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Assessing Resilience in Preschool Children Exposed to Intimate Partner Violence

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This study examined why some preschool-age children exposed to intimate partner violence (IPV) showed deleterious outcomes and others appeared more resilient. Resilience, conceptualized as strengths in emotion regulation and prosocial skills, was evaluated using the Social Competence Scale developed by the Conduct Problem Prevention Research Group. The sample consisted of 56 mothers and their 4- to 6-year-old children exposed to IPV within the past 2 years. After controlling for relevant demographic factors, hierarchical regression analyses indicated that better parenting performance, fewer maternal mental health problems, and less severe violence exposure predicted better emotion regulation and prosocial skill scores, which in turn were negatively correlated with maladaptive child behaviors. These findings can be used to inform and enhance clinical services for children exposed to IPV.

Keywords: protective factors; domestic violence; child adjustment; competence; emotion regulation

Intimate partner violence (IPV) continues to be a serious, widespread public health problem, with an estimated annual rate of IPV ranging from 17% to 28% among married or cohabitating couples (McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). The definition of IPV encompasses physical, sexual, and emotional abuse between dating or married partners (Centers for Disease Control and Prevention, 2006). Both men and women can be targets of IPV; however, women are significantly more likely to experience the adverse physical and social consequences of such violence when compared to men (Tjaden & Thoennes, 2000).

The magnitude of problems associated with IPV extends beyond violence in a partnership, as children are frequently present in these families. One study by McDonald et al. (2006) revealed that IPV is more prevalent among married or cohabitating couples with children than those without children. They estimated that 15.5 million American children live in households with IPV, with 7 million children living in severely violent homes. Living in a household with IPV puts children at risk for witnessing violence. In a population-based study of children's direct exposure, Fantuzzo and Fusco (2007) found that of the children

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who were present during events involving IPV, 81% had direct exposure to these incidents. Furthermore, the risk of witnessing violence was especially high for younger children, with children under the age of 6 years old disproportionately exposed to violent events. Similar rates were reported in a community sample where 82% of children observed IPV when it occurred in the home (author reference).

Effects of IPV on Preschool Children

Despite preschool children's increased exposure to IPV, the effects of witnessing such violence have not been as extensively studied in this population as they have been among older children (Fantuzzo & Fusco, 2007). Exposure to family violence during these early years, when the capacity for emotion regulation is growing and children's attachment to parents is strongest, has severe and enduring negative effects (Levendosky, Huth-Bocks, Semel, & Shapiro, 2002). For instance, preschoolers exposed to IPV tend to have greater externalizing and internalizing behavior problems, lower social functioning, increased aggression, adverse health outcomes, and lower intellectual functioning relative to children not exposed to such violence (author reference; Huth-Bocks, Levendosky, & Semel, 2001; Levendosky et al., 2002).

Resilience in Children Exposed to IPV

Despite the multitude of negative consequences associated with exposure to IPV, a substantial proportion of children show evidence of resilience. One meta-analytic review of the literature on children exposed to family violence found that 37% of children who witnessed or personally experienced abuse fared as well or better than children who were not exposed to such violence in the home (Kitzmann, Gaylord, Holt, & Kenny, 2003). Resilience is a dynamic process; it encompasses positive adaptation within the context of significant adversity (Luthar, Cicchetti, & Becker, 2000). When applied to children exposed to stressful environments, resilience has been described as the ability to adapt and function successfully in a high-risk setting or following exposure to prolonged trauma (Masten, 2001). Adaptational success is typically defined with respect to mastery of salient developmental goals (Hughes, Graham-Bermann, & Gruber, 2001). For preschool children, some of the more salient developmental tasks include emotion regulation and prosocial skill development. During these years, children learn to develop appropriate and successful social relationships, resolve problems, and regulate emotional reactions (Hughes et al., 2001).

