

Parent and Partner Violence in Families With Young Children: Rates, Patterns, and Connections

Amy M. Smith Slep and Susan G. O'Leary
Stony Brook University, State University of New York

In this study, the authors assessed men's and women's partner and parent physical aggression among 453 representatively sampled families with young children. The prevalences of partner aggression and of severe parent aggression were higher than previously reported. Substantial rates of co-occurrence were found. Risk ratios and regression analyses indicated that connections between (a) husbands' and wives' partner aggression and (b) mothers' and fathers' parent aggression were especially strong. Patterns of co-occurrence pointed to the probable relative importance of family-level, in comparison with individual, predictors of aggression. Patterns of co-occurring violence are described in light of the theoretical literature. Implications for studying family violence in community samples are discussed.

Keywords: child abuse, partner violence, family violence, prevalence, co-occurrence

Family violence is a major public health problem, affecting tens of millions of American families each year. National surveys suggest that partner aggression occurs in 12% (Straus, 1990a) of American families, and severe parent-to-child violence occurs in 5% of American families (Straus, 1990a; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). The physical, psychological, and social consequences of family violence are enormous, and many of these consequences occur even with relatively commonplace and minor acts of aggression, including spanking (e.g., Gershoff, 2002; Repetti, Taylor, & Seeman, 2002).

Within the last several years, research on both partner and parent violence has advanced considerably. Theories are moving beyond models that consider only within-perpetrator and within-victim correlates and have begun to include possible family level influences. One area of research that has significant potential for shaping theories about the relative importance of individual and family influences on family violence is studies addressing the co-occurrence of various types of family violence. Such co-occurrence can exist within an individual and across individuals within the family. However, to date, research has only considered bivariate relations among types of family violence and for only a subset of the likely relations. To inform theories of family violence, researchers need a better understanding of the specific constellations of violence that occur in families, their relative prevalences, and the magnitude of the relations between violence types. In the current article, we focus on four patterns of co-occurring family violence. The relative importance of two patterns of co-occurrence (i.e., husband-to-wife with father-to-child aggression

and wife-to-husband with mother-to-child aggression) speak to the significance of within-perpetrator factors. The importance of family level influences is highlighted by examining the co-occurrence of husband-to-wife with wife-to-husband aggression and father-to-child with mother-to-child aggression, which involve co-occurrence within role but across perpetrator, as well as husband-to-wife with mother-to-child aggression and wife-to-husband with father-to-child aggression, which cross both role and perpetrator.

With respect to the existing literature, the most frequently replicated findings come from investigations of the co-occurrence of partner and child abuse, often within perpetrator (e.g., husband aggresses against both wife and child) or without consideration for which parent(s) or partner(s) were aggressive. In their review, Appel and Holden (1998) concluded that the presence of one type of abuse in a family considerably increases the odds of another type of abuse occurring. They estimated that 40% of violent families are characterized by co-occurring partner and child physical abuse. Furthermore, the probability of co-occurring child abuse is strongly related to the frequency of partner aggressive acts, especially for men (Ross, 1996). Men's risk of child abuse escalates from 5% when a single act of partner aggression has occurred in the past year, to nearly 100% when an average of one act of partner aggression has occurred each week. Several theories predict this sort of co-occurring family violence, in which some individuals are aggressive toward both their marital partners and their children. These theories propose that one or more characteristics within or broadly affecting the individual increase the probability of all types of aggression. For example, Simons, Wu, Johnson, and Conger (1995) suggested that an antisocial behavior trait might be one such characteristic. Straus and Smith (1990) noted that high rates of legitimate violence within a society would have spill-over effects that permeate many relationships. In addition, both the child abuse and the spouse abuse literatures are replete with more microlevel theories and findings that the same characteristics predict the presence of both types of family violence (see Slep & O'Leary's, 2001, study).

Amy M. Smith Slep and Susan G. O'Leary, Department of Psychology, Stony Brook University, State University of New York.

Preparation of this article was supported by National Institute of Mental Health Grant R01MH57985.

Correspondence concerning this article should be addressed to Amy M. Smith Slep, Department of Psychology, Stony Brook University, State University of New York, Stony Brook, NY 11794-2500. E-mail: amy.slep@stonybrook.edu

Co-occurrence research that speaks to the promise of broadening the unit of analysis from the individual to the family comes mostly from research on partner violence and concerns co-occurrence of aggression within the marital dyad. In the general population, at least 50% of physically aggressive couples are characterized by both husband-to-wife and wife-to-husband aggression (Straus & Gelles, 1990b). Additionally, longitudinal studies indicate that if women are physically aggressive at an initial assessment, then the risk that their husbands will initiate, respond in kind, and even escalate violence during the subsequent year is substantially increased (Feld & Straus, 1990). This type of co-occurring family violence could include self-defense (Saunders, 1986) or assortative partnering (Krueger, Moffitt, Caspi, Bleske, & Silva, 1998). The pattern of co-occurrence involving both parents aggressing toward the child has not received much attention. However, assortative mating could also contribute to relations between mothers' and fathers' physical violence. It is also likely that parents actively influence each others' parenting. Thus, a mother who has strong convictions about using violence with her children may shape her husband over time, contributing to mother-to-child and father-to-child co-occurrence.

Finally, the clinical literature especially addresses a more complicated form of co-occurring family violence that cuts across both individuals and relationships. Specifically, this literature highlights husband-to-wife violence as a risk factor for mother-to-child violence. The stress of being victimized by one's partner could reduce a mother's ability to deal effectively and appropriately with child misbehavior and could contribute to overreacting and possibly being abusive when confronted with challenging child behavior (e.g., McKay, 1994). In support of this proposition, Hilton (1992) interviewed women in shelters and found that 45% reported that children or parenting was often the focus of arguments with their partners that escalated to violence. The arguments most often centered on the wife (a) not being a good mother, (b) not keeping the children quiet, and (c) spending too much time with the children and not enough with the partner. Abused mothers might well alter their parenting to placate their abusive partners (e.g., become overbearing to keep children quiet), implying that mother-to-child aggression is occurring secondary to husband-to-wife aggression.

