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The co-occurrence of intimate partner violence exposure with other victimizations: A nationally representative survey of Chilean adolescents

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ABSTRACT

Background: Previous studies have found a high co-occurrence between Intimate Partner Violence exposure (IPVe) and other forms of victimization, such as physical and sexual abuse, yet little is known about this issue from community samples in Latin America or—in particular—Chile.

Objective: To examine the prevalence, sociodemographic correlates and co-occurrence of IPVe with other youth victimizations in Chile.

Participants and setting: A secondary data analysis of the First Poly-victimization Survey in Children and Adolescents in Chile was conducted, which had 19,684 responses from 7th to 11th grade students attending publicly-funded, subsidized and independent schools in urban areas across the country.

Methods: The Juvenile Victimization Questionnaire was applied, and sociodemographic information was collected. Multiple logistic regression models were used.

Results: The prevalence of lifetime IPVe was 13.0 % (95 % CI [12.4–13.6]), and 3.6 % (95 % CI [3.4–4.0]) for past-year IPVe. The factors that were positively associated with lifetime IPVe were: female, over 14 years old, indigenous ethnicity, with a disability, mother with immigrant status, living with only one parent, and attending publicly-funded and subsidized schools. Most of these associations were maintained for past-year IPVe. All victimizations studied were positively associated with lifetime and past-year IPVe. Poly-victimization, maltreatment and witnessing sibling abuse showed the strongest associations (adjusted OR > 4.0). Co-occurrence was particularly high among IPVe youth, especially for community violence (86.2 %) and any maltreatment (81.5 %) in lifetime reports.

Conclusions: An integrated approach to assessing IPVe and other forms of victimizations would enrich research and clinical practice, especially early detection of IPVe occurrences.

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What is known

IPV constitutes a psychologically abusive context for children. Studies shows that there is a high co-occurrence between IPV exposure and physical and sexual abuse against children, accounting for the complex relationships between different experiences of violence in childhood.

What this study adds

This study adds support to the poly-victimization model, confirming that there is an important co-occurrence of IPV exposure with a broad range of other victimizations, both inside and outside the home, inflicted both by adults and by peers.

1. Introduction

Some researchers have argued that intimate partner violence (IPV) constitutes a psychologically abusive context for children, as it is an environment that terrorizes, corrupts, spurns, denies emotional responsiveness, isolates and/or neglects their mental health, medical and/or educational needs (Artz et al., 2014; Holden, 2003). Furthermore, some researchers argue that growing up in a context of IPV constitutes a form of child maltreatment (Artz et al., 2014; Øverlien, 2010; Save the Children, 2011), with consequences similar to the four widely-recognized forms of abuse: physical, sexual, emotional, and negligence (McTavish, MacGregor, Wathen, & MacMillan, 2016). Consequently, a growing number of researchers agree that this type of violence should be defined as a fifth form of child abuse (Artz et al., 2014; Gilbert et al., 2009; McTavish et al., 2016).

Several international studies, mostly from the United States and European countries, show that there is a high co-occurrence between IPV exposure (IPVe) and physical and sexual abuse against children (Bidarra, Lessard, & Dumont, 2016; Chiesa et al., 2018; Hamby, Finkelhor, Turner, & Ormrod, 2010; Holt, Buckley, & Whelan, 2008). In a review of different studies, Holt et al. (2008) report a co-occurrence of IPVe and child physical abuse between 45 % and 70 %, and a co-occurrence of IPVe and sexual abuse ranging anywhere from 4 % to 77 %. Recently, Bidarra et al. (2016) reviewed literature on the co-occurrence of IPVe and intrafamilial child sexual abuse, revealing a high heterogeneity in prevalence ranging from 12 % to 70 %.

The research field of developmental victimology and its poly-victimization model, established by David Finkelhor (2007), highlight the need for a comprehensive approach to child victimization and the complex relationships between various experiences of violence in childhood. In this framework, studies with a nationally representative sample from the United States evidence that IPVe is very closely associated with different forms of maltreatment and other family victimizations (Hamby et al., 2010; Hamby, Finkelhor, Turner, & Ormrod, 2011). Despite the international interest in child victimization and poly-victimization, little is known about this issue from community samples in Latin America, in general, or Chile, in particular (Pinto-Cortez, Pereda, & Álvarez-Lister, 2017). A review of child victimization studies in Chile shows that researchers focused mainly on a single form of victimization and did not adapt the measures used to the Chilean or Latin American context (Pinto-Cortez, Pereda, & Flores-Jara, 2017). A recent study on children's perspectives and responses to IPVe in Chile reveals that, often, children not only have to confront IPV at home but are also potentially subjected to other types of victimization (Miranda, León, & Crockett, 2020).

Currently, due to the pandemic produced by the coronavirus disease (COVID-19), an increase in IPV reports has been observed in multiple countries around the globe (Kofman & Garfin, 2020; UN Women, 2020; World Health Organization, 2020). In Chile, at the start of the pandemic, there was an 18 % decrease in complaints of domestic violence, but an increase of 200 % in femicides and 70 % in calls related to violence against women, compared to the same period of the previous year (Basoalto, 2020). Measures to contain the virus, such as quarantine and social distancing, as well as the impact on jobs, economic instability, fear of the virus, among others, could exacerbate the risk of violence toward women and children (Pereda & Díaz-Faes, 2020; UN Women, 2020). Therefore, a better understanding about IPVe prevalence and correlates may be important for prevention.

The present study used data from the First Poly-Victimization Survey on Children and Adolescents in Chile (FPVSCA), which was developed following the poly-victimization framework (Finkelhor, 2007). It included a nationally representative sample of students in Chile, which provides data on IPVe prevalence, as well as other forms of victimization that occur within and outside the family (Consejo nacional de la infancia, 2018). Following guidelines from prior work by Hamby et al. (2010), the aim of this study is to examine the prevalence, sociodemographic correlates and co-occurrence of IPVe with other youth victimizations in Chile.

2. Methods

2.1. Participants

The data of the FPVSCA in Chile (Consejo nacional de la infancia, 2018) was used. This survey was answered by 19,684 students from 7th to 11th grade, belonging to 699 publicly-funded, subsidized and independent (privately-funded through any non-governmental means) schools in urban areas across the country. The survey used stratified sampling in three stages (schools, classrooms and students). The sampling frame was the enrollment records of the Chilean Ministry of Education, and the sampling error was ± 0.7 % (see Consejo nacional de la infancia, 2018, for more details).

2.2. Measures

2.2.1. Juvenile victimization questionnaire (JVQ, Finkelhor, Hamby, Ormrod, & Turner, 2005)

It assesses lifetime and past-year experiences of 36 different types of victimizations, including IPVe, child abuse and peer victimizations. It has a 2-point response format (yes = 1, no = 0). The Chilean adaptation of the instrument was used (Consejo nacional de la infancia, 2018), which is based on the Spanish version of the instrument and includes electronic types of victimization, such as electronic harassment or electronic sexual solicitations (see Pereda, Gallardo-Pujol, & Guilera, 2018, for more details). In the Chilean adaptation of the JVQ, direct physical IPVe was assessed by asking whether the adolescent saw one parent being hit by another parent or his/her partner. For this study, a selection of 20 victimization variables were used: 1 of IPVe, 4 of maltreatment, 1 of witnessing sibling abuse, 3 of peer victimizations, 5 of sexual abuse, and 6 of other victimizations (like community violence and electronic victimizations). In Tables the description of the items.

Composite variables were constructed for maltreatment, victimizations by peers and sexual victimizations. Each variable was coded as 1 if an adolescent reported yes to one or more victimizations of each group, and 0 if not.

2.2.2. Poly-victimization

This variable indicates the accumulative experiences of victimizations. According to the Chilean adaptation of the JVQ, adolescents are considered poly-victimized if they reported 14 or more victimizations in lifetime reports, or 8 or more victimizations in past-year reports (Consejo nacional de la infancia, 2018). The variable was coded 1 if the participant met that criteria and 0 if not.

2.2.3. Sociodemographic variables

Data about sex, age, ethnicity, disability, parents' immigration status, type of school and whether the children live with the parent (s) or have siblings was obtained through the questionnaire given to the adolescents.

2.3. Procedure

The procedures of the FPVSCA (Consejo nacional de la infancia, 2018) were approved by the Ethics Committee in Social Sciences, Arts and Humanities of the Pontificia Universidad Católica de Chile. Firstly, the directors of the schools were contacted, to request their participation. Passive consent forms were sent to the parents of the 17-year-old or younger adolescents selected to participate in the study. Informed assent was obtained from 17 years old or younger participants and informed consent from 18 years old or older adolescents. The administration of the instrument was supervised by a member of the research team and was carried out between October and December of 2017. The database is completely anonymous and is available for research purposes on the website of the government's Center for Crime Studies and Analysis (Centro de Análisis del Delito, 2021).

2.4. Analysis

Percentages were used to describe the distribution of sociodemographic variables. The prevalence of lifetime and past-year IPVe were informed with their respective 95 % confidence intervals (95 % CI) for the total sample and stratified by sex and age. Corrected for survey design, the χ^2 test (Rao & Scott, 1984) was used to compare prevalence by sex and age. Multiple logistic regression models were used to evaluate the relation between sociodemographic variables and IPVe, as well as for the relation between other victimizations and IPVe. Lifetime and past-year IPVe were used as response variables. The models for sociodemographic variables and IPVe included all the variables, simultaneously. The models for other victimizations and IPVe were performed for each victimization and were adjusted by sex, age, and ethnicity. Corrections for the survey design and expansion factors were used throughout the analysis in order to adequately represent the adolescent population of Chile. The analyses were performed in Stata 13.

