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To cite this article: Janique Kroese , Wim Bernasco , Aart C. Liefbroer & Jan Rouwendal (2020): Growing up in single-parent families and the criminal involvement of adolescents: a systematic review, *Psychology, Crime & Law*, DOI: [10.1080/1068316X.2020.1774589](https://doi.org/10.1080/1068316X.2020.1774589)

To link to this article: <https://doi.org/10.1080/1068316X.2020.1774589>



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Published online: 11 Jun 2020.



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REVIEW

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Growing up in single-parent families and the criminal involvement of adolescents: a systematic review

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ABSTRACT

Many studies have investigated the relation between growing up in single-parent families and crime. However, an up-to-date overview of the literature on this topic is lacking. To fill this gap, this article reviews the empirical literature regarding the effects of being raised in a single-parent family on criminal behavior of adolescent offspring, and additionally focusses on whether the effects depend on how single-parent families were constituted (by parental divorce or separation, by parental decease, or by being born to a single parent). A systematic search in five electronic databases (Web of Science, PsycINFO, Scopus, SocINDEX, and EconLit) is conducted to identify empirical studies on this topic, resulting in 48 studies that conform to a range of substantive and methodological selection criteria. The results suggest that growing up in single-parent families is associated with an elevated risk of involvement in crime by adolescents and that more research is needed to determine the effects of the different constituting events of single-parent families.

ARTICLE HISTORY

Received 9 October 2019
Accepted 25 February 2020

KEYWORDS

Single-parent families;
Parental divorce; Criminal
behavior; Adolescence;
Systematic review

Many children grow up in a single-parent family, meaning that often children grow up in a family with only one biological parent present. The percentage of single-parent families has been consistently high over the past few decades in western countries. In the European Union and the United States, respectively 15 and 27% of the children grow up in a single-parent family (Eurostat, 2016; Vespa et al., 2013). Growing up in a single-parent family results from parental divorce or separation, from parental decease, or from being born to a single parent. Although the proportion of single-parent families seems to remain quite stable, a clear shift is visible in the causes of single parenthood. Over the last decades, single-parent families have increasingly been constituted by parental

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divorce or separation and by births to unattached women, and decreasingly by parental decease (Ambert, 2006).

Since it appears that the rate of single parenthood will not decrease in the coming years, it is important to carefully consider the consequences of growing up in a single-parent family. Research suggests, amongst others, that growing up in a single-parent family has negative effects on children's emotional well-being, cognitive development, and school performance (e.g. Bradley & Corwyn, 2002; Chapple, 2013; De Lange et al., 2014; DiPrete & Eirich, 2006; McLanahan & Sandefur, 1994). Moreover, research suggests that children in different types of single-parent families show different types of poor school adjustment (i.e. children from divorced parents have significantly more acting-out problems than children from deceased parents or controls, and the children with histories of parental death show a higher level of shyness and anxiety than the other children; Felner et al., 1981b). Furthermore, divorce in particular is significantly related to increased levels of family stressors for children (Felner et al., 1981a). Thus, many studies demonstrate that growing up in a single-parent family entails risks that jeopardize adolescents' future life chances. Involvement in criminal behavior is another important risk factor for adolescents' future life chances. Involvement in crime during adolescence is associated with negative life outcomes such as lower income, worse health outcome, lower well-being, and a higher probability of adult crime involvement (Apel & Sweeten, 2010; Gilman et al., 2015; Massoglia, 2008). Since the monetized social burden of juvenile crime is also substantial (Welsh et al., 2008), attention to the relationship between growing up in single-parent families and criminal involvement of adolescents is warranted.

Prior literature reviews consistently show positive relations between single-parent families and crime. However, these literature reviews are either rather outdated (Wells & Rankin, 1991), limited in scope by only focusing on divorce (Price & Kunz, 2003) or status offenses (Buehler et al., 1997), or very broad by focusing on parental attachment (Savage, 2014) or well-being in general (Rodgers, 1996). This means that the effects of growing up in a single-parent family on serious delinquency by adolescents thus far have not been investigated in a literature review. This is unfortunate, because adolescents tend to show more delinquent behavior than both younger children and adults (i.e. age-crime-curve; Moffitt, 1993). Moreover, adolescents have more contact with their parents than adults because they often live with their parent(s), increasing their exposure to the direct effects of this particular family structure.

Theoretical background

A number of theoretical models have been proposed to explain the relation between single-parent families and a range of youth outcomes, including crime.