In the current article, we address the four patterns of parent and partner aggression that may occur in two-parent families with young children, lay the groundwork for a larger study designed to better understand patterns of and possible predictors of co-occurring partner and parent aggression, and test a series of hypotheses regarding the relative risk imparted by one type of aggression for the presence of other types of family violence. The four types of aggression examined were husband-to-wife, wife-to-husband, father-to-child, and mother-to-child. To our knowledge, no studies of community samples have assessed all four of these types of violence within the same families. Thus, knowing how related these types of violence are to each other and assembling a complete picture of the connections among the different types of adult violence in families is not possible.

Researchers who investigate both partner and child abuse continue to struggle with how to best define physical aggression and abuse, and neither area has achieved consensus (see Slep & O'Leary, 2001). In the current study, a single definition of physical aggression was adopted regardless of whether it was directed at a

spouse or a child, and two standard severity thresholds were used. The lower threshold was that of any physical aggression. Individuals or families met this threshold if any act of physical aggression was reported, regardless of its severity. A severity-based threshold was also adopted that limited analyses to individuals or families with severe physical aggression. Both are described in more detail in the Methods section. Descriptively, rates of severe aggression were expected to be lower, and co-occurring severe aggression was expected to be less likely than when the full range of aggression was considered. Furthermore, the most typical patterns of co-occurring severe aggression were expected to reflect the patterns highlighted in the clinical literature (detailed above), which is largely based on samples from domestic violence shelters.

Using a community sample drawn from a representative sampling frame, we hypothesized significant co-occurrence between types of violence across relationships within perpetrator (e.g., wife-to-husband aggression would relate to mother-to-child aggression), within role across perpetrators (e.g., husband-to-wife aggression would relate to wife-to-husband aggression), and across both relationships and perpetrators (e.g., husband-to-wife aggression would relate to mother-to-child aggression) for both the entire range of physical aggression and for severe physical aggression only. Furthermore, we hypothesized that the extent of each type of physical aggression would be uniquely predicted by the extent of aggression perpetrated in the other relationship by the same perpetrator and by the extent of aggression perpetrated by the partner in the same role. We hypothesized that the extent of parent aggression would also be predicted by the extent of aggression perpetrated by the partner in the marital relationship. Finally, we evaluated the entire pattern of findings with respect to the guidance it might offer future research decisions regarding the relative emphasis on individual or family level predictors of aggression.

We limited this investigation to families with preschool and young school-age children for two reasons. First, young children may be at the greatest risk for exposure to partner and parent violence in their families. Partner violence is consistently associated with age (see O'Leary's, 1999, study), and young children typically have young parents; these characteristics may contribute to higher base rates of partner violence in families with young children than among couples generally. In the most recent National Incidence Study (Sedlak & Broadhurst, 1996), children age 3 years through middle childhood were at higher risk for maltreatment than were both younger and older children. Second, violence in the families of young children was of particular interest, because the family is still the predominant socializing influence (Snyder, 2002), and exposure to violence during this period may have especially important implications for children's adjustment (Kitzmann, Gaylord, Holt, & Kenny, 2003).

Method

Participants

A total of 453 couples participated in the study. With an eye on the generalizability of the findings, we recruited participants through a random digit dialing procedure modeled after the one used by Louis Harris and Associates (1986) in conducting the 1985 National Family Violence Survey (NFVS). Whenever a call reached an adult, the respondent was told that the caller was from the university and was looking for families that might qualify to participate in a study of how families cope with conflict.

Table 1
Participant Characteristics

Variable	%		M		SD		Range	
	M	W	M	W	M	W	M	W
Age (years)			37	35.1	6.0	5.0	21.0–57.0	21.0–48.0
Education (years)			14.2	14.3	2.3	2.2	10.0–20.0	10.0–20.0
% minority	20.8	18.1						
% full-time employed	93.2	30.0						
% part-time employed	2.4	37.7						
% biological parent of child	94.5	99.3						
Family income (\$)			74,500 ^a		43,099		4,700–500,000	
% married	94.5							
No. of children in household			2.4		1.0		1.0–7.0	
% male target children	48.1							
Target child age (years)			5.4		1.4		2.9–8.0	
Any partner aggression (# acts)			3.65	4.54	13.62	11.48	0–208	0–105
Severe partner aggression (# acts)			0.96	1.10	5.50	4.33	0–83	0–50
Any parent aggression (# acts)			6.30	7.44	9.80	9.55	0–59	0–58
Severe parent aggression (# acts)			0.19	0.33	1.43	2.25	0–26	0–25

Note. M = men; W = women; # acts = number of aggressive acts in the past year using midpoint frequency estimates (i.e., 0, 1, 4, 8, 15, and 25) that are summed across all relevant items.

^aMedian family income is reported.

A brief demographic interview was administered to all willing respondents to determine study eligibility. To be eligible, respondents had to be living as a couple for at least 1 year, parenting a 3–7-year-old child who was the biological offspring of at least one of the parents, and able to complete questionnaires in English. If the family had more than one child in the age range, then one child was selected randomly to be the target child for the purposes of this study. Screened respondents who were eligible for the study then completed a slightly longer interview about family functioning. Finally, eligible respondents were contacted by one of the authors, who described the project in more detail and scheduled interested respondents' initial appointments to participate in the main study.

The random digit dialing procedure resulted in respondents who were fairly representative of the local population and in study participants who were quite similar to those who qualified for the study but chose not to participate. The demographics of all people contacted via phone ($N = 17,097$) were compared with the 2000 U.S. Census figures for Suffolk County, New York (U.S. Census Bureau, 2003). Note that this sample included all individuals who were administered a demographic interview, including those who did not qualify for the study. Given the large sample sizes, only differences with an effect size of .10 or greater are reported. Of the seven characteristics evaluated (i.e., Latino/Hispanic status, number of races, race, gender, age, family type, and family income), the demographic interview respondents and the local population differed on race, age, family type, and income. Our screening procedures slightly oversampled "Blacks or African Americans" and "American Indians and Alaskan Natives," and undersampled people of "some other race." In addition, our screening procedures oversampled adults between 30 and 44 years of age, oversampled two-parent families, and undersampled adults with family incomes below \$30,000 and in excess of \$100,000. Generally, the effect sizes were moderate ($\phi = .28-.38$), and the differences seem logical in light of the stated purpose of the study, which may have led adults living alone, for example, to guess they would not qualify for a study of how families cope with conflict and therefore not to complete the screening interview.

