

Witnessing Arrests and Elevated Symptoms of Posttraumatic Stress: Findings from a National
Study of Children Involved in the Child Welfare System

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Abstract

This study used data from the National Survey of Child and Adolescent Well-being to test the hypothesis that witnessing the arrest of a household member is significantly associated with elevated PTS symptoms. Analyses are based on data on 1,869 children ages 8 and up who were subjects of reports of maltreatment. Results show that the children child welfare authorities encounter who have witnessed arrests are significantly more likely to have also (1) witnessed multiple types of violence in their homes, (2) been victims of multiple types of violence, (3) witnessed non-violent crimes, and (4) lived in families having problems meeting children's basic needs. Results of multivariate analyses indicate that, all else being equal, witnessing the arrest of a household member either alone or in conjunction with the recent arrest of a parent is predictive of elevated posttraumatic symptoms. Approximately 1 in 4 children who witnessed an arrest and also had a recently arrested parent had elevated symptoms of posttraumatic stress

Witnessing Arrests and Elevated Symptoms of Posttraumatic Stress: Findings from a National Study of Children Involved in the Child Welfare System

Individuals who work with children with parents in jails and prisons contend that witnessing a parent's arrest traumatizes children. At present, there is very little empirical data to support or refute this claim. The current study helps address this gap in knowledge by using data from the National Survey of Child and Adolescent Well-being (NSCAW) to explore the relationship between children's exposure to the arrest of a household member and elevated symptoms of posttraumatic stress (PTS), while accounting for other factors which could also explain children's PTS symptoms.

Parental Arrest and Child Welfare Involvement

Currently, the best available information on children's reactions to witnessing their parents' arrests comes from individuals who work with children whose parents are incarcerated (e.g., Puddefoot & Foster, 2007) and journalistic interviews with a small number of children (Bernstein, 2005). According to these sources, children are sometimes frightened by events that occur in the course of police taking their parents into custody (which can involve the use of force [Harm & Phillips, 1998]). Some children report feeling as if they too were in trouble and under arrest because they were taken away from their homes in police cars, held at police stations while waiting for someone to come get them, or detained in emergency shelters. They also experience anxiety because they do not know where their parents were taken or when, or if, they would see them again. There are also occasions when young children have been left without adult supervision for days and even weeks following their parents' arrests.

Law enforcement and child protective services (CPS) agencies already have procedures in place for responding to children in certain specific circumstances when parents are arrested

(e.g., drugs, domestic violence, child maltreatment) (Cross, Finkelhor, & Ormrod, 2005). More recently, law enforcement and child welfare agencies in some jurisdictions have also been working together to establish procedures that take into consideration children's needs in *all* instances in which parents are arrested (Children & Families of Incarcerated Parents Subcommittee, 2008; Family and Child Welfare Research and Training Project, nd; Hirschfeld, 2009, Pima Prevention Partnership, 2007; Puddefoot & Foster, 2007). The goals of these procedures are: (1) preventing the unnecessary placement of children in shelters or foster homes when police take parents into custody; and (2) making the arrest of a parent less traumatic for children (San Francisco Partnership for Incarcerated Parents, nd). Some of the procedures being adopted include: (1) mandated training for law enforcement officers on ways to make the arrest of a parent less frightening and upsetting for children; (2) having police officers determine if arrestees have children even if none are present in order to prevent children from inadvertently being left without supervision; (3) co-locating CPS staff at law enforcement agencies so they can respond quickly when needed; and (4) arranging for children to be transported to shelters when necessary by CPS rather than in police cars (Puddefoot & Foster, 2007).

Advocates for the development of protocols to guide how law enforcement and CPS agencies respond to children when parents are arrested argue that witnessing a parent's arrest contributes to trauma-induced psychological symptoms (Puddefoot & Foster, 2007). To the best of our knowledge, only two studies have examined the relationship between witnessing a parent's arrest and symptoms of post-traumatic stress disorder. Both are based on small convenience samples and are limited to children whose parents were incarcerated, which is the outcome of only a fraction of arrests (Phillips, Erkanli, Costello, & Angold, 2006). One study (Kampfner, 1995) was based on interviews with 36 children who participated in a children's

visitation program at a women's prison. Based on interview data, the investigator concluded that "even though many of the children ... had been separated from their mothers for 2 to 3 years at the time of their interviews, each child could still vividly remember his or her mother's arrest and his or her experiences in the courtroom" (p. 94). Her interviews led her to surmise that, "75% of children [with incarcerated mothers] had symptoms consistent with PTS including depression, difficulty sleeping, concentration problems, and flashbacks about their mother's crimes and arrest".

The second study is based on 35 children in grades 1 through 10 who participated in a mentoring program for children of incarcerated parents (Bocknek, Sanderson, & Britner, 2009). Based on children's responses to standardized measures, 77% scored in the clinical range for symptoms of post-traumatic stress disorder. This study provides evidence that, collectively, *this specific group of children* were more likely to have elevated PTS symptoms than were the children upon whom the norms for the measure were based. The generalizability of these findings beyond the study sample, however, is uncertain. Moreover, it is not possible to attribute these symptoms to the events surrounding parents' arrests because children's exposure to other potentially traumatic events cannot be ruled out as a possible alternative explanation for their symptoms.

