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# Women's intergenerational intimate partner violence and household child abuse in Burma (Myanmar)

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## ABSTRACT

Intimate partner violence (IPV) and child abuse are prevalent in Burma (Myanmar). However, gaps exist in our understanding of intergenerational cycles and co-occurrence of violence, and whether patterns of violence vary by women and children's life course transitions and developmental stages. Using data from the 2015–2016 Demographic and Health Survey, we estimated structural equation models to evaluate the pathways between women's exposure to IPV perpetrated by her father against her mother (maternal abuse), her own past-year experiences of IPV, attitudes toward IPV, and household child discipline practices. We ran stratified analyses by women's age at first birth and child's age to assess whether intergenerational cycles and co-occurrence of violence in the household vary by pivotal life events and development stages. Maternal abuse was directly and indirectly associated with women's past-year exposure to physical and/or sexual IPV and children's exposure to physical or emotional child abuse by a caregiver in the household. Stratified models indicated significant intergenerational cycles of IPV and co-occurrence of IPV and children. We conclude that synchronized efforts to prevent violence against women and violence against children are integral to addressing cyclical and co-occurring patterns of violence in Burma (Myanmar). Violence prevention efforts might consider developmental stage and life course factors that may intensify risk of intergenerational violence.

## Author note

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Child abuse and intimate partner violence (IPV) are prevalent in the Southeast Asia region and contribute to the region's burden of disease and disability (Fang et al., 2015; Fry, McCoy, & Swales, 2012; Fulu et al., 2017). Two-thirds of children across Asia experience some form of child abuse in the past year (Hillis et al., 2016). In Southeast Asia, one in three ever-partnered women report physical and/or sexual IPV during their lifetime (Devries et al., 2013). While research and interventions on child

abuse and IPV tend to operate in silos, there are calls to increase research at the intersections between these two forms of violence (Guedes et al., 2016; Mercy et al., 2013). There is some regional evidence of co-occurrence of child abuse and IPV, as well as intergenerational cycles of child abuse and IPV victimization and perpetration, although research is still lacking in many Asian countries (Fry et al., 2012; Fulu et al., 2017; United Nations Children's Fund, 2012). However, evidence on whether co-occurrence and intergenerational cycles of violence vary based on pivotal child and maternal events and life stages is limited. Yet, children experience age-dependent risks of child abuse, and a woman's transition through key life events, such as marriage and childbirth, are central to her and her children's health and wellbeing, including risk of IPV (Administration for Children and Families, 2021; Miedema, Shwe, & Kyaw, 2016; Yount, Crandall, & Cheong, 2018; Yount et al., 2016). In low-income settings,1 research on developmental stage specific intersections between child abuse and IPV can help to guide practitioners

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<sup>&</sup>lt;sup>1</sup> Based on the 2020 World Bank classification system, low-income economies are those with a GNI per capita of \$1045 or less (https://datahelpdesk.worldbank.org/).

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and policymakers toward priority opportunities for violence prevention. In Burma (Myanmar),<sup>2</sup> a lower-middle income country situated between South and Southeast Asia, research on the intersections between child abuse and IPV is nascent, even while public health and development initiatives are expanding after decades of international isolation (Décobert, 2020).

#### 1. Background

Burma (Myanmar) is a Southeast Asian country bordering Thailand, Lao, Bangladesh, China, and India. The 2014 census, the country's first national census in 30 years, estimated a population of nearly 54 million, with over half of the population younger than 30 (Republic of the Union of Myanmar, 2015). After sixty years of authoritarian military rule, democratic elections in 2010 transitioned power to a quasi-civilian government. The transfer of power heralded an economic, political and social opening of this long-isolated country (U.S. Department of State, 2021b). In 2019, Burma (Myanmar) was one of the fastest growing economies in the region (International Development Association - World Bank Group, 2021). Still, repression and discrimination continue, particularly against minority ethnic communities, and civil conflict between the military and ethnic armed groups has contributed to internal displacement and documented civilian abuses (U.S. Department of State, 2021a). The United Nations Development Programme 2020 Gender Equality Index ranked Burma (Myanmar) 118 out of 189 countries (United Nations Development Programme, 2020). The current 10-year National Strategic Plan for Advancement of Women (NSPAW) 2013-2022 is the first national strategy to advance the rights and freedoms of women in Burma (Myanmar), in large part due to mobilization of the nascent women's rights movement (Mra & Livingstone, 2020). One of NSPAW priority areas is the prevention of violence against women (Myanmar National Committee for Women's Affairs, 2013). However, to date, there is no law prohibiting IPV. The Protection and Prevention of Violence against Women (PoVAW) legislation was first drafted and proposed in 2013. As of this writing, the law is awaiting debate in parliament.

Social norms that justify perpetration of violence against women and children are widespread in Burma (Myanmar) (Falb et al., 2020; Kyaw, 2021; Miedema et al., 2016). These norms derive from local gender ideologies that accord men physical, spiritual and material superiority over women and children in society (Falb et al., 2020; Larsen, Aye, & Bjertness, 2021; Miedema et al., 2016). These gender ideologies, referred to as *hpon*, evoke the spiritual protection accorded to men that confers men's higher status in Burmese (Myanmar) society (Ikeya, 2011; Nwe, 2009). Hpon is used to justify and reinforce gender stereotypes of men's dominance and leadership, and women's inferiority and caregiving roles in the family (Nwe, 2009). Under these conditions, women's ability to adequately care for children and maintain the household confer social standing to the family (Falb et al., 2020). Violence may be used as a corrective tool for men to discipline women (and children) who fail to conform to social expectations around these roles. Indeed, four out of ten Burmese (Myanmar) women agree that men's use of violence against women is justified in cases when women neglect their children (43%) and 24% justify IPV if women leave the home without telling their husbands (Larsen et al., 2021). These social norms influence women's risk of IPV. In Burma (Myanmar), women who espouse attitudes in favor of men's use of IPV are 1.4 times more likely to experience lifetime physical IPV (Tun & Ostergren, 2020). Further, norms that justify men's use of violence against their partners are related to the

co-occurrence of men's perpetration of child abuse and IPV (Namy et al., 2017).