Emotion regulation involves how children influence which emotions they have, when they have them, and how they experience and express them (Gross, 1998). Research consistently shows that difficulty in regulating emotions is linked to problems in childhood functioning. In a longitudinal study of 5-year-olds, it was found that low regulation of emotions was correlated with externalizing problem behaviors and low levels of prosocial actions (Rydell, Berlin, & Bohlin, 2003). In addition, children with high prosocial skills are able to garner support and protection from individuals outside of the family, often leading to better outcomes following exposure to violence (Alvord & Grados, 2005). Prosocial skills are the success of a person in meeting societal expectations, the ability to attend to relevant social cues, and solve interpersonal problems (Hines & Saudino, 2002). Those children who can successfully navigate their social world and generate solutions to social problems are better able to avoid negative outcomes (Lansford et al., 2006). This theory of resilience, based on strengths in prosocial skills and emotion regulation, seems the most relevant both from a developmental perspective, as it centers on tasks of the preschool years, and a contextual perspective, as it is intricately tied to functioning when exposed to domestic violence.

Protective Factors Associated With Resilience

Protective factors can be delineated from past research that help to explain why some children exposed to IPV appear to cope well and others do not. Protective factors are qualities of a person or context that predict better outcomes, particularly in situations of risk (Wright & Masten, 2006). Relevant factors are found in both the individual and the family system.

Demographic factors are relevant to potential resilience in preschool children. To date, there is no consistent evidence for gender differences in children's exposure or reactions to IPV (Sternberg, Baradaran, Abbott, Lamb, & Guterman, 2006). One study showed that boys from violent families had a higher risk of using abusive tactics in their teenage and young adult relationships (Pelcovitz et al., 1994), while other researchers have found that girls who witness violence in the home were more likely to exhibit internalized behavior problems (Cummings, Pepler, & Moore, 1999). In sum, both boys and girls show adjustment difficulties following IPV exposure; however, male children's externalizing problems may be more apparent to observers. Younger age at the time of exposure to IPV has also been associated with more deleterious outcomes for the child (Holden, Stein, Ritchey, Harris, & Jouriles, 1998). Young children who witness domestic violence may show behavior problems in the clinical range and have increased trauma symptoms relative to other children (author reference).

With respect to race and ethnicity, Graham-Bermann, De Voe, Mattis, Lynch, and Thomas (2006) found that European American children were more likely to have a diagnosis of posttraumatic stress disorder (PTSD) than ethnic minority children exposed to IPV. However, Grych and colleagues found no significant differences in behavioral adjustment outcomes among African American, Hispanic, and European American children exposed to IPV (Grych, Jouriles, Swank, McDonald, & Norwood, 2000).

Studies also reveal that positive features of families are associated with positive child adaptation following violence. For example, research on domestic violence shows that the mother's capacity to provide her child with effective coping mechanisms and conflict resolution strategies, despite exposure to violence in the home, significantly affects the child's social and emotional competence (Hines & Saudino, 2002). Mother's mental health also provides a protective function for children in families with IPV. Research studies have demonstrated that women exposed to IPV have higher rates of depression and PTSD symptoms as compared to nonabused women (Cascardi, O'Leary, Schlee, 1999; Levendosky & Graham-Bermann, 1998). In a sample of preschool-age children, Levendosky, Huth-Bocks, Shapiro, and Semel (2003) found that IPV was significantly related to maternal psychological health and that the women who struggled with more severe symptoms of depression and PTSD were more likely to report lower parenting effectiveness. In turn, this was negatively related to children's externalizing behaviors.

Effective parenting is one of the most well studied protective factors for children exposed to adverse situations. Children of mothers who are able to provide a more solid parenting environment typically develop a stronger attachment and fare better over time (Levendosky et al., 2003). A positive parent-child attachment has been shown to buffer against negative outcomes by providing support to children following exposure to violence at home (Grych, Raynor, & Fosco, 2004).

The Impact of Violence Severity on Resilience

Violence severity has the potential to significantly impact resilience in children exposed to IPV. Both the amount of violence exposure and violence severity influence future maladjustment (Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003). In a study of preschool-age

children exposed to family violence, Fantuzzo et al. (1991) found that the greater the violence to which the children were exposed, the more likely they were to experience conduct and emotional problems. Kitzmann noted that children who witnessed less severe forms of IPV evidenced less severe symptoms (Kitzmann et al., 2003).