Study participants ($N = 453$) were compared with people who were qualified to participate in the study but who did not participate ($N = 1,362$) on demographic and family functioning variables assessed via the phone interview. Of the 20 variables examined,¹ only 4 differed significantly ($p < .05$) between the two groups. The participants were less likely to report family incomes greater than \$100,000 and disagreed with their

partners more. In addition, both parents used a wider variety of corporal punishment. Although these differences were statistically significant, the effect sizes were all small ($\phi = .07-.11$). Given the number of comparisons, the large sample size, and the number and variety of variables on which the groups did not differ, we believe the sample is reasonably representative for a study being conducted in a laboratory. Participant characteristics appear in Table 1.

Procedure

Couples came to the office for two 3-hr sessions or one 6-hr session. They were told that the study was designed to learn about how families cope with conflict and why they handle problems in the ways they do. Participants completed extensive batteries of questionnaires about themselves, their relationships, and their families. Some observational and physiological data were also collected.

Conducting this study necessitated the collection of valid self-reports of the full range of family violence. Two options were available for collecting such data: (a) collect data anonymously and (b) ask violence questions nonanonymously, and warn participants that if they reported serious violence to children, they would then be reported to New York State Child Protective Services. After careful consideration, we determined that collecting completely anonymous data was the best option. With anonymity, the validity of reports can be maximized, without introducing risk to parents or children as a result of being a research participant. Through procedures detailed below, all participants had access to clinical services and had a way to initiate a Child Protective Services report being filed via their participation in this project. It is important to remember that this was

¹The 20 variables were as follows: gender of respondent; parents' relation to target child; marital status; race; age of respondent and partner; income, number of adults in home, relationship satisfaction (Quality of Marriage Index [Norton, 1983]); frequency of marital and parent-child conflict; percentage of marital disagreements that are about child; perceived difficulty of child; self-to-child, partner-to-child, husband-to-wife, and wife-to-husband aggression; frequency that marital disagreements and parent-child conflict is resolved; and perceived success in handling problems with child.

a community sample. Prioritizing anonymity as we did might not be appropriate with high-risk samples or with procedures that might increase risk of aggression.

Our anonymity and confidentiality procedures were carefully explained both verbally and in the written consent form. Numbers linking husbands and wives were randomly assigned to them as a couple following consent, and no records were made of the numbers that participants were assigned or of any other information that would link their identity to their data.² They were told that no one would read their written responses to questions while they were in the office and that after completing participation, all of their written responses would be completely anonymous. They were also told, however, that any information they volunteered verbally to the research staff, and not as a written response on a study questionnaire, was not anonymous, but was confidential, and was subject to the normal limits of confidentiality, including mandated reporting of suspected child abuse. After consent was obtained, the couple was separated to independently complete questionnaires. All measures used in this article were administered in the first half of the procedure. All participants received a family resource list that included abuse hotlines and other abuse-related services and were paid \$250 for their time.

Measures

Conflict Tactics Scale—Revised (CTS2). The CTS2 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996) is an expanded version of the original CTS. The CTS2 has additional items to enhance validity and reliability, revised wording to increase clarity, better differentiation between minor and severe levels of aggression, and randomly ordered items to reduce response sets. The CTS2 appears to retain or improve on the psychometric properties of the original measure (Straus et al., 1996). Participants indicated the frequency that they (i.e., perpetration) and their partners (i.e., victimization) engaged in specific acts during the preceding 12 months on a scale ranging from 0 (*never*) to 6 (*more than 20 times*). Physical aggression was assessed with 12 item pairs that assessed mild (i.e., thrown an object that could hurt, twisted arm or hair, pushed or shoved, grabbed, slapped) and severe (i.e., beat up, burned or scalded on purpose, kicked, slammed against a wall, choked, punched or hit with an object that could hurt, used a knife or gun) aggression.

Husband-to-wife³ and wife-to-husband aggression scores were based on both perpetration and victimization reports. Spouses' reports of their own victimization and their partner's reports of perpetration and vice versa were significantly and moderately correlated (i.e., $r_s = .37$ and $.46$, respectively; $p_s < .0001$). As is typically done when data from both partners are available (e.g., Heyman & Schlee, 1997; Schafer, Caetano, & Clark, 1998), if the husband and the wife differed in their ratings on a particular item (e.g., how frequently the husband pushed the wife), then the higher rating prevailed. Partners were classified as engaging in any or severe physical aggression on the basis of reports of at least one act of any physical aggression or one act of severe physical aggression. For the analyses concerning extent of any aggression, we averaged scores on all 12 physical aggression items using the 0–6 point scales to yield an extent of any physical aggression score. This scoring strategy, initially proposed by Straus (1990a), was chosen over converting ratings to frequencies of acts and summing over items because (a) the 0–6 point scales incorporate both the variety and frequency of aggressive acts in a more balanced way, coming closer to the construct of extent, (b) the frequency approach results in substantially more skewed distributions, making correlation and regression analyses inappropriate, and (c) the two scoring approaches correlated greater than or equal to $.90$ for husband and wife aggression in the current sample. For descriptive purposes, means, standard deviations, and aggressive act frequency ranges—which were based on Straus's (1990a) recommendation of using the midpoints of the response categories, of any physically aggressive acts, and of severely aggressive acts—are also reported in Table 1.

