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| Artículo de Investigación

Experiencias Infantiles Adversas y su asociación con el comportamiento delictivo en Adultos: Una revisión sistemática

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RESUMEN

Este estudio explora el impacto de las Experiencias Adversas en la Infancia (ACEs) sobre las conductas delictivas en la edad adulta, sintetizando los hallazgos más relevantes en este campo. Se realizó una revisión sistemática siguiendo las directrices PRISMA, y la calidad metodológica de los estudios empíricos incluidos se evaluó mediante la Herramienta de Evaluación de Métodos Mixtos (MMAT). La revisión identificó instrumentos clave para medir las ACE en adultos, siendo el cuestionario de Experiencias Adversas en la Infancia el más utilizado (59,26%). Se descubrió que las ACEs tenían fuertes asociaciones con varias formas de comportamiento delictivo, incluido el inicio precoz de la delincuencia, los actos delictivos autodeclarados, los delitos sexuales y los trastornos de personalidad del clúster B. Además, las ACE estaban relacionadas con los delincuentes juveniles, la violencia de pareja en la edad adulta, el TEPT, el consumo de opiáceos ilícitos y las detenciones por agresión sexual. También mostraron conexiones significativas con problemas de salud mental, violencia doméstica y un mayor riesgo de abuso de sustancias y actividad delictiva. Reconocer los efectos a largo plazo de las ACEs es esencial para informar las políticas públicas destinadas a reducir la delincuencia y mejorar la salud mental de los adultos. Se discuten las implicaciones de estos hallazgos.

| PALABRAS CLAVE

Conducta delictiva; adulto; delincuente; reincidencia.

| ABSTRACT

This study explores the impact of Adverse Childhood Experiences (ACEs) on delinquent behaviors in adulthood, synthesizing the most relevant findings in the field. A systematic review was conducted following PRISMA guidelines, and the methodological quality of the included empirical studies was assessed using the Mixed Methods Appraisal Tool (MMAT). The review identified key instruments for measuring ACEs in adults, with the Adverse Childhood Experiences questionnaire being the most commonly used (59.26%). ACEs were found to have strong associations with various forms of criminal behavior, including early onset of delinquency, self-reported criminal acts, sexual offenses, and Cluster B personality disorders. Additionally, ACEs were linked to young offenders, intimate partner violence in adulthood, PTSD, illicit opioid use, and arrests for sexual assault. They also showed significant connections with mental health issues, domestic violence, and an increased risk of substance abuse and criminal activity. Recognizing the long-term effects of ACEs is essential for informing public policies aimed at reducing delinquency and improving adult mental health. The implications of these findings are discussed.

| KEYWORDS:

Criminal behavior; adult; offender; recidivism.



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1. Introduction

Criminal actions committed by adults are explained through criminal behavior, encompassing actions ranging from minor infractions to serious crimes. Various influences, including biological, psychological, and socioenvironmental factors, contribute to the genesis of this conduct. The impact of Adverse Childhood Experiences (ACEs) emerges as a prominent explanatory theory, significantly affecting mental and physical health (Felitti et al., 1998; Trivedi et al., 2021). Risk factors such as physical, emotional, or sexual abuse, neglect, and family dysfunction are indicators of psychopathology and a poorer prognosis (Lipsky et al., 2022; Valarezo-Bravo et al., 2020). Additionally, factors like physical and psychological abuse, parental separation, family mental illness, family member incarceration, and substance use by family members contribute to the risk (Rehkopf et al., 2016; Vega-Arce & Núñez-Ulloa, 2017).

ACEs significantly impact socioemotional and behavioral functioning, correlating with psychopathological disorders, criminal offenses, and recidivism (Vallejos & Cesoni, 2020). Jackson et al. (2022) indicate a significant increase in the probability of police arrests with the accumulation of ACEs between ages 5 and 7, reaching 100% when experiencing 3 or more ACEs (Babad et al., 2022). Testa et al. (2022) report that having 4 or more ACEs is associated with various forms of justice system involvement in early to mid-adulthood, including arrests, a higher number of arrests, adult incarceration, and repeat incarcerations.

Criminals, in their childhood, have experienced child physical abuse, leading to higher rates of self-reported total crimes, violent crimes, and property damage (Baglivio et al., 2014; Teague et al., 2008). Understanding how ACEs can lead to criminal behaviors is of utmost importance for the implementation of public policies and mental health promotion and prevention plans. Therefore, the objective of this review was to describe research detailing the most relevant findings of ACEs and their incidence in delinquent behaviors in adults.

2. Materials y Methods

The current research corresponds to a qualitative systematic review following the PRISMA guidelines (Moher et al., 2009; Page et al., 2021). This systematic review analyzed empirical articles published between 2018 and 2022 in major databases such as Web of Science, Scopus, and PubMed, in both English and Spanish.

Search Strategy

The systematic review was conducted following the recommendations and criteria outlined in the PRISMA statement. Specifically, this investigation focused on studies conducted in English and Spanish that included the following keywords: a. ("advers* child* experienc*"), AND ("crimin* behav*" OR "offender"), AND ("emerging adult*" OR "Young"). The keywords were searched in the title, abstract, and keywords. The search strategy for article selection is illustrated in the flow diagram (Figure 1).

Inclusion and exclusion criteria

Empirical articles examining the relationship between adverse childhood experiences and criminal behavior in adults were included. The search encompassed only full-text articles published between 2018 and 2022, available in English or Spanish. Exclusion criteria involved qualitative research, review articles, clinical cases, case studies, dissertations, and conference abstracts. Additionally, studies written in languages other than English or Spanish were excluded.

Study selection process

A staged selection process was undertaken (see Figure 1), wherein, initially, all articles gathered from the specified scientific databases (n = 440), Web of Science (148), Scopus (146), and PubMed (146), were compiled. Secondly, duplicate articles were removed (n = 165). Thirdly, titles, abstracts, conducted instruments, and keywords were reviewed, eliminating those not meeting inclusion criteria (n = 192). Finally, full-text empirical studies were examined, eliminating theoretical or instrumental studies and those not focusing on adverse childhood experiences related to criminal behavior in emerging adults.

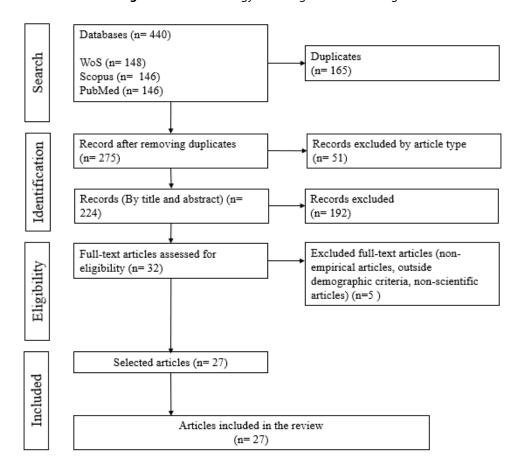


Figure 1. Search strategy following the PRISMA diagram.

Results synthesis

Upon completion of the selection process (n = 27), a synthesis of results was conducted to compare different studies. This involved extracting eight key pieces of information: (a) the author or authors of the article, (b) the year of publication, (c) the sample or samples studied, (d) the research design, (e) instruments used for identity fusion measurement, (f) and the primary results or findings of each article.

Data extraction

Articles included in the final sample underwent a thorough review through a descriptive analysis, utilizing custom forms for data extraction (Arksey & O'Malley, 2005). The authors independently assessed the quality of the studies. Methodological quality assessment of the articles in the reviewed empirical studies was conducted using the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2019; Pluye et al., 2011). The scoring varies based on the study type, assigning points according to specific quality criteria for each design (quantitative, qualitative, and mixed). Each criterion is evaluated as "Yes" (meets standards), "No" (does not meet), or "Cannot be determined." The total score is calculated based on the proportion of criteria met relative to the total possible. For instance, if a study fulfills 3 out of 4 criteria, its score would be 75%. By employing the MMAT tool, we were able to rigorously assess the methodological quality of the selected studies and conduct bias control in the review process.

