms of place, more than 60% of U.S. children surveyed in 2008 reported either direct or indirect exposure to violence [55]. However, few studies have examined the extent of victimization or extent and causation of crimes, including those committed by juveniles in Indonesia (see [56] for a brief overview). Importantly, the effect of ethnicity on the association between parental maltreatment and the risk of delinquency is less clear, with some studies showing that ethnicity moderates the association [47,48] but others did not find this effect [57–59]. Prior research has also documented differences in parenting across cultures including how parents view disciplinary practices, expressions of affection and define child abuse and maltreatment (see [60] for a review of studies). For instance, one study showed that Indonesian fathers tend to adopt an authoritarian style of parenting towards children while mothers typically are more permissive in their parenting and show more affection towards their children [61]. Clinicians also have difficulty in distinguishing between cultural parenting disciplinary practices and child maltreatment [62]. Research has also shown that children from a low socio-economic background or belonging to minority groups tend to believe that violence is justified when certain disciplinary practices are used within the family [63]. Therefore, we argue that:

Hypothesis 3. The moderating effect of gender on the association between parental maltreatment and self-reported violent delinquency will be stronger for Indonesia than the U.S.

1.2. Parental Social Control and Self-Reported Violent Delinquency

Parental social control is exercised differently based on a host of factors. We focus on how parental social control is transformed into different levels of self-control among females and males and subsequently, into different rates of delinquency [51]. While studies analyzing the role of child-parent interactions on delinquency have typically used data from a national sample, few studies have examined differences in offending across countries [21,64]. The Savolainen et al. study [64] used multi-level data from the International Self-Report Delinquency Survey (ISRD2) to examine the cross-national variation in gender gap in crime and found that the gender gap in delinquent offending is narrower when there are lower levels of patriarchy in a country. Generally, patriarchy can be understood as a system where relations between men and women are perceived as “hierarchical relations of superiority and inferiority” [65] (p. 3). However, no study has examined the role of differing levels of patriarchy in producing gender differences that moderate the association between parental social control and violent delinquent offending.

Like Savolainen et al. [64], we draw on power-control theory to examine the associations between parental social control, gender and violent delinquency. Power-control theory assumes that patriarchy is important in identifying the intersection of class with family relations [54] because patriarchal power relations differentially affect the involvement of males and females in crimes [66]. Essentially, the authority that parents have due to their positions at work translates into control over the family [67]. At the individual-level, males and females respond differently to adults depending on the positions...
that adults occupy in their lives [68]. At the cross-national level, a patriarchal environment moderates the relationship between gender and delinquency where a higher degree of patriarchy is associated with larger gender gaps in delinquent offending [64]. Therefore, we replace the class component in power-control theory with country.

Since the family is the ‘chief patriarchal institution’ in producing gender differences [69], power-control theory argues that “the class structure of the family plays a significant role in explaining the social distribution of delinquent behavior through the social reproduction of gender relations” ([54] p. 147), [70]. Thus, there are two important components of the theory: family class structure and social reproduction of gender relations. Family structure is determined by the configurations of power between spouses, which is usually the product of their relative positions at the workplace and regulates the hierarchical relations of power within the family [54]. This depicts an “instrument-object” relationship where parents are the instruments and children are the objects of control in the family [54,67]. On the other hand, social reproduction of gender relations includes all types of activities that involve the socialization of children “into roles they will occupy as adults” [54] (p. 145). There are multiple avenues by which parents socialize their children and differing levels of patriarchy can produce gender differences in the way males and females are socialized. This produces two distinct types of families. First, patriarchal families involve hierarchical structures through which parental control is exercised differentially through male domination. The assumption is that men have higher class positions in patriarchal families, and this imbalance provides fathers with greater resources to establish male dominance [71]. Parents exercise more control over daughters than sons, which allows daughters to become more risk averse and less likely to engage in delinquent acts. On the other hand, in egalitarian families, both the husband and wife work outside of the home resulting in a less obvious power structure unlike a patriarchal family where power structures are maintained [54,70]. Since the hierarchical power structure is less obvious, daughters and sons are not differentiated by the levels of control exercised by parents which in turn reduces the gender gap in delinquency. While there are several aspects of parental social control, we draw on the role of parental supervision and monitoring of children’s activities as a method of maintaining gender relations. Generally, low parental supervision is correlated with child delinquency [72] but the amount and type of parental supervision can also matter, for instance, two-parent households would exercise more parental supervision than single parent households [73]. Children are also more likely to reoffend when there is inconsistent parental supervision [74]. Therefore, we expect that:

**Hypothesis 4.** Children who are closely supervised by their parents will report lesser involvement in violent delinquency (controlling for other factors).

Previous studies that tested the power-control theory across different racial groups have been mixed (see [75] for a review of studies). Generally, these studies have tested the theory across smaller samples of limited racial and cultural groups instead of looking at specific and within-group differences. One study sought to test power-control theory across a sample of youth from American-Indians and argued that “unique cultural and historical experiences of American-Indian tribes that focus on gendered divisions of labor would not necessarily translate into hierarchical relationships of power” ([76], p. 1026). However, their findings reveal that patriarchy is a robust predictor of American-Indian female offending, and both paternal and maternal relational controls were deterrents of delinquent offending among females. They also find that the role of the grandparent is an important factor in preventing delinquency among American-Indian females. This is in line with evidence that grandparents and other adult family members may often play a more significant role than parents in other racial groups [76,77]. Other researchers have also tested power-control theory with samples from Europe [78]; Russia [79] and South Korea [80] with partial support for the theory. These studies show that cultural differences can produce variances in the exercise of parental control.
The Role of Gender and Place on Parental Social Control

The association between parental social control and self-reported violent delinquency can vary by both gender and place. In terms of maintaining gender relations, females are generally supervised more closely than males, and when parental supervision is reduced, females are influenced more negatively than males [45]. The gender of parents can also produce differential rates of parental supervision. Baer [81] found that a mother’s direct monitoring of her children’s activities is a significant deterrent of delinquent offending across all three racial-groups in the study’s sample but a father’s direct supervision is a significant deterrent for European-American (i.e., white) but not African-American (i.e., black) or Mexican-American (i.e., Hispanic) children. There could also be differences in terms of perceived threats of informal sanctions, such as shame and embarrassment, which can produce gender differences in offending and these differences can vary by type of household [82]. Females are more likely to be strongly attached to parents and feel more shame than males [83]. Gender differences are also affected by differential notions of masculinity perpetuated through gendered socialization. Previous research has also shown that certain structural factors like low income can be risk factors for norms surrounding masculinity [84] where masculinity is often enforced through traditional gender role socialization [24]. In a gendered environment, certain types of masculinity are enforced which drive males towards violent acts [66]. Young males are often expected to engage in “risky” behavior to demonstrate masculinity [85]. Similarly, in Indonesia, the trope of “warrior/hero” continues to be the most admired form of youthful masculinity that young males aspire to emulate [86]. Therefore, we expect that:

Hypothesis 5. The association between parental supervision and self-reported violent delinquency will be stronger for females than for males.

