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ORIGINAL ARTICLE

Exposure to Family Violence in Childhood and Intimate Partner Perpetration or Victimization in Adulthood: Exploring Intergenerational Transmission in Urban Thailand

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Abstract Investigators who study intimate partner violence have long recognized a relationship between exposure to violence in the family of origin and subsequent offending and victimization in the family context. This relationship holds not only for direct exposure (i.e., experiencing violence), but also for indirect exposure (i.e., witnessing violence against a parent or sibling). Typically, this relationship has been attributed to a social learning process that results in the *intergenerational transmission of family violence*. In this study, we explore intergenerational transmission in a sample of 816 married women in Bangkok, Thailand to determine how childhood exposure to violence in the family of origin is related to intimate partner perpetration and victimization during adulthood. Our results show that there are indeed long-term and significant effects of childhood exposure to family violence on the likelihood of Thai women's psychological and physical intimate partner perpetration. However, these effects appear to be indirect. Additionally, our results demonstrate a direct association between childhood exposure to parental intimate partner violence and subsequent psychological and physical victimization in adulthood.

Keywords Family violence · Intergenerational transmission of violence · Intimate partner perpetration · Intimate partner violence · Thailand

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Over the past few decades, a large body of research has demonstrated a consistent link between exposure to violence in the family of origin and subsequent family violence (e.g., intimate partner violence and child abuse) in adulthood. Despite the general trend in findings, there are many important variations in the *intergenerational transmission of family violence* based on factors such as gender, type of violence to which children are exposed (physical, sexual, or emotional), and whether childhood exposure leads to perpetration or victimization in adulthood (Kernsmith 2006; Mihalic and Elliott 1997). Using survey data collected from 816 married women residing in Bangkok, Thailand, this article contributes to the literature by: (a) studying an all-female sample in a cross-cultural context, (b) exploring a wide range of family violence variables in both childhood and adulthood, and (c) assessing whether childhood exposure to violence impacts both perpetration and victimization in the family context.

Intimate partner violence (IPV), defined as psychological, physical, or sexual harm by a current or former partner or spouse (Saltzman et al. 1999), is evident in countries around the world. Cross-cultural studies have found that physical

abuse of women by intimates is the most prevalent form of family violence. Rates of family violence in many non-Western and non-industrialized societies rival and often exceed those found in more developed nations (Bassuck and Huntington 2006; Garcia-Moreno et al. 2006; Xu et al. 2005). Although few reliable data sources exist, there is evidence to suggest that intimate partner violence is a significant problem in Thailand (Grisurapong 2002; Kerley et al. 2008; Quicker 2002). According to a recent 10-country study conducted by the World Health Organization, 40 % of Thai women experienced physical or sexual violence at least once during their lifetimes, and just over 20 % experienced intimate partner violence during the past year (Garcia-Moreno 2006). Results from the National Survey of Household Crowding and Family Relations, which included a representative sample of 619 husbands, indicated that 20 % of Thai males had hit, slapped, or kicked their wives at least once (Hoffman et al. 1994).

The issue of intimate partner violence in Thailand must be placed in the context of their two most important institutions: religion and family. Thai culture is predominately Buddhist and there is a strong focus on order, harmony, and responsibility within the family context (Hoffman et al. 1994; Klausner 1997). Family structure historically has been patriarchal, and wives are expected to place their own self-interests behind those of their husbands and children. Given the societal focus on harmony and the avoidance of conflict, the way that family disputes are expected to be solved is through wives submitting themselves to the wishes of their husbands. According to many investigators, Thai culture may perceive wife abuse as tolerable if it serves to maintain male superiority and to re-establish order (Hoffman et al. 1994; Kerley et al. 2008; Klausner 1997; Limanonda 1995).

Thus, urban Thailand provides a unique setting for research on the intergenerational transmission of intimate partner violence for two key reasons. First, the combination of Buddhist and Thai culture creates a gendered hierarchy that tends to place Thai women in a vulnerable position for early childhood exposure to violence and subsequent experience as adults. Second, because of the non-violent nature of Buddhism in Thailand, the setting provides an even more stringent test of the intergenerational transmission of violence. In other words, if Thai culture is generally non-violent, we should anticipate a weak to moderate transmission effect.