Hypotheses

The current study evaluates resilience in preschool children exposed to IPV by focusing on the age-appropriate milestones of emotion regulation and prosocial skills. This conceptualization of resilience and IPV has not been undertaken to date; however, it is critical to consider resilience from this perspective because of the central role that emotion regulation and prosocial skills play in preschool children's development. By assessing specific protective factors of the child and the family, this study provides information that can potentially be used to develop more effective interventions for this high-risk group.

1. It is hypothesized that scores on a measure of prosocial skills and emotion regulation will be negatively correlated with a measure of externalizing and internalizing behavior problems.
2. It is expected that younger, male children will score lower on the measure of prosocial skills and emotion regulation. Based on the literature, it is unclear what role ethnicity will play, as research has shown inconsistent findings with respect to this factor.
3. It is hypothesized that children exposed to more severe and chronic violence will have lower scores on the measure of prosocial skills and emotion regulation than those exposed to less severe and chronic violence.
4. After controlling for demographic factors and level of violence, factors predicting resilience will include more effective parenting practices, fewer maternal mental health problems, and strengths in mother's coping ability.

METHODS

Participants

The sample consisted of 56 children aged 4–6 (M = 5.01, SD = .80) who were exposed to IPV within the past 2 years. Women and their children (30 boys, 26 girls) were recruited in southeastern Michigan utilizing social service agencies, flyers, and newspaper advertisements. In total, 56 women and their children participated in this project, each completing all of the indices and scales. None of the women had more than one child in the study, thus preventing any overlap or conflict within the data. The sample was residing in the community (44.6%) and shelters (55.4%) at the time of the study. A breakdown of children's ethnicity was White (26.8%), African American (42.9%), Hispanic American (7.1%), or Biracial (21.4%). Mothers' age averaged 31 years (SD = 6.6). 12.5% had some high school education, 32.1% graduated high school, 14.3% had a college degree or technical training, and 1.8% obtained a graduate degree. Relationship status indicated 42.9% single women, with 7.1% living with a partner, 19.6% married, 21.4% separated, and 8.9% divorced. 41.1% of the mothers were currently employed and earned US$1,626.31 per month.

Measures

Demographics. A demographics questionnaire was administered to each mother to ascertain basic background information, such as child age, family income, residence, child ethnicity, maternal education, and current relationship status.

Resilience. Mothers completed the *Social Competence Scale* (SCS) developed by the Conduct Problem Prevention Research Group (Conduct Problems Prevention Research Group [CPPRG], 2002). This measure has been used with high-risk young children exhibiting chronic problems related to aggressive, disruptive, and oppositional behaviors. It consists of 12 items that measure a child's total behavioral competence in a social setting as perceived by the parent. Examples of these behaviors include: my child can accept things not going his or her way or my child thinks before acting. The measure includes two subscales defined as prosocial skills ($\alpha = .80$) and emotion regulation skills ($\alpha = .80$). A total competence score is derived from the combination of these two subscales. In the present study, $\alpha = .78$ on the prosocial subscale, $\alpha = .67$ on the emotion regulation subscale, and $\alpha = .84$ on total competence.

Independent sample *t* tests were performed to compare children in the current study with children in the original CPPRG high-risk and normative groups. These *t* tests were computed manually because we only had access to the CPPRG summary statistics, not the actual observations from the comparison groups. Such an analysis was undertaken because we could assume with relative certainty that all groups were independent from each other due to the timing of data collection and the location of subjects. Further, normality was verified in the current sample and there is no reason to doubt normality within the CPPRG sample. Based on these analyses, it was found that children in the current study had mean scores on the SCS measure ($M = 2.01$, $SD = .71$) consistent with children in the original CPPRG high-risk group ($t[56] = –.934$, $p > .05$). Children in the high-risk group had a mean score on the SCS measure of 2.11 with a standard deviation of .61. Additionally, both the high-risk sample and the current IPV sample were significantly different from a normative group of children ($t[56] = .–5.6$, $p < .01$). Children in the normative group had a mean score on the SCS measure of 2.57 with a standard deviation of .63. This provides additional support for using the SCS with high-risk children, including those exposed to IPV.