3. Results

Figure 2 provides an overview of the research related to the study topic. Furthermore, upon examining Table 1, it is noteworthy that the majority of investigations focused on Adverse Childhood Experiences (ACEs) and criminal behavior adopted a retrospective methodology (40.74%). In second place are cross-sectional studies (33.33%), followed by longitudinal studies (14.81%). Finally, case-control studies, prospective studies, and randomized controlled trials are each represented at 3.70%. Similarly, Figure 2 identifies that the majority of research conducted on this topic has taken place in the United States (55.56%), followed by Canada, the Netherlands, and Germany, each with 7.41%.

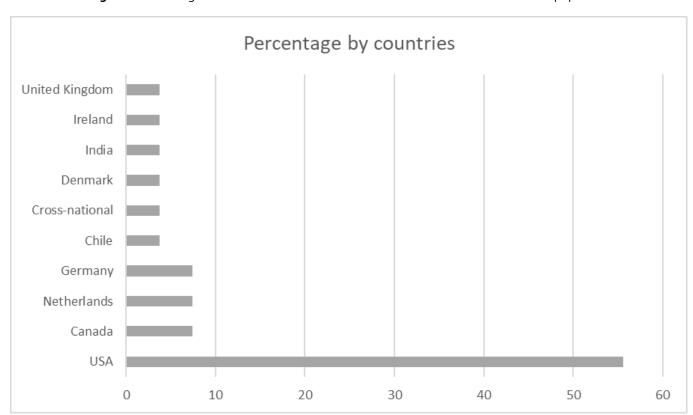


Figure 2. Percentage of research conducted on ACEs and criminal behavior in the adult population

 Table 1. Description of included studies

Author and year	Country	Desing	Sample	Reincidence	Measure	Objective
Basto-Pereira et al. (2022)	Cross- national	Cross- sectional	3797 young adults	N/D	ACE-Q	This study examined the relationship between ACEs and criminal behaviors in young adults living in 10 countries located across five continents, after accounting for sex, age, and cross-national differences
Beckley et al. (2018)	United Kingdom	Longitudinal	2232 monozygotic and dizygotic twin pairs	N/D	ACEs	Drawing from developmental literature, we additionally tested the effect of an accumulation of adverse childhood experiences (ACEs)
Carr et al. (2020)	Denmark	Retrospective	28956 individuals with dual-harm history	N/D	ACEs	We aimed to examine adversities experienced between birth and age 15 years among adolescents and young adults with histories of self-harm and violent criminality, with a specific focus on dual harm.
Craig & Zettler (2021)	USA	Retrospective	11788 indeterminate- sentenced juvenile offenders incarcerated	Approximately thirty percent (30.3%) were rearrested for any violent offense within the three years following release.	ACEs	The current study seeks to address this gap by examining the impact of ACE exposure on violent recidivism among a sample of confined juvenile delinquents.
Dalsklev et al. (2019)	Ireland	Retrospective	100 offenders	N/D	СТQ	The aim of the current study was to investigate whether childhood trauma among offenders who have served a life sentence.
DeLisi et al. (2018)	USA	Retrospective	863 Adult-onset offending	N/D	ACEs	This study examined this controversial subgroup of offenders using self-reported and official data from a total population of federal correctional clients.
DeLisi et al. (2019a)	USA	Retrospective	863 offenders	N/D	ACEs	The current study examined this "new" adverse childhood experience and its association with antisociality



DeLisi et al. (2019b)	USA	Retrospective	863 federal correctional clients	N/D	ACEs	The current study examined antecedent background factors spanning adverse childhood experiences and childhood psycho- pathology among federal offenders that had ASPD symptomatology or lifetime diagnostic history for ASPD.
DeLisi et al. (2021)	USA	Longitudinal	216 federal offenders	N/D	ACE-Q	Our research goal is to explore correlations and classification accuracy of these new adverse childhood experiences measures especially relative to the established ACE Questionnaire.
DeLisi & Beauregard (2018)	Canada	Prospective	624 Adult male sexual offenders	The majority (81.2%) of the victims in their sexual crimes were female, and almost 31% of the offenders were sexual recidivists.	ACEs	Examine the associations between exposure to violence, victimization, and total adverse childhood experiences on sexual homicide
Drury et al. (2019)	USA	Retrospective	863 sexual offending	N/D	ACEs	The current study tested the hypothesis that CSA is associated with sexual offendin
Fox et al. (2021)	USA	Cross- sectional	735 adults incarcerated in the jail	A high rate of recidivism 42%	ACEs	This study examines the latent heterogeneity in risk profiles using risk factors prominent in early years and adulthood, and whether risk profile severity changes across the early and adult risk models.
Heirigs (2021)	USA	Cross- sectional	326 incarcerated males and females	N/D	CM	To investigate the relationship psychopathy and childhood maltreatment have on homicidal ideation.
Humphrey & Van Brunschot (2018)	Canada	Cross- sectional	401 offenders	N/D	ACEs	The current study examines how cumulative adversity in childhood is related to both frequency of offending and criminal career length in adulthood.
Jankovic et al. (2021)	Netherlands	Randomized Controlled Trial	50 patients	N/D	CTQ-SF	The current study was to investigate the association between three clinical forms of abuse and two aspects of neglect and HRV.
Jones et al. (2020)	USA	Retrospective	349 incarcerated Mothers and their Children	N/D	ACEs	The purpose of this paper is to examine the relationships between ACEs, PTSD symptoms, and the perpetration of the physical violence in the adult intimate relationships of women prisoners.

Kahn et al. (2021)	USA	Cross- sectional	317 adult males who had committed sexual offenses	ACE scores were not related to the risk of sexual recidivism.	ACEs	To understand the frequency of ACEs in a sample of high- risk civilly committed sexual offenders and compare this rate with other samples.
Lansford et al. (2021)	USA	Longitudinal	585 offenders	N/D	ELC	We hypothesized that early childhood physical abuse would prospectively predict adult outcomes in education and economic stability, physical health, mental health, substance use, and criminal behavior.
Liu et al. (2021)	USA	Retrospective	1349 adult offenders	For men, compared to close family members visited frequently, those who visit relatives occasionally had a 27% higher risk of recidivism.	SCE	This study examines early adverse experiences and adult pro-social bonds simultaneously using a mixed-gender sample of serious adult offenders
Ramírez-Labbé et al. (2022)	Chile	Cross- sectional	200 general population	N/D	ACE-IQ	It is expected that the greater the number of ACEs, the greater the self-reported mental health problems will be observed throughout life, a greater number of OH and/or substance use problems, more criminal behavior, and more domestic violence will be observed.
Reidy et al. (2021)	USA	Cross- sectional	1451 general population and recruited from prisons.	N/D	ACEs	The purpose is to illustrate how these seemingly simple variations in measurement can alter analytic results and interpretation, thereby impacting generalizations to the broader population.
Schick et al. (2020)	USA	Cross- sectional	79 women who had been in prison	The fixed historical variables used to predict the risk of recidivism, such as juvenile incarceration and parental relationship, accounted for this.	ACEs	We hypothesised that adverse childhood experiences (ACEs) would be related to immutable risk measures according to the LSI-R: SV, such as juvenile arrest history, rather than more mutable factors, such as criminal attitudes.

Siva et al. (2022)	India	Case-control	35 case 32 control male recidivist violent offender	Among the recidivist violent offenders in this study, the number of incidents, longevity, or the severities of the exposure to individual ACEs was significantly higher.	ACE- IQ	This study was done as a case–control method among recidivist violent offenders and controls to examine the effects of adverse childhood experiences (ACEs) on violent criminality.
Stinson et al. (2021)	USA	Cross- sectional	182 male and female forensic psychiatric	N/D	ACEs	This study examines prevalence, distribution, and correlates of ACEs in 182 male and female forensic psychiatric inpatients in secure care
Turner et al. (2021)	Germany	Longitudinal	161 offenders	N/D	CTQ-SF	The present study aimed at evaluating the prevalence of ACEs and mental health problems as well as their association within a sample of male and female young offenders.
Van Duin et al. (2021)	Netherlands	Retrospective	692 multi- problem young adults were recruited.	During the average 30-month follow-up period, 37.8% of the participants were convicted of any new crime, either non-violent and/or violent.	ACEs	This study examines the relationship between criminal history and adverse childhood experiences (ACEs) and how they collectively predict (a) recidivism and (b) positive social functioning.
Woehrle et al. (2022)	Germany	Retrospective	239 offenders	N/D	CTQ	We examined the associations of psychopathy with both maltreatment and aggression on a rather exploratory basis.

Note. ACEs =Adverse Childhood Experiences; CTQ = Childhood Trauma Questionnaire; CM = Childhood Maltreatment; SCE = Self-reported Childhood Experiences; CTQ-SF = Childhood Trauma Questionnaire-Short Form; ELC = Early Life Circumstances; ACE-Q = Adverse Childhood Experiences Questionnaire; ACE-IQ = World Health Organization Adverse Childhood Experiences International Questionnaire; N/D = No data.

Source: Prepared by the authors

Measuring Adverse Childhood Experiences (ACEs) in adults

In this study, it has been identified that the primary measurement of Adverse Childhood Experiences (ACEs) has been carried out using the following instruments: Adverse Childhood Experiences (59.26%), followed by the Adverse Childhood Experiences Questionnaire and Childhood Trauma Questionnaire (CTQ), each with 7.41%. Lastly, instruments such as the Adverse Childhood Experiences International Questionnaire (ACE-IQ), Child Trauma Questionnaire-Short Form (CTQ-SF), Early Life Circumstances, Self-reported Childhood Experiences, and the World Health Organization Adverse Childhood Experiences International Questionnaire (ACE-IQ) each accounted for 3.70%.

Main findings of the research on adverse childhood experiences and criminal behavior

Adverse Childhood Experiences (ACEs) reveal significant associations with criminal behavior (Siva et al., 2022), the onset and self-reported criminal behavior, sexual offenses, and Cluster B personality disorders (DeLisi et al., 2021; Jankovic et al., 2021). Additionally, they impact young offenders (Turner et al., 2021); perpetration of violence in adult intimate partners (Jones et al., 2020); post-traumatic stress disorder; illicit opioid use; and arrests for sexual assault (Reidy et al., 2021). Likewise, they are linked to mental health problems, domestic violence, and a significantly higher risk of substance use and criminal behaviors (Ramírez-Labbé et al., 2022).

Various forms of physical and sexual abuse in childhood are associated with diagnoses of conduct disorder and antisocial personality disorder, as well as involvement in serious crimes (DeLisi et al., 2019b). They are also related to official charges for rape/sexual abuse (DeLisi et al., 2019a; Woehrle et al., 2022), the need for special education services, grade repetitions, dependence on government assistance, and clinical scores of externalizing or internalizing disorders. Moreover, these factors are linked to criminal convictions in the last year (Lansford et al., 2021) and serve as predictors of aggression and criminality (Basto-Pereira et al., 2022; Stinson et al., 2021).

Similarly, exposure to violence and victimization in childhood has been observed to increase the likelihood of committing sexual homicide (DeLisi & Beauregard, 2018). Parental drug exposure is associated with various substance-related crimes and dependence on cannabis, cocaine, methamphetamines, opioids, and alcohol (DeLisi et al., 2019a). Parental unemployment, hospitalization, and violent criminality are associated with dual harm (self-harm and perpetrating violence) (Carr et al., 2020). Exposure to child abuse is a significant predictor of homicidal ideation (Heirigs, 2021), aggressive behavior, and violent and sexual delinquency (Woehrle et al., 2022). Additionally, it has been discovered that the environment, genes, and ACEs contribute to the victim-offender overlap; in this regard, ACEs increase the odds of antisocial behavior (Beckley et al., 2018).

Regarding the onset of criminal behaviors and their relationship with ACEs, it has been observed that paternal abandonment and physical abuse are negatively associated with an advanced onset of delinquency, while maternal emotional/verbal abandonment and abuse tend toward a positive association with an advanced onset of delinquency (DeLisi et al., 2018). Likewise, not only has crime that begins in adulthood (25-29 years) been evidenced, but also a new concept of late-onset crime, characterized by individuals whose antisocial careers initiate at 60 years or older (DeLisi et al., 2018). Moreover, ACEs are positively associated with the duration of the criminal career and negatively with employment attachment (Humphrey & Van Brunschot, 2018).

Adverse childhood experiences and recidivism

Exposure to adverse childhood experiences, including childhood conflict-related trauma, home, community, and collective violence, is associated with the recurrence of violent crimes (Dalsklev et al., 2019; Siva et al., 2022). In the reviewed studies, ACEs and recidivism in general crimes predict 27% (Liu et al., 2021), 30.3% (Craig & Zettler, 2021), 37.8% (Van Duin et al., 2021), 42% (B. Fox et al., 2021), and 31% for sexual offenses (DeLisi & Beauregard, 2018). One study found no associations between ACEs and sexual offense recidivism (Kahn et al., 2021). Among specific ACE variables and the risk of recurrence, a significant association has been observed with conflict-related trauma (Dalsklev et al., 2019), juvenile incarceration, and parental relationships (Schick et al., 2020).



4. Discussion

In the present research, which aimed to describe research detailing the most relevant findings of Adverse Childhood Experiences (ACEs) and their incidence in delinquent behaviors in adults, adverse childhood experiences are significantly associated with various mental health issues, criminal and delinquent behaviors, and, most importantly, recidivism in offenses. Factors predisposing to criminal behavior, such as social learning theory, suggest that criminal behavior is learned and sustained through the observation of delinquent behaviors, manifesting as antisocial conduct during early development (Akers, 2017; Felson & Lane, 2009). Not only does the observation of delinquent behaviors act as a strong predictor, but early childhood experiences, specifically early adversity, are particularly detrimental when occurring within the family context, such as physical abuse, witnessing domestic violence, or parental substance abuse (Akers, 2017). Abuse and neglect are considered the most harmful types of adversity and are prevalent globally (Kessler et al., 2010). This perspective aligns with the results of the current research, where various abuse experiences are linked to conduct disorders, antisocial personality disorder, and the commission of serious crimes (DeLisi et al., 2019b; B. Fox et al., 2014). Additionally, it is observed that these specific types of ACEs, such as abuse, are associated with criminal behaviors related to rape and/or sexual abuse (DeLisi et al., 2019a; Woehrle et al., 2022). Research has concluded that victims of childhood trauma, abuse, neglect, and maltreatment exhibit more intense criminal behaviors and lead to more serious offenses compared to other types of adverse childhood experiences (Dierkhising et al., 2013; B. Fox et al., 2014).

Similarly, adverse childhood experiences show a significant correlation with recidivism in criminal behaviors, including serious offenses, with rates ranging from 27% to 42% (Craig & Zettler, 2021; Dalsklev et al., 2019; DeLisi & Beauregard, 2018; Fox et al., 2021; Liu et al., 2021; Siva et al., 2022; Van Duin et al., 2021). This relationship can be understood through the accumulation of adverse childhood experiences, as research suggests that experiencing especially 4 or more ACEs is significantly related to involvement in the criminal justice system in young and middle adulthood (Testa et al., 2022). Moreover, for each identified negative event, there is an increased risk of violence, particularly in men, ranging from 45% to 144%, especially when there are a history of sexual abuse, contributing to criminal and delinquent behaviors in adulthood (Duke et al., 2010; Jespersen et al., 2009; Reavis et al., 2013).

Thus, adverse childhood experiences become a crucial area of study to understand the origin and persistence of criminal behavior. Various research suggests early detection mechanisms in adolescents and young people based on childhood trauma, abuse, and neglect stories. Each experience increases the risk of becoming a serious, violent, and chronic offender in adulthood (Fox et al., 2015). In this context, mental health professionals can use ACEs scores as a primary detection tool to identify the risk of criminal behavior before significant harm occurs. Additionally, it is essential to implement public policies that promote personal development, capabilities, and education, as well as reduce poverty and provide access to various support services.

Despite significant findings, it is crucial to recognize certain limitations in this research. Firstly, most studies rely on self-reported data, which may lead to response biases and subjectivity. Additionally, most research focuses on specific populations, limiting the generalization of results to broader contexts. Moreover, the complexity of ACEs requires a multidimensional approach that some studies may not fully address. Future research should consider these limitations and address potential information gaps for a more comprehensive understanding.

5. Conclusions:

In conclusion, this research underscores the crucial importance of Adverse Childhood Experiences (ACEs) as significant predictors of criminal behavior and recurrence of serious offenses in adults. The accumulation of ACEs is associated with a substantial increase in the risk of involvement in the criminal justice system, emphasizing the need for early interventions and preventive policies. Mental health professionals can use ACEs scores as effective detection tools. However, ongoing attention to methodological limitations and the diversity of populations is required to enhance the application and understanding of these findings in broader contexts.

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