Theoretical Framework

Variations of social learning theory typically have been used to account for linkages between childhood exposure to family violence and subsequent perpetration and victimization in adult family contexts. This is often referred to as the *intergenerational transmission of family violence* (Corvo 2006; Corvo and Carpenter 2000; Kalmus 1984; Mihalic and Elliott 1997). Parallel research streams from criminologists, psychologists, and sociologists suggest a framework for understanding how childhood exposure to intimate partner violence is linked to adult experience. Sutherland (1939) contended that individuals learn criminal behaviors, much like other behaviors, through a process of socialization in inmate groups such as family and peer groups. Within these intimate groups, they learn both criminal attitudes (e.g., ways to neutralize guilt, ways to deny responsibility) and criminal actions (e.g., how to commit crimes, how to elude police). Bandura (1977) asserted that individuals tend to model the behaviors of authority figures and others whom they consider influential. The likelihood of modeling behavior is increased if the observed behavior is perceived to create a desired outcome. Children exposed directly (e.g., experience of emotional, physical, or sexual abuse) or indirectly (e.g., witnessing or hearing a parent or relative being emotionally, physically, or sexually abused) to violence in the family of origin may develop norms about the suitability of violence to address specific circumstances.

These theoretical works coalesce to suggest that a pro-abuse set of norms may emerge in certain family contexts that increases the likelihood of children exposed to violence in the family of origin becoming both offenders and victims of intimate partner violence as adults (Kernsmith 2006). More recently, Akers (2009) and others have extended Sutherland's work to highlight the importance of positive and negative reinforcements in the learning process. Children exposed to family violence learn the rationale and commission of violence. However, if the violence is perceived to "solve problems," it may be even more likely to be replicated by children in their adult families. It is in this theoretical tradition that we explore the extent to which childhood learning (e.g., exposure to family violence) is linked to intimate partner perpetration and victimization in urban Thailand.

Empirical Literature

The relationship between childhood exposure to intimate partner violence and adult offending or victimization in the family context is one of the most established relationships in the empirical literature, including cross-cultural studies (Bassuck et al. 2006; Bensley et al. 2003; Feerick and Haugaard 1999; Corvo 2006; Jin et al. 2007; Kalmus 1984; Kernic et al. 2001; Kernsmith 2006; Mihalic and Elliott 1997; Schewe et al. 2006, Straus et al. 1980; Swinford et al. 2000, Whitfield et al. 2003). Exposure to family violence includes both direct and indirect forms (Edelson 1999). One of the first studies to identify this relationship was the

National Family Violence Survey conducted by Straus and colleagues (1980). The authors found that males and females who had experienced higher levels of physical abuse (direct exposure) as children were more likely to engage in violence against their spouses and children as adults. In addition to the long-term effects of this direct victimization, Straus et al. (1980) and Kalmus (1984) further established that males and females who had witnessed parental violence (indirect exposure) as children were also significantly more likely to abuse their adult partners than children who did not witness such abuse. Based on a meta-analysis of over 160 studies, Stith et al. (2000) concluded that children growing up in an abusive home have a significant, albeit not statistically large, likelihood of being involved in a violent romantic relationship in adulthood.

Many empirical studies, however, have produced inconsistent findings with respect to both childhood exposure and subsequent intimate partner perpetration or victimization. One study indicates that while childhood physical abuse was predictive of adult intimate victimization, childhood witnessing of family violence was related to adult sexual assault and intimate victimization (Schewe et al. 2006). Bevan and Higgins (2002) found substantial overlap between five forms of childhood maltreatment and commission of spousal violence in adulthood. In particular, men who were neglected as children were significantly more likely to engage in physical abuse of a spouse later in life and those who witnessed parental violence were significantly more likely to engage in psychological abuse of a spouse. Harsh discipline of a child had a direct effect on problem behaviors in adolescents and young adults as well, which resulted in a direct effect on the perpetration of intimate partner violence as adults (Swinford et al. 2000). Furthermore, as demonstrated by Bassuck et al. (2006), sexual molestation in childhood was the most significant predictor of adult intimate partner violence. Similarly, children with a history of physical abuse, sexual abuse, or a battered mother were nearly four times more likely than children without these risk factors to be perpetrators and victims of family violence in adulthood (Whitfield et al. 2003). In short, as shown by Ehrensaft et al. (2003), conduct disorders, abuse, neglect, and exposure to violence in childhood were significant predictors of committing intimate partner violence in adulthood. And the best predictor for intimate partner victimization as an adult was childhood exposure to violence.