Behavior Problems. The Child Behavior Checklist (CBCL; Achenbach, 1991) has proven to be both valid and reliable in research with clinical populations (Achenbach & Edelbrock, 1993). In the present study, mothers completed this 113-item inventory using a 3-point rating scale: 0 (*not true*), 1 (*somewhat or sometimes true*), 2 (*very true or often true*). Two scales represent broad areas of child adjustment: The Internalizing scale consists of anxiety/depression, withdrawal, and somatic complaint items, whereas the Externalizing scale includes items measuring aggression and delinquency. The Total scale includes these as well as social problems, thought problems, and attention problems. Reported internal consistency for the Internalizing, Externalizing, and Total scales was = .89, .93, and .96, respectively (Achenbach, 1991). In the present study, α was .88, .91, and .96 for the three summary scales.

Severity of IPV. The Revised Conflict Tactics Scales (CTS2; Straus, Hamby, Bone-McCoy, & Sugarman, 1996) was used to assess violence perpetration and reception. The CTS2 is a 78-item instrument measuring the severity of psychological, physical, and sexual violence in a dating, cohabitating, or marital relationship, as well as the extent to which negotiation has been used to deal with conflict. Only questions in regard to reception were included in this study, for a total of 39 items. Mothers were asked to estimate the frequency with which their partners used different violence tactics toward them within the past year on a 7-point Likert scale (from *never occurred* to *occurred more than 20 times*). The CTS2 has strong internal consistency, with αs ranging from .79 to .95, as well as adequate construct and discriminant validity (Straus et al., 1996). The α for the present study was .93.

Mothers' Depression. The Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), a 21-item questionnaire designed to assess current levels of depressive symptoms, was used in this study. Participants were asked to indicate how frequently they had experienced each item within the past week using a 4-point scale. The BDI is both valid ($r = 77$; Bumberry, Oliver, & McClure, 1978) and reliable ($\alpha = .86$; Beck et al., 1961). It has been shown to be effective in distinguishing clinically depressed from nondepressed adults (Beck, Steer, & Garbin, 1988) and has been used in studies of battered women (Levendosky & Graham-Bermann, 2001). The α for the present study was .90.

Mothers' Posttraumatic Symptoms. The Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995) assessed trauma symptoms in this sample. The PDS is a 49-item measure designed to assist with the detection and diagnosis of PTSD. Items on the PDS correspond to *DSM-IV* criteria for a diagnosis of PTSD. Participants were asked to focus on the "worst" traumatic event associated with physical and/or sexual assault from a partner. They answered a series of questions that tap into symptoms of PTSD, including traumatic reexperiencing, avoidance, numbing, and physiological reactivity. The PDS has been shown to have high internal consistency and test–retest reliability for diagnosis and for symptom severity score (87.3% and 83%, respectively), good sensitivity and specificity (82% and 76.7%, respectively), and it correlates highly with other measures of PTSD (Foa, 1995). The α for the present study was .84.

Parenting Practices. The Alabama Parenting Questionnaire (Frick, Christian, & Wootton, 1999) was selected to measure parenting effectiveness. The APQ is a 42-item measure assessing positive and negative parenting practices within six domains: (a) involvement, (b) positive parenting, (c) poor monitoring/supervision, (d) inconsistent discipline, (e) use of corporal punishment, and (f) use of discipline practices other than corporal punishment. Mothers were asked to rate on a 5-point scale the frequency with which the parenting practices typically occur in their home. The APQ has sound psychometric properties in studies evaluating the association between parenting practices and child behavior outcomes (Dadds, Maujean, & Fraser, 2003). The α for the present study was .68.

Maternal Coping. The Ways of Coping Checklist (WCCL; Folkman & Lazarus, 1985) was used to assess maternal coping in this study. The WCCL assesses various cognitive/emotional and behavioral coping strategies used to deal with a stressful life situation. Each item was rated on a scale from 0 (*not used*) to 3 (*used a great deal*). Previous research shows that the WCCL has good internal consistency (α in the .70 range) and sound psychometric properties (Clark, Bormann, Cropanzano, & James, 1995). The α for the present study was .84.

