

ATTENTION BIASES AMONG PRESCHOOL-AGED CHILDREN EXPOSED TO DOMESTIC VIOLENCE: AN EYE-TRACKING STUDY



UNIVERSITY OF
TORONTO

**Tessie Mastorakos, Katreena Scott,
and Angelique Jenney**
University of Toronto and Child Development Institute



Attentional Bias: Elevated attention to stimuli with enhanced saliency or relevance for certain individuals or groups.

What was the Study?

An investigation into the relationship between attentional biases and emotional and behavioural problems in preschool-aged children who had and had not been exposed to domestic violence.

What was the Aim?

Exposure to domestic violence is related to a range of emotional and behavioural problems in children. It is theorized that such problems may relate to disruptions in how children learn to attend to emotion. To adapt in abusive environments, children may need to learn to be vigilant to some emotions (particularly anger) and to avoid others. Their ability to attend to emotion may also be disrupted because their mothers, who are themselves dealing with the effects of abuse, may not be able to provide enough scaffolding to help their children learn to recognize and regulate their emotions. Although children's vigilance or avoidance of emotion may be useful in their immediate situation, attentional biases may lead to problems in social and emotional development. This study examined if DV-exposed children disproportionately attended to threatening or distressing stimuli (i.e., angry or sad faces) compared to non-exposed children, and whether this bias in attention was associated

with the development of childhood behavioural and emotional problems.

Who Participated?

Thirty-eight children (between the ages of 18 to 60 months) and mothers (between the ages of 20 and 47) participated in this study. Thirteen DV-exposed children were recruited from a dyadic treatment group called *Mothers in Mind (MIM)* and twenty-five non-DV exposed children were recruited from the Child Development Institute Early Learning Daycare Centers and a University of Toronto psychology research laboratory.

What did Participants Do?

Children were asked to complete a computer task in which they would see some faces on the computer screen but had to locate Mr. Hippo as fast as they could. Children's mothers were asked to sit at the back of the testing room and complete two 5-minute questionnaires.

The visit took about 20-25 minutes. The experimenter monitored the mother and child for distress behaviours and discontinued the assessment when appropriate (i.e., when the child participant reported that their eyes hurt).



Safe and Understood

What did the Eye-Tracking Task Look Like?

Eye-movements were recorded from both the left and right eyes using a Tobii T60 Eye-Tracker, and were recorded with an average accuracy of 0.5 degrees. Thirty-two greyscale images—with an angry, sad, happy, and neutral emotional expression—were selected from the Radboud Faces Database. Each experimental screen included two images depicting the same child actor displaying an emotional face and a neutral face, with the pair of images for each actor randomized. The fixation hippo was visible throughout the trial and was randomly located on one of the four corners of the screen.

What Did We Find?

Consistent with prior studies...

Mothers of DV-exposed children reported more child emotional and behavioural problems relative to mothers of non-exposed children. Additionally, more problems (i.e., self-regulation and adaptive functioning) were associated with vigilance to threatening and distressing stimuli (angry faces).

An unexpected finding was that...

Children of DV-exposed children showed attentional bias away from sad and neutral faces, which for young children, are often confusing and upsetting. Additionally, the tendency to look away from sad and neutral emotions was associated with higher levels of child social and emotional problems. The relationship between looking away from

emotions and social emotional problems was especially strong for DV-exposed children and neutral faces.

All children showed a tendency to look away from angry faces. No differences were found in attention to anger among DV-exposed and non-exposed children.

Why was this Study Important?

- It is one of few studies that investigated associations to emotional and behavioural problems in very young children exposed to DV.
- It used eye-tracking technology instead of more commonly used reaction time measures (i.e., dot probe and visual tasks), meaning it did not rely on children's motor functioning abilities.
- It suggests that interventions for young children exposed to domestic violence should focus on supporting children's recognition, acceptance and regulation of their emotions.

FIND IT ONLINE

<http://kh-cdc.com/en/project-profiles/safe-understood.html>



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RELATED PUBLICATIONS

Mastorakos, T., & Scott, K. L. (2019). Attention biases and social-emotional development in preschool-aged children who have been exposed to domestic violence. *Child abuse & neglect*, 89, 78-86.

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