With regard to effects by gender, Mihalic and Elliott (1997) found that prior victimization and witnessing parental violence were significant predictors of IPV in adulthood among women, but not among men. For women who experienced childhood physical abuse and witnessed parental violence, the risk of physical and emotional abuse as well as post-traumatic stress disorder in adult relationships is substantially higher than for those without such risk factors (Bensley et al. 2003; Feerick and Haugaard 1999).

Our study adds to the literature in two key ways. First, most studies do not link exposure to violence in the family of origin with intimate partner perpetration and victimization simultaneously. Second, to the best of our knowledge, few studies have examined the role of either intimate partner perpetration or victimization in predicting the other. This gap must be addressed because: (a) intimate partner perpetration and intimate partner victimization tend to be closely correlated, (b) the empirical correlation between these variables tends to create a confounding effect that must be scrutinized closely, and (c) there could be both direct and indirect associations between exposure to violence in the family of origin and intimate partner perpetration or victimization.

Using these theoretical and empirical insights, in this study we investigate three key research questions. First, is childhood exposure to violence in the family of origin related to subsequent psychological and physical perpetration in urban Thailand? Second, is childhood exposure to violence in the family of origin related to subsequent psychological and physical victimization in urban Thailand? Third, if there are such relationships, are they direct or indirect? These questions are depicted graphically in Fig. 1.

Data and Methods

Sample

This study uses survey data from the Wife Abuse in Urban Thailand Project conducted by the authors in Bangkok, Thailand. A sample of 816 married women was randomly selected via a multistage probability cluster sampling technique. In the first stage, five districts in each of the five geographic regions in Bangkok (Northern, Southern,

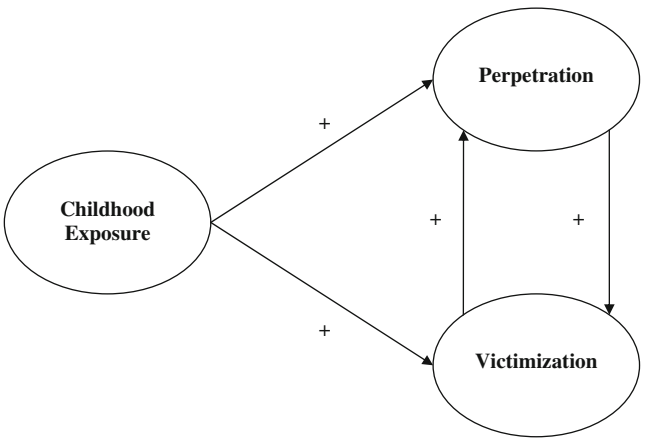

Fig. 1 Theoretical model

Western, Eastern, Business) were randomly chosen, yielding a total of 25 districts. In the second stage, four city blocks were randomly selected from each street in the sampled districts. Since the number of streets was not equal across the sampled districts, the second sampling stage resulted in 204 blocks. In the third stage, four housing units were randomly chosen through a systematic sampling procedure from a block-map prepared by the interviewers. In the final stage, one married woman from each selected household was interviewed. Among 816 completed interviews, five were excluded due to the short duration of marriage (less than 6 months). As a result, the sample size for the survey project was reduced to 811. After applying a listwise deletion procedure to the survey data, 793 cases were retained for multivariate statistical analysis.

The questionnaire used in this survey project was first developed in English and then translated into Thai by the study authors. To check the accuracy of the translation, the Thai questionnaire was back-translated into English by a native Thai translator. The Thai questionnaire was then pre-tested by interviewing 20 Thai females living in districts other than those selected for the project. After making necessary revisions based on the pre-test results, the final Thai questionnaire was utilized for face-to-face survey interviews, which were conducted by ten professional interviewers. Because of the sensitive nature of the survey, the interviewers received a three-day intensive training which included lectures, interview practices, and evaluations that addressed the importance of the survey project and provided the skills necessary to conduct effective interviews. The interviewers were careful to conduct the survey interviews with the Bangkok women only when the husbands were not present.

Dependent Variables

Perpetration The revised Conflict Tactics Scale (CTS-2) was utilized to create two measures of intimate partner perpetration (Straus et al. 1996). The first measure captured the frequency of *psychological perpetration* exhibited by the respondent in the past twelve months before survey administration. It includes the following CTS-2 items: (a) I insulted or swore at my partner, (b) I called my partner fat or ugly, (c) I destroyed something belonging to my partner, (d) I shouted or yelled at my partner, (e) I stomped out of the room or house or yard during a disagreement, (f) I accused my partner of being a lousy lover, and (g) I threatened to hit or throw something at my partner. For each of these survey items, there were seven response categories ranging from "never happened" (coded as 1) to "more than 20 times" (coded as 7). These items were summed and dummy-coded with 1 = psychologically aggressive in the past year and 0 = not psychologically aggressive in the past year. The reliability coefficient was 0.75.

The second measure of intimate partner perpetration tapped *physical perpetration*. It was derived from the following CTS-2 items: (a) I threw something at my partner that could hurt, (b) I twisted my partner's arm or hair, (c) I pushed or shoved my partner, (d) I used a knife or gun on my partner, (e) I punched or hit my partner with something that could hurt my partner, (f) I choked my partner, (g) I slammed my partner against a wall, (h) I beat my partner up, (i) I grabbed my partner, (j) I slapped my partner, (k) I burned or scalded my partner on purpose, (l) I kicked my partner, (m) my partner had a sprain, bruise, or small cut because of a fight with me, (n) my partner went to a doctor because of a fight with me, (o) my partner needed to see a doctor because of a fight with me but I didn't, (p) my partner had a broken bone from a fight with me, and (q) my partner felt physical pain that still hurt the next day because of a fight with me. There were seven response categories ranging from "never happened" (coded as 0) to "more than 20 times" (coded as 7). Once again, these items were summed and dummy-coded with 1 = physically aggressive in the past year and 0 = not physically aggressive in the past year. The reliability coefficient was 0.90.

Victimization Two measures of intimate partner victimization were created. These items tapped the frequency of *psychological victimization* and *physical victimization* committed by husbands against their wives. The same items as described under psychological perpetration and physical perpetration were used, except that the items were reworded to indicate victimization rather than perpetration. For example, "I insulted or swore at my partner" was changed to "my partner insulted or swore at me" and "I threw something at my partner that could hurt" was changed to "my partner threw something at me that could hurt." The two composite variables were dummy-coded with 1 = psychologically or physically victimized in the past year and 0 = not victimized in the past year. The reliability coefficients were 0.75 and 0.87, respectively.

Independent Variables

In this study, childhood exposure to family violence was operationalized along two different dimensions: witnessing parental violence during childhood (indirect measure) and experiencing physical abuse during childhood (direct measure). With regard to the first dimension, two retrospective questions that assessed the extent to which respondents had witnessed parental violence in their family of origin were included in the survey. Respondents were asked: (a) "How often did you see your father hit your mother?" and (b) "How often did you see your mother hit your father?" The response categories were recoded as 1 = never, 2 = seldom, 3 = sometimes, 4 = often, and 5 = very

often. The witnessing parental violence index was constructed by averaging the two items with higher values representing more frequent childhood exposure to parental violence. The reliability coefficient was 0.66.

To measure the second dimension of childhood exposure to family violence, respondents were asked: (a) "How often were you hit by father when you were young?" and (b) "How often were you hit by mother when you were young?" The response categories were coded as 1 = never, 2 = seldom, 3 = sometimes, 4 = often, and 5 = very often. The experiencing family violence index was constructed by averaging the two items with higher values indicating more frequent childhood experience of being hit by parents. The reliability coefficient was 0.50 (low but marginally acceptable).

Control Variables

Several socio-demographic characteristics were included in the study as statistical controls. They are: respondent's age, marital duration, family income (log-transformed), educational attainment, employment status (dummy coded with unemployed as the reference), number of children, religiosity (dummy coded with non-religious as the reference), and Buddhist faith tradition (dummy coded with other faith traditions as the reference). In addition, as suggested by the Centers for Disease Control (CDC) and other published research (Coker et al. 2000), risk factors, such as frequency of drinking and gambling, were included in our models. Both variables were measured on a 5-point Likert scale with 1 - never to 5 = very often. Finally, following Sugarman and Frankel's (1996) work as well as recent research on IPV in Thailand (Xu et al. 2009), *approval of violence* was used to gauge how respondents justify the patriarchal norm of wife abuse in Thailand. It was measured by 8 items of the Inventory of Beliefs in Wife Beating (IBWB; Saunder et al. 1987). Respondents were asked whether they 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, or 4 = *strongly agree* that (a) "It is sometimes OK for a man to beat his wife," (b) "The episodes of a man beating his wife are the wife's fault," and a man can abuse his wife if (c) "A wife breaks an agreement," (d) "Wife's behaviors challenge husband's manhood," (e) "A wife keeps reminding husband's weak points," (f) "A wife lies to her husband," (g) "A wife is sexually unfaithful," and (h) "A wife refuses to have sex." The composite variable was constructed by averaging these items with higher values indicating more tolerance for wife abuse. The reliability coefficient was 0.91. Descriptive statistics for the variables used in this study are shown in Table 1.