Parent–Child Conflict Tactics Scale (CTS-PC). The CTS-PC (Straus et al., 1998) is a 22-item, self-report inventory that assesses the frequency (on a scale ranging from 0 [*never*] to 6 [*more than 20 times*]) of parent conflict and discipline behaviors in the past 12 months. The CTS-PC is based on the original CTS (Straus, 1990a), with modifications to improve its reliability and validity in assessing parent-to-child aggression. The physical aggression scale consists of 13 items that include corporal punishment (i.e., spanked on bottom with bare hand; hit on bottom with something like a belt, hairbrush, a stick or some other hard object; slapped on hand, arm, or leg; slapped on head, face, or ears; pinched; shook) as well as severe aggression. In this study, severe physical aggression corresponds to Straus et al.'s (1998) abuse scale, which consists of seven items regarding acts with a high potential to cause injury (i.e., hit some other part of the body other than the bottom with something like a belt, hairbrush, a stick or some other hard object; burned or scalded on purpose; beat up; hit with fist or kicked hard; grabbed around neck and choked; threatened with a knife or gun; thrown or knocked down). Parents were classified as having reported either any or severe physical aggression if they endorsed at least one act of that type. The extent of physical aggression score was determined by averaging the 0–6 scores across the 13 physical aggression items (Straus, 1990a). Frequency of act scores and 0–6 scores were highly correlated ($r_s \geq .89$). For descriptive purposes, means, standard deviations, and frequency ranges—which were based on the midpoints of the response categories, of any physically aggressive act, and of severely aggressive acts—are also reported in Table 1.

Results

Data were complete for all of the aggression variables; therefore, the N for all analyses was 453. Three sets of results are presented. The first set addresses the prevalence of any physical aggression and severe physical aggression, dichotomized as present or absent. The second set examines the co-occurrence of different types of aggression and reports the effects of one type of aggression on risk for the others, again with dichotomous aggression data. The third set of results focuses on the extent of any physical aggression and moves beyond questions of prevalence and co-occurrence to assess the degree to which the extent of one type of any aggression is statistically accounted for by the extent of other types of any aggression.

Prevalence of Physical Aggression

Physical aggression was fairly pervasive in these families with young children (see Tables 2 and 3). At least one type of any aggression was reported by 90% of families, and over 40% of families reported that three or four types of any physical aggression occurred in the past year. Although severe aggression was less common, with almost no families reporting severe aggression of all four types, over 30% of the families reported at least one type of severe aggression. Partner physical aggression was reported by

² A detailed description of the procedures used to ensure anonymity is available electronically from Amy M. Smith Slep.

³ The terms *husband* and *wife* are used for ease of exposition. In fact, husband aggression refers to all aggression perpetrated by men against their female partners, and wife aggression refers to all aggression perpetrated by women against their male partners. A similar convention is adopted for parental aggression, in which the labels *father* and *mother* are used to denote the gender of the perpetrator and the relationship with the victim, regardless of the biological relatedness of the adult to the child.

Table 2
Prevalences of and Relations Between Types of Aggression

Form of aggr.	Any physical aggression				Severe physical aggression				
	Overall prev. (%)	Given	Cond. prev. (%)	Relative risk	Form of aggr.	Overall prev. (%)	Given	Cond. prev. (%)	Relative risk
Husb to wife	37.3	Wife to husb	74.6	9.9	Husb to wife	13.5	Wife to husb	48.8	10.6
		Fath to child	41.7	1.5			Fath to child	30.0	2.4
Wife to husb	44.4	Husb to wife	88.7	4.9	Wife to husb	19.9	Husb to wife	72.1	6.2
		Moth to child	50.0	2.1			Moth to child	37.1	2.0
Fath to child	68.2	Moth to child	75.7	1.8	Fath to child	6.7	Moth to child	20.0	3.6
		Husb to wife	76.3	1.2			Husb to wife	14.7	2.8
		Wife to husb	74.6	1.2			Wife to husb	12.2	2.3
Moth to child	78.1	Fath to child	86.7	1.4	Moth to child	7.7	Fath to child	23.3	3.5
		Wife to husb	88.1	1.2			Wife to husb	14.4	2.4
		Husb to wife	85.8	1.2			Husb to wife	18.0	3.0
Partner	48.6	Parent	52.6	2.5	Partner	23.6	Parent	41.3	2.0
Parent	87.2	Partner	94.5	1.2	Parent	12.8	Partner	22.4	2.3

Note. aggr. = aggression; prev. = prevalence; cond. prev. = prevalence when the Given factor is present; relative risk = ratio of cond. prev. to prevalence when factor is absent; Husb = husband; Fath = father; Moth = mother.

49% of families, including 33% of the sample who reported physical aggression by both husbands and wives. Severe partner aggression was reported by 24% of families, with nearly half of those (10% of the sample) reporting severe aggression by both partners. Of the target children, 87% were physically aggressed against by their parents; 59% of children were aggressed against by both parents. In addition, 13% of the children experienced severe aggression, but only 1.5% (i.e., 7 children) experienced severe aggression from both parents. The presence of both partner and parent physical aggression characterized 45% of the families, with 5% of families reporting co-occurring severe partner and parent aggression.

We compared prevalences across victim (partner vs. child) within gender of perpetrator and across gender of perpetrator within relationship to victim using chi-square tests of association for paired data (Glass & Hopkins, 1984). Both men and women were (a) more likely to engage in any physical aggression against their children than against their partners: (men: 68% vs. 37%), $\chi^2(1, N = 453) = 89.09, p < .001$;⁴ (women: 78% vs. 44%), $\chi^2(1, N = 453) = 116.46, p < .001$, and (b) more likely to engage in severe aggression against their partners than against their children: (men: 14% vs. 7%), $\chi^2(1, N = 453) = 13.16, p < .001$; (women: 20% vs. 14%), $\chi^2(1, N = 453) = 32.00, p < .001$. Women were more likely than men to engage in any, as well as in severe, partner aggression and in any parent aggression, $\chi^2(1, N = 453) = 14.63, 13.16, \text{ and } 15.94$, respectively, $ps < .001$, but men and women did not differ in the prevalence of severe parent aggression, $\chi^2(1, N = 453) = 0.49, ns$.

Co-Occurrence

All types of physical aggression, at both the overall and severe levels, significantly co-occurred as hypothesized ($\phi = .11-.69, ps < .05$). Table 2 includes conditional prevalences and relative risk ratios for all hypothesized bivariate relations for any and severe physical aggression. The relative risk ratios indicate that one partner's aggression increased the risk of the other partner's aggression from 500% (for wives' risk of any aggression) to 1,000%

(for husbands' risk of severe partner aggression). All other effects were moderate, generally reflecting a two- to four-fold increase in risk for one type of aggression due to the presence of another.