Table 1

Prevalence of lifetime and past-year IPVe by sex, age, and indigenous ethnicity.

	Lifetime IPVe			Past-year IPVe		
	%	95 % CI	p-value	%	95 % CI	p-value
Total	13.0	12.4-13.6	–	3.6	3.4-4.0	–
Sex			< 0.001			< 0.001
Female	16.5	15.6-17.4		4.8	4.4-5.4	
Male	9.5	8.8-10.2		2.4	2.1-2.8	
Age			< 0.001			0.041
12–13	10.7	9.6-11.8		3.2	2.7-3.8	
14–15	13.7	12.8-14.7		4.1	3.6-4.6	
16 or more	14.0	13.0-14.9		3.5	3.1-4.0	
Indigenous ethnicity			< 0.001			< 0.001
Yes	16.4	14.8-18.2		5.1	4.3-6.1	
No	12.6	11.9-13.2		3.5	3.2-3.8	

Note. IPVe = Intimate Partner Violence exposure. CI = Confidence intervals. Sex, age, and indigenous ethnicity differences were estimated using the corrected χ^2 test for survey analysis.

3. Results

Lifetime and past-year IPVe was reported by 19,013 and 19,018 adolescents, respectively. The prevalence of IPVe are reported in Table 1. The prevalence of lifetime IPVe was 13.0 % (95 % CI [12.4–13.6]), and for past-year IPVe was 3.6 % (95 % CI [3.4–4.0]). Among adolescents that reported lifetime IPVe, 28.2 % also reported IPVe during the last 12 months. Differences by sex, age and indigenous ethnicity were observed in lifetime and past-year IPVe prevalence. Females reported lifetime and past-year IPVe more frequently than males ($p < 0.001$), older adolescents reported lifetime IPVe ($p < 0.001$) more frequently, but adolescents 14–15 years old reported past-year IPVe ($p \leq 0.041$) more frequently, and adolescents with indigenous ethnicity had a higher prevalence of lifetime and past-year IPVe than non-indigenous adolescents ($p < 0.001$).

Table 2 shows the distribution of sociodemographic variables in the total population (% columns) who answered positive for lifetime IPVe and past-year IPVe. It also shows the association of sociodemographic variables with IPVe: being female, over 14 years of age, having indigenous ethnicity, a disability, an immigrant mother, living with one or no parent, and attending publicly-funded and subsidized schools were positively associated with lifetime IPVe (adjusted Odds Ratio [aOR] ≥ 1.30 , $p < 0.05$). All the associations maintained for past-year IPVe, except for being 16 or more years old and living only with the mother. Having siblings in the household was not associated with lifetime or past-year IPVe.

As shown in Table 3, all other victimizations showed positive associations with lifetime and past-year IPVe. Poly-victimization, any maltreatment, custodial interference and witnessing sibling physical abuse presented aOR > 4.0 . As for past-year reports, poly-victimization, any maltreatment, psychological abuse, physical abuse, custodial interference, witnessing sibling physical abuse, sexual abuse by a known adult and rape showed an aOR > 4.0 .

Table 4 shows the percentages of co-occurrence with other forms of violence. The columns % IPVe youth with other victimizations show the percentage of adolescents who reported IPVe and other victimizations, while % non-IPVe youth with other victimizations shows the percentage of adolescents who did not report IPVe but did report other victimizations. As exhibited, adolescents who have experienced lifetime and past-year IPVe also reported other forms of victimization more frequently. Percentages of co-occurrence were high among IPVe youth, especially for community violence (86.2 %), any maltreatment (81.5 %), and any peer victimization (79.8 %) in past-year reports; and for community violence (78.8 %), any maltreatment (73.5 %), and psychological abuse (64.3 %) for past-year reports.

In Table 4, the columns % of victimized youth who also witnessed IPV show the percentage of adolescents that reported IPVe out of all adolescents reporting any kind of victimization (in this case, the numerator is adolescents who reported IPVe, and the denominator is total number of adolescents who reported any type of victimization). Among adolescents who reported other victimizations, IPVe is a frequent phenomenon, especially in lifetime reports that range from 16 % (community violence) to 42 % (poly-victimization). In contrast, past-year reports range from 5.2 % (community violence) to 20 % (witnessed sibling physical abuse).

4. Discussion

The aim of our study was to examine the prevalence, sociodemographic correlates, and co-occurrence of IPVe and other youth victimizations in Chile. The results showed that IPVe is a common form of victimization among adolescents during their lifetimes (13 % lifetime IPVe), but is less frequent in past-year reports (3.6 % past-year IPVe). Lifetime IPVe was positively associated with female sex,

Table 2

Characteristics of the sample and adjusted odds ratios for the association of IPVe (lifetime and past-year) with socio-demographic variables.

Socio-demographic variables	Total	Lifetime IPVe			Past-year IPVe		
	%	%	aOR	95 % CI	%	aOR	95 % CI
Female (ref = male)	50.4	63.9	1.84	1.65-2.05	66.9	2.01	1.65-2.46
Age							
12–13	24.7	20.2	1		21.4	1	
14–15	39.9	42.0	1.32	1.14-1.53	44.6	1.28	1.02-1.61
16 or more	35.4	37.8	1.32	1.14-1.52	34.0	1.08	0.84-1.38
Indigenous ethnicity (ref = no)	13.3	16.7	1.30	1.13-1.51	18.4	1.43	1.14-1.79
Disability (ref = no)	12.2	16.2	1.39	1.21-1.59	16.9	1.38	1.10-1.74
Mother has immigrant status (ref = no)	4.7	6.9	1.56	1.25-1.95	8.1	1.80	1.24-2.61
Lives with							
Both parents	58.6	37.3	1		50.2	1	
Only the mother	32.3	47.7	2.49	2.23-2.77	35.8	1.17	0.96-1.42
Only the father	3.7	6.4	3.22	2.50-4.14	5.9	1.91	1.27-2.87
Other	5.4	8.6	2.97	2.38-3.71	8.1	1.67	1.12-2.49
Siblings in household (ref = no)	72.9	68.3	1.08	0.96-1.22	70.2	0.99	0.78-1.25
Type of school							
Independent	9.0	5.2	1		4.5	1	
Subsidized	52.1	51.2	1.62	1.18-2.23	50.9	1.88	1.06-3.33
Publicly-funded	38.9	43.6	1.71	1.24-2.35	44.6	2.08	1.17-3.71

Note. aOR = adjusted Odds Ratio. aOR were estimated by the inclusion of all sociodemographic variables in the model. In bold, statistically significant associations ($p \leq 0.05$).

Table 3

Adjusted odds ratios for the association of IPVe (lifetime and past-year) with other victimizations.

Type of victimization	Lifetime IPVe		Past-year IPVe	
	aOR	95 % CI	aOR	95 % CI
Poly-victimization ^a	6.84	6.05-7.74	7.91	6.47-9.68
<i>Maltreatment</i>				
Any maltreatment	4.40	3.88-5.00	5.00	4.05-6.18
Psychological abuse	3.55	3.17-3.96	4.41	3.61-5.38
Physical abuse	3.96	3.57-4.39	4.57	3.79-5.52
Negligence	2.78	2.39-3.24	3.17	2.44-4.12
Custodial interference	4.74	4.10-5.47	6.35	4.99-8.07
<i>Witnessed other forms of family violence</i>				
Witnessed sibling physical abuse	5.11	4.52-5.77	7.66	6.21-9.46
<i>Peer victimization</i>				
Any peer victimization	2.74	2.43-3.10	2.54	2.12-3.05
Psychological ^b	2.32	2.09-2.58	2.60	2.14-3.15
Physical ^b	2.26	2.03-2.52	2.31	1.91-2.80
Dating violence	2.17	1.76-2.68	2.64	1.78-3.92
<i>Sexual victimization</i>				
Any sexual victimization	2.53	2.24-2.85	2.45	1.93-3.12
Statutory rape ^c	1.93	1.65-2.26	2.03	1.52-2.72
Sexual abuse by peers	2.67	2.16-3.29	3.09	1.97-4.87
Sexual abuse by unknown adult	3.05	2.53-3.68	3.56	2.40-5.29
Sexual abuse by known adult	3.26	2.73-3.89	5.79	3.64-9.02
Rape	3.26	2.59-4.11	4.34	2.73-6.91
<i>Other forms of victimization</i>				
Property crime ^d	2.38	2.12-2.67	2.37	1.97-2.85
Physical assault ^e	2.72	2.42-3.05	2.93	2.43-3.52
Threats	2.38	2.13-2.65	2.89	2.41-3.48
Community violence ^f	3.01	2.58-3.51	3.15	2.52-3.94
Electronic victimization	1.88	1.69-2.10	2.15	1.74-2.66
Electronic sexual victimization	2.29	2.03-2.57	2.83	2.27-3.52

Note. aOR = adjusted odds ratio. IPVe = Intimate Partner Violence exposure. All the associations were statistically significant at $p < 0.001$. Models were adjusted by sex, age and ethnicity.

^a Lifetime poly-victimization was defined as 14 or more victimizations. Past-year poly-victimization was defined as 8 or more victimizations (Consejo nacional de la infancia, 2018).

^b Group and/or individual peer victimization.

^c Only for adolescents 14–17 years old.

^d Robbery, personal theft and/or burglary of family household.

^e Assault with and/or without weapon.

^f Exposure to shootings, drug sales, alcohol and drug use, or fights between people or gangs; witness to assault with weapon; and/or without weapon.

older adolescent age, indigenous ethnicity, disability, immigrant mother, not living with both parents, and attending publicly-funded and subsidized schools. Most of these associations were maintained in the past-year IPVe analysis, except for those over 16, and those living only with the mother. All victimizations were positively associated with lifetime and past-year IPVe. Poly-victimization and that related to maltreatment and witnessing sibling abuse showed the strongest associations, with an aOR > 4.0. Percentages of co-occurrence were high among IPVe youth, especially for community violence and any maltreatment in lifetime and past-year reports. These results are in line with previous investigations that showed the interrelatedness of IPVe and other forms of victimizations, especially with those that occur in the family (Bidarra et al., 2016; Hamby et al., 2010; Holt et al., 2008).

The prevalence of lifetime IPVe in our study is close to that previously reported in Chile (16.6 %; Pinto-Cortez, Pereda, Álvarez-Lister et al., 2017) and the United States (16.3 %; Finkelhor, Turner, Ormrod, & Hamby, 2009), but higher than that reported in Canada (3 %, Cyr et al., 2013) and Spain (2.9 %, Pereda, Guilera, & Abad, 2014). These studies all used the JVQ. In a previous national survey in Chile, children and adolescents from 6th to 12th grade reported a prevalence of IPVe of 29.8 % (Ministerio del Interior y Seguridad Pública, 2013) but this measure included a broader conception of IPV, including other types besides physical IPV. We believe that, with a broader conception of IPV, prevalence could be even higher.

Some of the sociodemographic variables that our results reveal are positively related to IPVe in this population have also been associated with IPVe in other studies, such as older age, physical disorder, and divorced parents (Meltzer, Doos, Vostains, Ford, & Goodman, 2009). Adolescents who attended publicly-funded and subsidized schools had higher odds of lifetime and past-year IPVe than their peers from independent schools. This could be related to the socioeconomic status of the adolescents' families, since the educational system in Chile is highly segregated and only students from high-income households attend independent schools (González, Mizala, & Romaguera, 2004). This suggests that our results are in line with previous literature, showing that low-income families have higher odds of IPVe in comparison to high-income families (Meltzer et al., 2009).

The present findings confirm that IPVe overlaps strongly with other direct and indirect victimizations at home, such as psychological/physical maltreatment and witnessing sibling physical abuse. But the data also evidence an important co-occurrence of IPVe

Table 4

Co-occurrence of IPVe (lifetime and past-year) with other victimizations.

Type of victimization	Lifetime			Past-year		
	% IPVe youth with other victimizations	% non-IPVe youth with other victimizations	% of victimized youth who also witnessed IPV	% IPVe youth with other victimizations	% non-IPVe youth with other victimizations	% of victimized youth who also witnessed IPV
Poly-victimization ^a	37.6	7.5	42.0	47.7	9.8	15.3
<i>Maltreatment</i>						
Any maltreatment	81.5	47.0	20.5	73.5	33.0	7.8
Psychological abuse	67.8	34.5	22.6	64.3	26.8	8.3
Physical abuse	58.7	25.5	25.4	39.4	11.7	11.2
Negligence	14.5	5.4	28.8	15.3	4.7	10.7
Custodial interference	22.0	5.4	37.9	16.6	2.8	18.1
<i>Witnessed other forms of family violence</i>						
Witnessed sibling physical abuse	29.8	7.1	38.4	26.1	3.9	20.0
<i>Peer victimization</i>						
Any peer victimization	79.8	58.5	16.9	49.4	27.4	6.3
Psychological ^b	62.5	39.8	19.0	35.7	16.7	7.5
Physical ^b	56.2	38.7	17.7	26.9	15.0	6.3
Dating violence	7.9	3.5	24.9	5.9	2.3	8.8
<i>Sexual victimization</i>						
Any sexual victimization	32.8	15.1	24.3	22.5	10.2	7.6
Statutory rape ^c	19.8	11.5	21.3	17.0	9.8	6.3
Sexual abuse by peers	8.1	2.8	29.6	4.2	1.3	11.0
Sexual abuse by unknown adult	12.6	3.7	33.3	6.4	1.5	13.4
Sexual abuse by known adult	11.6	3.2	35.0	5.0	0.8	19.9
Rape	6.8	1.9	34.3	4.3	0.9	15.3
<i>Other forms of victimization</i>						
Property crime ^d	76.5	56.5	16.8	49.0	27.8	6.2
Physical assault ^e	73.3	51.9	17.4	52.0	28.7	6.4
Threats	49.8	28.9	20.3	32.2	13.9	8.0
Community violence ^f	86.2	67.5	16.0	78.8	53.8	5.2
Electronic victimization	37.0	21.8	20.0	26.9	13.4	7.0
Electronic sexual victimization	32.7	15.3	24.0	28.6	11.0	8.8

Note. IPVe = Intimate Partner Violence Exposure.

^a Lifetime poly-victimization was defined as 14 or more victimizations. Past-year poly-victimization was defined as 8 or more victimizations (Consejo nacional de la infancia, 2018).^b Group and/or individual peer victimization.^c Only for adolescents 14–17 years old.^d Robbery, personal theft and/or burglary of family household.^e Assault with and/or without weapon.^f Exposure to shootings, drug sales, alcohol and drug use, or fights between people or gangs; witness to assault with weapon; and/or without weapon.

with a broad range of other victimizations inflicted by both adults and peers. Regarding poly-victimization, more than one third (37.6 %) of the adolescents who reported lifetime IPVe were classified as poly-victims, and almost half of the adolescents (47.7 %) who reported past-year IPVe were also classified as such. In line with the findings provided by Hamby et al. (2010), this study adds support to the poly-victimization model (Finkelhor, 2007), indicating that it is common for victims of one type of victimization also to be victims of others forms. The present study's findings confirm the advantages of a more integrated approach to victimization experiences by extending our current knowledge in two main ways: 1) by improving our understanding of multiple children's victimizations and their interrelatedness (Finkelhor, 2007), and 2) by creating new insights for resilience and prevention (Hamby et al., 2018).

It is important to note that 81.5 %, and 73.5 % of the adolescents who had been exposed to IPV had also been maltreated during their lifetime and in the past year, respectively. IPVe is clearly associated with all other forms of family violence in our population, with aOR ranging from 2.78 (neglect) to 5.11 (witnessing sibling physical abuse) in lifetime reports, and from 3.17 (neglect) to 7.66 (witnessing sibling physical abuse) in past-year reports. Our results are worrying, since the co-occurrence percentages are higher than those previously reported. Hamby et al. (2010) results showed a co-occurrence of 56.8 % and 33.9 % between IPVe and any maltreatment in lifetime and past-year reports, respectively. Holt et al. (2008) in their review of the literature reported a co-occurrence of IPVe and child maltreatment between 45 %–70 %.

The findings also show a high co-occurrence of IPVe with different types of sexual victimizations. IPVe had a co-occurrence of 32.8 % and 22.5 % with the composite variable “any sexual abuse” in lifetime and past-year reports, respectively. Our results are higher than those previously reported by Hamby et al. (2010), who reported co-occurrence percentages of 28.0 % and 14.8 % between IPVe and any sexual victimization. As Bidarra et al. (2016) stated in their review of the literature about co-occurrence of IPVe and child sexual abuse, it is difficult to make comparisons with other studies due to differing methodologies, so is important to investigate both of these forms of violence in an integrated way to have a better understanding of this phenomenon.

Regarding the high co-occurrence between IPVe and other forms of violence in the results obtained, a previous study has shown that Chile has a high prevalence of poly-victimization (4 or more different kind of victimizations during past-year as defined by Finkelhor, Ormrod, Turner, & Hamby, 2005) in adolescents, with a co-occurrence of 37 % in Chile (Pinto-Cortez, Pereda, Álvarez-Lister et al., 2017), whereas other studies have reported 22 % in United States (Finkelhor, Ormrod et al., 2005), 8 % in Canada (Cyr et al., 2013), and 19.3 % in Spain (Pereda et al., 2014). This could be related to widespread violence across Latin American countries (Imbusch, Misse, & Carrión, 2011), in general, and to violence against children and adolescents (Devries et al., 2019), specifically. Even though structural, social, and individual factors have been proposed as the possible causes of this phenomenon, more research is still needed (Imbusch et al., 2011).

Although this study does not allow causal inferences to be drawn, it suggests that IPVe may facilitate other abuse, constituting a form of “gateway” abuse. Considering that IPVe co-occurs with others forms of victimization –not only in the family–, that would account for the vulnerability it produces.

Regarding the implications of the study, the results highlight the need to integrate assessments of victimization across the spectrum into action protocols in clinical and legal areas, with special attention to victimization trajectories and the negative effects of IPVe on all the victims (the mother and her children). This would improve early detection of victimization experience occurrences in children and adolescents and, therefore, could allow child protection services to act more promptly. Regarding specialized intervention, since a complex phenomenon implying that children who report IPVe are victims in various areas should not be biased, multifactorial strategies should be promoted, expanding the range of victimization experiences treated. Like Hamby et al. (2010)'s work, our study highlights the importance and urgency of developing more collaboration between services for children and adult victims of IPV, child maltreatment, and other types of victimizations.

One of the main strengths of the present study is that data from a large national and representative sample was used. In addition, a widely-recognized instrument (JVQ, Finkelhor, Hamby et al., 2005) was used, validated for the Chilean population. It is also one of the few studies about IPVe in Chile and Latin-American countries that demonstrates the interrelatedness of IPVe and others victimizations.

One of the limitations of our study is the cross-sectional design, which means that our relations cannot be considered causal. Another limitation is that the sample did not consider adolescents that were living in rural areas, which means that our result cannot be generalized to the national population. Furthermore, the JVQ only assesses physical IPVe, so we need to consider a broader conception of IPV in future assessments, including other IPV victimizations such as psychological, economic and sexual.

This study underscores the importance of understanding victimization in an integrated way, such as the poly-victimization framework (Finkelhor, 2007), considering that there is a high co-occurrence among IPVe and others forms of victimization. This is especially important for community violence and any maltreatment in lifetime and past-year reports. In this regard, a great difference was observed when comparing adolescents that reported IPVe with youth that have not lived through IPV from their parents. The study showed that a third and nearly half of the adolescents who reported IPVe were classified as poly-victims in lifetime and past-year reports, respectively.

5. Conclusion

An integrated approach to assessing IPVe significantly improves our understanding of the interrelation of different victimization experiences, considering that in our population it was common for victims of one type of victimization to also be victims of other forms of victimization (such as neglect, psychological/physical maltreatment, witnessing sibling physical abuse and sexual victimization). Furthermore, is important to increase collaboration between services for children and adult victims of IPV, child maltreatment, and other types of victimizations to improve early detection and develop a more comprehensive evaluation of multiple types of victimization, with special attention to victimization trajectories, particularly of the mother, child and siblings affected by IPV.

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Declaration of Competing Interest

None.

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References

- Artz, S., Jackson, M., Rossiter, K., Nijdam-Jones, A., Géczy, I., & Porteus, S. (2014). A comprehensive review of the literature on the impact of exposure to intimate partner violence for children and youth. *International Journal of Child Youth and Family Studies*, 5(4), 493–587.
- Basoalto, H. (2020). *Ministerio de la Mujer advierte preocupación por aumento de violencia de género en cuarentena [The Ministry of Women expresses concern for the increase in gender-based violence during lockdown]*. La Tercera. Retrieved from <https://www.latercera.com/nacional/noticia/ministerio-de-la-mujer-advierte-preocupacion-por-aumento-de-violencia-de-genero-en-cuarentenas/2WHSURY7DZF7DCJISGCIEHQE3I/>.
- Bidarra, Z., Lessard, G., & Dumont, A. (2016). Co-occurrence of intimate partner violence and child sexual abuse: Prevalence, risk factors and related issues. *Child Abuse & Neglect*, 55, 10–21.
- Centro de Análisis del Delito. (2021). *Estudios y encuestas [Studies and surveys]*. Retrieved from <http://cead.spd.gov.cl/estudios-y-encuestas/>.
- Chiesa, A. E., Kallechey, L., Harlaar, N., Ford, C. R., Garrido, E. F., Betts, W. R., ... Maguire, S. (2018). Intimate partner violence victimization and parenting: A systematic review. *Child Abuse & Neglect*, 80, 285–300.
- Consejo nacional de la infancia. (2018). *Análisis multivariable de estudio polivictimización en niños, niñas y adolescentes [Multivariate analysis of polyvictimization study in children and adolescents]*. Retrieved from <http://www.creiciendoconderechos.gob.cl/docs/Informe.Final.polivictimizacion.pdf>.
- Cyr, K., Chamberland, C., Clément, M.E., Lessard, G., Wemmers, J. A., Collin-Vézina, D., ... Damant, D. (2013). Polyvictimization and victimization of children and youth: Results from a population survey. *Child Abuse & Neglect*, 37(10), 814–820.
- Devries, K., Merrill, K. G., Knight, L., Bott, S., Guedes, A., Butron-Riveros, B., ... Abrahams, N. (2019). Violence against children in Latin America and the Caribbean: What do available data reveal about prevalence and perpetrators? *Revista Panamericana de Salud Pública*, 43.
- Finkelhor, D. (2007). Developmental victimology: The comprehensive study of childhood victimization. In R. C. Davis, A. J. Lurigio, & S. Herman (Eds.), *Victims of crime* (3rd ed., pp. 9–34). Thousand Oaks, CA: Sage Publications.
- Finkelhor, D., Turner, H., Ormrod, R., & Hamby, S. L. (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics*, 124(5), 1411–1423.
- Finkelhor, D., Hamby, S. L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse & Neglect*, 29(4), 383–412.
- Finkelhor, D., Ormrod, R. K., Turner, H. A., & Hamby, S. L. (2005). Measuring poly-victimization using the juvenile victimization questionnaire. *Child Abuse & Neglect*, 29(11), 1297–1312.
- Gilbert, R., Widom, C., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *Lancet*, 373(9657), 68–81.
- González, P., Mizala, A., & Romaguera, P. (2004). Vouchers, inequalities and the Chilean experience. *Centro de Economía Aplicada (CEA)*. Universidad de Chile.
- Hamby, S., Finkelhor, D., Turner, H., & Ormrod, R. (2010). The overlap of witnessing partner violence with child maltreatment and other victimizations in a nationally representative survey of youth. *Child Abuse & Neglect*, 34, 734–741.
- Hamby, S., Finkelhor, D., Turner, H., & Ormrod, R. (2011). Children's exposure to intimate partner violence and other family violence. In *Juvenil Justice Bulletin*. Retrieved from <https://www.ncjrs.gov/pdffiles1/ojdp/232272.pdf>.
- Hamby, S., Taylor, E., Jones, L., Mitchell, K., Turner, H., & Newlin, C. (2018). From poly-victimization to poly-strengths: Understanding of web of violence can transform research on youth violence and illuminate the path to prevention and resilience. *Journal of Interpersonal Violence*, 33(5), 719–739.
- Holden, G. (2003). Children exposed to domestic violence and child abuse: Terminology and taxonomy. *Clinical Child and Family Psychology Review*, 6(3), 151–159.
- Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse & Neglect*, 32(8), 797–810.
- Imbusch, P., Misse, M., & Carrión, F. (2011). Violence research in Latin America and the Caribbean: A literature review. *International Journal of Conflict and Violence*, 5(1), 87–154.
- Kofman, Y. B., & Garfin, D. R. (2020). Home is not always a haven: The domestic violence crisis amid the COVID-19 pandemic. *Psychological Trauma Theory Research Practice and Policy*, 12(S1), s199–s201.
- McTavish, J., MacGregor, J., Wathen, C., & MacMillan, H. (2016). Children's exposure to intimate partner violence: An overview. *International Review of Psychiatry*, 28(5), 504–518.
- Meltzer, H., Doos, L., Vostanis, P., Ford, T., & Goodman, R. (2009). The mental health of children who witness domestic violence. *Child & Family Social Work*, 14(4), 491–501.
- Ministerio del Interior y Seguridad Pública. (2013). *Encuesta nacional de victimización por violencia intrafamiliar y delitos sexuales [National survey of victimization by intrafamily violence and sexual crimes]*. Retrieved from http://www.dsp.gov.cl/filesapp/Presentacion%20VIF_adimark_final.pdf.
- Miranda, J. K., León, C., & Crockett, M. A. (2020). A qualitative account of children's perspectives and responses to intimate partner violence in Chile. *Journal of Interpersonal Violence*.
- Øverlien, C. (2010). Children exposed to domestic violence. Conclusions from the literature and Challenges Ahead. *Journal of Social Work*, 10(1), 80–97.
- Pereda, N., & Díaz-Faes, D. A. (2020). Family violence against children in the wake of COVID-19 pandemic: A review of current perspectives and risk factors. *Child and Adolescent Psychiatry and Mental Health*, 14(1), 1–7.
- Pereda, N., Gallardo-Pujol, D., & Guilera, G. (2018). Good practices in the assessment of victimization: The Spanish adaptation of the Juvenile Victimization Questionnaire. *Psychology of Violence*, 8(1), 76.