Table 1 Descriptive statistics for study variables

	n	%	mean	SD
Dependent Variables				
Psychological Perpetration				
Yes	526	66.33	–	–
No	267	33.67	–	–
Physical Perpetration				
Yes	314	39.60	–	–
No	479	60.40	–	–
Psychological Victimization				
Yes	497	62.67	–	–
No	296	37.33	–	–
Physical Victimization				
Yes	276	34.80	–	–
No	517	65.20	–	–
Key Independent Variables				
Witnessed IP Violence	–	–	1.35	0.68
Hit or Spanked by Parents	–	–	2.17	0.77
Control Variables				
Age	–	–	39.03	10.37
Marital Duration	–	–	15.34	10.58
Number of Children	–	–	1.86	1.38
Family Income (log)	–	–	9.51	1.61
Education	–	–	3.36	1.88
Full Time Employment	402	50.69	–	–
Part Time Employment	143	18.03	–	–
Retired	200	25.22	–	–
Unemployed	48	6.05	–	–
Religious	240	30.26	–	–
Not Religious	553	69.74	–	–
Buddhist	720	90.79	–	–
Other Religion	73	9.21	–	–
Drinking Frequency	–	–	1.67	0.98
Gambling Frequency	–	–	1.63	1.01
Approval of Violence (Index)	–	–	1.85	0.54
N	793			

SD Standard deviation

Data Analyses

To assess social learning processes and the *intergenerational transmission of family violence* in urban Thailand, we specified and estimated four logistic regression models for each of the four dichotomous dependent variables. Following Powers and Xie (2000), the logistic regression model is denoted as $\log (p_i / 1 - p_i) = \Sigma \beta_k x_{ik}$, where p_i is the probability of intimate partner perpetration or victimization and β_k represents the parameter estimate of the kth independent or control variable that is expressed as x_{ik}. To create our dichotomous variables for the logistic regression models, respondents who reported an incident on any of the CTS-2 items were coded as 1 and 0 otherwise. This strategy has been used by other family violence researchers, in particular those using the CTS or CTS-2 (Hoffman et al. 1994).

To facilitate clear interpretations, the odds coefficients (e.g., odds ratios) were reported in the tables such that Models 1 and 2 estimated the independent effects of the two childhood exposure variables on the odds of psychological and physical perpetration or victimization separately, net of statistical controls. Model 3 further estimated the joint effects of the two childhood exposure variables on the odds of psychological and physical perpetration or victimization independent of the control variables. Model 4, which is the full model, estimated the mediating effects (or indirect effects) of psychological and physical perpetration or victimization. Stated differently, in Model 4 we scrutinized if the effects of childhood exposure on perpetration were mediated by victimization or if the effects of childhood exposure on victimization were mediated by perpetration as illustrated in Fig. 1.

Results

Childhood Exposure and Adult Psychological Perpetration

Table 2 displays the effects of childhood exposure to family violence on the likelihood of psychological aggression during adulthood. As seen in Models 1 and 2, when the frequency of witnessing parental violence or experiencing physical abuse during childhood increases, the odds of being psychologically aggressive in adulthood increase by 56% and 32%, respectively. Stated differently, Thai women with childhood exposure to family violence tend to be psychological perpetrators as adults. Although both effects are statistically significant at least at the .05 level, the effect of experiencing physical abuse during childhood is weaker than that of witnessing parental violence.

In addition to these independent effects, Model 3 also shows positive and significant joint effects of childhood exposure to family violence on the odds of psychological perpetration during adulthood (50% and 26%, respectively) net of statistical controls. In other words, the two childhood exposure variables are quite robust in predicting the odds of psychological perpetration during adulthood among married women in urban Thailand. However, the most striking findings are the mediating effects exhibited in Model 4 where the two childhood exposure variables became uniformly insignificant once psychological and physical victimization are added to the model. This demonstrates that all else being equal, the relationship between childhood exposure to family violence and psychological perpetration in adulthood is indirect, meaning that this relationship is mediated by psychological and physical victimization either separately (results are not shown, but are available upon request) or jointly, thus partially supporting the theoretical model depicted in Fig. 1.