In terms of place, parenting practices, including parental supervision and disciplinary practices, are embedded within a cultural context that determines the nature of the parent-child relationship [87]. Previous research on the association between ethnicity and/or culture of parents and delinquent offending has been mixed. Some studies found differences between the social control exercised by African-American parents (i.e., black parents) compared to European American parents (i.e., white parents) [88–90] while McLeod, Kruttschnitt and Dornfeld [91] found no significant differences between racial groups on the relationship between parenting and delinquent offending. We consider the effects of culture and argue that cultural differences affect both the family structure and social reproduction of gender relations. In terms of family structure, while there have been some recent changes relating to the separation of the home and workplace in Indonesia [92] which would change the relative positions of power between husband and wife at the workplace, the Indonesian family continues to play a vital role in maintaining social control. The concepts of “rukhun” (Javanese for harmonious social relations) and “hormat” (Javanese for respect for other people) are integral to child-rearing and results in the “inculcation of a moral obligation to accept a hierarchical social structure” ([93], p. 345). However, the differential levels of control exercised on males and females can also be related to the differential access to opportunities. Unlike other Islamic countries, Indonesian females have access to educational opportunities but they continue to have less access than males, especially “the type of education necessary to operate in a secular world” ([94], p. 58). Although females and males ostensibly receive equal opportunities of access to education, males are more likely to finish school because parents concentrate their resources on them [95]. We also draw on the differential social reproduction of gender relations across both countries. While the type of family (patriarchal or egalitarian) determines the amount of control that parents exercise and towards whom (sons or daughters, or both), the instrument-object relationship is also affected by cultural norms of parenting. For instance, the parent-child relationship in Indonesia can be “unequal” in terms of obligations where parents are superior and children inferior, whereas Western democratic practices may not support this view [93]. Similarly, one study in Indonesia with a small sample size found that “strict upbringi
is negatively correlated with incidents of high school brawls involving adolescents [96], though the dominance of family relationships can have paradoxical consequences for delinquent behaviors [23]. Within Indonesia’s collectivist environment, parent-child relationships are also dictated by religious values where a parent’s religiosity is positively associated with their child’s religiosity and religiosity serves as a moral deterrent [97]. While cultural shifts can significantly reduce offending among males [64], there are some underlying mechanisms that explain the role of patriarchy in contributing to higher offending among males [98]. For instance, a study in Indonesia found that males are more likely to have committed acts of delinquency than females whereas females are more likely to be truant/run away from home when they experience problems with parental control [99]. The U.S., like other Western countries, is signaling towards more balanced and less patriarchal households due to more women entering the labor market, liberalization of family laws and the recognition of feminist ideals and perspectives [71]. Similar economic and cultural changes are occurring in Indonesia, though changes in gender relations remains slow and patriarchal values still dominate social institutions [100]. Due to the tourism boom in the early 1990s, many women from lower-class families now earn more than their husbands which could indicate a change in traditional child-rearing patterns but men continue to have little involvement due to the cultural pressure for women to take care of the family by any means possible [92]. In the transition from an agrarian society to an industrial society, indonesian women are still negotiating their gender identities between two extremes: the “traditional woman” who takes care of the home and the “modern woman”, who can work outside of the home and take care of the household [101]. Patriarchal values that perpetuate gender differences seem to be stronger in Indonesia, despite progressive changes in the country’s economy, resulting in presumably higher parental social control for females and subsequently a larger gender gap in violent delinquent offending in Indonesia. On the other hand, the U.S. is more likely to have a narrower gender gap in the rate of violent delinquency due to more balanced households and a more uniform approach to parental social control over males and females. Figure 1 provides the theoretical framework for our study. Therefore, we expect that:

**Hypothesis 6.** The moderating effect of gender on the association between parental supervision and self-reported violent delinquency will be stronger in Indonesia than in the U.S.

![Figure 1. Theoretical Framework of Study](image)

We conceptualized gender and country as modifying variables. We expect that gender and country would modify the associations between (a) parental maltreatment and self-reported violent delinquency and (b) parental social control and self-reported violent delinquency. Parental maltreatment includes both direct exposure to violence inflicted by parents (i.e., parental violence) and indirect exposure to violence (i.e., inter-parental violence or violence between parents) whereas parental supervision was used to measure parental social control.
2. Materials and Methods

2.1. Data and Sample

The data in this study come from the International Self-Report Delinquency Study (ISRD3), an ongoing international collaborative survey study of 7th, 8th and 9th graders (12–16-year olds). The ISRD3 survey is the third in a series that is built around modules of questions asking school children in the 7th to 9th grades (aged 12–16) about their self-reported offending and experience of victimization [102–107]. Data collection for ISRD3 started in 2012 and will continue till 2019. About 30 countries participate in the project. In the ISRD project, students are asked to complete a questionnaire about their experiences as victims of crime and as offenders, as well as about their family, school, neighbourhood, attitudes toward the police, moral values, and several socio-demographic characteristics. Each country organized its own fieldwork and translation of the questionnaire, following a joint research protocol. The surveys were completed in schools either online or through paper and pencil questionnaires. Most participating countries sampled classrooms in schools in two medium-sized or large cities with samples designed to be representative of the 7th, 8th and 9th grade students in these cities (rather than the respective county). The survey should not be considered representative of the whole population of young people in these countries but instead of 7th to 9th grade students in those cities or regions in which the data were collected. For additional details on the overall methodology of the ISRD project see [108,109].

For this article, we use results from the U.S. and Indonesia only. In the U.S., the surveys were administered to 7th, 8th and 9th grade classrooms in 39 schools in three metropolitan areas in the Northeast, the Midwest and the Southeast, producing an effective sample of 2395 surveys. Most of the questionnaires were completed online (93.6%) with a small proportion using the paper and pencil version. A teacher was present during survey administration in all cases and active parental consent was used. Data collection took place between October 2015 and June 2017. In Indonesia, the standard ISRD questionnaire was translated in the local language and the standard ISRD research protocol was followed. One deviation was that the sampling frame in Indonesia used schools rather than classrooms. The surveys were administered to 7th, 8th and 9th graders in 49 schools in four Indonesian cities producing an effective sample size of 1800 students. All questionnaires were completed offline on laptops. The survey administration was supervised by a research assistant in the absence of the teacher. Passive parental consent procedures were used. Data collection took place in 2013 and 2014.

