



# A national study of intimate partner violence risk among female caregivers involved in the child welfare system: The role of nativity, acculturation, and legal status



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## ABSTRACT

Although intimate partner violence (IPV) is a well-known risk for child maltreatment, little is known if the prevalence of and risk factors for IPV differ among US-born and foreign-born families involved with Child Protective Services. Data came from a new cohort of the National Survey of Child and Adolescent Well-Being II (NSCAW II), a national probability study of children reported for child abuse and neglect. The study sample was restricted to female caregivers whose children remained in the home following an investigation ( $N = 2210$ ). Caregiver self-report information was used to measure physical form of IPV during the past 12 months. The study results revealed no significant differences in IPV victimization rates between foreign-born and US-born caregivers both bivariate and while controlling for key socio-demographic and psychosocial functioning characteristics as well as family needs. Common risk factors for both population groups included caregiver's young age, depression, high family stress and low social support. Additionally, foreign-born caregivers were more likely to experience IPV when there was high neighborhood stress and intimate partner was absent while Hispanic ethnicity, higher education, problematic substance use, and difficulty with paying for basic necessities predicted IPV among US-born caregivers. Neither legal status nor acculturation indicators were significantly associated with IPV victimization for foreign-born. Findings indicate that IPV remains a significant problem for child welfare involved caregivers and warrant effective screening, identification and prevention.

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## 1. Introduction

Intimate partner violence (IPV) is a serious concern in the field of child welfare. It is estimated that approximately one third of all families involved with Child Protective Services (CPS) experienced IPV during the year preceding their involvement with the CPS system (Hanzen, Connelly, Kelleher, Landsverk, & Barth, 2004; U.S. Department of Health and Human Services [USHHS], 2012). Its association with child maltreatment (Casanueva, Martin, & Runyan, 2009; McGuigan & Pratt, 2001; Taylor, Guterman, Lee, & Rathouz, 2009; Windham et al., 2004) as well as other unfavorable outcomes, including higher lifetime prevalence of poor physical and mental health, increased risk of substance abuse, and suicide attempts (Campbell, 2002; Gilbert et al., 2009), calls for appropriate services to be provided to families in CPS experiencing IPV.

Ethnic and nativity differences in prevalence rates of IPV and child maltreatment found in population studies (Altschul & Lee, 2011; Field & Caetano, 2004; Lown & Vega, 2001) suggest that there may be different factors associated with IPV for different population groups.

However, very little is known if the prevalence of and risk factors for IPV differs among US-born and foreign-born families involved with CPS. A few recent studies suggest that foreign-born families may be at a greater risk of entering CPS due to IPV concerns in states that consider IPV a form of child neglect (e.g., Earner, 2010;) although the occurrence between child maltreatment and IPV has been well established (Edleson, 1999; McGuigan & Pratt, 2001). Given that the foreign-born population is one the fastest growing groups in the US and that their prevalence in the child welfare population has also been increasing (Applied Research Center [ARC], 2011; Committee for Hispanic Children & Families, 2001; Grieco et al., 2012), this knowledge gap requires immediate scholarly attention in order to inform IPV prevention and child welfare practice with immigrants.

Theoretical and prior empirical work on immigrants' risk for IPV is mixed. On one hand, IPV is linked to patriarchal attitudes (Stith, Smith, Penn, Ward, & Tritt, 2004; Sugarman & Frankel, 1996), and immigrants have been shown to have greater endorsement of traditional gender roles (Altschul & Lee, 2011). Further, acculturation and social stratification theories suggest that immigrants may be at risk for IPV and CPS involvement due to substantial changes to a family system upon migration (i.e. shifting gender roles) and increased structural vulnerabilities encountered in a new country (ARC, 2011; Johnson,

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2007). These changes may lead to higher economic insecurities and acculturation stress that may in turn increase risk for IPV (Caetano, Ramisetty-Mikler, Vaeth, & Harris, 2007; Earner, 2010; Menjivar & Salcido, 2002). Additionally, heightened anti-immigrant sentiment and enforcement of immigrant law at local and federal levels pose an increased risk for undocumented families to enter CPS (Androff et al., 2011; Cervantes & Lincroft, 2010; Women's Refugee Commission, 2010). Lack of legal status may lead families to live in a constant state of stress and fear of being discovered that ultimately may affect their overall well-being and family interactions (Androff et al., 2011).

On the other hand, empirical findings regarding immigrants' risk for IPV from both population and CPS samples remain mixed. Dettlaff and Earner (2012), using CPS caseworker reports of family's experience of IPV among a national sample of child welfare involved families, found that the prevalence of IPV did not significantly differ between US-born and foreign-born families, 12.2% vs. 13.2% respectively. Another study using the same data found that the prevalence of IPV did not vary between Latino immigrants and US-born Latinos (Dettlaff, Earner, & Phillips, 2009). However, prior research suggests that sensitivity between CPS worker assessment and caregiver's reports of problematic issues, including IPV, is low, with workers detecting only a fraction of problems reported by families (English & Graham, 2000; Kohl, Barth, Hazen, & Landsverk, 2005). It is possible that sensitivity to detect IPV among immigrant families may be lower than for US-born due to cultural, language, trust, and fear of deportation issues (Dettlaff & Rycraft, 2006; Segal & Mayadas, 2005).

Community studies found that foreign-born families had higher self-reported IPV compared to US-born families when examined in bivariate analyses (Altschul & Lee, 2011; Taylor et al., 2009). Likewise, studies examining IPV risk with multivariate controls have produced inconsistent findings. In particular, while some found that foreign-born and lower acculturated Latino families had significantly lower IPV compared to US-born or more acculturated Latino families (Caetano et al., 2007; Lown & Vega, 2001; Wrigh & Benson, 2010), others found no association between nativity/acculturation and IPV (Altschul & Lee, 2011; Cunradi, 2009; Moore, Probst, Tompkins, Cuffe, & Martin, 2007). In addition, one study examining nativity differences in pregnant and post-partum women found that although there were no significant differences in IPV prevalence between US-born and foreign-born mothers during pregnancy, immigrant mothers that lived in the U.S. for less than five years had an increased risk for IPV one year post-partum compared to US-born mothers and immigrants whose length of stay in the country was longer than five years (Charles & Perreira, 2007). No study to date has looked at IPV prevalence within CPS using caregiver report. Consequently, this greatly limits our understanding of how prevalent IPV is within the CPS-involved foreign-born population and which factors IPV risk may be attributed to. Thus, the current study seeks to fill this knowledge gap in the literature by examining national prevalence and risk factors of IPV among US-born and foreign-born families involved with CPS.