In fact, when advocates for arrest protocols assert that children who witness a parent's arrest are traumatized, they sometimes blur acts specifically related to parents' arrests with events leading up to or following those arrests (e.g., Dallaire & Wilson, in press). For example, Kampfner talks about children "vividly remembering [their] mother's arrest and [their] *experiences in the courtroom*" [emphasis added] and about children having flashbacks to their mothers arrest *and crimes*.

It is plausible that symptoms of PTS exhibited by children who witness arrests could be the result of other traumatic experiences or an accumulation of traumas instead of, or in addition to, the consequence of witnessing law enforcement officers arrest their parents. A number of studies have shown that multiple exposures to traumatic events, either within the same type of event or across event types, are associated with higher levels of PTS symptoms (Follette, Polusny, Bechtle & Naugle, 1996; Green et al., 2000; McCauley et al., 1997; Miranda, Green & Grupnick, 1997; Norris & Kaniasty, 1994). Consistent with this, prior analyses of NSCAW data (Kolko et al., 2009) found that the likelihood of children having PTS symptoms increased markedly as the number of types of violence they witnessed and were victims of in their homes increased.

Of specific relevance to the current study, the instrument used in NSCAW to assess children's violence exposure, the VEX-R (Fox & Leavitt, 1996), includes an item that asks if children witnessed the arrest of *someone* with whom they lived (albeit not exclusively their parents). This study capitalizes on the availability of these data to provide novel and timely information about the relationship between children's exposure to arrests and PTS symptoms, while also accounting for other factors that might explain heightened PTS symptoms.

METHODS

Data

Data used in the current study come from the National Survey of Child and Adolescent Well-being (NSCAW), a study that employed a two-stage stratified sample design (Dowd et al., 2003). In the first stage of sampling, 92 primary sampling units (PSU), in this case geographic areas encompassing the population served by a single child protective services agency, were selected from a national sampling frame. In the second stage, a stratified random sample of children was selected from lists of investigations and assessments in each PSU. The sampling of

children was stratified based on age (infants versus all others), sexual abuse (versus all other types of maltreatment), and receipt of services (to ensure a sufficient number of cases open for CPS were included).

A total of 5,501 children ages 0 to 15 participated in NSCAW, but NSCAW is not simply a study of these 5,501 children. When data on NSCAW participants are weighted and statistics are adjusted to account for the sampling design, statistical inferences can be made about the 2.4 million children nationally who are subjects of reports of maltreatment.

The current study is limited to NSCAW participants who were ages 8 or up at the baseline interview ($n=1,869$) because younger children were not asked questions about trauma symptoms. The results reported in this article are inferential statistics (i.e., population parameter estimates) describing the national population of children who were subjects of reports of maltreatment in this age group ($N=985,105$). Approximately 46.4% of these children are male. Also, approximately 46.1% are white, 36.3% are black, 15.3% are Hispanic, and the remainder are of other races and ethnicities. Note that here, and throughout this article, we employ the convention of using n when referring to the number of participants in the NSCAW sample and N for population estimates.

Measures

Elevated PTS symptoms. The dependent variable in this study is elevated symptoms of PTS, which were assessed using the 10-item PTS subscale of the Trauma Symptom Checklist for Children (TSCC; Briere, 1996). The TSCC is a self-report measure of current trauma-related symptoms or distress in children or adolescents exposed to unspecified traumatic events. Children indicate how often they experienced symptoms using a 4-point scale scored in the direction of increased frequency. The scale has high internal consistency ($\alpha = .87$), good

concurrent validity with self-reported depression ($r=.64$), and good construct validity (see Briere, 1996). The TSCC was standardized on racially and economically diverse children from both urban and suburban settings, has established norms based on age and gender, and has an identified clinical cutoff score ($T > 64$). Children in the current study were categorized as having elevated PTS symptoms if they scored above this cutoff score.

Witnessing the arrest of a household member and recent parental arrest. As is often the case with secondary analyses, the available data do not precisely match the construct of interest, which in this instance is children's experiences witnessing their *parents'* arrests. That being the case, the current study draws on two variables as a proxy for the phenomenon of interest: children's reports of witnessing the arrest of a *household* member and the recent arrest of a child's parent.

Children's exposure to the arrest of someone with whom they lived was determined using a single item from the VEX-R (Fox & Leavitt, 1995). The recent arrest of a parent was determined from caseworkers' assessments of the parent/family risks that existed at the time of the index maltreatment investigation. These measures are described in detail below. We do not assume that children who reported witnessing an arrest who also had a recently arrested parent necessarily witnessed their parent's arrest. Nonetheless, supplementing children's accounts of witnessing a household members' arrest with information about the recent arrest of a parent at least enables us to examine the effect of children's exposure to arrests in the context of identified parent involvement with police.

Violence exposure (witnessing and victimization). This study examines the possibility that children's PTS symptoms could be a reaction to exposure to violence or victimization in their homes rather than to witnessing arrests. In NSCAW, children's violence exposure was

assessed using the VEX-R (Fox & Leavitt, 1995), a 23-item self-report measure administered in cartoon format. Children view cartoons depicting 13 acts of violence and are asked if they ever saw someone with whom they lived commit each act, and whether they were the victim of each act.