2.2. Measurements

We attribute certain social values and behaviors as representing cross-culturally applicable terms rather than culturally specific terms [78]. In doing so, we try to avoid differential connotations of constructs that usually plague cross-cultural research [110]. Additionally, variables drawn from power-control theory are conceptualized as latent constructs that cannot be measured directly [71,78,80]. Table 1 provides the single variable descriptions of our key variables for the overall sample.
Table 1. Univariate Description of Key Variables for Overall Sample and By Country.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall Sample</th>
<th>U.S.</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>Percent</td>
<td>Cumulative Percent</td>
</tr>
<tr>
<td>Country</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>2395</td>
<td>57.4</td>
<td>57.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1780</td>
<td>42.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2016</td>
<td>48.3</td>
<td>48.3</td>
</tr>
<tr>
<td>Female</td>
<td>2156</td>
<td>51.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Occurrences of Violent Offending</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>3698</td>
<td>90.7</td>
<td>90.7</td>
</tr>
<tr>
<td>1</td>
<td>281</td>
<td>6.9</td>
<td>97.6</td>
</tr>
<tr>
<td>2</td>
<td>66</td>
<td>1.6</td>
<td>99.2</td>
</tr>
<tr>
<td>3</td>
<td>21</td>
<td>0.5</td>
<td>99.7</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>0.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Parental Violence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Past Violence</td>
<td>2653</td>
<td>64.1</td>
<td>64.1</td>
</tr>
<tr>
<td>Mild Violence</td>
<td>1051</td>
<td>25.4</td>
<td>89.5</td>
</tr>
<tr>
<td>Severe Violence</td>
<td>434</td>
<td>10.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Inter Parental Violence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Past Violence</td>
<td>3207</td>
<td>77.5</td>
<td>77.5</td>
</tr>
<tr>
<td>Mild Violence</td>
<td>658</td>
<td>15.9</td>
<td>93.5</td>
</tr>
<tr>
<td>Severe Violence</td>
<td>271</td>
<td>6.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would not lie</td>
<td>2013</td>
<td>55.6</td>
<td>55.6</td>
</tr>
<tr>
<td>Would lie</td>
<td>1611</td>
<td>44.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Low Self-Contral</td>
<td>4081</td>
<td>2.03</td>
<td>0.65</td>
</tr>
<tr>
<td>Family Bond</td>
<td>4153</td>
<td>4.53</td>
<td>0.72</td>
</tr>
<tr>
<td>Parent Supervision</td>
<td>4151</td>
<td>3.98</td>
<td>0.81</td>
</tr>
</tbody>
</table>
Occurrence of Violent Offending: Delinquent behavior in the ISRD3 project is measured by asking questions about 12 different offenses ranging from shoplifting to robbery and assault. Our main dependent variable in this article is ‘occurrence of violent offending’, which was comprised of the sum-total of the number of ‘yes’ responses to each of four items measuring group fights, carrying a weapon, extortion/robbery, and assault. The questions were: “Have you ever in your life taken part in a group fight in a football stadium, on the street or other public place?”; “Have you ever in your life carried a weapon, such as stick, knife, gun, or chain?”; “Have you ever in your life used a weapon, force or threat of force to get money or things from someone?”; “Have you ever in your life beaten someone up or hurt someone with stick or knife so badly that the person was injured?”. Because of the relatively low frequencies of self-reported violent offenses, we use the ‘ever’ measures instead of the ‘last year’ responses. We first created an ordinal level measure of occurrences of violent offending: “0 = no violent offenses; 1 = involvement in one type of violent offense; 2 = involvement in two; 3 = involvement in three, and 4 = involvement in 4”. By far the largest category were those who had not done any of these (90.7%); the smallest group (0.3%) included those who had done all four of these offenses in the last 12 months. Therefore, for the multivariate analyses, we constructed a binary variable: “No offenses versus one or more offenses” and define it as “occurrence of violent offending”.

Parental Maltreatment: We argue that two variables are expected to play an important role in offending behavior under the broader concept of parental maltreatment. First, parental violence is measured by combining the responses to two questions. The first question asks: “Has your mother or father (or your stepmother or stepfather) ever hit, slapped or shoved you? (Include also times when this was punishment for something you had done)”. A positive response indicates a mild form of parental violence. The second question measures the harsher use of violence by asking: “Has your mother or father (or your stepmother or stepfather) ever hit you with an object, punched or kicked you forcefully or beat you up? (Include also times when this was punishment for something you have done)”. We added the two variables and constructed a three-category response framework: No Past Violence (64.1%), Mild Violence (25.4%), and Severe Violence (10.5%). Second, we include what we term as inter-parental violence which is measured by combining the answers to two questions that were part of a series of items about serious events in a child’s life. One question is a straightforward measure: “Have you ever experienced physical fights between your parents?” Observing repeated conflicts between parents may also be viewed as witnessing inter-parental violence [36], so we used a second question in our measure of indirect exposure to parental violence: “Have you ever experienced repeated serious conflicts between your parents?” The response framework was the same as parental violence: No Past Violence (77.5%), Mild Violence (15.9%), and Severe Violence (6.6%).

Parental supervision: The degree to which parents control their children and are aware of their activities has been shown to be one of the most consistent predictors of delinquency [111]. The Parental Supervision measure was based on the mean responses to five questions: “If I have been out, my parents asks me what I did, where I went, and who I spent time with”; “If I go out in the evening, my parents tell me when I have to be back home”; “If I am out and it gets late I have to call my parents and let them know”; “My parents check if I have done my homework”; “My parents check that I only watch films/DVDs allowed for my age-group”. Responses ranged from: “(1) almost never, (2) seldom; (3) sometimes; (4) often; (5) almost always”. The mean value was 3.98. As anticipated, the level of parental supervision in Indonesia (4.13) appears to be slightly higher than in the U.S. (3.87). We use the measure of parental supervision as a proxy for control exercised by parents towards their children based on previous research that supports the use of latent constructs for power-control variables [71,78,80].

Gender: This is measured by asking: “Are you male or female?” with female as the reference category and the sample was 48.3% male.

Country: We also expect that the magnitude of the relationship between parental and inter-parental violence and occurrence of violent offending is contingent on the cultural context. The reference category for this dummy variable is Indonesia and the sample was 57.4% U.S. youth.
**Family bonding:** This measure is based on the responses to the question: “How well do you get along with your parents?” with the following statements: “(1) I get along just fine with my father (stepfather); (2) I get along just fine with my mother (stepmother); (3) I can easily get emotional support and care from my parents”. Responses categories were: “totally agree, rather agree; neither agree nor disagree; rather disagree; and totally disagree”. We constructed the composite measure by calculating the mean score for each respondent (4.53).

**Grade:** Age is an important correlate of involvement in offending. Furthermore, we are using the lifetime (‘ever’) measure of offending, which makes it even more important that we control for age. However, because of the relationship between age and repeating a grade, which is an artefact of the sampling design that takes classes as primary units (not individual students), we substitute grade for age ([21], p. 45). Grade is measured as an ordinal variable: (1) 7th grade; (2) 8th grade; (3) 9th grade and the sample is evenly distributed over the 7th, 8th and 9th grades.

**Openness:** Reluctance to honestly respond to questions about socially undesirable behavior or attitudes is a major threat to the validity of self-report surveys of delinquency (see, for example, [112]). The ISRD questionnaire includes a direct question meant to tap willingness to be open about deviant behavior and hence, we refer to this as the openness measure. The question asked: “Imagine you had used cannabis/marijuana/hash, would you have said so in this questionnaire?” with answer categories: “(1) I already said that I have used it; (2) definitely yes, (3) probably yes; (4) probably not; (5) definitely not”. Originally adapted from the ESPAD project [112], this question type has been previously used in individual-level analysis of underreporting offenses in a self-report delinquency survey [113]. Typically, high scores on the openness variable indicate a reluctance to admit socially undesirable behavior, i.e., more likely to lie. It is important to include this question as a control in our analysis, since the percentage of students who responded that they would not admit to socially undesirable behavior such as using marijuana differs between countries in the ISRD3 data. There is considerable cultural variability regarding the validity of self-report measures. In a few countries, only about one in nine of students say that they would lie (Czech Republic, Croatia, and Finland), and there are also outliers on the other extreme (Cape Verde, Indonesia) where about half of the responses suggest that the answers would not be truthful [108]. We chose to collapse the original question into Would Lie (44.5%) and Would Not Lie (55.6%). Willingness to admit to undesirable behavior is important to consider, particularly since the Indonesian sample appears to be more willing to lie (56%) than the U.S. sample (33%).

**Low self-control:** Low self-control has been shown to be consistent correlate of offending. Children with low self-control may be more likely to be subject to parental violence (because they are more challenging to discipline), and they also may be more closely supervised by their parents. Therefore, we include low self-control as a control variable. We use a short (9-item) version of the Grasmick et al. [114] scale. This abbreviated scale uses three items for the three dimensions (impulsivity, risk-taking, and self-centeredness) which have been shown to be most robust in previous work. Response categories were: “(1) agree fully; (2) agree somewhat; (3) disagree somewhat; (4) disagree fully”. Items have been reverse coded, so that a high score means a high level of low self-control. Individuals received the mean score on 9 responses. Analysis of the psychometric properties of the shortened Grasmick et al. scale has shown to have a strong degree of cross-national comparability in reliability as well as construct validity [21]. A mean value of 2.03 indicates that most youth express a high level of self-control since the variable measures levels of low self-control.

3. Results

3.1. Differences between U.S. and Indonesian Youths

There are some differences worth noting that support the need for further comparative analyses (see Table 1). First, violent offending in the U.S. seems a much more likely occurrence than in Indonesia whereas 96.6% of Indonesian youth claim no instances of violent offending. It is on variables such as
this that the Openness check plays a role because Indonesian youths seem more likely to report that they would lie (56.0% in Indonesia compared to 33.3% in U.S.). Therefore, we will further examine the role of Openness as an active aspect of our multivariate analysis. Second, though the level of parental violence is comparable between both samples, the U.S. sample reports greater exposure to inter-parental violence than the Indonesian sample. Finally, the level of parental supervision in Indonesia (4.13) appears to be slightly higher than in the U.S. (3.87), as well as the level of family bonding (Indonesia (4.66), U.S. (4.43)). The mean score for low self-control for Indonesian youths (1.88) was lower than the mean score for the U.S. sample (2.16), indicating lower levels of self-control among U.S. youths.

3.2. Bivariate Associations

Table 2 is the correlation matrix for our key variables. The matrix shows that the only insignificant correlation with Occurrence of Violent Offending was Grade (+0.031). We had originally included grade as a proxy for age for the respondents but since it had no significant influence on the dependent variable in bivariate testing or multivariate testing, we decided to drop it from our final multivariate analyses. We assume this to be the result of slight variation in the ages of the youths. A low yet significant relationship with Occurrence of Violent Offending is the Openness variable (+0.038). While this suggests, with much caution, that those who are likely to lie will tend to underreport their offending but it may also imply that those who are more likely to lie about their deviant behavior are also more likely than their more honest counterparts to be involved in deviance in the first place. Among the strongest relationships with Occurrence of Violent Offending were Country (0.207), Family Bond (−0.140), Parental Supervision (−0.181), Low Self-Control (0.231), Parental Violence (0.140), and Inter-Parent Violence (0.139). All correlations are in the expected direction.

An indication that multicollinearity was not a problem were the generally small intercorrelations among the independent variables. One of the more notable correlations was between Parental Supervision and Family Bond (0.315) though we expect that those with higher parental supervision would also be those who bond with family. The Inter-Parental Violence and Family Bond correlation (−0.283) is sensible too as the violence between parents would weigh negatively on the level of family bonding. Finally, Inter-Parental Violence is moderately and positively correlated with Parental Violence (+0.291). This relates to previous research that suggests that children exposed to violence between parents are also more likely to be victims of other forms of maltreatment [12]. On the other hand, a significant negative correlation between low self-control and parental supervision (−0.278) indicates that children with a lower level of self-control experience less parental supervision, contrary to previous empirical research.
Table 2. Correlation Matrix for Key Variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Occurrence of Violent Offending</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Lie? (ref No Lie)</td>
<td>0.038</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) U.S. (ref Indonesia)</td>
<td>0.207</td>
<td>−0.207</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Gender (ref Male)</td>
<td>−0.097</td>
<td>−0.076</td>
<td>0.039</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Grade</td>
<td>0.031</td>
<td>0.003</td>
<td>−0.005</td>
<td>−0.022</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Family Bond</td>
<td>−0.140</td>
<td>−0.026</td>
<td>−0.154</td>
<td>−0.080</td>
<td>−0.005</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) Parent Supervision</td>
<td>−0.181</td>
<td>0.010</td>
<td>−0.203</td>
<td>0.079</td>
<td>−0.095</td>
<td>0.315</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) Low Self Control</td>
<td>0.231</td>
<td>0.034</td>
<td>0.214</td>
<td>−0.123</td>
<td>0.084</td>
<td>−0.219</td>
<td>−0.287</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) Parental Violence</td>
<td>0.140</td>
<td>0.052</td>
<td>0.014</td>
<td>−0.061</td>
<td>−0.025</td>
<td>−0.207</td>
<td>−0.170</td>
<td>0.153</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>(10) Inter-Parent Violence</td>
<td>0.139</td>
<td>0.021</td>
<td>0.120</td>
<td>0.048</td>
<td>0.005</td>
<td>−0.283</td>
<td>−0.179</td>
<td>0.145</td>
<td>0.291</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001.
3.3. Testing the Study Design: Multivariate Results

3.3.1. Multivariate Results with Key Variables

This part of our analysis involves all the variables which our theoretical discussion suggests play a role in reporting violent offending. We chose to construct our dependent variable as a binary variable. In our original data on the variable Occurrence of Violent Offending, we collected 1 s, 2 s, 3 s, and 4 s together as “Yes” for any violent behavior across all years and 0 s were designated as “No” for never engaging in violent behavior. We then use logistic regression to investigate the multiple influences on our constructed binary variable. Table 3 represents the first set of four logistic regression models with a sample size of 3187 respondents after listwise deletion of cases with missing values.

Model 1 in Table 3 is our most simple model using Openness and U.S. (with Indonesia as the reference category). Both are significantly influential on Occurrence of Violent Offending. Specifically, the odds of U.S. adolescents reporting violent offending are about 5.8 times greater than the odds of Indonesian adolescents reporting violent delinquency. Furthermore, for those who reported that they would be unlikely to admit to (hypothetical) marijuana use if asked (the Openness variable), the odds of being involved in violent delinquency is about 1.9 times greater than those who report that they would be honest about (hypothetical) marijuana use. Model 1 suggests that country of residence is an important determinant of violent delinquency. The influence of the country (U.S.) is about 2.9 times that of lying (standardized coefficient of U.S. is 0.662 and that for Openness is 0.232). The combination of Openness and Country (U.S.) explains about 8.8% of the variation in Occurrence of Violent Offending (pseudo $R^2$ is 0.088). We have included both the AIC (Akaike Information Criterion) and BIC (Bayesian Information Criterion) to determine the relative quality of one model vis-à-vis another. Though the interpretation of these is somewhat problematic, the general interpretation is the smaller these statistics, the better the model. Therefore, for Model 1, its two statistics (AIC and BIC) are larger than any of the other four models in.

<table>
<thead>
<tr>
<th>Key Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would Lie</td>
<td>1.887 ***</td>
<td>1.855 ***</td>
<td>1.592 ***</td>
<td>1.666 ***</td>
</tr>
<tr>
<td>US</td>
<td>5.850 ***</td>
<td>6.180 ***</td>
<td>4.327 ***</td>
<td>5.868 ***</td>
</tr>
<tr>
<td>Male</td>
<td>2.197 ***</td>
<td>2.117 ***</td>
<td>2.349 ***</td>
<td></td>
</tr>
<tr>
<td>Family Bond</td>
<td></td>
<td>0.774 **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental Supervision</td>
<td></td>
<td>0.708 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Self Control</td>
<td></td>
<td>2.440 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild Parental Violence</td>
<td></td>
<td></td>
<td></td>
<td>1.688 ***</td>
</tr>
<tr>
<td>Severe Parental Violence</td>
<td></td>
<td></td>
<td></td>
<td>2.694 ***</td>
</tr>
<tr>
<td>Mild Inter-Parental Violence</td>
<td></td>
<td></td>
<td></td>
<td>1.454 *</td>
</tr>
<tr>
<td>Severe Inter-Parental Violence</td>
<td></td>
<td></td>
<td></td>
<td>2.371 ***</td>
</tr>
<tr>
<td>Observations</td>
<td>3187</td>
<td>3187</td>
<td>3187</td>
<td>3187</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.088</td>
<td>0.107</td>
<td>0.178</td>
<td>0.142</td>
</tr>
<tr>
<td>AIC</td>
<td>1701.50</td>
<td>1668.30</td>
<td>1542.25</td>
<td>1610.24</td>
</tr>
<tr>
<td>BIC</td>
<td>1719.70</td>
<td>1692.57</td>
<td>1584.72</td>
<td>1658.78</td>
</tr>
<tr>
<td>chi2</td>
<td>163.40</td>
<td>198.59</td>
<td>330.64</td>
<td>264.65</td>
</tr>
<tr>
<td>$P$</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Exponentiated coefficients * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Note that the coefficients referenced in the interpretation section here are exponentiated coefficients; for example, $\exp(\beta_1)$.

We will make some comparative interpretations between individual coefficients within our various models. For this type of comparison, we are using the standardized logistic regression coefficients. We have not provided the standardized coefficient estimates in the main text but they are available upon request.
In Model 2, we add the other main variable of interest: gender (Male) and together these three variables—U.S., Openness, and Male—explain about 0.11 of the variability in the logged odds of Occurrence of Violent Offending. Again, country effect trumps gender effect, where the odds of being in the U.S. increases the likelihood of reporting violent offending by 6 times.

In Model 3, we add Parental Supervision, Family Bond and Low Self-Control to assess the relative importance of non-violence related family and individual variables. Country remains the largest influence but it is followed closely by Low Self-Control. Low Self Control is about three times as influential as Family Bond and Parental Supervision. A one-unit change in Low Self-Control will lead to about 2.4 times (exp(β) = 2.440) increase in the odds of occurrence of violent offending.

Model 4 includes openness, country and gender together with parental maltreatment variables of parental violence and inter-parental violence. In Model 4, all the variables had significant impacts on Occurrence of Violent Offending. Country remains the strongest predictor (standardized coefficient is 0.594). All four parental maltreatment variables significantly increase the odds of reporting violent offending. The strongest of these four appears to be Serious Parental Violence (standardized coefficient is 0.215); the weakest, Mild Inter-Parental Violence (standardized coefficient 0.084). Those adolescents who report Severe Parental Violence have 2.7 times higher odds of reporting violent offending than those who report no such violence. Adolescents who report Severe Inter-Parental Violence are 2.4 times more likely to report violent offending than those who do not report severe inter-parental violence. Comparison of Models 3 and 4 suggests that the pseudo $R^2$ of Model 3 (0.18) is higher than that of Model 4 (0.14). The AIC and BIC statistics seem to suggest that Model 3 is better than Model 4 in explaining occurrence of violent offending.

3.3.2. Multivariate Results with Key Variables by Country and Gender

The prior multivariate analysis allows us to gauge the effects of several independent variables on likelihood of violent offending. Country and gender are influential factors: living in the U.S. and being male increase likelihood of reporting violent offending. We also found that exposure to parental and inter-parental violence increases the odds of reporting violent offending, as did—low parental supervision. Therefore, we opted to break down our analysis by country and gender of the respondents (Table 4).

<table>
<thead>
<tr>
<th>Key Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would Lie</td>
<td>1.518 ***</td>
<td>1.582 ***</td>
<td>1.322</td>
<td>1.556 *</td>
<td>1.394</td>
</tr>
<tr>
<td>U.S.</td>
<td>4.377 ***</td>
<td>4.183 ***</td>
<td>4.521 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.195 ***</td>
<td>2.135 ***</td>
<td>2.707 **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Bond</td>
<td>0.895</td>
<td>0.844</td>
<td>1.112</td>
<td>1.001</td>
<td>0.807</td>
</tr>
<tr>
<td>Parental Supervision</td>
<td>0.726 ***</td>
<td>0.769 **</td>
<td>0.584 **</td>
<td>0.699 ***</td>
<td>0.766</td>
</tr>
<tr>
<td>Low Self Control</td>
<td>2.352 ***</td>
<td>2.763 ***</td>
<td>1.615 *</td>
<td>2.246 ***</td>
<td>2.518 ***</td>
</tr>
<tr>
<td>Mild Parental Violence</td>
<td>1.566 **</td>
<td>1.776 **</td>
<td>1.102</td>
<td>1.606 *</td>
<td>1.444</td>
</tr>
<tr>
<td>Severe Parental Violence</td>
<td>2.031 ***</td>
<td>2.378 ***</td>
<td>1.223</td>
<td>1.834 *</td>
<td>2.302 **</td>
</tr>
<tr>
<td>Mild Inter Parental Violence</td>
<td>1.186</td>
<td>0.986</td>
<td>1.972 *</td>
<td>1.005</td>
<td>1.524</td>
</tr>
<tr>
<td>Severe Inter Parental Violence</td>
<td>1.912 **</td>
<td>1.785 *</td>
<td>1.989</td>
<td>1.445</td>
<td>2.580 **</td>
</tr>
<tr>
<td>Observations</td>
<td>3187</td>
<td>1410</td>
<td>1777</td>
<td>1523</td>
<td>1664</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.194</td>
<td>0.154</td>
<td>0.094</td>
<td>0.151</td>
<td>0.232</td>
</tr>
<tr>
<td>AIC</td>
<td>1520.54</td>
<td>1029.45</td>
<td>495.47</td>
<td>934.84</td>
<td>596.21</td>
</tr>
<tr>
<td>BIC</td>
<td>1567.28</td>
<td>1081.96</td>
<td>550.30</td>
<td>988.13</td>
<td>650.38</td>
</tr>
<tr>
<td>chi2</td>
<td>360.35</td>
<td>184.33</td>
<td>49.08</td>
<td>163.32</td>
<td>174.51</td>
</tr>
<tr>
<td>$P$</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Exponentiated coefficients $^*$ $p < 0.05$, $^{**} p < 0.01$, $^{***} p < 0.001$.

4 The sample sizes vary because they are split up between U.S.-Indonesia and Male-Female models.
In terms of the comparison of all four models, the Indonesia Model 3 seems the best in terms of the AIC (495.47) and BIC (550.30) comparison. However, the Female Model is the best in terms of the pseudo $R^2$ at 0.232.

The U.S. Model 2 shows that individual variables of being male and having low self-control most strongly influence reporting of violent offending (standardized coefficients 0.273 and 0.421), whereas family bond does not have a statistically significant effect on occurrences of violent offending. The Openness variable remains significant in the U.S. sample where admitting that one would not tell the truth increases the odds of reporting violent offending by about 58%. In terms of our key theoretical variables, American adolescents who are closely supervised are nearly 23% less likely to report violent offending ($\exp(\beta) = 0.769$) than their counterparts with less parental supervision. Adolescents who are exposed to mild parental-violence and severe parental-violence are respectively 1.8 times and nearly 2.4 times more likely to report violent offending. Similarly, those who are exposed to severe inter-parental violence are 1.8 times more likely to report violent offending than those who are not exposed to inter-parental violence.

On the other hand, in the Indonesia Model 3, the strongest influences are Parental Supervision and Gender (standardized coefficients for these variables were $-0.293$ and $0.370$). This indicates that Indonesian youths who are closely supervised are about 42% (odds ratio 0.584) less likely to report violent offending than the less supervised children. Indonesian males are 2.7 times more likely to report violent offending than females. The effect of parental supervision for the Indonesian sample is about 75% stronger than in the U.S. sample (based on comparisons of standardized coefficients: Indonesia $-0.293$; U.S. $-0.168$). Low self-control increases the odds of violent offending by 61% in the Indonesian sample (standardized coefficient 0.217). Moreover, low self-control is twice as important in the U.S. sample compared to the Indonesian sample (standardized coefficient Indonesia 0.217; U.S. 0.421). The gender effect in Indonesia is about one-third stronger than in the U.S. sample (standardized coefficients for Indonesia 0.370; U.S. 0.273). For the Indonesian sample, the openness variable is not a significant predictor of reporting violent offending. In terms of parental maltreatment, Model 3 in Table 4 shows that only mild inter-parental violence influences Indonesian youth in reporting violent offending. Indonesian youth who have experienced mild forms of inter-parental violence are nearly twice as likely to report violent offending compared to those who have not experienced any inter-parental violence. Importantly, for the Indonesian sample, other forms of parental maltreatment had no effect on occurrence of violent offending.

In terms of gender Models 4 and 5, country is the strongest influence on reporting of violent offending for both males and females. U.S. males are 4.2 times more likely than Indonesian males to report violent offending whereas U.S. females are 4.5 times more likely than Indonesian females to report violent offending. Willingness to lie (Openness) increases the odds of reporting violent offending for both males and females by about 55%, although the female sample fails to reach the .05 level of statistical significance ($p = 0.066$). Family bonding is not significant for both males and females. Low self-control is an important predictor for both males and females where low self-control increases the odds of violent offending by 125% for males and 152% for females. In terms of our key variables, parental supervision is more influential for males than females. Males who are supervised closely are about 30% (odds ratio is 0.704; standardized coefficient $-0.192$) less likely to report violent offending than their counterparts who are not closely supervised by their parents. Whereas for females, the odds decrease by about 23% but this is not significant. Severe parental violence has a significant association with occurrence of violent offending for both females and males. Males exposed to severe parental violence are 1.8 times more likely than their counterparts who have not suffered from severe parental violence to report violent offending whereas females who are exposed to severe parental violence are 2.3 times more likely to report violent offending. Exposure to severe inter-parental violence increases the odds of reporting violent offending by 158% for females (standardized coefficient 0.134) but such an effect is not shown for males (see Model 5 in Table 4).
However, we are also interested in analyzing whether gender and context (country) influence the relationship between, respectively, exposure to parental and inter-parental violence and parental supervision and occurrence of violent offending. Our multivariate analysis including interaction terms failed to reveal interpretable significant results (results not shown here but available upon request). Out of all the interaction terms involving maltreatment and social control variables, two interaction terms were significant. First, \text{Mild Inter-Parental Violence} \# \text{U.S.} (\exp(\beta) = 0.448, p < 0.058) was close to statistical significance which suggests that exposure to mild inter-parental violence is likely to increase reporting of violent offending for Indonesia youths by about 55% relative to its effect on U.S. youths. Second, in the Indonesia Model 3, \text{Mild Inter-Parental Violence} \# \text{Male} (\exp(\beta) = 2.613, p < 0.05) suggests that moving from female to male and being exposed to mild inter-parental violence increases the odds of reporting violent offending by 2.6 times.

4. Discussion

4.1. Parental Maltreatment and Self-Reported Violent Delinquency

We find support for Hypothesis 1 where controlling for other variables, the odds of being involved in violent offending are greater for adolescents who have been exposed to parental maltreatment in the form of severe parental and inter-parental violence. The impact of exposure to mild parental violence is smaller but still significant, whereas exposure to mild inter-parental violence is not significant under controlled conditions (see Model 4 in Table 3, and Model 1 in Table 4). This aligns with previous research on the association between parental maltreatment and violent offending including the role of intergenerational transmission of violence in the form of direct and indirect exposure to violence [13] as well as social learning theories that explain the mechanisms through which youths learn violent behavior from their parents [39].

Gender and Place as Modifiers

In terms of gender affecting the association between parental maltreatment and violent offending, we find some interesting results. Exposure to severe parental violence affects females slightly more than males (logged odds for males 1.8; females 2.3). However, the magnitude of the gender difference is so small that we are reluctant to interpret this as conclusive evidence. The significant effect of exposure to direct parental violence for the females aligns with some of the previous research that indicates that parental maltreatment increases female involvement in delinquency [46–48]. Interestingly, the impact of exposure to severe \text{inter-parental violence} is significant for females (odds ratio 2.6), but not for males. This suggests partial support for Hypothesis 2, in that the gender effect in our study applies to \text{indirect} exposure to parent violence (i.e., physical fights and repeated parental conflicts), while the criminogenic effects of \text{direct} parental violence (being slapped or punched) appears to be only slightly stronger for females (see also [115]).

On the other hand, findings regarding parental maltreatment in Indonesia and the U.S. (Table 4) support the idea that context matters. Parental maltreatment consistently increases the odds of reporting violent offending among U.S. adolescents (except for exposure to mild inter-parental violence) (see Model 2 in Table 4), but this does not appear to be the case for the Indonesian sample (see Model 3 in Table 4). For Indonesian youths, the only variable that reaches statistical significance (of the four measures of parental maltreatment) is exposure to \text{mild inter-parental violence}. Indonesian youths exposed to mild inter-parental violence were 1.9 times more likely to report violent offending than their counterparts who had not experienced this. This may seem perplexing but we believe that this may be explained by two factors. First, Indonesian youths report a higher likelihood of lying than their American counterparts. However, in the controlled country-level analysis, the openness variable failed to reach statistical significance (Table 4, Model 3). It is plausible, though we state this with some caution, that Indonesian youths are not as honest about the levels of offending. Second, it is also possible that given the parenting culture and social milieu, Indonesian youths may not view parental...
violence as being contrary to how parents are supposed to deal with their children. As we noted, previous research has shown that there is variation in how parents view disciplinary practices [60] and children from some backgrounds view violence as being a justified form of discipline within the family [63]. Physical punishment is considered a parenting requisite in many Asian countries [116]. However, another study found that Indonesian parents rarely use physical punishment and are generally permissive, especially in early years of a child’s life [117]. Therefore, we find support that U.S. youths are more likely to report violent offending than Indonesian youths when exposed to parental maltreatment.

In terms of gender as a modifying variable on the association between parental maltreatment and offending, the results are less clear and we once again proceed with some caution. As mentioned, when we ran the interactions terms, we found generally insignificant results except in the Indonesia Model where changing from female to male and to mild parental violence increased the odds of reporting violent offending by 2.6 times (results not shown but available upon request). This is also reflected in the country Models 2 and 3 in Table 4 where gender is a significant predictor of reporting violent offending for Indonesian youth but only mild inter-parental violence has a significant effect on occurrence of violent offending. Thus, in terms of Hypothesis 3, the moderating effect of gender on the association between parental maltreatment and violent delinquency between the U.S. and Indonesia is not clear and needs further exploration.

4.2. Parental Social Control and Self-Reported Violent Delinquency

We find support for Hypothesis 4, where controlling for other variables, adolescents whose parents do not supervise them closely are more likely to report involvement in violent delinquency, controlling for other variables (see Model 3 in Table 3 and Model 1 in Table 4). Previous research has indicated that low levels of parental supervision are associated with delinquency [72] and children are also more likely to offend when there is inconsistent parental supervision [74].

Gender and Place as Modifiers

Based on power-control theory, we anticipated that the association between parental supervision and self-reported violent delinquency will be stronger for females than for males. Instead we find that the effect of parental supervision is stronger for males (−0.192) than for females (−0.153). A recent meta-analysis of studies on gender-differences in parenting found that the actual differences in parenting of males and females are minimal even in Asian countries [116]. Previous research that has examined cultural differences in parenting has found that socioeconomic factors have a stronger impact on parental social control than cultural factors [118] but in this study we do not control for class. We also expect this to relate to the fact that the sample of Indonesian youths were drawn from major cities in Indonesia, where the power-control dynamic between parents may resemble balanced households in the U.S. [71]. Therefore, we do not find support for Hypothesis 5. Controlling for other factors, we did not find that parental supervision is a more important predictor for violent offending for girls than for boys.

On the other hand, there are some differences in the importance of parental supervision by place. U.S. youths who are closely supervised are 23% less likely to report violent offending than those who are not closely supervised whereas Indonesian youths are 42% less likely to report violent offending when supervised closely. Parental supervision appears to be a stronger predictor of violent offending in Indonesia (standardized coefficient −0.293) than in the U.S. (−0.168). We also hypothesized that the modifying effect of gender on this association would be different in Indonesia than in the U.S. (Hypothesis 6). The interaction terms (not shown) were not significant, but appear to suggest that the direction of the association may be different in the U.S. than in Indonesia. In Indonesia, the odds of reporting violent offending if you are male and experience high parental supervision are 8.3% (odds ratio is 1.083) greater than if you are female and experience low parental supervision. In the U.S., if you are male and experience high parental supervision, the odds of reporting violent offending are about
12% lower than for females who experience low parental supervision (odds ratio is 0.885). Since these interactions are not statistically significant, we cautiously interpret these findings as merely suggesting that the moderating effect of gender on the association between parental supervision and violent offending varies by place. Thus, in terms of Hypothesis 6, the moderating effect of gender on the association between parental social control and violent delinquency between the U.S. and Indonesia is not directly supported by our analyses and awaits further exploration.

4.3. Implications

Our analysis confirms previous research and theory that gender and country are major determinants of violent delinquency. We purposively selected two countries that are quite different culturally, politically and economically, and we found that being male is an important risk factor in both the U.S. and Indonesia (Model 1, Table 4). We also found that living in the U.S. significantly increases the risk of violent delinquency for both males and females (Models 4 and 5 in Table 4). We could focus on the similarities and conclude that several predictors (gender, parental supervision, low self-control) operate comparably in both the U.S. and Indonesia. In a similar vein, country, parental supervision and low self-control also are significant predictors for both males and females (in the combined sample). On the other hand, we do find differences between the U.S. and Indonesia (and males and females) regarding the key theoretical concepts of the study: parental maltreatment and parental supervision. This supports the mandate of our study: context and gender matter. While our study does not find conclusive evidence that gender and place modify the impact of parent-child relationships on delinquency, we expect this to be the result of limitations in our study sample. Specifically, the number of Indonesian youths who reported violent offending is very low (N = 60) and this presumably affects the statistical power of some of our analyses. We also dropped cases that had missing data on any one of the variables before running any of the regression models. However, our future research will include other types of offending and this may allow us to unpack the mechanisms through which gender and place could modify the association between predictors of violent delinquency.

4.4. Limitations

We recognize other important limitations to our study. First, we do not control for when children are exposed to parental maltreatment, i.e., either parental violence or inter-parental violence. For instance, children who experience physical violence by age 5 are more likely to be arrested as juveniles for any type of offense [119]. Our study sample does not categorize the time of exposure. Second, we recognize that pro-violent attitudes or definitions that are favorable to offending are an important mediating variable that can explain the association between repeated exposure to violence and self-reported violent delinquency. Third, while we focus on the influence of parents, we also recognize that the influence of peers and older siblings [16] can modify the association between exposure to parental maltreatment and violent offending. From previous analysis of ISRD3 data, we know that inclusion of a larger number of available variables related to school, neighborhood, leisure time and morality will significantly increase the explanatory power of the models. However, for the current study, we decided to limit the number of variables to those most closely related to our theoretical focus (i.e., family and parent-child relationships), thereby limiting the explanatory power of our models. Fourth, we are also mindful of the complicated nature of punitive or harsh parenting practices as a form of parental violence. While the ISRD3 measures include parental violence in the form of discipline, we cannot definitively state whether the youths in the sample perceive this as repeated exposure to parental violence or as an appropriate technique of discipline. A final limitation is the very nature of self-report measures used in this article. Although self-report surveys of delinquency have been accepted as a valid method [102,120], the measurement of sensitive issues such as physical violence by parents and delinquent behaviors remain fraught with problems particularly when used in cross-cultural context. As our measure of integrity (openness) shows, more than half of the Indonesian respondents and one-third of the U.S. respondents indicated that they would lie if asked about
drug use, thus suggesting that there may be a considerable level of measurement error in our data, possibly distorting cross-national comparisons.

5. Conclusions

Nonetheless, we find some corroboration that there are gender and context (country) differences in violent delinquent offending and its predictors. Indonesian males are more likely to report violent offending than females and this may relate directly to Indonesian males committing more violent acts generally whereas Indonesian girls tend to indulge in more status offenses [96,97,99]. Although this is also true for the U.S., the gender effect (on violent offending) in Indonesia is about one-third stronger than in the U.S. sample. This is consistent with the notion that Indonesia remains a more patriarchal society than the U.S. Furthermore, severe inter-parental violence was significant for females but not males. This supports previous theoretical and empirical findings that females are more affected by violence between parents and more likely to exhibit similar behaviors. We also found that the hypothesized effect of parental maltreatment was only partially supported in Indonesia (mild inter-parental violence only) but more fully in the U.S. sample (for both mild and severe parental violence as well as for severe inter-parental violence). Contrary to our expectations, we found that parental supervision is a somewhat stronger predictor of violent offending for males than for females. Moreover, the effect of parental supervision for the Indonesian sample is about 75% stronger than in the U.S. sample, whereas low self-control is twice as important in the U.S. sample. Thus, to answer the question in our title: Yes, gender does make a difference! However, place appears to be even more important. Though we observed a strong impact of context (i.e., country), we can only speculate about exactly what it is about the country that may explain the observed differences. Answering this complex issue goes beyond the power of variable-oriented cross-sectional analysis such as ours.

Author Contributions: I.H.M. and S.S.K. conceived and designed the study. I.H.M. made the data available for analyses and provided the description of the data and measures. C.E.M. conducted the analyses and drafted the interpretation section. S.S.K. wrote the final manuscript while I.H.M. and C.E.M. provided comments and edits.

Acknowledgments: Collection of the U.S. data was made possible through the National Science Foundation (NSF) Grant #1419588, through the Open Research Area (ORA) program.

Conflicts of Interest: The authors declare no conflict of interest.

References


35. Chapple, C.L. Examining Intergenerational Violence: Violent Role Modeling or Weak Parental Controls? Violence Vict. 2003, 18, 143–162. [CrossRef] [PubMed]
42. Heimer, K.; Coster, S.D. The gendering of violent delinquency. Criminology 1999, 37, 277–318. [CrossRef]
53. Laible, D.J.; Carlo, G. The differential relations of maternal and paternal support and control to adolescent social competence, self-worth, and sympathy. J. Adolesc. Res. 2004, 19, 759–782. [CrossRef]
65. Renzetti, C.M.; Curran, D.J. *Women, Men and Society*; Allyn and Bacon: Boston, MA, USA, 1999.
75. Blackwell, B.S.; Reed, M.D. Power-control as a between-and within-family model: Reconsidering the unit of analysis. *J. Youth Adolesc.* 2003, 32, 385–399. [CrossRef]
88. Giordano, P.C.; Cernkovich, S.A.; DeMaris, A. The family and peer relations of black adolescents. J. Marriage Fam. 1993, 55, 277–287. [CrossRef]


© 2018 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).