Procedure

Following Institutional Review Board (IRB) approval, mothers interested in participating in the study contacted the research team by phone. Interviews took place in a variety of private sites in or near the participants' homes. Interviewers were advanced undergraduate and graduate students, a research associate, and a postdoctoral fellow who underwent training in research ethics and working with survivors of IPV conducted by a local domestic violence shelter. In addition, all interviewers received training in clinical interviewing techniques and successfully completed the Program for Education and Evaluation in Responsible Research and Scholarship (PEERS) certification. Mothers signed informed consent and children gave their assent to participate. The rights of both mothers and children were protected at all times. That is, study participants were told that they could stop at any time,

could "pass" or not answer any question, and were given referrals for appropriate and affordable mental health services when indicated. In addition, they were assured that their identities and responses would remain confidential. Mothers were paid US$25 and children were given a small gift worth approximately 5 dollars in exchange for participating.

RESULTS

Descriptive statistics for the study variables and reliability coefficients are given in Table 1. Intercorrelations among the study-dependent variables and continuous predictor variables are given in Table 2; they ranged from .00 to .29.

The dependent variable, resilience in children exposed to IPV, was measured using prosocial and emotion regulation scores from the SCS. To test hypothesis one, scores on the SCS were correlated with scores on the CBCL. As seen in Table 3, significant negative correlations were found between both SCS total and the CBCL total scores, and between SCS subscales and CBCL subscales. In this situation, the more the child exhibited emotion regulation and prosocial skills, the less likely it was that the child showed internalizing, externalizing, or total behavior problems. All correlations were significant and in the expected

TABLE 1. Descriptive Statistics for the Study Measures

Measure	*M*	*SD*	Minimum	Maximum	Cronbach's Alpha (α)
SCS					
Total	36.10	8.52	17	52	.84
Emotional regulation skills	16.16	4.30	8	25	.67
Prosocial/ communication skills	19.89	4.90	9	30	.78
CBCL					
Total	37.98	27.63	0	118	.96
Internalizing	7.79	7.65	0	31	.88
Externalizing	14.86	10.45	0	41	.91
APQ	162.13	19.23	111	189	.68
Maternal mental health					
BDI	45.93	13.07	20	72	.90
PDS	23.15	11.60	0	47	.84
WCCL	116.73	16.42	81	147	.84
CTS-2	239.54	160.79	0	687	.93

Notes. $N = 56$; SCS = Social Competence Scale; CBCL = Child Behavior Checklist; APQ = Alabama Parenting Questionnaire; BDI = Beck's Depression Inventory; PDS = Posttraumatic Stress Diagnostic Scale; WCCL = Ways of Coping Checklist; CTS2 = Conflict Tactics Scales-Revised.

TABLE 2. Intercorrelations of Predictor Variables and Resilience as Measured by Social Competence Scale (SCS)

		1	2	3	4	5	6	7	8
1	SCS Total	–							
2	SCS Emotional regulation skills	.91**	_						
3	SCS Prosocial/ communication skills	.93**	.68**	_					
4	Child age	.20	.17	.19	_				
5	Parenting practices	.41**	.35**	.39**	.14	_			
6	Maternal coping	.22	.17	.23	.11	.17	_		
7	Maternal mental health	–.44**	–.36**	–.43**	–.03	–.25	.17	_	
8	Severity of IPV	–.29*	–.25	–.29*	.08	.21	0	.29*	_

Note. $N = 56$.
*$p < .05$. **$p < .01$.

direction, thus providing partial construct validation of the resilience measure employed in the study. This suggests preliminary support for the conceptualization of resilience as a function of emotion regulation and prosocial skills used in this research.

To test hypotheses two through four, which sought to identify significant predictors of resilient outcomes in this sample, hierarchical multiple regression analyses were conducted for the three indictors of resilience: SCS total, emotion regulation subscale, and prosocial subscale. Each regression followed the same structure and all variables were standardized before being entered into the equation. Demographic variables of child age, child sex, child ethnicity, and family income were entered in Step 1 to test the second hypothesis. For the purposes of these analyses, income was collapsed into a dichotomous variable (i.e., monthly income greater than US$1,000 vs. monthly income less than US$1,000). The mean of family violence severity and frequency (hypothesis three) was entered in Step 2, and mean parenting performance, maternal mental health, and maternal coping (hypothesis four) were entered into Step 3. Maternal mental health was based on a combined score from the BDI and PDS. These scores were combined to create one assessment of mental health because of their high intercorrelation ($r = .60$, $p < .01$). In sum, variables that were furthest from the parent–child relationship, such as demographic information, were entered first and those closest to this relationship were entered last. In addition to examining whether each successive step improved the prediction of a given resilience outcome, individual processes were examined for their independent relationship to the outcome. Results are given in Table 4.

