# ARTICLE IN PRESS

AVB-01077; No of Pages 14

Aggression and Violent Behavior xxx (2017) xxx-xxx



Contents lists available at ScienceDirect

### **Aggression and Violent Behavior**



## Unraveling the link between maltreatment and juvenile antisocial behavior: A meta-analysis of prospective longitudinal studies

Teresa Braga <sup>a,\*,1</sup>, Leonel Cunha Gonçalves <sup>b,2</sup>, Miguel Basto-Pereira <sup>a,1</sup>, Ângela Maia <sup>a,1</sup>

#### ARTICLE INFO

Article history:
Received 28 June 2016
Received in revised form 20 November 2016
Accepted 11 January 2017
Available online xxxx

Keywords: Maltreatment Juvenile antisocial behavior Meta-analysis

#### ABSTRACT

The maltreatment-antisocial behavior relationship has been a focus of research for decades. However, understanding this association has been largely based on individual empirical studies or on reviews of maltreatments' broad consequences or of delinquency's diverse risk factors. To thoroughly examine the relationship between maltreatment and juvenile antisocial behaviors, we conducted a meta-analysis exclusively of prospective longitudinal studies and explored moderator effects. Overall maltreatment, physical, sexual and emotional abuse, and neglect were included, and general and aggressive antisocial behaviors were considered. The final data set consisted of 33 studies, including 23,973 youth, and 69 correlations. Results showed that maltreatment is associated with higher rates of general antisocial behaviors (r = 0.11; 95% CI [0.08, 0.14]) and aggressive antisocial behaviors (r = 0.11; 95% CI [0.07, 0.14]), and the relationship holds in the presence of potential confounders, as common risk factors and methodological variations. Furthermore, sexual and physical abuse were more strongly linked to aggressive rather than general antisocial behaviors, while neglected youth had an increased risk of general antisocial involvement. The causal mechanisms underlying these dissimilar relationships warrant further research to prevent the adverse antisocial consequences of maltreatment.

© 2017 Elsevier Ltd. All rights reserved.

#### 1. Introduction

Maltreatment has been proven a prevailing and global phenomenon, affecting millions of children. A recent meta-analysis showed that the prevalence of self-reported maltreatment ranged from 12.7% for sexual abuse to 36.3% for emotional abuse (Stoltenborgh, Bakermans-Kranenburg, Alink, & van IJzendoorn, 2015). Moreover, victims of maltreatment reveal a variety of adjustment difficulties (e.g., Kendall-Tackett, Williams, & Finkelhor, 1993; Norman et al., 2012), and juvenile antisocial behaviors is one of the most commonly reported consequences (see Knutson & Schartz, 1997). The maltreatment-juvenile delinquency relationship has been a focus of research for decades (e.g., Falshaw & Browne, 1997; Jenkins, 1968; Platt, 2016; Rivera & Widom, 1990; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001; Tarter, Hegedus, Winsten, & Alterman, 1984). However, understanding

this association has been largely based on individual empirical studies, relying on retrospective recalls and cross-sectional designs (e.g., Geller & Ford-Somma, 1984; Kilpatrick, Saunders, & Smith, 2003), or on reviews of the consequences of maltreatment (e.g., Gilbert et al., 2009; Paolucci & Genuis, 2001) or of the risk factors for juvenile delinquency (e.g., Assink et al., 2015; Loeber & Dishion, 1983).

Following the growing recognition of child abuse in the 1960s, largely driven by Kempe and his colleagues, studies promptly examined juvenile delinquency as a potential consequence. They generally found overwhelming rates of maltreatment among delinquent youth (e.g., Falshaw & Browne, 1997; Lewis, Shanok, Pincus, & Glaser, 1979; Mouzakitis, 1981). The conceptual and methodological weaknesses of these studies have been thoroughly reviewed (see Widom, 1988, 1989; Zingraff\*, Leiter, Myers, & Johnsen, 1993), suggesting that the rates were overestimated. The main limitations concern: the reliance on retrospective reports, shown to be particularly biased for recalling family processes (Henry, Moffitt, Caspi, Langley, & Silva, 1994) and ages of onset (Jolliffe et al., 2003; Kazemian & Farrington, 2005); the ex post facto assessment of maltreatment among official delinquents, most probably those responsible for more serious crimes, as self-reported delinquency seriousness significantly predicts court petitions (Farrington, Loeber, Stouthamer-Loeber, Van Kammen, & Schmidt, 1996), and consequently those exposed to more risk factors, as child maltreatment, considering a dose-response effect; finally, the

http://dx.doi.org/10.1016/j.avb.2017.01.006 1359-1789/© 2017 Elsevier Ltd. All rights reserved.