Table 2 Effects of childhood exposure to family violence on psychological intimate partner perpetration (odds coefficients)

	Model 1		Model 2		Model 3		Model 4	
Age	0.964		0.959	*	0.964		0.948	
Marital Duration	1.005		1.007		1.004		1.034	
Number of Children	1.087		1.092		1.091		1.076	
Family Income (log)	1.115	*	1.119	*	1.114		1.130	
Education	0.940		0.936		0.932		0.910	
Full Time Employment	0.416	*	0.412	*	0.406	*	0.502	
Part Time Employment	0.401	*	0.392	*	0.379	*	0.342	
Retired	0.474		0.484		0.466		0.849	
Religious	1.242		1.255		1.256		1.082	
Buddhist	1.335		1.482		1.411		2.219	
Drinking Frequency	1.327	**	1.339	**	1.309	**	1.059	
Gambling Frequency	2.463	**	2.512	**	2.462	**	2.012	**
Approval of Violence	1.636	**	1.648	**	1.638	**	0.815	
Witnessed IP Violence	1.557	**			1.495	**	1.125	
Hit or Spanked by Parents			1.320	*	1.262	*	1.197	
Psychological Victimization							66.492	**
Physical Victimization							5.758	**
Intercept	0.188		0.183		0.126	*	0.083	
Model $\chi 2$	156.88	**	153.12	**	161.10	**	619.61	**
Degrees of Freedom	14		14		15		17	
N	793		793		793		793	

*p< .05; **p< .01

Childhood Exposure and Adult Physical Perpetration

Table 3 features the effects of childhood exposure to family violence on the likelihood of physical perpetration during adulthood. The regression results displayed in this table are remarkably similar to those reported in Table 2. For example, Models 1 and 2 show that as the frequency of witnessing parental violence or experiencing physical abuse during childhood increases, the odds of being physically aggressive during adulthood increase by 45% and 40%, respectively. That is, Thai women with childhood exposure to family violence tend to be physical perpetrators as adults. Once again, these independent effects are statistically significant at least at the .01 level. Similarly, the joint effects shown in Model 3 are also statistically significant, indicating that as the frequency of witnessing parental violence and experiencing physical abuse during childhood increases, so do the odds of being physically aggressive during adulthood. The magnitude of increase is 37% and 34%, respectively. These results, however, become statistically insignificant in Model 4 once the victimization variables were entered into the regression model.

Taken together, these findings are consistent with those reported in Table 2, thus lending partial credence to the theoretical model portrayed in Fig. 1. In other words, the statistical evidence derived from the regression models reported in Table 3 suggests that there is a significant, but indirect, relationship between childhood exposure to family violence and physical perpetration during adulthood. Additionally, our ancillary analyses suggest that it is the physical victimization, rather than psychological victimization, that primarily and persistently mediates the relationship between childhood exposure to family violence and physical perpetration during adulthood in urban Thailand (results not shown in tabular form due to space considerations).

Childhood Exposure and Adult Psychological Victimization

Table 4 reports the effects of childhood exposure to family violence on the likelihood of psychological victimization during adulthood. The regression results from Models 1 and 2 indicate, respectively, that else being equal as the frequency of witnessing parental violence or experiencing physical abuse during childhood increases, the odds of psychological victimization increase by 67% and 28%. Put differently, Thai women with childhood exposure to family violence tend to be psychologically abused as adults. While these independent effects are statistically significant at least at the .05 level, the effect of experiencing physical abuse is obviously weaker than that of witnessing intimate partner violence. This pattern persists in Model 3 where the joint effect of experiencing physical abuse during childhood is only marginally significant.

Interestingly, neither jointly (Model 4) nor separately (ancillary analyses) do psychological perpetration and physical perpetration completely mediate the relationship

Table 3 Effects of childhood exposure to family violence on physical intimate partner perpetration (odds coefficients)

	Model 1		Model 2		Model 3		Model 4	
Age	0.967		0.962	*	0.966		0.985	
Marital Duration	1.005		1.007		1.005		0.972	
Number of Children	1.105		1.105		1.103		1.147	
Family Income (log)	1.006		1.007		1.005		0.972	
Education	1.018		1.006		1.008		0.980	
Full Time Employment	0.570		0.560		0.543		0.928	
Part Time Employment	0.434	*	0.414	*	0.398	*	0.620	
Retired	0.374	**	0.373	**	0.362	**	0.645	
Religious	1.125		1.124		1.125		1.321	
Buddhist	0.984		1.107		1.047		1.106	
Drinking Frequency	1.453	**	1.451	**	1.432	**	1.333	**
Gambling Frequency	1.447	**	1.483	**	1.462	**	1.071	
Approval of Violence	1.890	**	1.922	**	1.916	**	1.479	
Witnessed IP Violence	1.446	**			1.367	**	0.967	
Hit or Spanked by Parents			1.401	**	1.337	**	1.209	
Psychological Victimization							2.732	**
Physical Victimization							31.444	**
Intercept	0.17	*	0.142	*	0.104	**	0.053	*
Model $\chi 2$	114.07	**	114.99	**	121.90	**	500.00	
Degrees of Freedom	14		14		15		17	
N	793		793		793		793	

*p< .05; **p< .01

Table 4 Effects of childhood exposure to family violence on psychological intimate partner victimization (odds coefficients)

	Model 1		Model 2		Model 3		Model 4	
Age	0.979		0.972		0.979		1.015	
Marital Duration	0.995		1.000		0.995		0.981	
Number of Children	1.063		1.066		1.065		0.990	
Family Income (log)	1.052		1.057		1.051		0.942	
Education	0.966		0.963		0.960		1.015	
Full Time Employment	0.527		0.526		0.514		0.981	
Part Time Employment	0.619		0.611	*	0.591		1.668	
Retired	0.470	*	0.482		0.462	*	0.638	
Religious	1.164		1.169		1.171		0.984	
Buddhist	0.964		1.075		1.007		0.500	
Drinking Frequency	1.257	*	1.274	**	1.244	*	1.040	
Gambling Frequency	1.927	**	1.966	**	1.930	**	1.175	
Approval of Violence	1.937	**	1.949	**	1.945	**	2.024	**
Witnessed IP Violence	1.669	**			1.611	**	1.527	*
Hit or Spanked by Parents			1.287	*	1.218		1.036	
Psychological Perp.							80.185	**
Physical Perpetration							1.578	
Intercept	0.187	*	0.212		0.132	*	0.024	**
Model $\chi 2$	130.57	**	121.68	**	133.912	**	578.26	**
Degrees of Freedom	14		14		15		17	
N	793		793		793		793	

*p< .05; **p< .01

between childhood exposure to family violence and psychological victimization (the coefficient for the witnessing intimate partner violence variable is still statistically significant, albeit noticeably weaker, after the perpetration variables were included in the model). In fact, regression results reported in Table 4 reveal that the relationship between childhood exposure to family violence in terms of witnessing parental violence and psychological victimization is both direct and indirect, which supports the theoretical model as depicted in Fig. 1. However, the relationship between experiencing physical abuse during childhood and psychological victimization during adulthood is indirect.

Childhood Exposure and Adult Physical Victimization

Table 5 displays the effects of childhood exposure to family violence on the likelihood of physical victimization during adulthood. Consistent with Table 4, Models 1 and 2 in Table 5 reveal similar regression results, namely, as the frequency of witnessing parental violence or experiencing physical abuse during childhood increases, the odds of physical victimization increase by 66% and 39%, respectively. In other words, Thai women with childhood exposure to family violence tend to be physically abused as adults. Both effects are statistically significant at the .01 level. Moreover, Model 3 features significant joint effects of the two childhood exposure variables on the likelihood of physical victimization. As can be seen from the table, the odds coefficients for the two childhood exposure variables are statistically significant at the .01 level, signifying robust joint effects. However, only one of these two variables remained significant in Model 4 where both psychological and physical perpetration variables were included. With these results, it can be concluded that there is a direct as well as indirect relationship between witnessing intimate partner violence and physical victimization, whereas the relationship between experiencing physical abuse and physical victimization is by and large indirect.

Discussion

The primary goal of this study was to evaluate social learning and intergenerational transmission approaches for understanding intimate partner violence in urban Thailand. Using childhood exposure to family violence to operationalize the constructs of social learning and intergenerational transmission, we draw two major conclusions. First, as anticipated, our results demonstrate long-term and significant effects of childhood exposure to family violence on the likelihood of Thai women's psychological and physical intimate partner perpetration during adulthood. However, these long-term effects are indirect, which suggests that they are mediated fully by Thai women's psychological and physical intimate

Table 5 Effects of childhood exposure to family violence on physical intimate partner victimization (odds coefficients)

	Model 1		Model 2		Model 3		Model 4	
Age	0.963		0.956	*	0.962		0.984	
Marital Duration	1.033		1.037		1.034		1.052	
Number of Children	1.029		1.030		1.027		0.912	
Family Income (log)	1.026		1.030		1.025		1.033	
Education	1.042		1.029		1.033		1.067	
Full Time Employment	0.486	*	0.487	*	0.463	*	0.551	
Part Time Employment	0.418	*	0.410	*	0.385	**	0.547	
Retired	0.348	**	0.354	**	0.337	**	0.480	
Religious	0.934		0.931		0.929		0.789	
Buddhist	0.951		1.097		1.006		0.936	
Drinking Frequency	1.343	**	1.348	**	1.325	**	1.077	
Gambling Frequency	1.530	**	1.570	**	1.546	**	1.255	*
Approval of Violence	1.743	**	1.770	**	1.765	**	1.303	
Witnessed IP Violence	1.659	**			1.579	**	1.553	**
Hit or Spanked by Parents			1.393	**	1.301	**	1.100	
Psychological Perpetration							4.680	**
Physical Perpetration							28.131	**
Intercept	0.11	**	0.109	**	0.069	**	0.006	**
Model $\chi 2$	107.75	**	99.16	**	113.95	**	498.90	**
Degrees of Freedom	14		14		15		17	
N	793		793		793		793	

*p< .05; **p< .01

partner victimization. This finding is important because much of the prior research has overlooked the mediating role of intimate partner victimization in establishing linkages between childhood exposure to family violence and intimate partner perpetration. Our results suggest that there is a persistent and strong indirect association between Thai women's childhood exposure to family violence and intimate partner perpetration. Stated differently, the association between childhood exposure to family violence and intimate partner perpetration for Thai women appears to be spurious once intimate partner victimization is considered.

Second, the above mentioned results are further strengthened and supported by our second major finding of long-term effects of Thai women's childhood exposure to family violence on their psychological and physical intimate partner victimization. However, unlike our analyses on intimate partner perpetration, the estimated long-term effects on intimate partner victimization are less uniform. In fact, the effects of childhood exposure to parental violence are direct but less robust, whereas the effects of childhood exposure to physical abuse are indirect and mediated by Thai women's intimate partner perpetration. Given these nuances, we conclude, with a certain degree of confidence, that the association between Thai women's childhood exposure to parental violence and adult intimate partner victimization is not spurious.

What do we make of these findings in the context of urban Thailand? As noted previously, Thai culture is predominately Buddhist and has a strong focus on order, harmony, and responsibility within the family context (Hoffman et al. 1994; Klausner 1997). Family structure historically has been patriarchal. And wives were expected to place their own self-interests behind those of their husbands and children, even if it involved tolerance of intimate violence (Hoffman et al. 1994; Klausner 1997; Limanonda 1995). Additionally, Thai females do not have the same legal protections against intimate partner violence as women in many Western societies (Quicker 2002).

Given this patriarchal culture as well as prevalence levels of intimate partner violence documented in previous studies (Garcia-Moreno et al. 2006; Xu et al. 2005), perhaps it is not surprising to observe a direct as well as indirect association between childhood exposure to family violence and adult intimate partner victimization and an indirect association between childhood exposure to family violence and adult intimate partner perpetration. Although we do not deny the existence of mutual intimate partner violence (Johnson 1995, 2006) in contemporary urban Thailand, our fine-grained analyses suggest that childhood exposure to family violence tends to place Thai women in a vulnerable position that is linked empirically with later victimization by a spouse in adulthood. In reaction to intimate partner victimization, Thai women who were

exposed to family violence as children tend to respond violently as well in adult family contexts.

Although we cannot be certain of the precise mechanisms that link childhood exposure to adult family violence, our findings appear to support a social learning or intergenerational transmission explanation that children exposed to family violence learn a pro-abuse set of norms and behaviors that may be replicated in their adult family relationships (Bevan and Higgins 2002; Edelson 1999; Ehrensaft et al. 2003; Kalmus 1984; Kernsmith 2006; Mihalic and Elliott 1997; Straus et al. 1980). Our findings also suggest that childhood exposure to family violence may also exacerbate the disadvantaged position of Thai women both in society and in the family and thus increase the likelihood of psychological and physical victimization in adulthood. Finally, because of the non-violent nature of Buddhism in Thailand, the setting provides an even more stringent test of the intergenerational transmission of family violence. In other words, if Thai culture is generally non-violent, we should have observed a weak to moderate transmission effect. Our findings, of course, suggested otherwise. In fact, our robust findings provide strong support for intergenerational transmission and social learning theories. We urge investigators to continue studying the intergenerational transmission of family violence in both national and international contexts.

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