Prior studies using the VEX-R based on young, minority, inner-city children (Shahinfar, Fox, & Leavitt, 2000) and elementary school children in Israel (Raviv, Raviv, Shimoni, Fox, & Leavitt, 1999) have found modest parent-child correspondence and convergent validity. Research with older children in foster care (ages 6 to 12) (Hartnett, Bruhn, Helton, Fuller, & Steiner, 2009) and prior analyses of data from NSCAW participants (Kolko et al., 2009) show substantial rates of violence exposure and, in the latter study, the predictive validity of reported exposure to mild violence and victimization in relation to heightened PTS symptoms (Kolko et al., 2009).

One VEX-R item asks if children have ever witnessed the arrest of someone with whom they live. For the purpose of this study, this item is used as a key independent variable (see above). Two other items measure children's experiences witnessing criminal acts (i.e., people in their homes stealing something or dealing drugs). Although these activities might be correlated with violence exposure, they are not necessarily violent acts in and of themselves. In the current study, these items are used as distinct covariates rather than as a measure of children's violence exposure.

After removing the item pertaining to witnessing arrests and the two items pertaining to witnessing non-violent crimes, we created a variable representing the number of different acts of violence children had ever witnessed in their homes. Possible scores range from 0 to 8. A similarly constructed variable represents the number of different types of violence children were the victims of in their homes. Possible scores range from 0 to 7.

Parent and family risks. Child welfare workers reported the presence or absence of various risk factors based on information and knowledge available to them at the time of the case investigation. In the current study, a risk assessment item inquiring about the recent arrest of a parent is used as a key independent variable (see above). Other items from the risk assessment were used to categorize families based on whether, at the time of the case investigation, there was evidence that the child's primary or secondary caregiver: (1) were not adequately supervising the child; were using harsh, excessive, or inappropriate discipline, or had unrealistic expectations of the child (i.e., poor parenting); (2) had an alcohol or drug problem; (3) were victims of domestic violence; (4) had a serious mental illness or a physical or cognitive/intellectual impairment; or (5) were having trouble paying for basic necessities such as food, shelter, clothing, electricity or heat. Responses were summed across domains to create a cumulative parent/family risk score with possible values ranging from 0 to 5.

Depression. Prior research on predictors of elevated PTS symptoms among children ages 8 and up who are represented in NSCAW shows that depressive symptoms are significantly correlated with elevated PTS symptoms (Kolko et al., 2009); accordingly, children's depressive symptoms are included as a covariate in the current study. Children's symptoms of depression were assessed using the Child Depression Inventory (CDI) (Kovacs, 1992). The CDI consists of 27 items that assess a range of depressive symptoms such as negative mood, ineffectiveness, anhedonia, and so forth. Items are rated on a 3-point Likert-type scale. Based on normative data, children in the 91st percentile or above for their age and gender were classified as depressed. Prior studies, including previous analyses of NSCAW, show that the CDI has high internal consistency ($\alpha=.71$ to $.88$) (Kolko et al., 2009; Kovacs, 1992).

CPS case characteristics. This study takes into consideration several elements of children's CPS case characteristics: (1) current type of alleged maltreatment, (2) substantiation, (3) children's relationship to alleged perpetrators, (4) past child welfare investigations, and (5) current placement. Information about the types of maltreatment associated with the report of maltreatment that resulted in children's selection into NSCAW was obtained from child welfare workers using a modified Maltreatment Classification Scale (MCS; Manly, Cicchetti, & Barnett, 1994). This information was used to classify children as being subjects of reports of alleged: (1) physical abuse, (2) sexual abuse, (3) emotional abuse, (4) neglect (i.e., failure to supervise or failure to provide), and (4) other, a category capturing several relatively infrequent (i.e., fewer than 5% each) types of maltreatment (e.g., moral/legal, education, exploitation, abandonment). In addition, workers provided information about whether any maltreatment was substantiated.

Workers also identified the perpetrator of the most serious current abuse. Perpetrator status was classified as biological parent if a biological parent was reported across any type of alleged abuse or neglect; otherwise, the perpetrator was classified as "other" (typically relatives or friends). Information on whether children had been the subjects of prior investigations of reported maltreatment was also obtained from workers based on information in CPS records.

Finally, information about children's current placement was obtained from children's caregivers. Children were classified as being in an out-of-home placement if they were living in a placement other than with the person who was their permanent primary caregiver (typically their parent) at the time of the case investigation. Out-of-home placements include (a) non-relative foster care, (b) placements with relatives, and (c) institutional placements such as residential treatment or group homes.

Child demographic characteristics. Information on child demographic characteristics (i.e., age, race, gender) was obtained from children's caregivers.

Analyses

Analysis weights. Analysis weights were derived by the NSCAW Research Team (Dowd et al., 2003). The weights adjust for the probability of PSU selection and the probability of children being selected from within selected PSUs. They also account for the month-to-month variations in the size of the sampling frame, the exclusion of siblings of children selected in previous months, and loss of coverage in certain states because of the omission of unsubstantiated cases and cases not receiving services. At the person level, the weights adjust for nonresponse and include a post-stratification adjustment to external population totals.

Analyses. All analyses were conducted using SAS v. 9.2 with survey procedures to account for the sampling design and case weights. The goal of our analyses was to test the hypothesis that witnessing arrests is significantly associated with elevated PTS symptoms after taking into consideration the recent arrest of children's parents, as well as children's exposure to violence (both as witnesses and victims) and criminal activities in their homes, parent/family risk factors, depression, CPS case characteristics, and child demographic characteristics.