Among patterns of co-occurring any physical aggression (see Table 3), both parents being physically aggressive toward their child but not against each other was the most prevalent pattern ($n = 121$), with any physical aggression of all four types being the second most prevalent pattern ($n = 102$). We find it interesting that the absence of any physical aggression, the third most prevalent pattern, characterized only 46 families, or approximately 10% of the sample. Among the patterns of severe aggression, the absence of severe aggression of any type was by far the most prevalent pattern ($n = 312$). The next most common patterns were only wife-to-husband severe aggression ($n = 40$) and the presence of both types of severe partner aggression with no severe parent aggression ($n = 28$). When collapsed across the genders of the perpetrators, the data revealed that more families were characterized by both partner and parent aggression ($n = 208$) than any other pattern. Parent-only aggression was relatively less common but still quite prevalent ($n = 187$). The reverse pattern was found for severe physical aggression. Partner-only severe aggression was the most common pattern ($n = 83$) among families with any severe aggression.

Predicting the Extent of Physical Aggression

Because the distributions for the extent of severe aggression variables substantially violated the normality assumptions of multiple regression (Tabachnick & Fidell, 2001), only relations among the extent of any physical aggression variables were considered. The distributions for these variables were significantly nonnormal; however, inverse transformations resulted in reasonable distributions. All zero-order Pearson correlations among the transformed extent of any physical aggression variables were significant.

To understand the possible additive and interactive effects of

⁴ Exact p levels are not available, as we calculated these statistics by hand and evaluated significance using a critical value table.

Table 3
Proportions of Families With Each Pattern of Aggression

Specific pattern of perpetration				% with this pattern of severe physical aggression	% with this pattern of any physical aggression
Husb to wife	Wife to husb	Fath to child	Moth to child		
	No aggression of any type			68.9	10.2
√				3.3	0.4
	√			8.8	0.9
		√		2.9	5.3
			√	3.5	9.3
√	√			6.2	1.3
√		√		0.2	0.7
√			√	0.2	0.7
	√	√		0.7	0.2
	√		√	0.7	2.6
		√	√	1.1	26.7
√	√	√		1.3	2.9
√	√		√	1.8	6.4
√		√	√	0.0	2.4
	√	√	√	0.0	7.5
√	√	√	√	0.4	22.5

Note. A check mark indicates aggression present; empty cells indicate no aggression of that type. Husb = husband; Fath = father; Moth = mother.

any physical aggression types, we conducted a series of regression analyses and used an exploratory analytic approach with respect to interaction effects. When predicting each type of aggression, we entered the other three types of aggression simultaneously as main effects in the first block of a hierarchical regression. In the second block, we entered all two-way interactions simultaneously. In the third block, we tested the relevant three-way interaction using backward stepwise entry. In no case was the three-way interaction significant. Therefore, we conducted a second regression analysis that predicted each type of aggression, with the other three types of aggression entered simultaneously in the first block, and we tested the relevant two-way interactions using backward stepwise entry. In no case was a two-way interaction significant. The backward stepwise method enters all of the predictors into the equation and

then drops predictors that, when removed, do not significantly worsen the fit of the model (Cohen, Cohen, West, & Aiken, 2003).

More than 55% of the variance in the extent of husband-to-wife and wife-to-husband aggression was accounted for by the extent of other types of aggression (see Table 4). The extent of partner aggression depended considerably on the extent of aggression perpetrated by the other partner, with mother aggression adding significantly to the prediction of the extent of women's partner aggression. The amounts of variance accounted for in the extent of mother and father physical aggression were much lower than the amounts of variance accounted for in partner aggression. The extent of one parent's aggression depended on the extent of aggression perpetrated by the other parent, with wife aggression adding significantly to the prediction of the extent of women's parent aggression.

Table 4
Linear Regressions Predicting the Extent of Each Type of Any Physical Aggression From the Other Types and Interactions Among the Other Types

Dependent variable	Predictor variables	B	SE B	β	Adjusted R ²
1. Husband	Wife	0.64	0.03	.74**	.56
	Father	0.05	0.03	.05	
	Mother	-0.02	0.03	-.02	
2. Wife	Husband	0.83	0.04	.72**	.57
	Mother	0.12	0.04	.10*	
	Father	0.04	0.04	.04	
3. Father	Mother	0.33	0.04	.33**	.15
	Husband	0.01	0.06	.10	
	Wife	0.01	0.06	.08	
4. Mother	Father	0.33	0.04	.33**	.16
	Wife	0.17	0.06	.20*	
	Husband	-0.05	0.07	-.05	

Note. Husband = extent of husband-to-wife physical aggression of any kind. Wife = extent of wife-to-husband physical aggression of any kind. Father = extent of father-to-child physical aggression of any kind. Mother = extent of mother-to-child physical aggression of any kind.
 * $p < .01$. ** $p < .001$.

Discussion

Prevalence

Our findings suggest that violence is more widespread in young children's families than the best epidemiological surveys indicate. Of our 453 families, nearly 90% reported that some partner physical aggression, some parent physical aggression, or both occurred in the past year, and nearly one third reported at least one type of severe aggression (e.g., beat up, choked). One quarter of our families reported severe partner aggression, and 13% reported parent violence severe enough to meet many definitions of child physical abuse (Straus, 1990a). These data stand in contrast to the 1985 NFVS results (Straus & Gelles, 1990a), which indicated that approximately 12% of families were characterized by any partner violence and only 5% by severe parent violence.