Previous research with the general population and CPS samples among predominantly US-born families suggests that potential risk factors for IPV may include (a) caregiver and family socio-demographic characteristics (young age, unemployment, low income, low education, large household size, presence of a male intimate partner in household, being single) (Charles & Perreira, 2007; Hanzen et al., 2004; Kessler, Molnar, Feurer, & Appelbaum, 2001), (b) psychosocial factors (poor mental and physical health, substance use, prior criminal history, low social support, high stress, prior CPS history) (Beeman, Hagemester, & Edleson, 2001; Charles & Perreira, 2007; Cunradi, 2009; English, Marshall, & Orme, 2000; Hanzen et al., 2004), (c) immigration related factors (acculturation, legal status) (ARC, 2011; Earner, 2010); (d) environmental characteristics (neighborhood disorder and safety) (Cunradi, 2009). Although findings have been mixed in regard to race/ethnicity and IPV (Charles & Perreira, 2007; Hanzen et al., 2004; McFarlane, Parker, & Soeken, 1996), race has served as an important covariate in child welfare studies. Overall, it is not clear if any of the above

factors relate to IPV among foreign-born families in the same manner they are related to IPV in other populations. For example, there is some evidence that neighborhood poverty and alcohol use may not be associated with IPV for Hispanics in the same way as for Whites and African Americans (Cunradi, 2009; Cunradi, Caetano, Clark, & Schafer, 1999, 2000). Nevertheless, the above factors need to be accounted for when examining the unique relationship between nativity and IPV in addition to serving as potential risk factors for IPV among the study families.

Using national data from a new cohort of the National Survey of Child and Adolescent Well-Being II (NSCAW II) the current study seeks to (1) examine differences in prevalence of IPV among foreign-born and US-born caregivers, (2) examine whether there are significant nativity differences after controlling for other variables, and (3) examine risk factors for IPV among foreign-born caregivers compared to US-born caregivers. This will be one of the first studies exploring prevalence of IPV among foreign-born families in CPS using the primary caregiver's perspective. Based on prior literature it is expected that prevalence of and risk factors for IPV will vary by nativity. The study objectives above will help (1) better understand IPV etiology, (2) identify foreign-born families that are at risk for IPV, (3) determine appropriate referrals and services, and (4) reduce entry into CPS.

## 2. Methods

### 2.1. Data source

Data for this study came from wave 1 of the National Survey of Child and Adolescent Well-Being II (NSCAW II). NSCAW II is a national probability sample of families investigated for child maltreatment. Baseline data collection occurred during 2008–2009. Face-to-face interviews and assessments were conducted with children, parents, non-parental adult caregivers, and investigative caseworkers. The dataset contains 81 primary sampling units (PSUs) nested within eight state level sampling strata. Of the eight strata, seven consist of the states with the largest child welfare caseloads in the United States and the remaining strata contain all other states in the sample. Complex weighting involving stratification, clustering, and weighting were utilized to make national estimates. Children are not nested within caregivers as there is only one child per family in the NSCAW II sample.

### 2.2. Sample

The NSCAW II sample includes children from zero to 17.5 years old at the time of sampling ( $N = 5872$ ). The sample for the current study was limited to biological or adoptive caregivers whose children remained in-home at baseline following the investigation of maltreatment ( $N = 3635$ ). Because the IPV measure was administered only to female caregivers further restrictions for the current sample included female caregivers where gender information was non-missing ( $N = 3281$ ) that also had complete IPV and nativity measures ( $N = 3213$ ). The final sample for this study included complete data for all measures used in the analyses ( $N = 2210$ ). Bivariate analysis revealed significant differences between participants with complete versus missing data on caregiver's education, length of stay and legal residency with completers being higher educated, having resided in the U.S. longer and more likely to be of documented status than those with missing data. Listwise deletion was utilized rather than imputation because the data in this study did not meet the missing at random assumption.

### 2.3. Measures

#### 2.3.1. Dependent variable

Using Audio Computer-Assisted Self-Interview (ACASI) technology, IPV was assessed by mothers' self-report on the physical violence subscale of the Conflict Tactic Scales (Straus, Hamby, Boney-McCoy, &

Sugarman, 1996). Respondents listened to the recorded questions using headphones and responded on a computer. The minor and severe violence subscales were combined into one variable in this study to create a dichotomous indicator of whether or not any physical violence occurred in the past 12 months. In this study, the alpha coefficient for any IPV experienced in the past 12 months was 0.91 for the whole sample (US-born = .92, foreign-born = .91).

### 2.3.2. Independent and control variables

Because the same variable could have been an independent or control (e.g. nativity) depending on a research question examined, the following section does not distinguish variables by type.

**2.3.2.1. Nativity.** Caregiver nativity was a dichotomous variable indicating whether or not the primary caregiver reported that she was born outside the United States or not. Individuals born in US territories were defined as foreign-born within the NSCAW II study.

**2.3.2.2. Acculturation and legal status.** Self-reported level of primary caregiver's English proficiency (not or somewhat comfortable vs. very comfortable) and length of stay in the U.S. were used as measures of acculturation following prior literature (Altschul & Lee, 2011; Cabrera, Shannon, West, & Brooks-Gunn, 2006). Legal status (documented vs. undocumented) was created by the researchers using self-reported immigration status information. Foreign-born mothers were categorized as documented if they became a US citizen by naturalization, or they had a green card, working visa permit, or other legal immigration documentation. Foreign-born mothers were categorized as undocumented if they did not have any legal documents. The self-reported number of years in the US for the primary caregiver was reported categorically (5 or fewer years, 5–10 years, 10–20 years, 20 or more years) in the descriptive analyses and used continuously in the multivariate models.