To begin, χ^2 tests of independence were calculated to determine whether the two groups of interest (i.e., children who ever witnessed an arrest and those who did not) differed with respect to the prevalence of the dependent and independent variables. Note that population point prevalence estimates for each variable can be determined from Table 2, but the results of the χ^2 tests are only reported in the text of the Results section.

Next, logistic regression was used to determine whether each covariate was individually predictive of elevated PTS symptoms (Table 2). Analyses were conducted separately for

children who had and had not ever witnessed arrests as a way of examining potential colinearity in advance of multivariate modeling. In addition, we also examined the variance inflation factor (VIF) which was below 3 for all variables.

The final step involved estimating two multivariate models predicting elevated PTS symptoms. In the first, we modeled the effect of all covariates other than witnessing an arrest and the recent arrest of a parent. In the second, in addition to the variables included in Model 1, we modeled the main effect of witnessing arrests, the main effect of recent parental arrest, and the interaction of witnessing arrest and recent parental arrest.

This sequence of modeling was carried out two different ways. In one round of modeling, we used the individual items that comprised the three different cumulative scores (i.e., number of types of violence the child witnessed, number of types of violence number of parent/family risk factors). We were particularly interested in whether the coefficients for witnessing arrest and recent parental arrest changed appreciably when the specific effect of child-reported exposure to drug dealing or case-worker reported drug abuse were present in the model as past research shows a high correlation between parent drug abuse and parental arrest (Phillips, Erkanli, Keeler, Costello, & Angold, 2006). In the second model, we used measures of cumulative parent/family risk, cumulative violence exposure, and cumulative victimization by household members in lieu of the individual items along with the other covariates. As the effect of witnessing arrests, recent parental arrest and the interaction terms were consistent between models, we report the models based on cumulative measures as they are the more parsimonious models.

Results

Nationally, there are nearly one million children ages 8 and up who are subjects of reports of maltreatment. More than one-third (38.7%) of these children ($N=314,429$) have

witnessed the arrest of someone with whom they lived. The majority of this subgroup (60.5%) witnessed an arrest only once, but a substantial proportion (39.5%) witnessed arrests on multiple occasions (not shown).

Table 1 shows the prevalence of elevated PTS symptoms among children who did and did not witness arrests and who did and did not have recently arrested parents. Elevated PTS symptoms were most prevalent among children who witnessed the arrest of someone with whom they lived who also had a recently arrested parent (27.4%) followed in turn by children who witnessed an arrest whose parents were not recently arrested (15.7%).

INSERT TABLE 1 ABOUT HERE

Comparison of Children who did and did not Witness a Household Member's Arrest

Table 2 provides population point prevalence estimates for each variable examined in this study. Statistical tests of independence (not shown) indicate that children who did and did not ever witness the arrest of someone with whom they lived were statistically indistinguishable ($p > .05$) with respect to the recent arrest of a parent, and their demographic (i.e., age, race, gender) and CPS case characteristics (i.e., type of current alleged maltreatment, substantiation, perpetrator, prior CPS reports, and current placement). Beyond those similarities, the two groups differed significantly ($p < .05$) with respect to *every other variable examined in this study* (i.e., exposure to violence both as witnesses and victims, exposure to people stealing and dealing drugs in their homes, caseworker-identified risk factors, and depression).

The between-group differences in children's exposure to acts of serious violence are particularly noteworthy. Acts of serious violence are relatively low frequency events; however, children who witnessed arrests were significantly more likely than were other children to report witnessing or being victims of serious violence. This included being threatened with guns or

knives (8.8% of children who witnessed an arrest in comparison to 1.7% of children who did not), seeing someone else threatened with a gun or knife (18.3% versus 5.0%), witnessing a stabbing (12.7% versus 1.1%), and witnessing a shooting (9.1% versus 2.0%).

Bivariate Analyses of Predictors of Elevated PTS Symptoms

Significant relationships between individual covariates and elevated PTS symptoms were determined using bivariate logistic regression (Table 2). Bivariate relationships were estimated separately for children who had and had not ever witnessed a household member's arrest.

Several covariates were significantly related to elevated PTS symptoms in both subgroups (i.e., depression; witnessing four or more types of violence in the home; being yelled at, pushed, or slapped; perpetrator's relationship to the child; and age), but there were also between-group differences. The recent arrest of a parent, for example, was significantly associated with elevated PTS symptoms among children who had never witnessed an arrest, but not among those who had. A further difference was that witnessing a shooting was significantly associated with PTS symptoms among children who had seen an arrest, but not among those who had not.

INSERT TABLE 2 ABOUT HERE

Multivariate Model of the Relationship between Witnessing Arrests and Children's Elevated Symptoms of Post Traumatic Stress

After examining the bivariate predictors of elevated PTS symptoms separately for children who had and had not ever witnessed the arrest of someone with whom they lived, all covariates were then entered into a multivariate model predicting PTS using the full sample. Model 1 (Table 3) included all covariates except witnessing arrests and the recent arrest of a parent. The significant predictors of heightened PTS symptoms in this model were being the

victim of four or more types of violence, depression, allegations of emotional abuse, maltreatment by a perpetrator other than the child's biological parent, and age (higher likelihood among children 8 thru 11).