## 1.1. IPV and child abuse in Burma (Myanmar)

Although survey research is limited, IPV appears to be prevalent across Burma (Myanmar). A nationally-representative population-based survey finds that 20% of ever-partnered women aged 15–49 years have experienced lifetime physical, sexual or psychological IPV (Larsen et al., 2021). Other survey data document prevalence of any IPV as high as 69%, with one in four women reporting physical partner abuse (Kyu & Kanai, 2005). One in three women report controlling behaviors by their partners, including psychologically aggressive and coercive behaviors (Tun & Ostergren, 2020). Young age is a risk factor for IPV, with ever-married women aged 15–19 reporting the highest rates of abusive behaviors by their spouses compared to women in other age groups (Ministry of Health and Sports &ICF, 2017; Pengpid & Peltzer, 2017).

To date there are no comprehensive prevalence estimates of child abuse in Burma (Myanmar), although child protection agencies point toward child labor, sex trafficking and ethnic conflict as indicative of the state of child safety and security in the country (United Nations Children's Fund, 2021). While an updated Child Rights Law was passed in 2019 criminalizing all forms of violence against children, in practice, certain types of child abuse remain common (Republic of the Union of Myanmar, 2019). According to nationally-representative adult reports of child abuse and neglect in the household, three-fourths of children aged 2–14 years have experienced some form of psychological aggression or physical punishment by a caregiver (Ministry of Health and Sports &ICF, 2017).

## 1.2. Developmental stages and intergenerational cycles of violence

Maternal and child developmental stages or transitions may influence intergenerational and co-occurring cycles of family violence. Women's transition into marriage and age at first birth are significant life course events that reflect women's human and social resources. In South and Southeast Asia, age of marriage consistently predicts age of childbearing, net of demographic factors such as birth cohort or sociodemographic factors (MacQuarrie, 2016). Women who marry and give birth early (e.g. before age 18 years) may experience limited agency, status and access to resources in the household (Miedema et al., 2016; Raj, Jackson, & Dunham, 2018; Yount et al., 2018). Women's marriage before age 18 is associated with women's increased risk of IPV (Yount et al., 2016). In Burma (Myanmar), qualitative research finds that IPV survivors describe early marriage (and subsequently early childbearing) as a strategy to improve economic and social insecurities during adolescence, such as parental separation or household economic strain. However, the nature of these early marital transitions inhibit women's ability to mitigate risk of IPV during the course of marriage (Miedema et al., 2016).

Child developmental stages may also influence the associations between intergenerational cycles of IPV and child abuse. Early childhood (e.g. birth to age 5 years) is a high risk period for child abuse (Administration for Children and Families, 2021). In Burma (Myanmar), a nationally representative sample of caregivers reported that 80% of children aged 2–4 experienced any child physical or emotional abuse, compared to 72% of children aged 10–14 (Ministry of Health and Sports &ICF, 2017). While young children are at greater risk of abuse, the determinants of abuse may change as they age. Worldwide, children face increased gendered restrictions on behavior as they transition into adolescence (Blum et al., 2017). These restrictions may be enforced by parents or caregivers via harsh discipline tactics or abusive behaviors.

In this study, we ask the following questions: (1) What are the pathways between intergenerational cycles of IPV, attitudes toward IPV and child discipline in Burma (Myanmar), and (2) How do pivotal maternal and child developmental stages or events influence these

<sup>&</sup>lt;sup>2</sup> Formerly Burma, the country was renamed Myanmar by the ruling military government in 1989, a year after the 1988 violent military crackdown on the country's student-led pro-democracy movement. The U.S State Department continues to refer to the country as Burma or Burma (Myanmar) in official documents (https://www.state.gov/u-s-relations-with-burma/).

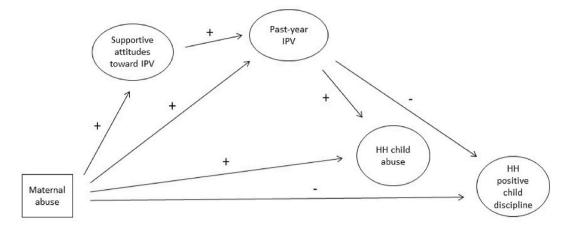


Fig. 1. Hypothesized pathways of the associations between intergenerational intimate partner violence and child discipline.

pathways? Fig. 1 illustrates our conceptual model. We hypothesize that women's exposure to IPV between her parents (i.e., physical IPV against her mother) will be significantly and positively associated with attitudes justifying men's use of IPV and exposure to past-year IPV during adulthood. We anticipate that women's exposure to IPV between her parents will be positively associated with household child abuse and negatively associated with household positive child discipline practices, and that these pathways will be mediated through women's exposure to past-year IPV. We hypothesize that pathways will be stronger and more significant for women who give birth younger than the average age of first birth, and for younger children.