**2.3.2.3. Caregiver's psychosocial functioning and family needs.** Mothers' physical health was a dichotomous variable based on self-report on the Short Health Form Survey (SF-12; Ware, Kosinski, & Keller, 1998). Standardized physical scores of less than 45 were considered problematic physical health. The presence of a major depressive disorder was based on primary caregiver self-report on the depression module of the Composite International Diagnostic Interview Short Form (CIDI-SF; Kessler, Andrews, Mroczek, Ustun, & Wittchen, 1998). Caregivers whose responses indicated the presence of dysphoric or anhedonic depression in the past 12 months were coded as having a major depressive disorder. Problematic substance use was a dichotomous variable based on caregiver self-report, utilizing ACASI technology, on the 10-item Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) and 20-item Drug Abuse Screening Test (DAST-20; Skinner, 1982). Consistent with AUDIT cut-offs indicated for female samples (Reinert & Allen, 2007), scores of five or higher on the AUDIT and/or scores of six or higher on the DAST-20 were operationalized as problematic substance use in the sample.

Three variables (high family stress, prior CPS history, and difficulty paying for necessities) were based on caseworker report on the risk assessment about the investigation. High family stress is a dichotomous variable indicating whether or not high stress was present at the time of the investigation. Caseworkers were prompted by interviewers that high stress could result from "things like unemployment, drug use, poverty, or neighborhood violence" (National Data Archive on Child Abuse & Neglect, 2011, p. 49). Prior CPS history was a dichotomous variable indicating there was or was not prior report of child maltreatment to the CPS agency. Difficulty paying for basic necessities was the caseworker's report that the family was or was not having difficulty paying for basic necessities including food, clothing, shelter, electricity, or heat at the time of the investigation.

Prior police arrest(s) was a dichotomous self-report variable indicating whether or not the caregiver had ever been arrested for any offense. Neighborhood stress was a nine item measure adapted by the NSCAW II study team from the Philadelphia Family Management Study parent interview schedule (Furstenberg, 1990) to assess for perceived safety and stressors in their community. Higher scores in this measure indicated worse environment. Adapted from the Duke-UNC Functional Social Support Questionnaire (FSSQ; Broadhead, Gehlbach, DeGruy, and Kaplan, 1988), social support was a continuous variable, created from the sum of the 17 item FSSQ scale, indicating the caregiver's perceived social support.

**2.3.2.4. Caregiver socio-demographic characteristics.** The caregiver socio-demographic characteristics were race, age, marital status, level of education, and employment status. Caregiver race was a four category variable combining race and ethnicity: black and non-Hispanic, white and non-Hispanic, Hispanic, and other race. Caregiver age was measured continuously in years based on caregiver self-report. Caregiver marital status was a three category variable (married, separated/divorced/widowed, and never married) based on the primary caregiver's self-report. Level of education was a self-reported dichotomous variable indicating if the primary caregiver received at least a high school degree or had less than a high school degree. Caregiver employment status was also a self-reported dichotomous indicator (employed or unemployed).

**2.3.2.5. Household characteristics.** The household characteristics included poverty status, household size, whether or not an intimate partner was present, and whether or not a language other than English was spoken in the home. Household poverty is a NSCAW II derived variable based on the percent of poverty according to the 2009 US Department of Health and Human Services guidelines. The four category variable indicated families were at less than 50%, 50 to less than 100%, 100 to 200%, or greater than 200% of the poverty guidelines. Household size was a continuous variable indicating the number of adults and children living in the home. The presence of an intimate partner in the home is a dichotomous variable indicating whether or not the primary caregiver reported her spouse, unmarried partner, or a boyfriend or girlfriend was living in the home. The language spoken in the home was a dichotomous variable based on the primary caregiver's report of whether or not she regularly spoke a language other than English at home.

## 2.4. Data analysis

Data management was conducted in SAS version 9.2 and univariate, bivariate, and multivariate analyses were conducted in Stata/SE 12.0 with the survey commands to account for stratification, clustering, and weighting. Univariate analysis was conducted to produce weighted descriptives for the sample. Bivariate analysis was used to examine sample characteristics for two groups and relationships between the independent/control variables and IPV while a multivariate binary logistic regression was used to model IPV.

Variables for the multivariate models were selected based on bivariate associations of each control with IPV at  $p < .25$  (Hosmer & Lemeshow, 2000) and our selected controls (e.g. caregiver's education, intimate partner present) based on prior theory. Multicollinearity checks were made prior to entering variables in the multivariate models. To facilitate comparison of risk factors between foreign-born and US-born, we chose to enter only those variables into the multivariate analysis that met our selected threshold in both samples at the bivariate level. There were four variables that were significant for one group but not the other: caregiver's marital status, employment status, and number of children were only significantly associated with IPV in the foreign-born sample while history of police arrests—in the US-born sample. These variables were entered in the secondary analyses

described below. Acculturation and legal status characteristics were entered hierarchically for foreign-born subsample into logistic regression as a second set after socio-demographic, caregiver's psychosocial functioning and family needs to examine their associations with IPV. Final models were selected based on goodness-of-fit test for a logistic regression model using complex survey sampling design (Archer & Lemeshow, 2006). Secondary analyses were performed to check the robustness of the findings by adding individually those variables that did not meet our selected threshold in the bivariate analysis and those excluded when examining risk factors for two population groups to make sure that they remained non-significant and/or did not change parameter coefficients of the other variables.

### 3. Results

#### 3.1. Sample descriptives

Table 1 presents weighted primary caregiver's characteristics stratified by nativity (N = 2210). Foreign-born female caregivers

comprised almost ten percent of the total sample in this study (n = 211). Almost half of the caregivers in the total study sample were Caucasian non-Hispanic (51%) followed by equal proportions of Black non-Hispanic (21%) and Hispanic (22%) caregivers. The mean age for the caregivers was 32 years. About one third of the caregivers were single (35%) and about half (47%) had an intimate partner present at home. In terms of socio-economic status, nearly three quarters (74%) had high school degree or higher but the majority (62%) was at or below 100% federal poverty line. Slightly less than half of the caregivers were employed (47%). An average household size was between two and three children and two adults. Nearly three quarters of the foreign-born caregivers (71%) spoke another language at home and resided in the U.S. for ten or more years (77%). One quarter of foreign-born families (26%) were undocumented.