Model 2 included the same covariates as Model 1 with the addition of the main effect of witnessing the arrest of a household member, the main effect of recent parental arrest, and the interaction of the two variables. The strength and significance of the covariates that were included in Model 1 were not notably different in Model 2. Additionally, the main effect of witnessing a household member's arrest and the interaction of witnessing arrests and recent parental arrest were significant. The main effect of recent parental arrest, however, was not.

Based on these models, children who witnessed the arrest of someone with whom they lived had approximately a 57% greater likelihood of having elevated PTS symptoms relative to children who never witnessed an arrest. Children who witnessed a household member's arrest and also had a recently arrested parent had a 73% greater likelihood of having elevated PTS symptoms relative to children who had never seen an arrest and whose parents were not recently arrested .

INSERT TABLE 3 HERE

Discussion

Data from the National Survey of Child and Adolescent Well-being show that more than 1 in 3 children ages 8 and up who are subjects of reports of maltreatment have witnessed the arrest of someone with whom they lived. If we looked only at information obtained from caseworkers about the types of alleged maltreatment that triggered children's contact with the child welfare system, their history of CPS involvement, and current placements, we might have concluded that children who have witnessed arrests are much like all the other children who

come to the attention of CPS agencies. In reality, children who have seen arrests differ from the remainder of the child welfare population in a number of important ways: (1) they are more likely to have been victims of and witnesses to a broader range of violence in their homes (including acts of extreme violence such as shootings and stabbings); (2) they have had greater exposure to non-violent crimes (i.e., drug dealing and stealing); and (3) they are more likely to be living in families having difficulty meeting children's basic needs. None of these differences are surprising considering that higher levels of violence, drug involvement, and theft (each of which are correlated with poverty) could result in arrests and, therefore, would help to explain why children witnessed arrests.

The novel and more interesting findings from this study are found in the results of the multivariate analyses. These analyses show that witnessing the arrest of any household member is significantly predictive of PTS symptoms even after a number of other possible explanations for children's PTS symptoms are taken into account. The current results confirm findings based on NSCAW that were previously reported by Kolko and colleagues (2009) with respect to other significant predictors of elevated PTS symptoms among children known to the child welfare system. While basically replicating Kolko et al's earlier work, we also separated out items assessing children's experiences witnessing arrests and non-violent crimes. In doing so, we learned that witnessing arrests is a distinct predictor of children's elevated PTS symptoms.

Implications for Policy and Practice

This study has timely implications for policy and practice. There is a growing push for law enforcement and child welfare agencies to implement protocols to make the arrest of a parent less traumatic for children. This study suggests that *the arrest of any member of a child's household* may be traumatic for children.

Moreover, the current study suggests that the arrest of a parent or other family member, at least among children who are involved in the child welfare system, is a window of opportunity for identifying children at increased risk for PTS and referring them to appropriate mental health services. Accordingly, it is important for representatives from children's mental health systems to be involved in the work law enforcement and child protective services agencies are currently doing to develop protocols for responding to the needs of children who are present at arrests. At the same time, mental health providers also need to be alert to the fact that witnessing arrests is a risk factor for PTS independent of other acts of violence children may have experienced.

Implications for Research

The current study raises several questions about the validity of the VEX-R as a measure of children's exposure to violence in their homes, particularly when used in research on PTS. First, including exposure to arrests with items measuring children's exposure to acts of violence in their homes potentially distorts our knowledge about the relationship between family violence and PTS by confounding family violence with actions the criminal justice system may take in response to that violence. Second, the VEX-R includes items assessing children's exposure to certain non-violent crimes in their homes (i.e., drug dealing and stealing); items which lack face validity as measures of violence exposure. The current study did not find a significant relationship between witnessing these activities and increased PTS symptoms among youth involved in the child welfare system. Accordingly, the inclusion of these items in the VEX-R may weaken its predictive ability with respect to PTS symptoms in this population.

Limitations and Future Research

This study makes an important and timely contribution to knowledge about a phenomenon – witnessing arrests – which has become an increasingly common childhood

experience. That fact notwithstanding, there are a number of limitations for readers to keep in mind.

First, while the results of the current study lend credence to the claim that witnessing a parent's (or other family member's) arrest increases children's chances of experiencing PTS symptoms, these findings pertain only to children who were subjects of reports of maltreatment. Additional research is needed to ascertain whether these findings hold true for younger children in the child welfare system and for children who witness arrests who do not become involved with CPS agencies.

Second, arrests are not homogenous events. Some arrests can be relatively uneventful; e.g., police serve a warrant and the wanted individual surrenders peacefully. Others can involve sirens, struggles, weapons, and other more frightening and violent actions. That being the case, further research is needed to clarify what exactly children are witnessing when they are present at arrests and whether the results of the current study pertain to *all* arrests or are more specifically the result of witnessing arrests involving the use of force.

Additional research is also needed to confirm the extent to which children are traumatized by events specifically related to the police arresting members of their households rather than events that happen in the wake of arrests. Relevant post-arrest phenomenon might include children being placed in shelters or being required to testify at trials. There is also variation in whether individuals are cited and released, held in jail pending trial, and the ultimate disposition of their cases (e.g., sentences to probation or other community-based punishments, versus jail or prison sentences).

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Table 1.