Demographic variables entered in Step 1 did not account for a significant proportion of variance in the SCS total, emotion regulation subscale, or prosocial skills subscale ($R^2 = .084, .084, .059$, respectively). Once violence severity was entered in Step 2, there was a substantial increase in the amount of variance explained ($R^2 = .193, .164, .168$, respectively); however, this model also did not reach significance. When parenting performance, maternal mental health, and maternal coping were entered in the final step, however, there

TABLE 3. Intercorrelations of Social Competence Scale (SCS) and Child Behavior Checklist (CBCL)

		1	2	3	4	5	6
1	SCS Total	–					
2	SCS Prosocial skills	.93**	–				
3	SCS Emotional regulation skills	.91**	.68**	_			
4	CBCL Total	–.56**	–.48**	–.55**	–		
5	CBCL Internalizing	–.40**	–.34*	–40**	.93**	_	
6	CBCL Externalizing	–.65**	–.55**	–.65**	.91**	.78**	_

Note. $N = 56$.
*$p < .05$. **$p < .01$.

was a significant increment in the variance accounted for in the full measure and its subscales ($R^2 = .458, .349, .428$). To take into consideration the small sample size and number of regressors used in this analysis, we also report the adjusted R^2 in Table 4. This adjusted R^2 accounts for the number of explanatory terms in the model and approaches R^2 more closely as the predictor improves the model more than would be expected by chance.

As can be seen by the unstandardized regression coefficients, several predictors reached significance for the various indicators of resilience. For SCS total, parenting performance (B = .867; $p < .05$), maternal mental health (B = –.225; $p < .01$), and violence severity (B = –.057; $p < .05$) made significant contributions. Better parenting performance, fewer maternal mental health problems, and less severe or frequent violence exposure predicted better total competence among children exposed to domestic violence. For the emotion regulation subscale, parenting performance (B = .795; $p < .05$) was the only significant predictor and violence severity (B = –.052; $p < .10$) approached significance. In terms of the prosocial subscale, specific significant predictors in the final step included violence severity (B = –.063; $p < .05$), parenting performance (B = .930; $p < .05$), and maternal mental health (B = –.266; $p < .05$). In general, better parenting performance, fewer maternal mental health problems, and less severe violence exposure predicted better prosocial skills among children exposed to domestic violence.

DISCUSSION

The present study conceptualized resilience as strengths in emotion regulation and prosocial skills, two areas crucial to preschool-age children's development, despite exposure to IPV. This conceptualization was validated by the negative correlation between the SCS and the CBCL, which has been used in previous studies to detect poor functioning in children exposed to IPV (author reference; Grych et al., 2000; Levendosky et al., 2002). Such a comparison with known measures provides preliminary support for convergent validity. Resilient children appear to be less vulnerable to developing problems often identified in children who witness IPV.

As outlined in the remaining three hypotheses, it was expected that there would be some variability in resilience outcomes among children in this sample based on potential

TABLE 4. Summary of Separate Hierarchical Regression Analyses for Variables Predicting to Resilience as Measured by Social Competence Scale (SCS) Total, Emotion Regulation, and Prosocial Skills Using Demographics, Violence Exposure, Maternal Mental Health, Maternal Coping, and Parenting