Nearly one third of the caregivers (31%) in the total sample experienced problematic physical health and almost a quarter had a major depressive disorder (23%). Problematic substance use was present in a minority of families (11%). More than half (56%) of the families had prior history with CPS and one third (34%) had police arrest records.

**Table 1**  
Descriptive characteristics of the sample by nativity.

Variable	US-born (n = 1999) % or mean	Foreign-born (n = 211) % or mean	Total (N = 2210) % or mean	P <sup>a</sup>
<i>Socio-demographic characteristics</i>				
<i>Race</i>				
African American/Black	22.09	6.93	20.56	***
Caucasian non-Hispanic	54.79	14.68	50.76	
Hispanic	16.52	72.28	22.12	
Other	6.61	6.11	6.56	
Age (mean)	31.14	35.25	31.55	***
<i>Marital status</i>				
Single/never married	37.82	16.81	35.71	**
Married	29.85	43.78	31.25	
Separated/divorced/widowed	32.33	39.41	33.04	
Intimate partner present in the household	45.25	58.19	46.55	0.09
<i>Education</i>				
Less than high school	25.01	31.60	25.67	0.25
High school and more	74.99	68.40	74.33	
<i>Employment status</i>				
Employed	46.74	49.71	47.04	0.68
Unemployed	53.26	50.29	52.96	
<i>Poverty status (federal poverty threshold)</i>				
<50%	27.50	18.90	26.64	0.32
50–100%	34.95	42.34	35.69	
101–200%	24.24	19.56	23.77	
>200%	13.31	19.20	13.9	
<i>Household size</i>				
Number of children at home	2.48	2.60	2.49	0.53
Number of adults at home	1.94	2.49	2.00	***
Language other than English at home	11.44	70.49	17.37	***
<i>Acculturation and legal status (foreign-born only)</i>				
<i>Years in the U.S.</i>				
<5	–	5.81	0.86	
5–10	–	16.96	1.95	
10–20	–	35.90	3.98	
>20	–	41.33	2.76	
<i>English proficiency</i>				
High	–	92.32	98.89	
Low/intermediate	–	7.68	1.11	
<i>Legal status</i>				
Legally residing	–	73.63	6.33	
Undocumented	–	26.37	3.21	
<i>Caregiver's psychosocial functioning and family needs</i>				
Problematic physical health	32.70	17.21	31.15	*
Major depressive disorder	24.41	15.17	23.48	0.07
Problematic substance use	10.96	9.84	10.84	0.85
Prior CPS history	56.34	55.83	56.29	0.95
Prior police arrest(s)	36.08	11.19	33.59	***
High family stress	51.48	41.97	50.52	0.15
Difficulty paying for basic necessities	23.90	21.42	21.42	0.61
Neighborhood stress (mean, range 9–27)	13.91	14.98	14.02	0.13
Social support (mean, range 11–55)	41.71	39.65	41.50	0.18

Note: \*p ≤ .05, \*\*p ≤ .01, \*\*\*p ≤ .001; a. Significance indicates significant difference between US-born and Foreign-born groups.

**Table 2**  
Prevalence of intimate partner violence by nativity.

Type of physical violence	US-born (n = 1999) %	Foreign-born (n = 211) %	Total (N = 2210) %	p <sup>a</sup>
Less severe physical violence in the past year				
Had something thrown	15.44	12.33	15.44	0.58
Pushed, grabbed, shoved	20.93	17.55	20.60	0.59
Slapped	9.67	7.82	9.48	0.62
Any less severe physical violence	24.41	20.48	24.02	0.50
Less severe physical violence only	6.93	6.88	6.92	0.99
Less severe physical violence ever	34.97	26.94	34.17	0.15
Less severe physical violence only ever	10.31	10.95	10.37	0.87
Severe physical violence in the past year				
Kicked, bitten or hit with fist	5.82	2.60	5.49	0.06
Hit or tried to hit with something	10.66	4.59	10.05	*
Beat up	6.49	4.82	6.32	0.52
Choked	7.11	3.93	6.79	0.23
Threatened with knife or gun	4.74	1.83	4.45	0.12
Knife or gun used	1.13	1.21	1.14	0.95
Twisted arm	7.63	5.01	7.37	0.26
Slammed against the wall	10.56	7.49	10.25	0.42
Burned or scalded on purpose	1.03	0	0.93	0.38
Grabbed	16.01	11.05	15.51	0.27
Any severe physical violence	19.67	16.95	19.40	0.60
Severe physical violence ever	26.72	20.30	26.07	0.36
Any physical violence in the past year	26.58	23.83	26.30	0.65
Any physical violence ever	37.01	31.25	36.43	0.38

Note: \* $p \leq .05$ ; a. Significance indicates significant difference between US-born and Foreign-born groups.

Families had a substantial amount of high family stress (51%) and one fifth struggled to pay for basic necessities.

There were several significant differences between US-born and foreign-born caregivers on key socio-demographic and psychosocial functioning characteristics. Foreign-born caregivers were more likely to be Hispanic ( $p < .001$ ), older ( $p < .001$ ), married ( $p < .01$ ), have more adults at home ( $p < .001$ ), speak other language than English at home ( $p < .001$ ), have better physical health ( $p < .05$ ), fewer police arrests ( $p < .001$ ), and were marginally less depressed ( $p = .07$ ).

### 3.2. IPV prevalence and nativity differences

Table 2 presents weighted IPV prevalence estimates stratified by nativity. Slightly more than one quarter of female caregivers (26%) involved with CPS experienced some act of physical violence perpetrated by an intimate partner in the past year. Regarding severity

level, 24% experiencing at least one incident of less severe physical violence (e.g. pushed, shoved; slapped) while 19% reporting at least one incident of severe violence (e.g. kicked; beat up; choked; slammed) in the past year. Prevalence for specific types of less severe physical violence ranged from 9.48% (slapped) to 20.60% (pushed, grabbed, shoved) while severe physical IPV ranged from 0.93% (burned or scalded on purpose) to 15.51% (grabbed). Of all caregivers experiencing some type of physical violence in the past year, the majority experienced both less severe and severe physical violence in the past year. Those who reported being victimized exclusively by less severe violence acts accounted for 23% of all caregivers victimized in the past year, with prevalence rate being 7%. The prevalence rate for exclusively severe physical violence victimization was low—2.29%.