Prevalence of Elevated PTS Symptoms Based on Children's Experience Witnessing Arrests and Recent Parental Arrest

Ever witnessed the arrest of a household member	Parent was recently arrested	Sample <i>n</i>	Estimated Pop. Frequency <i>N</i> =	Estimated Pop. Proportion %(SE)	Elevated PTS Symptoms Est. Pop. Proportion (% of subgroup) (SE)
Yes	Yes	122	46,144	5.7 (1.0)	27.4 (8.8)
Yes	No	519	268,285	33.0 (2.4)	15.7 (2.9)
No	Yes	118	47,759	5.9 (1.2)	3.9 (1.4)
No	No	803	451,791	55.5 (2.7)	10.3 (2.1)

Table 2.

Bivariate Relationship between Covariates and Elevated PTS Symptoms by Exposure to the Arrest of a Household Member

	Child Ever Witnessed the Arrest of Someone with Whom He/She Lived			
	No (n=1111)		Yes (n=758)	
	Pop. Frequency N=499,521		Pop. Frequency N=314,429	
	Pop.%(SE)	Odds Ratio(95% CI)	Pop. % (SE)	Odds Ratio(95% CI)
Parent Recently Arrested				
Yes	9.6(2.0)	0.36(0.16, 0.80)*	14.7(2.4)	2.0(0.73, 5.64)
No	90.4(2.0)	(reference)	85.3(2.4)	(reference)
Violence Exposure (Witnessed)				
<i>Child saw someone he or she lived with...</i>				
Yell at someone				
Yes	68.9(3.0)	3.44(1.27, 9.31)*	79.8(2.9)	1.54(0.51, 4.7)
No	31.1(3.0)	(reference)	20.2(2.9)	(reference)
Throw something at someone				
Yes	19.9(2.1)	2.22(1.08, 4.55)*	38.8(3.2)	2.01(0.99, 4.08)
No	80.1(2.1)	(reference)	61.2(3.2)	(reference)
Push someone				
Yes	22.7(3.0)	3.00(1.42, 6.34)**	50.1(3.8)	1.80(0.81, 3.98)
No	77.3(3.0)	(reference)	49.9(3.8)	(reference)
Slap someone				
Yes	19.1(2.6)	3.02(1.35, 6.73)**	40.3(3.7)	1.70(0.78, 3.73)
No	80.9(2.6)	(reference)	59.7(3.7)	(reference)
Beat up someone				
Yes	10.8(1.5)	1.64(0.83, 3.24)	40.4(3.7)	1.48(0.66, 3.34)
No	89.2(1.5)	(reference)	59.6(3.7)	(reference)

Table 2. Continued

Child Ever Witnessed the Arrest of Someone with Whom He/She Lived				
	No (n=1111)		Yes (n=758)	
	Pop. % (SE)	Odds Ratio(95% CI)	Pop. % (SE)	Odds Ratio(95% CI)
Spank someone				
Yes	61.0(3.3)	1.61(0.62, 4.17)	79.4(2.9)	0.66(0.24, 1.80)
No	39.0(3.3)	(reference)	20.6(2.9)	(reference)
Threaten someone with a gun or knife				
Yes	5.0(1.1)	2.52(0.79, 8.06)	18.3(2.7)	1.30(0.59, 2.87)
No	95.0(1.1)	(reference)	81.7(2.7)	(reference)
Stab someone				
Yes	1.1(0.4)	0.38(0.05, 2.72)	12.7(3.0)	1.42(0.50, 4.00)
No	98.9(0.4)	(reference)	87.3(3.0)	(reference)
Shoot someone				
Yes	2.0(1.0)	0.34(0.06, 2.01)	9.1(2.7)	3.91(1.54, 9.91)**
No	98.0(1.0)	(reference)	90.9(2.7)	(reference)
Cumulative Violence (Witnessed)				
0-1	43.2(3.0)	(reference)	17.1(2.4)	(reference)
2-3	39.6(3.0)	1.75 (0.75, 4.08)	34.2(3.4)	2.28 (0.74, 7.01)
4+	17.2(2.4)	3.85 (1.77, 8.35)**	48.7(3.6)	3.42 (1.06, 11.01)*
Violence Exposure (Victimization)				
<i>Someone in child's household...</i>				
Yelled at child				
Yes	66.6(2.7)	2.46(1.04, 5.81)*	82.8(2.5)	6.91(1.82, 26.29)**
No	33.4(2.7)	(reference)	17.2(2.5)	(reference)
Threw something at child				
Yes	12.7(1.9)	4.40(1.94, 10.02)***	24.3(3.1)	1.79(0.85, 3.77)
No	87.3(1.9)	(reference)	75.7(3.1)	(reference)