	SCS Total					SCS Emotional regulation skills					SCS Prosocial skills				
Variable	B	β (sta)	R^2	*Adj.* R^2	*F*	B	β (sta)	R^2	*Adj.* R^2	*F*	B	β (sta)	R^2	*Adj.* R^2	*F*
Step 1			.084	.006	1.07			.084	.007	1.08			.059	–.02	0.74
Child age	.142	.160				.113	.125				.166	.161			
Child gender	–.327	–.229				–.364	–.250				–.280	–.169			
Child ethnicity	–.008	–.014				–.016	–.028				–.003	–.005			
Income	.023	.016				.047	.032				–.008	–.005			
Step 2			.193	.105	2.20†			.164	.074	1.81			.168	.077	1.86
Child age	.172	.193				.139	.153				.201	.195			
Child gender	–.316	–.222				–.354	–.243				–.267	–.162			
Child ethnicity	–.028	–.051				–.034	–.059				–.027	–.042			
Income	–.094	–.066				–.055	–.038				–.143	–.086			
Severity of IPV	–.063*	–.346*				–.055*	–.295*				–.073*	–.344*			
Step 3			.458	.357	4.54**			.349	.228	2.88*			.428	.321	4.02*
Child age	.116	.130				.093	.103				.135	.131			
Child gender	–.254	–.178				–.297	–.204				–.201	–.121			
Child ethnicity	–.004	–.008				–.016	–.028				.004	.006			
Income	–.175	–.122				–.132	–.090				–.227	–.137			
Severity of IPV	–.057*	–.310*				–.052†	–2.77†				–.063*	–.299*			
Maternal mental health	–.225*	–.270*				–.182	–.215				–.266*	–.276*			
Maternal coping	.042	.174				.027	.107				.059	.208			
Parenting performance	.867*	.343*				.795*	.308*				.930*	.318*			

Note. $N = 56$.
†$p < .10$. *$p < .05$. **$p < .001$.

protective factors. Contrary to the second hypothesis, none of the demographic factors emerged as predictors of resilience. Male, younger children were not more likely to score lower on the prosocial communication and emotion regulation measure. Additionally, there were no ethnic or economic differences in the sample in terms of the resilience variables. The fact that neither child gender nor ethnicity had a significant effect on resilience outcomes could suggest that children of both genders and different ethnicities may be just as vulnerable to, or just as resilient against, developing various adjustment problems following IPV exposure. The results might indicate that differences in resilience outcomes may be better accounted for by factors beyond individual characteristics of the child. The idea that child gender or ethnicity may not be the most reliable predictor of resilience corresponds to previous research findings, which have been inconclusive as to whether children of one gender or ethnicity fare better or worse when faced with IPV (Grych et al., 2000).

Even though the above findings are consistent with previous research, it is important to highlight the small sample size of this study. Our lack of significance regarding demographic variables could be in part attributed to little variability within our sample with regard to participant characteristics. Additionally, our findings could be the result of small effect sizes and low power. Post hoc power analyses were conducted to determine if there was sufficient power to evaluate the demographic variables hypothesis. For total competence, as well as the emotion regulation and prosocial skills subscales, effect sizes were small and observed power did not exceed .35 for the demographic variables. For example, with regard to total competence, the gender effect size was .037 with .263 observed power. Given these findings, our conclusions regarding demographic variables are speculative and should be re-evaluated in future studies with a larger sample.

Consistent with the third hypothesis, violence severity had an independent effect on resilience outcomes, indicating that children whose mothers reported having experienced more violent incidents were less likely to show competence in prosocial behaviors and emotion regulation. While we did not directly assess children's exposure to IPV, violence experienced by the mother can be a good indicator of children's exposure to violence because a vast majority of children of women experiencing IPV, especially younger ones, have direct sensory exposure to episodes of family violence (Fantuzzo & Fusco, 2007; author reference). The current findings show that the less severe the violence a child is exposed to, the more likely he or she is to exhibit resilient outcomes.

In the fourth hypothesis, it was postulated that positive maternal factors (better parenting, fewer mental health difficulties, and increased coping) would predict better resilience in children exposed to IPV. After controlling for level of violence and demographic variables, two of these factors—better parenting performance and better maternal mental heath—were significant predictors in this study. It is likely that mothers who suffer from fewer depressive and traumatic symptoms, the two indicators of maternal mental health in this study, have a greater capacity to maintain a more positive parent–child attachment, which, in turn, has been shown to play a protective role against negative child outcomes associated with family violence (Grych et al., 2004). From a developmental perspective, mothers with fewer mental health problems, who may be better able to maintain a positive parent–child attachment, may be better equipped to support their children in mastering developmental tasks, including emotion regulation and prosocial skill development.

Similarly, it is reasonable to expect that more positive parenting, which is likely reflective of more positive parent–child interactions, serves as a protective factor linked to increased resilience in children exposed to IPV. While Levendosky and colleagues' (2003) study highlighted the protective role of parenting in mitigating child adjustment problems

following exposure to IPV, this study found that parenting characterized by warmth, responsiveness, and appropriate discipline has the potential to facilitate the development of strengths in emotion regulation and prosocial skills.

Contrary to expectations, maternal coping did not predict resilience in this study. One possible explanation for this result may lie in the way coping was measured. Since we used a modified version of the WCCL, it is possible that the shortened version lacked the necessary detection capability to capture maternal coping. In addition, we were mainly interested in determining whether *any* maternal coping is predictive of better resilience outcomes in children exposed to IPV; future studies could explore the extent to which mothers rely on different coping strategies.

Clinical Implications

This study provides preliminary evidence that aspects of prosocial skills and emotion regulation in preschool children are associated with more positive functioning and can be predicted from factors related to the child, the mother, and their relationship. Such findings can be highly influential in clinical work with families exposed to IPV. As opposed to focusing solely on reducing pathology associated with family violence, clinicians could conceptualize treatment from a more positive, empowering perspective and build on the strengths of these families.

The results of this study specified parenting and maternal mental health as highly relevant factors predicting resilience. Therefore, clinicians can benefit from knowing that when working with children exposed to family violence, it is important to take an ecological, systemic approach to treatment. This integrated approach will bolster the mother's strengths and help her provide a supportive foundation for her child. In treatment, preschool children, in addition to receiving individual care to better cope with the traumatic event of witnessing family violence, can benefit from their caregiver receiving parent guidance and mental health services. As the mother's health and ability to parent improves, her child's resilience may also grow.

Limitations

Despite the contribution of the results related to understanding resilience in young children, this study has some limitations. The results cannot be generalized to all young children, as this was a study of low-income families in Michigan. The findings of the present study are limited to this sample of children and families who were interested in joining the evaluation study. The study is also limited by having the mother as the sole reporter of information about her child. The mother identified the family trauma, discussed her child's problematic behavior, and evaluated her child's competence. One of the main limitations of this study is its small sample size, which inhibited the addition of factors to the regression analysis that are likely important to understanding competence in this population. Conducting a hierarchical regression analysis with multiple predictors on such a small sample may lead to spurious results. Additionally, the small sample size may increase the likelihood of a Type II error leading to inaccurate findings. Therefore, it is important to note the exploratory nature of this study and the need to conduct more in-depth analyses with a larger population. The results of this study, though speculative, do provide unique information on resilience in a population often neglected in research on IPV.

Another limitation pertains to the cross-sectional nature of this project. There is evidence that children can exhibit varying levels of resilience over time (Freitas & Downey,

1998). We cannot determine whether the children deemed resilient at the time of this study remained so, or alternately, whether children showing lower competence became more resilient with the passing of time. Further, children can be resilient under one set of circumstances and not another (Kaufmann, Cook, Arny, Jones, & Pittinsky, 1994). Therefore, it is not clear whether children who are exposed to IPV and show generally resilient functioning would be resilient in the face of other forms of adversity.

Future Studies

Given the limitations of the current study, future work in this area should include a larger sample with more ethnic diversity and variability in income. Such research should utilize a longitudinal study design that is more suitable for evaluating pathways to resilience in this population as opposed to providing a snapshot of current functioning. Additionally, future work should collect data from multiple informants, that is, teachers, extended family, and counselors. The results presented here suggest additional questions and directions for studying resilience in preschoolers' lives. Future studies could evaluate children pre- and postintervention to determine if resilience changes after families receive relevant services.

SUMMARY

This study addresses various factors related to positive functioning in preschool children exposed to IPV and gives preliminary evidence to suggest that some predictors are associated with resilience in this population. It was found that frequency and severity of violence exposure, parenting performance, and maternal mental health were predictors to child resilience. Understanding the processes by which some at-risk children cope with adversity can inform clinical practice and policy when creating developmentally appropriate intervention strategies for children exposed to IPV. Given the high prevalence rates of IPV in families with young children, continued efforts to identify strengths and enhance coping for this population are greatly needed.

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