Lifetime prevalence estimates of any physical violence was 36% in the study sample, with 34% experiencing at least one incidence of less severe physical violence and 26% reporting at least one incident of severe physical victimization.

There were no significant differences between US-born and foreign-born caregivers on past year and lifetime prevalence of IPV, including the severity type, except for one item of the severe violence subscale. Compared to foreign-born, US-born caregivers were twice as likely to report that their partner “hit or tried to hit with something”.

Table 3 presents the results from weighted multivariate binary logistic regression model examining nativity differences in IPV victimization rates while controlling for key socio-demographic and psychosocial functioning characteristics as well as family needs. Caregiver's nativity, race, age, intimate partner presence, education, number of children, major depressive disorder, problematic substance use, prior police arrests, high family stress, difficulty paying for basic necessities, neighborhood stress and social support were simultaneously entered into a multivariate model. While controlling for other variables in the model, nativity was not a significant predictor for IPV ( $p > .05$ ). However, younger caregivers ( $OR = 0.96$ ,  $p < .01$ ), those with high school or higher education ( $OR = 1.56$ ,  $p < .05$ ), caregivers that experienced major depression ( $OR = 2.10$ ,  $p < .001$ ), problematic substance use ( $OR = 1.69$ ,  $p < .01$ ), high family stress ( $OR = 1.47$ ,  $p < .05$ ), difficulty paying for necessities ( $OR = 1.53$ ,  $p < .05$ ), high neighborhood stress ( $OR = 1.04$ ,  $p < .05$ ) and low social support ( $OR = 0.98$ ,  $p < .01$ ) had higher odds of experiencing IPV victimization.

**Table 3**  
Multivariate logistic regression model examining nativity and intimate partner violence.

Variable	OR	95% CI	p
<i>Socio-demographic characteristics</i>			
Foreign-born (US-born)	0.93	0.51, 1.73	0.83
<i>Race (Caucasian non-Hispanic)</i>			
African American/Black	0.78	0.47, 1.31	0.34
Hispanic	1.39	0.99, 1.94	0.06
Other	1.12	0.53, 2.37	0.77
Age	0.96	0.94, 0.99	**
Intimate partner present	0.89	0.59, 1.34	0.58
<i>Education</i>			
High school and more (less than high school)	1.56	1.05, 2.33	*
Household size			
Number of children at home	1.06	0.92, 1.23	0.42
<i>Caregiver's psychosocial functioning and family needs</i>			
Major depressive disorder	2.10	1.43, 3.07	***
Problematic substance use	1.69	1.19, 2.41	**
Prior police arrest(s)	1.31	0.87, 1.96	0.19
High family stress	1.47	1.09, 1.98	*
Difficulty paying for basic necessities	1.53	1.01, 2.33	*
Neighborhood stress	1.04	1.00, 1.08	*
Social support	0.98	0.97, 0.99	**

Note: \* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$ .

3.3 . Risk factors for IPV among US-born and foreign-born caregivers

Table 4 presents the results of bivariate analyses comparing caregivers who experienced IPV in the past year with those that did not among US-born (n = 1999) and foreign-born (n = 211) subsamples. Differences were examined across socio-demographic, psychosocial functioning, and family needs domains. Among the US-born subsample, caregivers who experienced IPV in the past 12 months were significantly more likely to be younger (p < .05), depressed (p < .001), engage in problematic substance use (p < .001), have a prior arrest history (p < .01), higher family stress (p < .001), difficulty meeting basic needs (p < .01), be poorer (p < .05), have higher perceived neighborhood stress (p < .05) and lower social support (p < .001) than caregivers who did not experience IPV. Foreign-born caregivers who experienced IPV in the past year were significantly more likely to be younger (p < .05), depressed (p < .001), have higher family stress

(p < .05), difficulty paying for basic necessities (p < .05), higher perceived neighborhood stress (p < .001) and lower social support (p < .001) than caregivers without IPV during the past year. Foreign-born caregivers with IPV victimization were also more likely to be single (29.89% vs. 12.72%), poor (93.25% vs. 76.90% at or below 200%), unemployed (61.21% vs. 46.87%), engage in problematic substance use (19.86% vs. 6.70%), and to have more children (3.01 vs. 2.47) than those without IPV, however, these associations did not reach statistical significance. Acculturation and legal status indicators did not differ by IPV experience among foreign-born subsample.

The following variables reached a statistical significance of p < .25 among both US-born and foreign-born caregivers: race, age, poverty, trouble meeting basic needs, depression, substance use, high family stress, neighborhood stress, and social support. These variables, except for poverty (because of a substantial conceptual overlap between poverty and meeting basic needs, we chose not to include both), and

**Table 4**  
Bivariate correlates of intimate partner violence by nativity.

Variable	US-born (n = 1999) % or mean			Foreign-born (n = 211) % or mean		
	IPV	No IPV	p	IPV	No IPV	p
<i>Socio-demographic characteristics</i>						
<i>Race</i>						
African American/Black	19.34	23.08	0.14	0.80	8.85	0.17
Caucasian non-Hispanic	51.50	55.98		10.73	15.92	
Hispanic	21.93	14.56		72.93	72.08	
Other	7.23	6.38		15.54	3.16	
Age (mean)	30.14	31.5	*	32.32	36.17	*
<i>Marital status</i>						
Single/never married	37.70	37.87	0.83	29.89	12.72	0.23
Married	28.24	30.43		37.91	45.62	
Separated/divorced/widowed	34.06	31.7		32.20	41.67	
Intimate partner present	42.58	46.22	0.47	49.27	60.98	0.32
<i>Education</i>						
Less than high school	22.73	25.84	0.41	38.58	29.42	0.56
High school and more	77.27	74.16		61.42	70.58	
<i>Employment status</i>						
Employed	45.24	47.28	0.63	38.79	53.13	0.23
Unemployed	54.76	52.72		61.21	46.87	
<i>Poverty status (federal poverty threshold)</i>						
<50%	34.05	25.13	*	16.05	19.79	0.22
50–100%	35.2	34.85		60.14	36.78	
101–200%	22.74	24.78		17.06	20.34	
>200%	8.01	15.23		6.75	23.10	
<i>Household size</i>						
Number of children at home	2.58	2.45	0.29	3.01	2.47	0.14
Number of adults at home	1.90	1.96	0.56	2.32	2.55	0.43
Language other than English at home	9.97	11.98	0.37	65.82	71.95	0.70
<i>Acculturation and legal status (foreign-born only)</i>						
<i>Years in the U.S.</i>						
<5	–	–		6.81	5.50	0.86
5–10	–	–		12.98	18.21	
10–20	–	–		33.34	36.70	
>20	–	–		46.87	39.60	
<i>English proficiency</i>						
High	–	–		89.65	93.15	0.63
Low/intermediate	–	–		10.35	6.85	
<i>Legal status</i>						
Legally residing	–	–		75.89	72.93	0.82
Undocumented	–	–		24.11	27.07	
<i>Caregiver's psychosocial functioning and family needs</i>						
Problematic physical health	34.11	32.20	0.66	23.64	15.20	0.47
Major depressive disorder	37.20	19.78	***	46.85	5.26	***
Problematic substance use	17.09	8.74	***	19.86	6.70	0.21
Prior CPS history	57.57	55.89	0.68	60.88	54.25	0.58
Prior police arrest(s)	45.59	32.64	**	11.54	11.09	0.96
High family stress	62.80	47.37	***	64.92	34.79	*
Difficulty paying for basic necessities	33.57	20.40	**	39.33	15.81	*
Neighborhood stress (mean, range 9–27)	14.46	13.71	*	17.72	14.13	**
Social support (mean, range 11–55)	38.89	42.73	***	33.24	41.66	***

Note: \*p < .05, \*\*p < .01, \*\*\*p < .001.

additional controls for caregiver's education and intimate partner present at home were included in the multivariate binary logistic models to predict IPV for each subsample separately (Table 5). The foreign-born sample had acculturation and legal status indicators entered in a second step of the hierarchical model (Model 2).

Among US-born caregivers, physical past year IPV victimization was significantly associated with Hispanic ethnicity ( $OR = 1.50, p < .05$ ), young age ( $OR = 0.97, p < .05$ ), high school or higher education ( $OR = 1.56, p < .05$ ), major depressive disorder ( $OR = 1.89, p < .01$ ), problematic substance use ( $OR = 1.80, p < .01$ ), high family stress ( $OR = 1.42, p < .05$ ), difficulty paying for basic necessities ( $OR = 1.59, p < .05$ ), and low social support ( $OR = 0.98, p < .05$ ) controlling for other variables in the model. Among foreign-born caregivers, physical violence victimization that occurred in the past 12 months was significantly associated with younger age ( $OR = 0.84, p < .01$ ), absence of intimate partner at home ( $OR = 0.32, p < .05$ ), major depressive disorder ( $OR = 23.81, p < .001$ ), high family stress ( $OR = 3.74, p < .05$ ) and neighborhood stress ( $OR = 1.21, p < .001$ ) and marginally associated with low social support ( $OR = 0.97, p < .10$ ) controlling for other variables in the model (Model 1). Neither legal status nor acculturation indicators were significantly associated with IPV (Model 2). Depression and high family stress became stronger predictors of IPV victimization in Model 2,  $OR = 27.35$  and  $OR = 4.34$  respectively, which also had a better model fit.

#### 4. Discussion

The purpose of this study was to examine national prevalence of physical violence victimization rates perpetrated by an intimate partner among female caregivers of children reported to CPS due to suspected abuse and/or neglect who remained at home following an assessment or investigation. The special focus of the study was to examine nativity differences in IPV prevalence and risk factors associated with IPV victimization while using the caregiver's perspective. The study found that IPV prevalence in the year preceding the baseline assessment was 26.07% with lifetime rate being 36.43% for the whole sample. These findings are consistent with prior literature reporting rates of past year IPV ranging from 28% to 42% for samples derived from child protective services (Hanzen et al., 2004; Jones, Gross, & Becker, 2002; USHHS, 2012), and are disproportionately higher than recent national

prevalence rates of IPV among the general population, ranging from 1.2% to 5.9% (Black et al., 2011; Tjaden & Thoennes, 2000). The study found that both US-born and foreign-born caregivers are at proportionally equal risk for IPV within the child welfare population, with IPV prevalence for the past year being 26.58% and 23.83% and lifetime rates being 37.01% and 31.25% respectively. Compared to the only prior study examining national prevalence rate of IPV among foreign-born caregivers involved with CPS, we found that the overall prevalence rate of IPV was twice as high; however, our findings were consistent with the prior study in regards to nativity (Dettlaff & Earner, 2012). A much lower prevalence rate found by the prior study can be explained by its use of caseworkers' accounts to measure for IPV, which is known to have a low sensitivity to detect problematic issues (English & Graham, 2000; Kohl et al., 2005).

The current study also examined the association between nativity and IPV in the multivariate analysis to account for a potential influence of confounders. Drawing on theoretical and some prior empirical work, we hypothesized that foreign-born caregivers would have different rates of IPV victimization than their US-born counterparts. While controlling for a range of socio-demographic factors, caregiver's psychosocial functioning characteristics and family needs, the study found that the IPV prevalence did not differ by nativity. The only other prior study that examined nativity differences in IPV among caregivers involved with CPS did not use multivariate controls (Dettlaff & Earner, 2012). Our study findings are consistent with several community studies (Altschul & Lee, 2011; Cunradi, 2009; Moore et al., 2007) but differ from others (Caetano et al., 2007; Lown & Vega, 2001; Wrigh & Benson, 2010) that found immigrants to be at a lesser risk for IPV. Perhaps our study's null findings in regards to nativity should not be surprising after all. The child welfare population is characterized by complex and often chronic problems, which may extend across different racial/ethnic groups. In addition to IPV, foreign-born and US-born caregivers in this study also did not significantly differ from each other on SES and problematic substance use, factors found to be significantly different between the two groups in the general population (Altschul & Lee, 2011).