## 2. Methods

## 2.1. Data

For this study, we used data from the 2015-2016 Myanmar Demographic and Health Survey (DHS) (Ministry of Health and Sports & ICF, 2017). The Myanmar DHS was implemented by the Ministry of Health and Sports (MoHS) with technical support from ICF International and the DHS program. The MDHS used a two-stage sample design, stratified by regions/state (Ministry of Health and Sports &ICF, 2017). The sampling frame comprised of 76,990 primary sampling units which included 2014 census enumeration areas or non-enumerated wards or village tracts. A random sample of PSUs (clusters) were selected and then households were sampled from each cluster. The Myanmar DHS women's questionnaire was administered among a probability based, nationally-representative sample of women and included a domestic violence module, derived from the World Health Organization, which was administered among a random sub-sample of women (Garcia--Moreno et al., 2006). The household questionnaire was completed by the head of household or another eligible adult. Child discipline measures were included in the household questionnaire. For each household, a single child aged 2-17 years was randomly selected from the household list as the target child for all child discipline questions. If there was no child younger than 18 living in the household, the child discipline questions were omitted. In each household, women aged 15-49 years were eligible for the women's survey. The selected woman was not necessarily the mother of the target child selected for the household child discipline measures as the household survey items were administered to a mother, father, caregiver or guardian. Further, in some cases, the selected women might have been another woman living in the household, such as a daughter, cousin, aunt or other family member, or permanent household member. A total of 12,885 women completed the women's questionnaire, with a response rate of 96%. A total of 3425 ever-partnered women completed the domestic violence module. Our final analytic sample included 2751 ever-partnered women who lived with a child between the ages of 2-17 years.

#### 3. Measures

#### 3.1. Measured variables

We used continuous measures of women's age, target child's age, and women's age at first birth. For stratified analysis based on women's age at first birth, we generated a binary variable of women whose age at first birth was below or above the mean (23 years) of the sample population. For stratified analysis on target child's age, a binary variable captured younger (aged 2–8 years) and older (aged 9–14 years) children. DHS wealth quintiles captured household wealth status (Rutstein, 2020). Measurement of DHS wealth quintiles included questions from the household survey pertaining to sources of drinking water, toilet facilities, house materials (floor, roof, walls), household services and possessions such as electricity, TV, radio, watches, etc., fuel sources, agricultural land, and livestock ownership. A single binary item assessed whether women's mothers had experienced physical IPV (referred to from here as maternal abuse).

#### 3.2. Latent factors and indicator variables

Indicator variables for latent factors on attitudes toward IPV and past-year exposure to IPV derived from the women's questionnaire. Seven items captured women's attitudes on IPV by asking women whether a husband was justified in hitting or beating his wife under certain conditions (e.g. "she neglects the children"). Women's exposure to IPV in the past 12 months included measures of psychological abuse (3 items, for example "Did your (last) husband ever say or do something to humiliate you in front of others"); physical violence (7 items, for example "Did your (last) husband ever kick you, drag you, or beat you up"); and sexual violence (3 items, for example "Did your (last) husband ever physically force you to have sexual intercourse with him when you did not want to?").

Eleven items in the household survey reflected the latent factor for past-month child discipline practices when children misbehaved. Positive child discipline included "explained to the child why some behavior was wrong" or "gave him/her something else to do." Child abuse included physical and emotional abuse, such as spanking, hitting or slapping him/her on the bottom with bare hands", or calling him/her dumb or lazy.

## 3.3. Analytic strategy

We calculated weighted means/proportions and standard deviations for all measures. We used Spearman's rho correlations to assess bivariate

#### Table 1

Weighted descriptive results of intergenerational IPV, IPV attitudes and child discipline among ever-partnered women (n = 2751), stratified by woman and child's age, Myanmar DHS 2015–2016. \_