Several methodological factors could be contributing to this apparent discrepancy in prevalence rates. First, young families would be expected to engage in more aggression than families comprising older parents and older children (O'Leary, 1999; Sedlak & Broadhurst, 1996; Straus, 1994). In fact, even with the restricted range of ages in the current sample, the presence of any physical aggression was negatively correlated with age for husbands and wives ($r_s = -.17, p_s < .01$) and for mothers ($r = -.12, p < .05$).⁵ Second, most surveys rely on a single respondent and assess only one parent's aggression. If the child is not victimized by the respondent, then the child is classified as not aggressed against. Although our mothers' and fathers' reports of aggression are related, they do not completely overlap. Similarly, basing partner violence rates on reports from both partners (as we did) should result in a higher prevalence than if only one partner provides information (Heyman & Schlee, 1997). If only a single reporter were used to determine rates of partner aggression in the current sample, then the prevalences of any physical husband-to-wife aggression would be 25%–28% (depending on the gender of reporter) and any wife-to-husband aggression would be 30%–35%. These rates are lower than those we obtained using two reporters but were not as low as reported in the 1985 NFVS, in which the rates of husband-to-wife and wife-to-husband aggression were both approximately 12% (Straus & Gelles, 1990b). Thus, the number of reporters accounts for some, but not all, of the differences in prevalences. Third, the revised CTS scales are no longer identical for partner and parent violence, and the items are now randomly ordered, so that respondents are less able to adopt an invariant nay-saying response set when a particular severity threshold is reached. Additionally, scales were administered via paper-and-pencil with an assurance of anonymity, a procedure that likely contributed to our high prevalences.

The participants did not generally differ from nonparticipants on questions asked during the phone survey, suggesting minimal sampling bias. We find it interesting that the limited research on regional and population effects on family violence suggests that a suburban county in the northeast would be expected to have the same or lower rates of family violence than elsewhere in the country (Straus, Gelles, & Steinmetz, 1980). Therefore, considering that (a) the sample was families with young children drawn from a representative sampling frame and that (b) both parents reported on parent and partner aggression using the revised CTS scales administered anonymously, we think the rates that were obtained are reasonably generalizable to similar families, and we

expect that the rates obtained in earlier surveys are underestimates for all families. If many millions more families are characterized by partner violence and severe parent violence than currently believed, then the implications for both researchers and policy-makers are significant.

The prevalence results also suggest that more inclusive, family-level models of family violence must seriously consider women's partner aggression, which was quite common among families in our sample. The role of women's aggression in families at risk for violence might be particularly important to investigate. Although less likely to lead to injury or fear than men's aggression (e.g., Cantos, Neidig, & O'Leary, 1994; Stets & Straus, 1990), women's aggression might, regardless of its severity, disinhibit other types of family aggression, perhaps putting the women themselves and their children at risk.

Co-Occurrence

Co-occurrence was by far the rule when considering any physical aggression (i.e., both mild and severe acts), with 82% of aggressive families reporting multiple types. More than two thirds of the partner aggressive families reported that both partners aggressed—a proportion substantially higher than the 50% generally reported for community samples (Straus, 1990b).⁶ We also found strikingly high co-occurrence between men's and women's severe partner aggression. With respect to parent-to-child aggression, both parents were aggressive in over two thirds of families with at least one aggressive parent. In contrast to partner aggression, in which co-occurrence rates were high regardless of the severity level considered, men's and women's severe parent aggression co-occurred at a much lower rate. To the best of our knowledge, these associations have never before been explored by asking both parents about parent violence. Some of the methodological issues noted previously surely affect the estimates of co-occurrence as well as prevalence.

With respect to the patterns of co-occurrence that our families reported, differences existed in the patterns that were most prevalent, depending on whether any physical aggression or only severe physical aggression was the focus. In the case of severe aggression, co-occurring wife-to-husband and husband-to-wife aggression was the most prevalent pattern, with 31% of families reporting any sort of severe aggression being characterized by mutually severely aggressive partners. Surprisingly, two of the most discussed patterns of co-occurrence in the theoretical literature (see Slep & O'Leary's, 2001, study), which are based primarily on studies of abused women (e.g., Hilton, 1992; McKay, 1994), did not best characterize families with severe aggression. These patterns both involve a severely aggressive husband (with no severe aggression on the part of the wife) along with either a severely aggressive father or a severely aggressive mother. Together, these two patterns accounted for only 2% of families reporting the presence of any type of severe aggression. It is

⁵ The presence of any physical aggression was also negatively correlated for wives with years of education ($r = -.12, p < .01$) and for fathers with the log transformation of family income ($r = -.10, p < .05$).

⁶ The single-reporter, co-occurrence prevalence of any physical partner aggression in aggressive couples in the current sample was 64.5% on the basis of husband data and 59.8% on the basis of wife data.

possible, of course, that these patterns might be more typical among battered women's shelter samples, in which most families are characterized by very severe husband aggression. We were struck, however, by the finding that 92% of families who reported some sort of severe aggression reported the presence of both severe partner and severe parent aggression. Most typically, these families were characterized by both partners severely aggressing against each other and at least one partner severely aggressing against the child. We find it interesting that this constellation of family violence has not received attention in either the clinical or research literatures.

When any physical aggression was considered, co-occurrence of mother-to-child and father-to-child was by far the most common pattern, with 30% of the families who reported any aggression being characterized by only the presence of two aggressive parents. The second most prevalent pattern of co-occurring any physical aggression, and one of the patterns described by Appel and Holden (1998), involved both adults aggressing against each other and both adults aggressing against the child. This pattern occurred in 22% of the families. The presence of some type of any physical aggression occurring both between the partners and toward the child was especially common and was reported by 51% of the families.

In sum, co-occurring aggression in families is the rule, and aggression by both men and women in the same family is particularly common, much more common than co-occurring aggression by either gender in both of their roles as a partner and as a parent without aggression on the part of the spouse. In fact, instances of sole perpetrators aggressing in both roles were rare: 3% of severely aggressive families and 4% of families reporting any physical aggression. Perhaps adults partner with individuals who have similar aggression risk profiles. This might suggest that the relation between the partners' and parents' violence is an outgrowth of the similarity of spouses. Supporting this interpretation, assortative partnering among young adults with a history of antisocial behavior has been reported (Krueger et al., 1998). Alternatively, perhaps spouses actively shape each other's marital and parenting styles, including the use of violence, resulting in the relations we observed (e.g., Capaldi, Shortt, & Crosby, 2003; Leonard & Mudar, 2003). Finally, perhaps family-level stressors may create a shared environment that contributes to both adults' aggression. Sharing responsibility for a challenging child, for example, may provoke both parents to be aggressive toward the child and to engage in aggressive conflicts regarding child rearing with one another.

The high co-occurrence of mothers' and fathers' aggression toward their children has implications for research on the effects of aggression on children. Studies often find inconsistent or relatively heterogeneous effects (Grych, Jouriles, Swank, McDonald, & Norwood, 2000; Hughes & Luke, 1998); however, most studies do not assess all types of family violence that the child might have been exposed to or victimized by (e.g., Holden, Stein, Ritchie, Harris, & Jouriles, 1998). Some of the unexplained heterogeneity found in previous studies might be a function of unassessed violence. The current data suggest that, although mothers are more likely to aggress against their young children, fathers are also quite likely to aggress. To provide a complete picture of children's victimization experiences, researchers must assess both parents' aggressive behaviors. Furthermore, having one aggressive and one nonaggressive parent may be a qualitatively different experience for a child

than having two aggressive parents, even if the number and severity of acts experienced by the child are held constant.

Extent

The findings from the regression analyses that predicted women's partner and parent aggression suggest that both dyadic or family-level factors and factors within the individual explained unique variance. However, only dyadic or family-level factors seem indicated by the men's partner and parent aggression findings. These results suggest the presence of complicated, family-level processes—processes that may differ for men and women. Such processes could include the impact of partner violence victimization in addition to the contextual factors already discussed.

As was the case when dichotomous aggression data were considered, the results regarding the extent of aggression suggest that parent aggression was somewhat less tightly related to other forms of aggression than were husband and wife aggression. Parent aggression may be a more complicated phenomenon than partner aggression. However, a more likely explanation relates to the nature of partner and parent-child relationships and to the numbers of family members from and about whom we have information. Reports of partner aggression were based on both perpetrator and victim reports; whereas reports of parent aggression were based on only perpetrator reports. Practical limitations regarding the ability of young children to provide valid reports aside, if information regarding parent-to-child aggression came from both members of the dyad, then a more complete picture could be drawn and better prediction of parent aggression would probably be possible.

Limitations

Several important limitations should be noted. First, all of the measures were questionnaires, and all variables were based, at least in part, on self-reports. It seems unlikely that our findings are driven primarily by shared reporter biases, however, because the presence and extent of partner violence variables were based on the reports of both respondents and because the relations between mothers' and fathers' aggression were also based on information from two reporters. Second, despite the difficulty of obtaining valid reports from young children, a fully complete picture of family aggression would include reports from the child. Third, our sample, although quite representative for a study that required extended in-office participation, was certainly not perfectly representative of the population from which it was drawn. Furthermore, the sample comprised English-speaking couples who had been living together for at least 1 year and who had a 3–7-year-old child. At least one member of the couple was the child's biological parent. Thus, our findings should not be generalized to families who do not fit within these parameters, particularly not to clinic families. The dynamics in families who are receiving services from child welfare or battered women's shelters are probably quite different from those in a community sample.

In conclusion, both minor and severe violence may be much more widespread in young children's families than is currently believed. All types of adult family violence are meaningfully related. The influence of one partner's aggression on the other's and of one parent's aggression on the other's may be particularly

important to consider in models of family violence. Some specific patterns of family violence appear fairly typical, whereas others are nearly nonexistent in community samples. Explanatory models that could potentially account for different patterns of violence in families might prove especially useful in tailoring prevention and intervention efforts. Assessment and treatment for partner violence and child abuse should address the possible presence of women's partner aggression and men's parental aggression. Furthermore, the focus should shift away from individual perpetrators and separate dyads, acknowledging that multiple forms of aggression in families predominate. Expanding the focus to include the whole family will open new avenues to achieve reductions in family violence. Our findings lend support to arguments in the literature (e.g., Edleson, 1999; O'Leary, Slep, & O'Leary, 2000; Slep & O'Leary, 2001) urging the consideration of family violence at the level of the family as a way to potentially increase the power and precision of both theoretical models and intervention efforts.