Table 2. Continued

	Child Ever Witnessed the Arrest of Someone with Whom He/She Lived			
	No (<i>n</i> =1111)		Yes (<i>n</i> =758)	
	Pop. % (SE)	Odds Ratio(95% CI)	Pop. % (SE)	Odds Ratio(95% CI)
Pushed child				
Yes	12.4(1.7)	3.95(1.76,8.83)***	32.7(3.6)	2.25(1.09, 4.66)*
No	87.6(1.7)	(reference)	67.3(3.6)	(reference)
Slapped child				
Yes	15.9(2.1)	3.32(1.48, 7.47)**	37.4(4.0)	2.30(1.14, 4.63)*
No	84.1(2.1)	(reference)	62.6(4.0)	(reference)
Beat up child				
Yes	8.1(1.7)	5.10(2.14, 12.14)***	17.3(2.7)	2.36(0.94, 5.89)
No	91.9(1.7)	(reference)	82.7(2.7)	(reference)
Spanked child				
Yes	48.7(3.6)	2.28(0.97, 5.38)	74.7(2.5)	0.84(0.38, 1.84)
No	51.3(3.6)	(reference)	25.3(2.5)	(reference)
Threatened child with gun or knife				
Yes	1.7(0.8)	0.30(0.05, 1.70)	8.8(2.0)	1.54(0.54, 4.42)
No	98.3(0.8)	(reference)	91.2(2.0)	(reference)
Cumulative Violence (Victimization)				
0-1	53.8(3.3)	(reference)	23.5(3.1)	(reference)
2-3	35.7(3.4)	1.77 (0.68, 4.64)	49.2(3.2)	1.27(0.49, 3.32)
4+	10.5(1.8)	5.96 (2.25, 15.76)	27.3(3.0)	3.08 (1.10, 8.62)***
Exposure to Crime in Household				
<i>Child saw someone he or she lived with...</i>				
Deal drugs				
Yes	7.1(1.4)	2.43(0.99, 5.99)	24.9(2.8)	1.56(0.66, 3.68)
No	92.9(1.4)	(reference)	75.1(2.8)	(reference)

Table 2. Continued

	Child Ever Witnessed the Arrest of Someone with Whom He/She Lived			
	No (<i>n</i> =1111)		Yes (<i>n</i> =758)	
	Pop. % (SE)	Odds Ratio(95% CI)	Pop. % (SE)	Odds Ratio(95% CI)
Steal something				
Yes	20.9(2.2)	1.55(0.70, 3.45)	33.7(3.0)	0.90(0.39, 2.10)
No	79.1(2.2)	(reference)	66.3(3.0)	(reference)
Parent/Family Risks				
Poor Parenting				
Yes	33.0 (2.9)	1.75 (0.85, 3.60)	50.9 (4.2)	1.06 (0.51, 2.21)
No	67.0 (2.9)	(reference)	49.1 (4.2)	(reference)
Alcohol or Drug Problem				
Yes	38.2 (3.8)	0.72 (0.34, 1.52)	50.1 (3.7)	0.86 (0.42, 1.76)
No	61.7 (3.8)	(reference)	49.9 (3.7)	(reference)
Domestic Violence				
Yes	23.4 (2.7)	1.04 (0.50, 2.14)	33.7 (3.9)	1.41 (0.68, 2.94)
No	76.6 (2.7)	(reference)	66.3 (3.9)	(reference)
Serious Mental Illness, Cognitive or Physical Impairment				
Yes	16.6 (1.9)	1.98 (0.70, 5.57)	22.9 (2.8)	0.73 (0.34, 1.57)
No	83.4 (1.9)	(reference)	77.1 (2.8)	(reference)
Unable to Meet Basic Needs				
Yes	16.4 (2.1)	0.76 (0.42, 1.37)	30.3 (4.3)	1.27 (0.62, 2.59)
No	83.6 (2.1)	(reference)	69.7 (4.3)	(reference)

Table 2. Continued

Child Ever Witnessed the Arrest of Someone with Whom He/She Lived				
	No (<i>n</i> =1111)		Yes (<i>n</i> =758)	
	Pop. % (SE)	Odds Ratio(95% CI)	Pop. % (SE)	Odds Ratio(95% CI)
Cumulative Parent/Family Risks				
0	35.3 (3.1)	(reference)	20.9 (3.6)	(reference)
1-2	45.0 (2.4)	1.56 (0.62, 3.92)	44.2 (4.4)	0.98 (0.34, 2.80)
3+	19.7 (2.1)	1.36 (0.55, 3.34)	34.9 (3.8)	1.04 (0.37, 2.96)
Depression (CDI)				
Yes	91.7(1.3)	4.89 (2.09, 11.27)***	84.7 (2.4)	6.24 (2.97, 13.10)***
No	8.3(1.3)	(reference)	15.3 (2.4)	(reference)
CPS Case Characteristics				
Type of Alleged Maltreatment				
Physical abuse				
Yes	39.6 (3.9)	1.32 (0.57, 3.04)	42.0 (3.6)	0.78 (0.37, 1.66)
No	60.4 (3.9)	(reference)	58.0 (3.6)	(reference)
Sexual abuse				
Yes	15.7 (2.4)	1.56 (0.50, 4.88)	11.0 (2.1)	0.71 (0.22, 2.37)
No	84.3 (2.4)	(reference)	89.0 (2.1)	(reference)
Emotional abuse				
Yes	9.9 (1.6)	1.22 (0.41, 3.65)	12.6 (2.3)	1.78 (0.72, 4.43)
No	90.1 (1.6)	(reference)	87.4 (2.3)	(reference)
Neglect				
Yes	51.5 (3.1)	1.06 (0.46, 2.47)	51.5 (3.6)	1.31 (0.60, 2.87)
No	48.5 (3.1)	(reference)	48.5 (3.6)	(reference)
Other				
Yes	11.8 (2.4)	0.24 (0.09,0.66)**	14.5 (2.9)	0.83 (0.32, 2.14)
No	88.2 (2.4)	(reference)	85.5 (2.9)	(reference)