	All women		Target c	Target children aged 2-8 Target children aged 9			ed 9-14	Women who gave birth before age 23 <sup>a</sup>				Women who gave birth at or after age 22 <sup>a</sup>			
	n = 2752	1		n = 156	9		n = 1182		n = 1320			n = 1333			
	Mean/ %	95% CI		Mean/ %	95% CI		Mean/ %	95% CI		Mean/ %	95% CI		Mean/ %	95% CI	
Demographic Characteristics															
Woman's age	34.64	34.32	34.97	32.51	32.08	32.94	37.45	37.02	37.89	33.2	32.71	33.69	36.65	36.25	37.0
Woman's age at first birth	22.52	22.32	22.73	22.83	22.56	23.10	22.11	21.79	22.43	18.84	18.73	18.96	26.04	25.80	26.2
Child age	7.74	7.58	7.91	4.91	4.80	5.02	11.47	11.36	11.59	7.93	7.70	8.17	7.46	7.22	7.70
Wealth index															
Poorest	25.92	24.20	27.71	28.09	25.81	30.50	23.06	20.55	25.78	31.85	29.25	34.56	20.25	18.00	22.7
Poorer	22.07	20.31	23.94	22.11	19.80	24.60	22.02	19.37	24.92	26.42	23.69	29.36	18.35	16.04	20.9
Middle	19.06	17.42	20.82	18.45	16.27	20.84	19.87	17.44	22.55	16.49	14.24	19.03	21.38	18.99	23.9
Richer	17.19	15.60	18.90	16.78	14.70	19.10	17.72	15.34	20.39	14.88	12.76	17.29	19.12	16.75	21.7
Richest	15.76	14.39	17.23	14.57	12.79	16.55	17.33	15.24	19.63	10.35	8.66	12.33	20.90	18.80	23.1
Structural model variables Maternal abuse Attitudes on IPV	18.49	16.89	20.20	19.70	17.53	22.06	16.90	14.60	19.49	18.62	16.36	21.11	17.95	15.68	20.4
Wife beating is justified if: she goes out without telling	24.33	22.52	26.23	23.93	21.58	26.44	24.85	22.08	27.84	23.86	21.32	26.60	24.92	22.33	27.6
him													-		
she neglects the children	43.45	41.37	45.56	43.57	40.80	46.38	43.30	40.01	46.64	43.87	40.85	46.93	42.72	39.71	45.7
she argues with him	10.65	9.38	12.07	10.53	8.91	12.40	10.81	8.88	13.10	11.70	9.80	13.92	9.61	7.91	11.6
she refuses to have sex with	11.55	10.20	13.06	12.36	10.56	14.41	10.50	8.59	12.77	13.17	11.15	15.50	9.84	8.10	11.9
him														-	
she burns the food she refuses to use	13.04 10.62	11.65 9.34	14.57 12.06	12.45 10.43	10.64 8.75	14.52 12.40	13.82 10.87	11.69 8.98	16.25 13.11	14.27 12.54	12.19 10.56	16.63 14.83	11.98 8.56	10.07 6.93	14.: 10.:
contraception he is involved in too many	15.20	13.67	16.85	14.35	12.42	16.51	16.31	13.97	18.95	16.23	14.06	18.68	14.03	11.89	16.4
social activities Past-year IPV in the past twelve months:															
something thrown by husband/partner	6.49	5.52	7.62	7.60	6.23	9.25	5.02	3.77	6.66	7.38	5.92	9.17	5.31	4.07	6.9
slapped by husband/partner	7.06	6.06	8.22	7.91	6.50	9.58	5.95	4.61	7.65	9.19	7.54	11.15	5.04	3.87	6.5
something harmful by husband/partner	4.11	3.33	5.06	4.28	3.24	5.63	3.88	2.81	5.34	5.41	4.14	7.04	2.80	1.94	4.03
kicked or dragged by husband/partner	2.57	1.98	3.33	3.01	2.16	4.17	1.98	1.28	3.05	3.43	2.47	4.75	1.56	0.97	2.50
strangled or burnt by husband/partner	0.73	0.43	1.24	0.98	0.53	1.78	0.41	0.14	1.20	0.68	0.30	1.50	0.80	0.39	1.67
threatened with knife/gun or other weapon by husband/partner	1.57	1.11	2.20	1.75	1.13	2.71	1.33	0.77	2.26	1.58	0.96	2.60	1.61	0.99	2.60
arm twisted or hair pulled by husband/partner	2.80	2.19	3.59	3.17	2.29	4.38	2.31	1.57	3.39	3.89	2.84	5.30	1.64	1.06	2.53
numiliated by husband/ partner	4.38	3.58	5.36	5.02	3.88	6.46	3.54	2.54	4.92	4.71	3.58	6.19	3.60	2.58	5.00
hreatened with harm by husband/partner	2.85	2.20	3.69	3.19	2.29	4.43	2.40	1.58	3.64	3.79	2.74	5.23	1.83	1.12	2.97
nsulted or made to feel bad by husband/partner	8.69	7.55	9.99	8.28	6.85	9.98	9.23	7.50	11.32	9.38	7.71	11.38	7.90	6.40	9.72
physically forced into unwanted sex by husband/partner	2.07	1.56	2.75	2.40	1.67	3.44	1.64	1.05	2.55	2.30	1.58	3.35	1.67	1.06	2.62
orced into other unwanted sexual acts by husband/ partner <sup>b</sup>	0.30	0.15	0.62	0.25	0.08	0.77	0.37	0.14	0.93	0.39	0.16	0.95	0.24	0.07	0.8
hysically forced to perform sexual acts respondent didn't want to ositive child discipline	0.62	0.36	1.06	0.77	0.38	1.54	0.42	0.19	0.94	0.68	0.35	1.32	0.30	0.09	1.0
in the past month, a caregiver:	01 50	10.07	00 =0	00.10	00.01	04.00	10.55	18.05	00.10	oo	10.00	05.00	01	10.07	
ook away child's privileges explained to child why some	21.78 73.43	19.97 71.46	23.70 75.31	23.42 72.98	20.94 70.32	26.09 75.49	19.60 74.02	17.05 70.96	22.43 76.87	22.55 70.26	19.93 67.26	25.39 73.10	21.49 76.63	18.96 73.87	24.2 79.1
behavior was wrong gave him/her something else to do Child abuse	52.83	50.63	55.02	53.56	50.57	56.53	51.86	48.59	55.11	49.43	46.21	52.66	56.98	53.85	60.0
Child abuse in the past month, a caregiver: Shook him/her	14.50	13.04	16.10	17.50	15.35	19.87	10.53	8.69	12.71	16.07	13.87	18.54	13.35	11.35	15.6

## Table 1 (continued)

	All women $n = 2751$		Target c	hildren ag	ed 2-8	Target children aged 9-14			Women who gave birth before age $23^{a}$ n = 1320			Women who gave birth at or after age 22 <sup>a</sup> n = 1333			
			n = 1569	9		n = 1182									
	Mean/ %	95% CI		Mean/ %	95% CI		Mean/ %	95% CI		Mean/ %	95% CI		Mean/ %	95% CI	
shouted, yelled or screamed at him/her	73.67	71.71	75.54	75.84	73.26	78.23	70.80	67.70	73.72	73.70	70.83	76.37	73.96	71.13	76.60
spanked, hit or slapped him/her on the bottom with bare hands	31.15	29.08	33.31	38.32	35.44	41.29	21.66	18.93	24.67	32.65	29.65	35.81	30.28	27.41	33.31
hit him/her on the bottom or elsewhere on the body with something like a belt, hairbrush, stick or other object	17.18	15.53	18.95	19.88	17.62	22.35	13.60	11.40	16.15	18.85	16.48	21.47	15.82	13.60	18.32
called him/her dumb, lazy or a similar name	21.64	19.90	23.51	19.97	17.75	22.39	23.86	21.13	26.82	23.35	20.77	26.16	19.75	17.37	22.36
hit or slapped him/her on the face, head or ears	10.73	9.45	12.19	12.62	10.76	14.74	8.25	6.60	10.27	12.21	10.21	14.55	9.31	7.63	11.31
hit or slapped him/her on the hand, arm or leg	19.79	18.12	21.58	22.81	20.44	25.37	15.80	13.51	18.39	20.44	17.98	23.14	19.64	17.24	22.28
beat her/him up with an implement (hit over and over as hard as one could)	3.40	2.70	4.26	3.49	2.56	4.75	3.25	2.30	4.60	3.89	2.82	5.35	3.04	2.16	4.26

Note.