<sup>&</sup>lt;sup>a</sup> Psychology Research Centre, School of Psychology, University of Minho, Portugal

b Canton of Zurich, Directorate of Justice and the Interior, Office of Corrections, Department of Mental Health Services, Research and Development Division, Switzerland

<sup>\*</sup> Corresponding author.

*E-mail addresses*: teresa.g.braga@gmail.com (T. Braga), leonel.goncalves@ji.zh.ch (L.C. Gonçalves), miguelbastopereira@hotmail.com (M. Basto-Pereira), angelam@psi.uminho.pt (Â. Maia).

Postal address: Escola de Psicologia, Universidade do Minho, Campus de Gualtar, 4710-057 Braga, Portugal.

<sup>&</sup>lt;sup>2</sup> Postal address: Hohlstrasse 552, 8090 Zurich, Switzerland.

non-inclusion of a control group, not allowing us to assess if maltreated youth further engage in antisocial acts compared to non-maltreated children with similar demographic characteristics.

Methodologically more sound studies have emerged, especially since the 1980s and 1990s, and these have generally reported lower delinquency rates among individuals exposed to maltreatment. For instance, Widom prospectively tracked a cohort of maltreated children until adulthood and compared their criminal involvement with that of a non-maltreated group. Nearly 30% of the abused and neglected children were arrested during their adolescence and had an increased delinguency rate of 10% compared to their non-maltreated controls (Widom & Maxfield, 2001). Other prospective studies have concluded that considerable proportions of both maltreated and non-maltreated youth are officially involved in delinquent acts with differential delinquency rates as low as 7% for index violent offenses (Stouthamer-Loeber et al., 2001). Smaller effect sizes from prospective compared to cross-sectional retrospective recall studies have been otherwise presented by Wilson, Stover, and Berkowitz (2009) in their meta-analytic review. A Cohen's d of 0.31 was obtained from prospective studies, while this effect nearly tripled for the cross-sectional studies (d = 0.88). Although enlightening, this review focused on the antisocial outcomes of indirect and direct child victimization and did not test potential moderation effects exclusively on experiences of abuse and neglect.

The maltreatment-delinquency literature does not vary only on the use of prospective versus retrospective designs. Within prospective studies, innumerous variations have been highlighted (see Malvaso, Delfabbro, & Day, 2015, for systematic review of methodological variations among prospective studies of the maltreatment–offending association), and differential group effects have been revealed (Maas, Herrenkohl, & Sousa, 2008). Nevertheless, the extent and the manner in which these variations influence the maltreatment–juvenile antisocial behavior link are yet unclear. Thus, we briefly describe findings of prospective studies, highlighting conflicting findings and unanswered questions.

Differential gender and ethnicity effects on the maltreatment-juvenile delinquency link have been largely studied. The results suggest that being maltreated largely increases the risk of involvement in violence among girls but to a lesser extent among boys (Burnette, 2013; Lansford et al., 2002; Maxfield & Widom, 1996). However, it is uncertain if this pronounced effect of maltreatment for girls also applies to general offending (Herrera & McCloskey, 2001). As for ethnicity, some studies have showed that being maltreated and of an ethnic minority was associated with an increased risk of violence and behavioral problems (Lansford et al., 2002; Maxfield & Widom, 1996), while others have not found this effect (Godinet, Li, & Berg, 2014; Hatcher, Maschi, Morgen, & Toldson, 2009; Lee\* et al., 2012).

Maltreatment's timing has been essentially examined in the Rochester Youth Development Study by Thornberry and his colleagues. They have concluded that adolescent and persistent maltreatment (i.e., occurring both in childhood and adolescence) consistently predicted official and self-report general and violent delinquency, whereas maltreatment limited to childhood showed a weaker or nonexistent effect on antisocial behavior (Ireland, Smith, & Thornberry, 2002; Smith, Ireland, & Thornberry, 2005; Thornberry, Henry, Ireland, & Smith, 2010; Thornberry\*, Ireland, & Smith, 2001). These results have been addressed in various manners. Life course theories appeal to the proximity of the events (Sampson & Laub, 2005), strain theories refer to the negative emotions elicited by maltreatment and to adolescents' increased risk of reacting by engaging in delinquent behavior (Agnew, 2001), and other authors specifically invoke developmental features of adolescence, such as greater autonomy and accessibly to illegitimate coping strategies (Garbarino, 1989).