Table 2. Continued

	Child Ever Witnessed the Arrest of Someone with Whom He/She Lived			
	No (<i>n</i> =1111)		Yes (<i>n</i> =758)	
	Pop. % (SE)	Odds Ratio(95% CI)	Pop. % (SE)	Odds Ratio(95% CI)
Substantiated Maltreatment				
Yes	24.0 (3.2)	1.64 (0.67, 3.99)	25.1 (2.9)	1.71 (0.84, 3.47)
No	76.0 (3.2)	(reference)	74.9 (2.9)	(reference)
Perpetrator				
Biological parent	68.5 (2.8)	0.37 (0.18, 0.79)*	61.7 (3.9)	0.96 (0.42, 2.20)
Other	31.5(2.8)	(reference)	38.3 (3.9)	(reference)
Any prior CPS investigation				
Yes	49.6 (3.1)	1.13 (0.53, 2.41)	57.1 (5.1)	1.48 (0.66, 3.32)
No	50.4 (3.1)	(reference)	42.9 (5.1)	(reference)
Out of Home Placement				
Yes	65.6 (3.3)	1.09(0.61, 1.94)	65.2 (3.2)	1.74(0.96, 3.14)
No	34.4 (3.3)	(reference)	34.8 (3.2)	(reference)
Child Demographic Characteristics				
Age				
8 thru 11	46.5 (2.7)	2.49 (1.12, 5.53)*	44.5 (4.0)	2.39 (1.05, 5.46)*
12+	53.5 (2.7)	(reference)	55.5 (4.0)	(reference)
Gender				
Male	46.7 (2.9)	1.27 (0.66, 2.42)	45.9 (4.0)	0.70 (0.32, 1.50)
Female	53.3 (2.9)	(reference)	54.1 (4.0)	(reference)
Race/ethnicity				
White	43.6 (4.7)	(reference)	50.1 (4.6)	(reference)
Black	32.2 (3.9)	1.09 (0.44, 2.75)	27.2 (4.8)	0.73 (0.28, 1.88)
Hispanic	16.1 (3.0)	1.40 (0.41, 4.81)	13.9 (2.9)	0.47 (0.17, 1.31)
Other	8.0 (1.7)	1.19 (0.37, 3.81)	8.8 (1.7)	0.87 (0.28, 2.71)

$p \leq .05 = *$, $p \leq .01 = **$, $p \leq .001 = ***$

Table 3. Multivariate Model of Relationship between Witnessing an Arrest and Elevated PTS Symptoms

Parameter	Model 1			Model 2		
	<i>Exp. B</i>	<i>SE</i>	<i>sig</i>	<i>Exp. B</i>	<i>SE</i>	<i>sig</i>
Violence Exposure (Witnessed)						
0-1		reference			reference	
2-3	1.18	0.23	ns	1.15	0.23	ns
4+	1.17	0.30	ns	1.17	0.29	ns
Violence Exposure (Victim)						
0-1		reference			reference	
2-3	.61	0.27	ns	.63	0.26	ns
4+	2.75	0.33	<.01	2.54	0.32	<.01
Exposure to Crime in the Household						
<i>Child saw someone he or she lived with...</i>						
Deal drugs						
Yes	1.01	0.24	ns	1.04	0.24	ns
No		reference			reference	
Steal something						
Yes	0.83	0.23	ns	0.81	0.23	ns
No		reference			reference	
Parent/Family Risks						
0		reference			reference	
1-2	1.07	0.28	ns	1.13	0.28	ns
3+	0.98	0.27	ns	0.81	0.27	ns
Depression						
Yes	2.27	0.23	<.001	2.61	0.23	<.001
No		Reference			Reference	
CPS Case Characteristics						
Type of Maltreatment						
Physical abuse	0.77	0.30	ns	0.76	0.30	ns
Sexual abuse	0.81	0.45	ns	0.77	0.45	ns
Emotional abuse	2.22	0.28	<.01	2.33	0.27	<.01
Other		reference			Reference	
Substantiated Maltreatment						
Yes	1.82	0.26	ns	1.47	0.22	ns
No		Reference			Reference	

Table 3. Continued

		Model 1			Model 2		
		<i>Exp. B</i>	<i>SE</i>	<i>sig</i>	<i>Exp. B</i>	<i>SE</i>	<i>sig</i>
Perpetrator (Biological Parent)							
	Yes	0.53	0.18	<.01	0.51	0.18	<.01
	No		reference		Reference		
Prior Investigation							
	Yes	0.98	0.18	ns	0.96	0.19	ns
	No		reference		reference		
Out-of-home Placement							
	Yes	0.86	0.16	ns	0.87	0.16	ns
	No		reference		reference		
Demographic Characteristics							
Age							
	8 thru 11	1.90	0.21	<.01	1.88	0.21	<.01
	12+		reference		reference		
Gender							
	Male	1.09	0.19	ns	1.13	0.18	ns
	Female		reference		reference		
Race/ethnicity							
	White		reference		reference		
	Black	0.89	0.33	ns	0.64	0.34	ns
	Hispanic	0.86	0.37	ns	0.85	0.37	ns
	Other	1.36	0.39	ns	1.27	0.39	ns
Parent was Recently Arrested							
	Yes				0.92	0.22	ns
	No		NA		reference		
Child Ever Witnessed Arrest of Household Member							
	Yes				1.57	0.18	<.01
	No		NA		reference		
Recent Arrest x Witnessed Arrest							
	Yes				1.73	0.18	<.01
	No		NA		reference		

ns = $p > .05$