Lastly, the current study examined risk factors for IPV separately for US-born and foreign-born groups. Drawing on prior work, the study hypothesized that risk factors for IPV victimization would differ by caregiver's nativity. Rates of IPV did not vary significantly by most

**Table 5**  
Multivariate logistic regression models predicting intimate partner violence among US-born and foreign-born female caregivers.

	US-born (n = 1999)			Foreign-born (n = 211) Model 1			Foreign-born (n = 211) Model 2		
	OR	95% CI	p	OR	95% CI	p	OR	95% CI	p
<i>Socio-demographic characteristics</i>									
<i>Race (Caucasian non-Hispanic)</i>									
African American/Black	0.86	0.53, 1.40	0.54						
Hispanic <sup>1</sup>	1.50	1.02, 2.20	*	1.12	0.17, 7.28	0.91	1.31	0.22, 8.00	0.77
Other	1.02	0.47, 2.18	0.96						
Age	0.97	0.94, 1.00	*	0.84	0.76, 0.93	***	0.84	0.75, 0.94	**
Intimate partner present	0.95	0.62, 1.44	0.78	0.32	0.11, 0.96	*	0.33	0.12, 0.93	*
Education									
High school and more (less than high school)	1.56	1.01, 2.40	*	1.32	0.42, 4.13	0.63	1.44	0.46, 4.54	0.53
<i>Caregiver's psychosocial functioning and family needs</i>									
Major depressive disorder	1.89	1.28, 2.80	**	23.81	8.63, 65.71	***	27.35	9.61, 77.78	***
Problematic substance use	1.80	1.24, 2.62	**	1.90	0.27, 13.20	0.51	2.15	0.31, 14.81	0.43
High family stress	1.42	1.05, 1.93	*	3.74	1.07, 13.06	*	4.34	1.00, 18.86	*
Difficulty paying for basic necessities	1.59	1.02, 2.47	*	1.77	0.31, 10.19	0.52	1.69	0.34, 8.48	0.52
Neighborhood stress	1.03	0.99, 1.06	0.18	1.21	1.09, 1.35	***	1.22	1.10, 1.36	***
Social support	0.98	0.97, 1.00	*	0.97	0.93, 1.01	0.09	0.97	0.93, 1.01	0.14
<i>Acculturation and legal status</i>									
Years in the U.S.							0.97	0.89, 1.06	0.53
Low English proficiency (high)							1.91	0.23, 15.61	0.54
Legally residing (undocumented)							0.40	0.07, 2.26	0.29

Note: Reference categories included in the parenthesis; <sup>1</sup> for foreign-born sample, Hispanics are compared to all other groups combined; \* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$ .

socio-demographic, psychosocial, and family characteristics examined between US-born and foreign-born caregivers in the bivariate analysis. There were significant associations between age, depression, high family stress, difficulty meeting basic needs, high neighborhood stress, low social support and IPV among both groups. On the other hand, race, marital status, presence of intimate partner, education, employment status, household size, another language spoken at home, problematic physical health, and prior CPS involvement did not significantly differ by IPV status for both groups. Differences in correlates with IPV status between the two population groups were found for problematic substance use, history of police arrests and poverty, with all being significantly more prevalent in US-born households experiencing IPV than those that are not. A slightly different picture emerged from the multivariate analyses. While caregiver's young age, higher rates of depression and family stress were associated with IPV victimization among both US-born and foreign-born caregivers, absence of partner at home and high neighborhood stress predicted higher rates of IPV among foreign-born caregivers while Hispanic ethnicity, high school or higher education, substance disorder, difficulty meeting basic needs and low social support significantly predicted IPV only among US-born caregivers. In addition, neither acculturation nor legal status indicators significantly predicted IPV.

Our findings that caregiver's young age, major depression disorder, and problematic substance use predicted IPV are consistent with prior work (Golding, 1999; Hanzen et al., 2004). In foreign-born sample, depression had a much stronger association with IPV than among US-born caregivers. In fact, depression was overwhelmingly overrepresented in foreign-born households experiencing IPV compared to those where violence was absent. Immigrants' lesser risk for psychopathology is consistent with prior work (Escobar, Nervi, & Gara, 2000), but as this study suggests, this advantage may disappear among IPV victims. This may be due to a lot of immigrant women being isolated and feeling trapped in a relationship due to financial and structural barriers, and inability to access needed supports (ARC, 2010; Earner, 2010).

High family and neighborhood stress and low social support have been theoretically and empirically related to increased IPV rates suggesting that those females with low social support may be less likely to leave the abusive situation and that living in a highly stressful circumstances (individual or neighborhood level) may lead to a conflict between the intimates (Fox & Benson, 2006; Klein & Milardo, 2000). Interestingly, high neighborhood stress seemed to matter more for foreign-born caregivers, and it was a significant predictor of IPV even after controlling for high family stress. Research suggests that social ties and support at a neighborhood level may provide immigrants with strong emotional support and opportunities for employment and integration (Chiswick & Miller, 2005; Desmond & Kubrin, 2009; Portes & Rumbaut, 2001). It would seem then that those foreign-born caregivers who perceive their neighborhoods as not being supportive would be more likely to experience increased overall stress at home that may lead to IPV. Alternatively, supportive neighborhoods may have increased social control and surveillance as well as different cultural norms in regards to violence tolerance between partners at home (Bellair, 2000).