References

- Appel, A. E., & Holden, G. W. (1998). The co-occurrence of spouse and physical child abuse: A review and appraisal. *Journal of Family Psychology, 12*, 578–599.
- Cantos, A. L., Neidig, P. H., & O'Leary, K. D. (1994). Injuries of women and men in a treatment program for domestic violence. *Journal of Family Violence, 9*, 113–124.
- Capaldi, D. M., Shortt, J. W., & Crosby, L. (2003). Physical and psychological aggression in at-risk young couples: Stability and change in young adulthood. *Merrill-Palmer Quarterly, 49*, 1–27.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Edleson, J. L. (1999). Interventions and issues in the co-occurrence of child abuse and domestic violence [Special issue]. *Child Maltreatment, 4*, 91–182.
- Feld, S. L., & Straus, M. A. (1990). Escalation and desistance from wife assault in marriage. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families* (pp. 489–526). New Brunswick, NJ: Transaction Publishers.
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin, 128*, 539–579.
- Glass, G. V., & Hopkins, K. D. (1984). *Statistical methods in education and psychology* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Grych, J. H., Jouriles, E. N., Swank, P. R., McDonald, R., & Norwood, W. D. (2000). Patterns of adjustment among children of battered women. *Journal of Consulting and Clinical Psychology, 68*, 84–94.
- Heyman, R. E., & Schlee, K. A. (1997). Toward a better estimate of the prevalence of partner abuse: Adjusting rates based on the sensitivity of the Conflict Tactics Scale. *Journal of Family Psychology, 11*, 331–338.
- Hilton, N. Z. (1992). Battered women's concerns about their children witnessing wife assault. *Journal of Interpersonal Violence, 7*, 77–86.
- Holden, G. W., Stein, J. D., Ritchie, K. L., Harris, S. D., & Jouriles, E. N. (1998). Parenting behaviors and beliefs of battered women. In G. W. Holden, R. Geffner, & E. N. Jouriles (Eds.), *Children exposed to marital violence: Theory, research, and practice* (pp. 289–336). Washington, DC: American Psychological Association.
- Hughes, H. M., & Luke, D. A. (1998). Heterogeneity in adjustment among children of battered women. In R. Geffner & E. N. Jouriles (Eds.), *Children exposed to marital violence: Theory, research, and applied issues* (pp. 185–221). Washington, DC: American Psychological Association.
- Kitzmann, K. M., Gaylord, N. K., Holt, A. R., & Kenny, E. D. (2003). Child witnesses to domestic violence: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 71*, 339–352.
- Krueger, R. F., Moffitt, T. E., Caspi, A., Bleske, A., & Silva, P. A. (1998). Assortative mating for antisocial behavior: Developmental and methodological limitations. *Behavior Genetics, 28*, 173–186.
- Leonard, K. E., & Mudar, P. (2003). Peer and partner drinking and the transition to marriage: A longitudinal examination of selection and influence processes. *Psychology of Addictive Behaviors, 17*, 115–125.
- Louis Harris & Associates. (1986). *Second National Family Violence Survey methodology*. Unpublished manuscript, University of New Hampshire, Durham.
- McKay, M. M. (1994). The link between domestic violence and child abuse: Assessment and treatment considerations. *Child Welfare, 73*, 29–39.
- Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family, 45*, 141–151.
- O'Leary, K. D. (1999). Developmental and affective issues in assessing and treating partner aggression. *Clinical Psychology: Science & Practice, 6*, 400–414.
- O'Leary, K. D., Slep, A. M. S., & O'Leary, S. G. (2000). Co-occurrence of partner and parent aggression: Research and treatment implications. *Behavior Therapy, 31*, 631–648.
- Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin, 128*, 330–366.
- Ross, S. M. (1996). Risk of physical abuse to children of spouse abusing parents. *Child Abuse and Neglect, 20*, 589–598.
- Saunders, D. G. (1986). When battered women use violence: Husband abuse or self-defense? *Violence and Victims, 1*, 47–60.
- Schafer, J., Caetano, R., & Clark, C. L. (1998). Rates of intimate partner violence in the United States. *American Journal of Public Health, 88*, 1702–1704.
- Sedlak, A. J., & Broadhurst, D. D. (1996). *Third National Incidence Study of Child Abuse and Neglect* (Contract No. 105–91–1800). Washington, DC: National Center on Child Abuse and Neglect.
- Simons, R. L., Wu, C., Johnson, C., & Conger, R. D. (1995). A test of various perspectives on the intergenerational transmission of domestic violence. *Criminology, 33*, 141–171.
- Slep, A. M. S., & O'Leary, S. G. (2001). Examining partner and child abuse: Are we ready for a more integrated approach to family violence? *Clinical Child and Family Psychology Review, 4*, 87–107.
- Snyder, J. (2002). Reinforcement and coercion mechanisms in the development of antisocial behavior: Peer relationships. In J. B. Reid, G. R. Patterson, & J. Snyder (Eds.), *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention* (pp. 101–122). Washington, DC: American Psychological Association.
- Stets, J. E., & Straus, M. A. (1990). Gender differences in reporting marital violence and its medical and psychological consequences. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families* (pp. 151–165). New Brunswick, NJ: Transaction Publishers.
- Straus, M. A. (1990a). The Conflict Tactics Scales and its critics: An evaluation and new data on validity and reliability. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptation to violence in 8,145 families* (pp. 3–16). New Brunswick, NJ: Transaction Publishers.
- Straus, M. A. (1990b). Ordinary violence, child abuse, and wife beating: What do they have in common? In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptation to violence in 8,145 families* (pp. 403–424). New Brunswick, NJ: Transaction Publishers.
- Straus, M. A. (1994). *Beating the devil out of them*. New York: Lexington Books.
- Straus, M. A., & Gelles, R. J. (1990a). *Physical violence in American*

- families: *Risk factors and adaptation to violence in 8,145 families*. New Brunswick, NJ: Transaction Publishers.
- Straus, M. A., & Gelles, R. J. (1990b). Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptation to violence in 8,145 families* (pp. 113–131). New Brunswick, NJ: Transaction Publishers.
- Straus, M. A., Gelles, R. J., & Steinmetz, S. K. (1980). *Behind closed doors: Violence in the American family*. Garden City, NY: Doubleday.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17, 283–316.
- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent–Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse and Neglect*, 22, 249–270.
- Straus, M. A., & Smith, C. (1990). Family patterns and primary prevention of family violence. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptation to violence in 8,145 families* (pp. 507–526). New Brunswick, NJ: Transaction Publishers.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). New York: HarperCollins.
- U.S. Census Bureau. (2003). *Census 2000: Summary Files 1 and 3*. Retrieved May, 5, 2003, from <http://factfinder.census.gov/servlet/CTGeoSearchByListServlet>

Received April 7, 2004

Revision received October 18, 2004

Accepted November 1, 2004 ■

Members of Underrepresented Groups: Reviewers for Journal Manuscripts Wanted

If you are interested in reviewing manuscripts for APA journals, the APA Publications and Communications Board would like to invite your participation. Manuscript reviewers are vital to the publications process. As a reviewer, you would gain valuable experience in publishing. The P&C Board is particularly interested in encouraging members of underrepresented groups to participate more in this process.

If you are interested in reviewing manuscripts, please write to Demarie Jackson at the address below. Please note the following important points:

- To be selected as a reviewer, you must have published articles in peer-reviewed journals. The experience of publishing provides a reviewer with the basis for preparing a thorough, objective review.
- To be selected, it is critical to be a regular reader of the five to six empirical journals that are most central to the area or journal for which you would like to review. Current knowledge of recently published research provides a reviewer with the knowledge base to evaluate a new submission within the context of existing research.
- To select the appropriate reviewers for each manuscript, the editor needs detailed information. Please include with your letter your vita. In your letter, please identify which APA journal(s) you are interested in, and describe your area of expertise. Be as specific as possible. For example, “social psychology” is not sufficient—you would need to specify “social cognition” or “attitude change” as well.
- Reviewing a manuscript takes time (1–4 hours per manuscript reviewed). If you are selected to review a manuscript, be prepared to invest the necessary time to evaluate the manuscript thoroughly.

Write to Demarie Jackson, Journals Office, American Psychological Association, 750 First Street, NE, Washington, DC 20002-4242.