



# The acute effect of community violent crime on maternal engagement in cognitive and socioemotional stimulation



Jorge Cuartas<sup>a,\*</sup>, Dana Charles McCoy<sup>b</sup>, Andrés Molano<sup>c</sup>

<sup>a</sup> School of Government, Universidad de los Andes, Cra. 1 No. 19-27, Block AU, Third Floor, Bogotá, Colombia

<sup>b</sup> Graduate School of Education, Harvard University, Larsen Hall, Room 704, 14 Appian Way, Cambridge, MA 02138, United States

<sup>c</sup> School of Education, Universidad de los Andes, Street 18 A#0-19 East, Second Floor, Bogotá, Colombia

## ARTICLE INFO

### Article history:

Received 15 November 2017

Received in revised form 15 April 2018

Accepted 6 June 2018

### Keywords:

Community crime  
Maternal stimulation  
Caregiving  
Violence  
Acute stressor  
Colombia

## ABSTRACT

Parental cognitive and socioemotional stimulation in early childhood is a strong predictor of children's skill development and future life success. At the same time, little work has examined the effect of environmental risk factors on parents' engagement in stimulation practices. The present study estimates the acute effect of geocoded community violent crime on 491 Colombian mothers' reported engagement in stimulating activities with their children younger than five. We exploit naturalistic exogenous variation in the timing and location of a violence incident relative to a mothers' participation in a household survey to identify internally valid estimates.

Findings show that mothers reduced their engagement in stimulating activities, on average, by 0.23–0.30 *SD* following an incident of violent crime in their residential neighborhoods. The estimated effect was larger for mothers living in the poorest neighborhoods and for mothers exposed to domestic violence. Implications for research on the effects of violence on children and their caregivers as well as for interventions at different ecological levels are discussed.

© 2018 Elsevier Inc. All rights reserved.

## 1. Introduction

Globally, it is estimated that at least 300 million children younger than five have been exposed to community violent crime (Walker et al., 2011). This burden is especially relevant in low- and middle-income countries (LMICs) like Colombia, which has experienced recent increases in urban criminality (Mejía, Ortega, & Ortiz, 2015) with effects on local inhabitants' development, behavior, and wellbeing that are not entirely known. Recent evidence suggests that community violent crime may interfere with children's development (Foster & Brooks-Gunn, 2015; Leventhal, Dupéré, & Shuey, 2015; McCoy, Connors, Morris, Yoshikawa, & Friedman-Krauss, 2015), sleep and cortisol patterns (Heissel, Sharkey, Torrats-Espinosa, Grant, & Adam, 2017), cognitive performance (McCoy, Raver, & Sharkey, 2015; Sharkey, 2010), and emotional processing and regulation (McCoy, Roy, & Raver, 2016; Sharkey, Tirado-Strayer, Papachristos, & Raver, 2012). At the same

time, relatively little is known about how community violent crime may impact family processes more broadly. Theoretical and correlational evidence suggests that the occurrence of threatening and stressful crimes in residential neighborhoods may be linked to differences in parents' and primary caregivers' attitudes and practices (Cuartas, 2018; McCoy, 2013). Yet, there is very little empirical work that has examined the causal impact of community violent crime on parents and caregivers' attitudes and behaviors, which may serve to either buffer or exacerbate the effects of external threat on children's outcomes.

To fill the aforementioned gap in the literature, the aim of this study is to assess the acute effect of recent community violent crime on Colombian mothers' engagement in stimulating activities with their children younger than five. Moreover, we perform exploratory analyses to understand whether these effects differ based on families' exposure to a set of risk and protective factors, including exposure to neighborhood poverty and domestic violence, different levels of maternal education, and families' participation in early childhood social programs. We use a quasi-experimental approach to assess the acute effect of geocoded, objective police reports of community crime on mothers' self-reported stimulation practices, exploiting geographic and temporal variation in the occurrence of violent crimes relative to participants' homes location and house-

\* Corresponding author.

E-mail addresses: ja.cuartas10@uniandes.edu.co (J. Cuartas), dana.mccoy@gse.harvard.edu (D.C. McCoy), a.molano@uniandes.edu.co (A. Molano).

hold interview date, respectively. In doing so, we offer insights into the ways that community crime, a particularly prevalent risk factor in many LMICs, influences parenting practices, while also contributing important input to the design of future evidence-based interventions and strategies to bolster positive family outcomes.

### 1.1. Nurturing care in contexts of adversity

The care that children receive during their first years of life is critical to supporting their developmental wellbeing. In these early years, children are particularly sensitive to environmental influences and experiences, and adversities such as exposure to poverty, violence, or neglect can impose a heavy burden for children's developmental paths (Blair et al., 2011; Shonkoff & Garner, 2011). Conversely, positive experiences – particularly nurturing interactions with caregivers – can protect children from the detrimental effects of contextual stressors (Hackman, Gallop, Evans, & Farah, 2015; Luby, Belden, Botteron, & et al., 2013; McLaughlin et al., 2015), and support children's development and subsequent life success even in the face of adversity (Shonkoff, 2010).

The Nurturing Care Framework proposed by the WHO and UNICEF defines nurturing care as a stable and predictable environment where children's health, nutritional, and emotional needs are met, children are protected from threats such as violence and neglect, and caregivers interact in responsive, attentive, supportive, and developmentally stimulating ways (Britto et al., 2017). Two of the most important dimensions of nurturing care compromise cognitive and socioemotional stimulation, which are strong predictors of children's cognitive and socioemotional development (Britto et al., 2017; Brooks-Gunn & Markman, 2005; Jeong, McCoy, Yousafzai, Salhi, & Fink, 2016; Jeong, McCoy, & Fink, 2017). Furthermore, experimental evidence shows that parenting interventions aimed at fostering parental engagement in stimulating activities such as reading or playing produce considerable gains in children's development, skill acquisition, and later life outcomes (Attanasio et al., 2014; Gertler et al., 2014).