The differential impact of maltreatment's measurement source on antisocial behavior has not yet, to our knowledge, been examined. Maltreatment is widespread and a significant proportion goes

undetected by official agencies (Stoltenborgh et al., 2015). Accordingly, it is reasonable to assume that official records represent the most serious and frequent cases, which are linked to particularly poor behavioral outcomes (Jonson-Reid, 2002; Lemmon, 2006; Li & Godinet, 2014). Although substantiated or unsubstantiated reports of maltreatment are not necessary defined by the source, it is unquestionable that substantiated reports are officially informed and unsubstantiated maltreatment may be self, parent or teacher-reported. Studies focusing on this issue have generally found no differences between the substantiation statuses of maltreatment on delinquency (Jonson-Reid, 2002; Leiter, Myers, & Zingraff, 1994). Through which source delinquency is assessed has, in turn, been examined. The results have generally supported a stronger maltreatment-official delinquency link (e.g., Lansford\* et al., 2007), although the strength of this association appears to be related to the seriousness of the offense, as maltreatment predicts serious but not minor self-reported crimes (Smith & Thornberry, 1995). In the same sense, other levels of measure, such as frequency, seem to influence the link. Beyond mere involvement, maltreated youth engage more frequently in delinquent behaviors than their non-maltreated peers (e.g., Lemmon\*, 1999).

Gaining considerable attention are the differential effects of maltreatments' subtypes on specific forms of delinquency. Much of the initial work gave proof of the physical abuse-aggression link (e.g., Widom & Maxfield, 1996, 2001), rooted in the cycle of violence framework and in social learning concepts, such as modeling and reinforcement (Akers, 2009). Nonetheless, data on neglect has suggested that it may be as or more damaging than physical abuse (Smith et al., 2005; Widom & Ames, 1994). The analysis of the sexual abuse-delinquency relationship has, in turn, produced a more mixed picture, with this form of maltreatment having an impact on both general and violent behavior (Herrera & McCloskey, 2003), influencing only general delinquency (Widom & Ames, 1994), and appearing as irrelevant for all antisocial behaviors (Zingraff\* et al., 1993). There have been far fewer prospective studies concerning emotional abuse (e.g., Herrenkohl, Herrenkohl, & Egolf, 2003; Shaffer, Yates, & Egeland, 2009) so it is difficult to draw conclusions about its impact on juvenile antisocial behavior.

Finally, the effect of maltreatment on delinquency weakens or disappears when covariates are included in the analysis (e.g., Kazemian\*, Widom, & Farrington, 2011; Swanston\* et al., 2003; Zingraff\* et al., 1993). Meta-analyses of risk factors for child maltreatment (Stith et al., 2009) and juvenile antisocial behavior (Assink et al., 2015; Derzon, 2010) concur that family configuration, family size, family stress, parent-child relationship, child rearing skills, parental psychopathology, and child externalizing behavior are common risks for maltreatment and delinquency, which raises questions about whether the association between them is real or spurious.

#### 1.1. Objectives

To the best of our knowledge, no meta-analysis<sup>3</sup> has yet summarized results on the relationship between maltreatment and juvenile antisocial behaviors exclusively from prospective longitudinal studies. Moreover, the present meta-analysis goes beyond the mere association towards testing the heterogeneity within it. Establishing whether and how the maltreatment-delinquency link varies may shed light on the underlying etiological mechanisms. In this sense, we addressed the following questions: a) To what extent is maltreatment associated with general and aggressive juvenile antisocial behavior in longitudinal prospective studies? b) How strong are the associations between subtypes of maltreatment and juvenile antisocial acts? c) Is the relationship between maltreatment and juvenile antisocial behaviors moderated by

<sup>&</sup>lt;sup>3</sup> Malvasco et al. (2015) presented a systematic review on the methodological features of prospective studies of the maltreatment–offending association and Maas et al. (2008) reported a systematic review concerning the link between maltreatment and juvenile violence but neither performed a meta-analysis.

# دريافت فورى ب متن كامل مقاله

# ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
  - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
    - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات