Conduct disorder symptoms in pre-school children exposed to intimate partner violence: Gender differences in risk and resilience

Linda Sowan

International Family Violence and Child Victimization Research Conference, Portsmouth, NH July 11th 2016

EXCELLENCE WITH IMPACT

Previous literature

- Pre-school children vulnerable to IPV (Fantuzzo & Fusco, 2007)
  - Few studies of pre-schoolers (Howell, 2011)

- IPV leads to increased CD in children (Moylan et al, 2010)
  - Potential sex differences (Moffitt, 2001)
  - Predictor of future criminality and IPV (Fang et al, 2010; Moffitt, 2003)

- Not all children adversely affected by IPV (Kitzman et al, 2003)

- Gender may moderate effects
  - Boys not shielded from aggression (Hetherington et al, 1989)
  - Sex-role socialisation of IPV (Kerig et al, 1993)
  - Sex-role socialisation of coping (Zahn-Waxler, 1993)

- Potential predictors of resilience
- Lower IPV (Grych et al, 2000)
- Perceiving IPV as less serios (Graham-Bermann et al, 2009

Previous literature

Potential predictors of resilience

- Lower IPV (Grych et al, 2000)
- Perceiving IPV as less serious (Graham-Bermann et al, 2009; Grych et al, 2000)
- Higher social support (boys only; Kolbo, 1996)
- Low maternal mental health problems (Kolbo, 1996)
- Better quality parenting (Kolbo, 1996)
- Low maternal depression (Graham-Bermann et al, 2009; Martinez-Torteya et al, 2009)
- Easy child temperament (Martinez-Torteya et al, 2009)
- More effective family problem solving abilities (Graham-Bermann et al, 2009)

BUT

- Studies typically cross sectional (Except Martinez-Torteya et al, 2009)
- Small samples
- Sex differences not examined (except Grych et al, 2000 who found none)
- Attachment not examined

Study aims

- To examine profiles of adaptation to IPV focusing on CD symptoms in community based cohort of pre-school children

- To examine gender differences in predictors of adaptation

Hypotheses

1.A group of IPV-exposed children would be identified as resilient and that boys will be less likely than girls to be resilient to conduct disorder symptoms due to previous findings that boys are more likely to exhibit externalizing behavior problems when exposed to IPV.

2.In addition, IPV-exposed children are expected to have higher levels of conduct disorder symptoms than non-IPV exposed children, and that the highest levels would be identified in boys exposed to IPV.

3.Family and child characteristics, specifically attachment, parental involvement, and easy temperament will predict resilience, whereas non-resilience was expected to be predicted by higher levels of maternal depression and maternal life events.

Method

Sample

14,541 mothers enrolled

→ 14,676 foetuses

14,062 live births

→ 13,988 alive at year 1

13,617 mother-child pairs

→ Complete data Birth – 4 years

7,743 (51.6% boys)

Included cases: ↑ Education ↓ Non-White = DV victimisation

Method

Measures

IPV: 8, 21, 33 months

Child conduct disorder symptoms: SDQ (Goodman, 1997) 47 months

Child temperament*:*
- Carey Temperament Scales (Carey & McdDevitt, 1977) 6 months, 24 months
- Emotionality, Activity Sociability scales (Buss & Plomin, 1984) 38 months

Social development*:* Denver Developmental Screening Test (Frankenburg et al, 1992) 6 & 24 months

Attachment*:* 3 item reunion warmth scale; 42 months

Parental involvement*:* 9 item scale 6, 24, 42 months

Maternal mental health*:* Edinburgh Postnatal Depression Scale (Cox et al, 1987), 8, 21, 33 months

Maternal life events*:* Life events scale, 8, 21, 33 months

Findings 1

CENTRE FOR RESEARCH IN PSYCHOLOGY, BEHAVIOUR & ACHIEVEMENT

Adaptation categorisation

c.f. Masten, 2001; Martinez-Torteya et al (2009)

17.7% IPV exposure: 18.4% girls, 17.0% boys

IPV experienced (yes/no) x conduct disorder symptoms (yes/no)

Resilient =	IPV + NO CD	16%: 15.3% boys, 16.7% girls
Non-resilient =	IPV + CD	1.7%: 1.7% boys, 1.7% girls
Vulnerable =	NO IPV + CD	3.1%: 3.8% boys, 2.4% girls
Competent =	NO IPV + NO CD	79.2%: 79.2% boys, 79.2% girls

Findings 2: Resilient vs. Non-resilient

BOYS

Logistic regression: Nagelkerke $R^2 = .14$

- Maternal education (low vs. high) = OR 2.24 (2.08 4.64)*
- Emotionality = OR .88 (.82-.94)*
- Activity = OR .86 (.76-.91)*
- Shyness = OR 1.03 (.95 – 1.12)*

GIRLS

Logistic regression: Nagelkerke $R^2 = .14$

- Maternal education (low vs. high) = OR 2.71 (1.27 – 5.76)*
- Shyness = OR 1.09 (1.00 – 1.18)*
- Attachment to mother = OR 1.46 (1.01 – 2.10)*
- Maternal involvement = OR 1.12 (1.02 – 1.22)*
- Social development = OR .90 (.83 - .99)*
- Emotionality = OR .92 (.86 - .98)*
- Activity = OR .86 (.79 - .99)*

Findings 3: Resilient vs. Vulnerable

CENTRE FOR RESEARCH IN PSYCHOLOGY, BEHAVIOUR & ACHIEVEMENT

BOYS

Logistic regression: Nagelkerke $R^2 = .19$

- Mood = OR .94 (.90-0.98)*
- Emotionality = OR .93 (.89-.98)*
- Activity = OR .93 (.86 – 1.00)*
- Maternal involvement = OR 1.14 (1.06 – 1.21)*
- Paternal involvement = OR .93 (.89 - .96)*
- Maternal depression = OR 1.06 (1.01-1.12)*
- Maternal life events = OR 1.07 (1.03-1.15)*

GIRLS

Logistic regression: Nagelkerke $R^2 = .20$

- Maternal education (low vs high) 2.14 (1.12 – 4.11)*
- Emotionality = OR .90 (.85 - .95)*
- Shyness = OR 1.05 (.98 – 1.13)*
- Sociability = OR .96 (.87 – 1.04)*
- Paternal involvement = OR .91 (.87 - .95)*
- Maternal life events = OR 1.07 (1.03-1.12)*

Findings 4: Resilient vs. Competent

BOYS

Logistic regression: Nagelkerke $R^2 = .28$

- Paternal involvement = OR .89 (.88-.91)*
- Maternal depression = OR 1.15 (1.11-1.18)*
- Maternal life events = OR 1.10 (1.08-1.12)*

GIRLS

Logistic regression: Nagelkerke $R^2 = .29$

- Maternal involvement = OR 1.05 (1.04 – 1.04)*
- Paternal involvement = OR .87 (.85 - .89)*
- Maternal depression = OR 1.11 (1.08-1.14)*
- Maternal life events = OR 1.11 (1.09-1.13)*

Summary and interpretation

- IPV impact heterogeneous; boys less likely to be resilient, majority of children resilient however.

- Different resilience processes for boys and girls

- Resilient (relative to non-resilience) predicted by:
  - High Maternal education, low emotionality and low activity for all children
  - High attachment to mother, high involvement by mother, lower social development for girls only.

- Resilient (relative to vulnerable) predicted by:
  - Low emotionality, low paternal involvement, higher life events for all children
  - Low mood, high maternal involvement, high maternal depression for boys
  - High maternal education, high shyness, low sociability for girls

- Resilient (relative to competent) predicted by
  - Low paternal involvement, high maternal depression, high life events for all children
  - High maternal involvement for girls

- Suggests potential gender differences in sex role socialisation and coping (c.f. Zahn-Waxler, 1993)

Limitations and implications

CENTRE FOR RESEARCH IN PSYCHOLOGY, BEHAVIOUR & ACHIEVEMENT

Limitations

- Ethnicity under-specified
- Cohort attrition
- Operationalization of IPV
- Reliance on mothers as respondents

Implications

Intervention design: differences for boys and girls:

- Boys: focus on social skills and emotion regulation training
- Girls: focus on maternal parenting

Research

- Need to more clearly unpack impact of maternal education
- Multi-informant methods needed

CENTRE FOR RESEARCH IN PSYCHOLOGY, BEHAVIOUR & ACHIEVEMENT

Acknowledgements

We are extremely grateful to all the families who took part in this study, the midwives for their help in recruiting them, and the whole ALSPAC team, which includes interviewers, computer and laboratory technicians, clerical workers, research scientists, volunteers, managers, receptionists and nurses.

The UK Medical Research Council (Grant ref: 74882) the Wellcome Trust (Grant ref: 076467) and the University of Bristol provide core support for ALSPAC.

CENTRE FOR RESEARCH IN PSYCHOLOGY, BEHAVIOUR & ACHIEVEMENT

Any Questions?