- Pereda, N., Guilera, G., & Abad, J. (2014). Victimization and polyvictimization of Spanish children and youth: Results from a community sample. *Child Abuse & Neglect*, 38(4), 640–649.
- Pinto-Cortez, C., Pereda, N., & Álvarez-Lister, S. (2017). Child victimization and poly-victimization in a community sample of adolescents in northern Chile. *Journal of Aggression, Maltreatment & Trauma*, 1–20.
- Pinto-Cortez, C., Pereda, N., & Flores-Jara, J. (2017). Estudios sobre violencia interpersonal contra la infancia y la adolescencia en Chile: Una revisión [Studies on interpersonal violence against children and adolescents in Chile: A review]. *Interciencia*, 42(5), 277–285.
- Rao, J. N., & Scott, A. J. (1984). On chi-squared tests for multiway contingency tables with cell proportions estimated from survey data. *Annals of Statistics*, 12(1), 46–60.
- Save the Children. (2011). En la violencia de género no hay una sola víctima. Atención a los hijos e hijas de mujeres víctimas de violencia de género [In gender violence there is not a single victim. Attention to the sons and daughters of women victims of gender violence]. *Programa DAPHNE III de la Comisión Europea*.
- UN Women. (2020). *Strategies for the prevention of violence against women in the context of COVID-19 in Latin America and the Caribbean*. Retrieved from <https://lac.unwomen.org/en/digiteca/publicaciones/2020/04/prevencion-de-la-violencia-contra-las-mujeres-frente-a-covid-19>.
- World Health Organization. (2020). *Statement – During COVID-19 pandemic, violence remains preventable, not inevitable*. Retrieved from <https://www.euro.who.int/en/about-us/regional-director/statements-and-speeches/2020/statement-during-covid-19-pandemic,-violence-remains-preventable,-not-inevitable>.