<sup>a</sup> Among women who reported a live birth (n = 2653).

<sup>b</sup> Item dropped in CFA and not used in final structural models. Abbreviations: Intimate partner violence = IPV; Demographic and Health Survey = DHS.

relationships between items. We used StataSE 16 for descriptive analyses and then transferred the data to Mplus 8 for subsequent analyses (Muthén & Muthén, 1998-2017).

We used exploratory (EFA) and confirmatory factor analysis (CFA) to analyze the factor structure of latent variables for child discipline, attitudes on IPV and past-year exposure to IPV. We performed EFA on a random one-third split sample, with variance-adjusted weighted least squares (WLSMV) estimation, which is appropriate for dichotomous data, and GEOMIN (oblique) rotation (Muthén & Muthén, 1998-2017). We ran sequential models with increasing numbers of factors for each latent variable to evaluate the fit of alternative solutions (Bandalos & Finney, 2010). We selected a priori criteria to drop items with factor loadings less than |0.4| or items that cross-loaded on more than one factor greater than [0.4]. Model fit was assessed based on acceptable threshold levels for fit indices: Root Mean Square Error of Approximation (RMSEA) < 0.07, Comparative Fit Index (CFI) > 0.95 and Tucker Lewis Index (TLI) > 0.95 (Hooper et al., 2008). We ran CFA on a two-third split sample for the best-fitting factor structure for each of the latent variables, using the maximum sample population. Fit indices were assessed as described above. No model modifications were made. EFA and CFA accounted for the complex survey design of the Myanmar DHS. A final measurement model of all latent and measured variables was estimated with the final analytic sample (n = 2751), and model fit was assessed based on previously described fit indices (RMSEA, CFI, TLI) (Hooper et al., 2008).

We used structural equation models (SEM) with latent constructs to estimate pathways between exposure to maternal abuse and household child discipline practices, directly and indirectly through attitudes on IPV and past-year IPV exposure. We used WLSMV estimation to calculate standardized path coefficients. We ran SEM with the full sample of ever-partnered women living with children between 2 and 17 years (n =2751), as well as SEM stratified by (1) women's age at first birth (among women who had ever delivered a live birth, n = 2653) and (2) the target child's age (n = 2751). Adequacy of model fit was based on previously described fit indices (RMSEA, CFI, TLI) (Hooper et al., 2008). Models were adjusted for household wealth quintiles, which have been shown to be associated with both child abuse and women's experiences of physical and/or sexual IPV in Burma (Myanmar) (Larsen et al., 2021; Ministry of Health and Sports &ICF, 2017).

## 4. Results

#### 4.1. Sample characteristics

Women's sample mean age was 35 years (Table 1). The mean age for the target child selected for the child discipline questions was 8 years. The mean age of women at first birth was 23 years. Almost half the sample were in the poorest or second poorest wealth quantile (48%) with only 16% of women in the richest wealth quantile.

Eighteen percent of the sample reported maternal abuse. Women's attitudes justifying IPV under certain conditions ranged from 10% (if she refuses contraception) to 43% (if she neglects the children). Women's exposure to forms of sexual IPV in the past twelve months ranged from 0.3% to 2% (forced into other unwanted sexual acts and physically forced into unwanted sex, respectively). Women reported higher rates of exposure to psychological and physical IPV items. For example, 9% of women reported that they had been insulted or made to feel bad and 7% reported being slapped by their husband/partner.

Household reports of positive child discipline measures ranged from 22% (took away child's privileges) to 73% (explained to the child why some behavior was wrong). Shouting, yelling or screaming at the child was reported by 74% of households.

## 4.2. Factor analysis

EFA identified unidimensional measures of attitudes toward IPV (Latent Variable [LV] 1) and exposure to past year psychological, physical, and sexual IPV (LV 2) as the best-fitting models (Supplementary Tables 1 and 2). We identified a bi-dimensional latent measure of child discipline with one factor reflecting child abuse (LV 3) and the second factor capturing positive discipline measures (LV 4) (Supplementary Table 3). Factor structures of all latent constructs were confirmed through CFA, except a single item of sexual IPV (forced into other unwanted sexual acts by husband/partner) that had a negative residual variance in CFA and was dropped to avoid a not positive definite residual covariance matrix (theta). The full measurement model with the final analytic sample (Table 2) showed good fit (RMSEA = 0.02; CFI = 0.976; TLI = 0.974). Most items loaded strongly onto all latent constructs, and all final items loaded >0.4 (item loading ranges: LV1:

#### Table 2

Measurement model: Standardized item loadings on latent variables of women's attitudes on IPV, exposure to past-year IPV and child discipline practices (n = 2751).

Item	ble 1: Attitudes on IPV Husband is justified in hitting or beating his	Factor	S.E.
item	wife if:	loading	5.Ц.
V744A	wife goes out without telling husband	0.815	0.018
V744B	wife neglects children	0.815	0.019
V744C	argues with husband	0.770	0.023
V744D	refuses to have sex with husband	0.801	0.020
V744E	burns the food	0.755	0.020
S826F	refuses to use contraception	0.807	0.023
S826G	is involved in too much social activity	0.645	0.024
	able 2: Past-year IPV (psychological, physical		
Item	In the past twelve months:	Factor loading	S.E.
D105A_12	pushed, shook or had something thrown by	0.885	0.015
D100/1_12	husband/partner	0.000	0.010
D105B_12	slapped by husband/partner	0.939	0.010
D105C_12	punched with fist or hit by something harmful	0.953	0.011
51000_12	by husband/partner	01900	01011
D105D_12	kicked or dragged by husband/partner	0.913	0.018
D105E_12	strangled or burnt by husband/partner	0.849	0.043
D105F_12	threatened with knife/gun or other weapon by husband/partner	0.853	0.032
D105J_12	arm twisted or hair pulled by husband/ partner	0.928	0.015
D103A_12	humiliated by husband/partner	0.838	0.023
D103B_12	threatened with harm by husband/partner	0.809	0.028
D103C_12	insulted or made to feel bad by husband/ partner	0.838	0.019
D105H_12	physically forced into unwanted sex by husband/partner	0.768	0.033
D105K_12	physically forced to perform sexual acts respondent didn't want to	0.861	0.041
Latent Vari	able 3: Child abuse		
Item	In the past month, anyone in the household:	Factor	S.E.
		loading	
SH152	shook child	0.626	0.025
SH153	shouted at child	0.682	0.027
SH155	hit child on bottom with bare hand	0.788	0.019
SH156	hit child with object	0.811	0.018
SH157	called child dumb, lazy, etc.	0.599	0.024
SH158	hit child on face, head, or ears	0.703	0.025
SH159	hit child on hand, arm, leg	0.736	0.022
SH160	beat child with an implement	0.746	0.035
	able 4: Positive child discipline		
Item	In the past month, anyone in the household:	Factor loading	S.E.
SH150	took away privileges	0.660	0.036
SH151	explained why behavior was wrong	0.739	0.040
SH154	gave child something else to do	0.498	0.034

*Note.* Model fit indices: chi-square(df) = 898.887 (429); RMSEA = 0.020; CFI = 0.976; TLI = 0.974; Abbreviations: Intimate partner violence = IPV.

#### Table 3

Measurement model: Covariance matrix for latent variables of women's attitudes on IPV, exposure to past-year IPV and child discipline practices (n = 2751).

	LV 1	LV 2	LV 3	LV 4
Latent Variable 1: Attitudes on IPV	-	-	-	-
Latent Variable 2: Past-year IPV	0.107	-	-	-
Latent Variable 3: Child abuse	0.025	0.187	-	-
Latent Variable 4: Positive child discipline	-0.083	0.031	0.460	-

Note. Bolded estimates p < 0.05; Abbreviations: Intimate partner violence = IPV.

0.645–0.815; LV2: 0.768–0.953; LV3: 0.599–0.811; LV4: 0.498–0.739). Table 3 provides the covariance matrix for latent variables. Covariance was significant between the following pairings (Table 3): LV1 & LV2 (0.107); LV2 & LV3 (0.187); LV1 & LV4 (-0.083); and LV3 & LV4 (0.460). Not surprisingly, the largest covariance was between the two latent constructs of child discipline.

#### 4.3. SEM

For our primary model, adjusted for household wealth quantiles (Fig. 2 and Table 4), we found significant direct effects of maternal abuse on exposure to past-year IPV (0.168 [95% CI: 0.049, 0.287]) and child abuse by a caregiver in the household (0.134 [95% CI:0.030, 0.238]). As expected, we saw a direct effect of attitudes justifying IPV with women's past-year exposure to IPV (0.091 [95% CI: 0.031, 0.150]). We also found a direct effect of women's past-year exposure to IPV on household reports of child abuse (0.140 [95% CI: 0.066, 0.215]). Neither maternal abuse or past-year exposure to IPV was associated with household use of positive child discipline. We identified an indirect association of maternal abuse on child abuse through women's exposure to past-year IPV (0.023 [95% CI: 0.007, 0.040]). No other indirect effects were significant. We observed significant total effects for the pathways from maternal abuse to past-year IPV via attitudes on IPV (0.169 [95% CI: 0.049, 0.290]), and from maternal abuse to child abuse via past-year IPV (0.158 [95% CI: 0.046, 0.270]).

#### 4.4. SEM by child age

In SEM stratified by age of target child, effects were significant only for older children (Fig. 3, Supplementary Table 4). We identified direct pathways from maternal abuse to past-year IPV (0.112 [95% CI: 0.021, 0.203]) and child abuse (0.095 [95% CI: 0.017, 0.173]). We found a direct effect from women's past-year exposure of IPV to child abuse (0.188 [95% CI: 0.096, 0.279]), with a significant indirect effect from maternal abuse through women's past-year exposure to IPV (0.021 [95% CI:0.004, 0.038]). The total effect was significant at 0.116 (95% CI: 0.034, 0.198). As in the full SEM, we identified a direct effect of IPV attitudes on exposure to past-year IPV (0.110 [95% CI: 0.019, 0.201]) among target children aged 9–14.

## 4.5. SEM by women's age of first birth

SEM stratified by women's age of first birth showed differences in significant direct and indirect pathways between the two groups (Fig. 4, Supplementary Table 5). We found significant direct and indirect effects between maternal abuse, women's exposure to past-year IPV and child abuse among women whose first birth was younger than the sample mean. These direct and indirect effects were of similar magnitude to those identified in the full SEM and SEM stratified by child age. Among women whose age at first birth was older than the sample mean, we found only direct effects from IPV attitudes on exposure to past-year IPV (0.104 [95% CI:0.017, 0.192] and past-year IPV on child abuse (0.145 [95% CI:0.035, 0.256]). No indirect effects were found among women who gave birth later than the sample mean.

## 5. Discussion

To date, insufficient research effort at the intersection of violence against women and violence against children contributes to knowledge gaps around how to prevent and respond to these intersecting forms of violence (Gevers et al., 2021). Notably, the Global Shared Research Agenda on Violence against Women in Low- and Middle-income Countries, launched by the Sexual Violence Research Initiative in September 2021, lists expanding measurement of the intersections and pathways between violence against women and violence against children as a priority area for the field (SVRI & EQI, 2021).

This study provides evidence of intergenerational pathways and cooccurrence of women's exposure to IPV and household child discipline practices among women and children in Burma (Myanmar), stratified by development stage and life course events. We found that women's

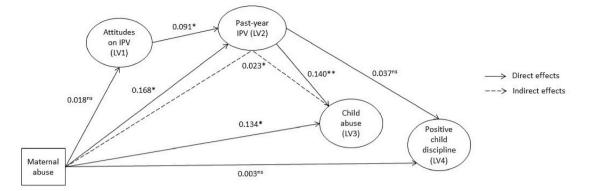


Fig. 2. Adjusted direct and indirect standardized path coefficients from maternal abuse to women's past-year intimate partner violence exposure, child abuse and positive child discipline by a caregiver in the household.

Table 4

Standardized, adjusted path coefficients for direct, indirect and total effects of maternal abuse through attitudes on IPV and past-year IPV on child abuse and positive child discipline.

Path and dependent outcomes	Latent (L)/ Manifest (M) Predictors	Direct Effects	Indirect Effects	Total Effects
Path 1: IPV	Maternal	0.018		
attitudes	abuse (M)	(-0.039,		
D (1 0 D )	<b>N</b> ( 1	0.074)		
Path 2: Past-year	Maternal	0.168		
IPV	abuse (M)	(0.049, 0.287)		
Path 3: Past-year	IPV Attitudes	0.287)		
IPV	(L)	(0.031,		
	(1)	0.150)		
Path 4: Past-year	IPV Attitudes		0.002	0.169 (0.049,
IPV through	(L)		(-0.004,	0.290)
IPV attitudes	Maternal		0.007)	
	abuse (M)			
Path 5: Child	Maternal	0.134		
abuse	abuse (M)	(0.030,		
	_	0.238)		
Path 6: Child	Past-year	0.140		
abuse	IPV (L)	(0.066, 0.215)		
Path 7: Child	Past-year	0.215)	0.023	0.158 (0.046,
abuse through	IPV (L)		(0.007,	0.270)
past-year IPV	Maternal		0.040)	
	abuse (M)			
Path 8: Positive	Maternal	0.003		
child	abuse (M)	(-0.052,		
discipline		0.058)		
Path 9: Positive	Past-year	0.037		
child	IPV (L)	(-0.042,		
discipline Path 10: Positive	Destaura	0.117)	0.000	0.000
child	Past-year IPV (L)		0.006 (-0.008,	0.009 (-0.045,0.064)
discipline	Maternal		(-0.008, 0.020)	(-0.045,0.064)
through past-	abuse (M)		0.020)	
year IPV	abuse (IVI)			

*Note.* Abbreviations: Intimate partner violence = IPV. Estimated pathways adjusted for wealth quintile.

mothers' exposure to physical IPV (maternal abuse) was directly associated with both women's past-year exposure to physical and/or sexual IPV and children's exposure to abuse by a caregiver within the household. Further, the relationship between maternal abuse and current household child abuse perpetration was partially mediated through women's past-year exposure to IPV. Consistent with studies in other Southeast Asian countries, our results demonstrate intergenerational cycles and co-occurrence of IPV and child abuse within households in Burma (Myanmar) (Fry et al., 2012; Fulu et al., 2017).

From developmental stage and life course perspectives, we observed that direct and indirect pathways between maternal abuse, exposure to physical and/sexual IPV and child abuse were stronger for women who experienced early childbearing, and for women who had older children living in their household (aged 9-14 years). Adversity within the natal family (such as growing up experiencing their father's abuse of their mother) may invoke women to leave home via marital unions at younger ages, as a strategy to attain security and safety, even after accounting for household wealth (Raj et al., 2018). This transition may put them at risk of entering violent relationships, or inhibit their agency and autonomy once married (Miedema et al., 2016). The direct and indirect effects of maternal abuse on past-year IPV and household child abuse were not significant among women who gave birth later in young adulthood. These non-significant effects may be due to women's pre-marital human and social resources (e.g., greater schooling attainment), which in turn may interrupt intergenerational pathways of adversity, enhance women's agency and accord women greater protection from violence in the home (Schuster et al., 2019; Yount et al., 2016). Further, pathways between maternal abuse, past-year IPV and household child abuse were attenuated as women aged. Structural models stratified by women's age at time of survey show similar results as those models stratified by age at first birth (results available upon request), suggesting that age-related factors - such as greater agency or status accorded to older women in Burma (Myanmar) - may influence patterns of intergenerational and co-occurring violence in the home. Finally, pathways between maternal abuse, past-year IPV and household child abuse were significant only for older children. These results suggest that individual level factors, such as maternal abuse and past-year IPV, may be more relevant to experiences of household child abuse among older children compared to younger children. Furthermore, in Burma (Myanmar), child abuse in pre- and early adolescence, may reflect increased salience of normative gendered constraints for boys and girls (Blum et al., 2017), and children may experience harsh parenting practices to conform to these gendered expectations. Individual-level exposure to interpersonal violence may have a greater influence on abuse during these transitional adolescent stages, compared to earlier stages of child development. Finally, older children who witness IPV between household members also may be more likely to intervene than younger children, and in turn be more likely to experience backlash violence as a result of their intervention.

Our results underscore the importance of integrating efforts to prevent violence against women and children in Burma (Myanmar). In this setting, as elsewhere, programs, policies, and legislation to prevent violence against women and violence against children operate largely independent of one another (Guedes et al., 2016; Mercy et al., 2013). Yet, interventions designed to prevent multiple forms of violence can have cross-cutting impact. Interventions targeting shared risk factors for both child abuse and IPV, as well as interventions geared to interrupt cycles of violence, may have significant effect in reducing the prevalence

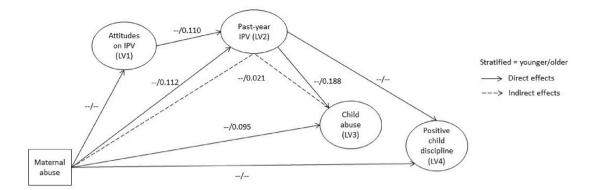
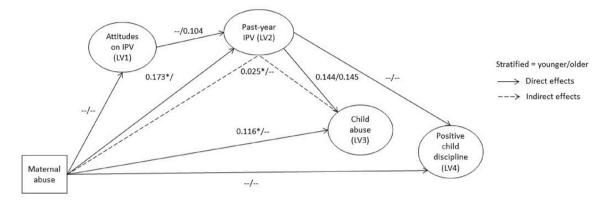


Fig. 3. Adjusted direct and indirect standardized path coefficients from maternal abuse to women's past-year intimate partner violence exposure and child abuse and positive child discipline by a caregiver in the household, stratified by child age categories 2-8 (n = 1569) and 9-14 (n = 1182).



**Fig. 4.** Adjusted direct and indirect standardized path coefficients from maternal abuse to women's past-year intimate partner violence exposure and child abuse and positive child discipline by a caregiver in the household, stratified by women's age at first birth prior to (n = 1320) and at/after (n = 1333) sample mean age at first birth.

of violence in this context. For example, effective interventions to prevent child abuse, such as early childhood home visitations, parenting skill and family relationship programs, and school enrichment and family engagement interventions, may also interrupt developmental pathways that put women and men at risk of IPV victimization and perpetration (Fortson et al., 2016; Niolon et al., 2017; World Health Organization, 2016). Adaptation of family-centered interventions that aim to prevent multiple forms of household violence may be effective given the intergenerational and intrahousehold nature of violence in this context (Shai et al., 2020). More research is needed on shared risk factors for child abuse and IPV in Burma (Myanmar). Notably, a global conversation is emerging on the similarities between the norms sustaining both violence against women and violence against children, such as norms that promote acceptance of violence or norms that limit intervention to interrupt family violence as it occurs (Kenny & Cislaghi, 2019). Evolving programmatic efforts to prevent IPV and violence against children through transformative social norms change, such as community mobilization efforts and family-centered interventions, may be adaptable to the Burma (Myanmar) context (Abramsky et al., 2014; Kyegombe et al., 2015; Shai et al., 2020).

This study has several limitations. The DHS was a cross-sectional study with retrospective reports of women's knowledge of her mother's exposure to physical IPV. Underreporting of violence is more common in large mixed-topic surveys, such as the DHS, compared to surveys focused explicitly on interpersonal violence (Ellsberg et al., 2001). In the DHS, child abuse was reported by a caregiver or adult, rather than self-report by children. This caregiver or adult was not necessarily the child's mother, and so we do not evaluate pathways to women's own reports of child abuse perpetration, but rather pathways

to abusive practices toward children by a caregiver within the household. Relatedly, we did not have adequate sample size to evaluate differences between women and men's perpetration of child abuse. This limitation has implications for interpretation of results. For example, in this analysis, we were unable to distinguish whether pathways reflect patterns of abuse cycles within women (i.e., exposure to maternal abuse, own experience of IPV and subsequence child abuse perpetration by the mother/female caregiver), or whether women's experiences of IPV and household child abuse were perpetrated by the same individual (e.g., a husband/father). Alternatively, multiple perpetrators of different forms of violence may have been present in the same household and these may vary by child's age. Therefore, the significant pathways may reflect underlying environmental conditions of risk, alongside individual-level factors. Future research should investigate gendered and household patterns of child abuse perpetration in Burma (Myanmar). Finally, we found relatively small effect sizes, which indicates the importance of other predictors of child abuse and neglect and positive discipline outside of what was captured in this study. Further research is needed on the multilevel determinants of child abuse and neglect in this context.

## 6. Epilogue

On February 1, 2021, the Burma (Myanmar) military, referred to as the *Tatmadaw*, overthrew the democratically elected government in a coup d'état, returning the country to full military rule after 11 years of democratic reform (U.S. Department of State, 2021b). Since then, reports have emerged of violence against peaceful pro-democracy protestors, as well as fatalities among bystanders, including children (Beech, 2021; Than, 2021). Burmese (Myanmar) scholars and activists predict worsening of violence against children and women during this ongoing period of military takeover (Kyaw, 2021; Onello & Radhakrishnan, 2021). At the time of writing, studies on violence against women and violence against children are postponed due to civil unrest. In September 2021, the Women's League of Burma reported on the effects of the military coup on the safety and wellbeing of women and girls. Adverse effects included risk of military-perpetrated sexual violence against women and girls, gendered impacts of the COVID-19 pandemic as handled by the military government, and limited safety or protections for women and girls who may experience abuse (WLB 2021). It remains to be seen what the long-term effects of the current political crisis will be on the prevalence of household violence against women and children. Future violence prevention efforts will need to consider the compounding effects of this backdrop of community violence and human rights abuses on the intersections of child abuse and IPV in Burma (Myanmar).

## Ethical statement

The authors declare no conflicts of interest.

#### Author statement

Stephanie Spaid Miedema: Conceptualization; Data curation; Methodology; Formal analysis; Roles/Writing – original draft. Aye Thiri Kyaw: Conceptualization; Data curation; Formal analysis; Writing – review & editing.

#### Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ssmph.2021.101010.

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