Both theoretical models (e.g., Belsky, 1984; Guryan, Hurst, & Kearney, 2008) and empirical evidence (e.g., Sun, Liu, Chen, Rao, & Liu, 2016) suggest that child and caregiver characteristics, caregiver psychological functioning, and contextual sources of stress and support are determinants of caregiving and parental stimulation. For instance, there is a well-documented gradient in parental stimulation by socioeconomic status, where children from the most disadvantaged contexts are significantly less exposed to cognitively and socioemotionally enriching activities and interactions (Bornstein & Putnick, 2012; Cabrera, Hofferth, & Chae, 2011; Kalil, Ryan, & Corey, 2012; Sun et al., 2016). Similarly, meta-analyses have revealed that parents living in crime-ridden communities are more likely to rely on psychologically and physically aggressive discipline than their peers from safer neighborhoods (Coulton, Crampton, Irwin, Spilsbury, & Korbin, 2007).

The biomedical, psychological, and sociological literatures offer several explanations for the above-described associations between environmental characteristics and caregiving practices. First of all, caregivers chronically exposed to environmental stressors (e.g., poverty and violence) display an array of mental health and emotional symptoms related to depression, anxiety, and even PTSD, which in turn may compromise their psychological functioning and capabilities to adequately address children's needs (Franco, Pottick, & Huang, 2010; Linares et al., 2001; McEwen & Sapolsky, 1995; White, Roosa, Weaver, & Nair, 2009). Secondly, impoverished, disorganized, and violent contexts may alter social norms around community ties and social control, with downstream consequences for parental attitudes and practices (Sampson, Morenoff, & Gannon-Rowley, 2002). These two factors are particularly rele-

vant to parental stimulation, since it is a highly demanding task that requires active attention, self-control, and processing of social cues related to desirable behaviors and attitudes (Harris & Almutairi, 2016).

In the present paper, we focus on recent exposure to community crime as a particularly prevalent and salient – yet understudied – representation of environmental adversity. Although the majority of research on crime and parental practices has focused on chronic exposures, evidence also suggests that even acute exposure to a stressor could, theoretically, affect parental stimulation practices in the short-term. Exposure to a shock (e.g., a violent crime) produces myriad physiological and neurological responses to facilitate the detection of threats and help an organism to respond quickly (Bar-Haim, Lamy, Pergamin, Bakermans-Kranenburg, & van Ijzendoorn, 2007). Meta-analyses have shown that these biological responses may compromise higher-order cognitive processes such as executive functioning and emotional feedback processing (Starcke & Brand, 2012). Collectively, physiological and neurological responses in the face of a threat lead to increased vigilance, focus on the source of threat (while ignoring non-related cues), and tendencies for making quick, though prone to error, responses for self-protection (Davies, Sturge-Apple, Cicchetti, & Cummings, 2007; McCoy, Raver et al., 2015; McEwen & Sapolsky, 1995). Although evolutionarily adaptive for promoting individual survival, these biological and cognitive responses may compromise caregivers' ability to engage their children in positive interactions immediately following an event of community violent crime.

### 1.2. Variation in the effects of community crime on parenting outcomes

An acute stressor may have even more pronounced consequences for parent outcomes in disadvantage contexts, where caregivers are exposed to more frequent and pervasive stressors of poverty, community violence, domestic violence, and disorganized neighborhoods. Naturalistic and laboratory studies have revealed that persistent exposure to environmental stressors, along with high levels of depression or anxiety, are related not only to higher levels of cortisol and perceived stress, but also to differences in stress reactivity and impaired recovery following an acute stressor (Burke, Davis, Otte, & Mohr, 2005; Burke, Fernald, Gertler, & Adler, 2005; Hubert & de Jong-Meyer, 1992; van Eck, Berkhof, Nicolson, & Sulon, 1996). Consequently, it is likely that a violent or stressful event may tax caregivers' capabilities even further in more disadvantaged and unstable contexts, capturing their attention, depleting their self-control (Lynch & Cicchetti, 2002), and eventually compromising their skills and engagement when they are most needed.

In the present study, we explore whether the effects of an acute violent crime may be exacerbated or mitigated depending on families' experiences with four distinct environmental characteristics. In particular, we explore neighborhood poverty and domestic violence as two possible risk factors that may enhance the negative impacts of crime on parent stimulation. Consistent with a cumulative risk hypothesis, exposure to neighborhood poverty – which has been found to have a negative association with maternal parenting practices (e.g., Klebanov, Brooks-Gunn, & Duncan, 1994) and psychological functioning (Cutrona, Wallace, & Wesner, 2006) – may increase the reactivity of mothers to the exposure to an event of community violent crime. Similarly, meta-analyses reveal that mothers exposed to domestic violence display an array of mental health symptoms, as well as a higher reactivity to stressors (Jones, Hughes, & Unterstaller, 2001). Conversely, we also explore two possible sources of protection. We consider whether higher levels of education (see Britto et al., 2017), and social programs aimed at the

Download English Version:

<https://daneshyari.com/en/article/6840503>

Download Persian Version:

<https://daneshyari.com/article/6840503>

[Daneshyari.com](https://daneshyari.com)