Prior work found that presence of intimate partner at home lowered frequency of less severe IPV though increased the overall victimization rate (Hanzen et al., 2004). In our sample, presence of intimate partner lowered and being single increased the odds of IPV victimization among foreign-born caregivers. Several hypotheses can be made to explain this finding. It could be that those women who are likely to leave an abusive relationship are more likely to experience retaliation from a former partner or it could be that the partners are no longer in the home due to CPS involvement (e.g. safety plans, court orders) but the relationship has not dissolved. Alternatively, it could be that partners still live in the house but women did not report them as being household members due to CPS involvement. The finding that more educated caregivers were at a higher risk for IPV in the US-born

sample is inconsistent with prior research and could be an artifact of complete case analysis. Finally, in contrast to our expectations, legal status and acculturation did not significantly predict IPV victimization. It should be noted, however, that there was a fairly small number of recent and undocumented foreign-born caregivers in our study. There is also evidence that undocumented women or those living with undocumented partner may be less likely to disclose victimization due to fear of deportation (Amanor-Boadu et al., 2012; Androff et al., 2011).

#### 4.1. Strengths and limitations

The current study is one of the first studies to use national data to examine prevalence and risk factors for IPV among foreign-born caregivers involved with CPS due to suspected child abuse and neglect. NSCAW is the only national data source containing CPS sample that has nativity information available. Thus, this study provides the best available estimates and correlates of IPV among foreign-born population involved with CPS. Another strength is that the study uses caregivers' self-reports with well-established psychometric properties. Examination of risk factors associated with IPV among foreign-born caregivers substantially adds to the knowledge base of IPV etiology and provides practice implications with this population.

Even with these strengths, the study contains a number of important limitations. First, IPV was assessed by physical violence only and did not include psychological or sexual abuse. It is likely that IPV prevalence reported in this study are conservative estimates of all IPV experienced by this population. It is also possible that there could be nativity differences if other forms of violence were included. Second, the study sample excluded out-of-home placement cases, as IPV measure was not collected on this subsample. Due to this reason, the study findings cannot be generalized to the entire child welfare population. While involvement with CPS is often used as a proxy for child maltreatment, it is thought to be a conservative estimate of all child maltreatment, as much of it goes underreported (Fallon et al., 2010; Sedlak et al., 2010). Further, some suggest that underreporting may be particularly acute among the foreign-born population, particular those residing in ethnic enclaves (Zhai & Gao, 2009). Another related factor is that the characteristics of the foreign-born population in NSCAW sharply differ from descriptors in the Census data suggesting that either recent and/or undocumented immigrants possess more parenting strengths or that they are underreported to CPS. It is also possible that some foreign-born families that were initially included in NSCAW sampling frame declined to participate either because of a general fear and distrust of the government and researchers and/or because of hesitancy to discuss sensitive information during interviews, including their nativity and legal status. For this reason, the study findings are limited to child welfare involved caregivers and offer conservative estimates of recent IPV for households where child maltreatment is present and particular immigrant households.

Several measures used in this study were based on the caseworkers' risk assessment. It is possible that workers were more likely to complete inaccurate assessments of foreign-born mothers compared to US-born mothers due to cultural and/or linguistic differences. The use of a cross-sectional sample limits the ability to understand the direction of the relationship between IPV and its correlates. Finally, this study had a substantial amount of missing data, and null findings between IPV and acculturation/legal status indicators should be interpreted with caution. Small cell sizes for those with undocumented status and arriving in the country fairly recently also prevented us from exploring theoretically important interactions between acculturation, legal status and correlates of IPV (stress, depression). Finally, the sample size for foreign-born group was considerably smaller compared to US-born population, which could have contributed to loss of statistically significant associations in the multivariate analysis.

## 4.2. Implications

The high prevalence of IPV found in this study calls for incorporation of IPV screening into the routine of child welfare practice. Special identification efforts may have to be made to accommodate the needs of foreign-born families (i.e. undocumented legal status, low English proficiency). This study found that both undocumented and less proficient English speaking caregivers were at an equal risk for IPV, however, given the nature of sensitive topic and fear of deportation, it is probably reasonable to assume that these numbers are conservative estimates of all violence occurring in immigrant households that are involved with CPS. Although this study found that over a quarter of primary foreign-born caregivers were undocumented and about eight percent had low or intermediate English proficiency, this number may be much higher in areas with a high proportion of foreign-born population. Local CPS jurisdictions should evaluate their assessment process of IPV and special measures may need to be in place to increase disclosure among immigrant caregivers. Hiring staff that is representative of a local immigrant community to specialize in immigrant cases may help identify the clients in need (Chand, 2005; Korbin, 2002). General domestic violence awareness campaigns may be another option. One such innovative program is the Ethnic Media Outreach Project in Montreal offered through ethnic media channels (Kamateros, 2004).

Our study also showed that depression was strongly associated with IPV among foreign-born caregivers. While the direction of this relationship could not be determined by this study, this finding suggests that mental health screening should be offered to all immigrant caregivers who have disclosed being involved in a violent relationship. Since problematic mental health can be often stigmatized in non-Western cultures (Abe-Kim et al., 2007), psychosocial education about mental health as well as support groups for women involved in IPV situations should be provided as another option. Likewise, information on IPV-related resources should be offered to immigrant women who are depressed. Support groups and connection to other resources may be particularly helpful to immigrant women residing in highly stressful communities.

While assessment of IPV is an important first step, effective intervention needs to follow. Currently, there is scarce evidence base for IPV interventions in general, and for families in CPS in particular. One example of an innovative program designed for women involved with CPS and experiencing IPV is the Mother Overcoming Violence through Education and Empowerment (MOVE) in North Carolina. It is a 13-week program with 2.5 hour educational and therapeutic sessions aimed to address parenting, mental health, and IPV (Ermentrout, Guo, Macy, & Rizo, 2013). The program, informed by the empowerment philosophy and social cognitive theory, focuses on participants to serve as models for group peers and encourage self-assessment for change. Initial evaluation of the program has showed significant improvements for mental health, including depression and PTSD, parenting, and IPV victimization outcomes. Foreign-born parents, however, may face obstacles while accessing available services (Earner, 2010). Special efforts should be made to provide services for undocumented and linguistically isolated women. CPS workers should be aware of immigration relief options for undocumented battered women and routinely assess them to determine if they qualify to obtain a legal residency status. Future research efforts are desperately needed to expand evidence base for interventions addressing IPV among child welfare involved women.

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