First, *social control theory* suggests that adolescents participate in crime because they (1) lack strong affective attachments to their parents, (2) lack a development of a stake in conformity that increases commitment to conventional norms, (3) do not engage in conventional activities, and (4) do not develop a belief that conventional norms deserve respect (Hirschi, 1969). Hirschi originally argued that the strength of the attachment of the children to their parents is the most important factor in increasing or decreasing the chances of children showing criminal behavior. For instance, weaker attachment bonds to their parents might stimulate children to spend more time in criminogenic

settings instead of with their parents. This could imply that children in single-parent families might show more delinquency because they possibly have a less strong attachment to one or both parents. However, this theory also states that a child in a two-parent family with weak attachments to its parents might show more delinquency than a child in a single-parent family with strong attachments to its parents.

Second, Hirschi revised his position in the *social control/parental absence model* (fitting within *self-control theory*) that single-parent families may be just as effective in producing positive child outcomes as two-parent families. This model proposes that single-parent families are, by their very nature, social settings that hamper the establishment of conformity because one of the parents is absent, and therefore unable to provide proper control, supervision, and socialization of the child. This deficit would result in a higher likelihood of engagement in criminal behavior (Gottfredson & Hirschi, 1990). In this revised version of social control theory, Gottfredson and Hirschi suggest that strong levels of attachment are difficult to maintain when one of the parents is absent. They also stress that the multiple demands single parents have to cope with make it more difficult for them to spend time with their children, increasing the opportunities for the children to engage in negative behaviors, such as criminal activities.

Third, the *economic strain model* focuses on how the lack of resources may mediate the effects that single-parent families have on adolescent criminal behavior (see Amato & Keith, 1991; Biblarz & Raftery, 1999). For instance, single parents may not have sufficient resources for extracurricular activities and other opportunities that help children to focus on positive activities instead of criminal behaviors. Furthermore, reduced income may force single-parent families to move to lower-income neighborhoods, exposing the children to potentially contagious higher levels of peer delinquency than in higher-income neighborhoods (Damm & Dustmann, 2014).

Fourth, the *family crisis model* focuses on the processes involved in family disruptions rather than on the family structure itself (see Biblarz & Raftery, 1999; Chen & Kaplan, 1997; Felner et al., 1981b; Wells & Rankin, 1986). This model suggests that family disruptions are important determining factors of the well-being of the children. For instance, the family crisis model suggests that experiencing a parental divorce or separation causes psychological distress, emotional resentment, and social tension in children. The emotional resentment of the children towards their parents may decrease the level of family attachment and increase the children's criminal behavior. In contrast, the model suggests that experiencing parental death causes anxiety, emotional distress, and depression. This event of losing a parent generally does not involve the same level of emotional resentment as parental divorce or separation (Felner et al., 1981b). Therefore, this model suggests that children are more likely to display criminal behavior in response to parental divorce or separation than in response to parental death. Children in two-parent families and children born to a single parent are expected to show less criminal behavior, because these children do not experience a family disruption crisis.

While most theoretical frameworks suggest that adolescents in single-parent families (in particular single-parent families that result from parental divorce or separation) are more likely to get involved in criminal behavior, up to this moment we lack a systematic overview of empirical evidence. In particular, it is not clear (1) whether there is a relation between growing up in a single-parent family and crime by adolescents, and (2) whether there is a different effect for different constituting events of single-parent families: parental

divorce or separation, parental decease, or being born to a single-parent family. Since an overview of the relation between (different types of) single-parent families and crime of adolescents is lacking, we perform a systematic review to fill this knowledge gap.

Method

A systematic database search was conducted to find studies on the relation between being raised in a single-parent family and criminal involvement of adolescents. The electronic databases Scopus, Web of Science, PsycINFO, SocINDEX, and EconLit were used to give a full overview of the existing research from different research fields. The search string consisted of keywords related to (1) single-parent families or the constituting event of single parenthood itself (divorce/separation, decease, and out-of-wedlock birth); (2) parents; (3) adolescents; and (4) crime. By way of example, the Appendix includes the full search-string used in Scopus, including synonyms and spelling variations. The systematic search took place on January 9, 2018, and was updated on October 29, 2018.

To be included in the systematic review studies sequentially had to meet the following criteria:

- (1) *Full-text*. The full-texts of the studies have to be available on the internet.
- (2) *Language*. The studies have to be written in English, German, French, or Dutch, to ensure that we are able to read the studies.
- (3) *Empirical studies*. The studies have to be empirical studies. Conference abstracts, editorials, books, article reviews, or literature reviews are excluded from the systematic review.
- (4) *Quantitative relation*. The relation between growing up in a single-parent family and the criminal involvement of adolescents has to be presented in a quantitative way.
- (5) *Study population*. The age range of the adolescents is between 10 and 17 years. A lower age limit starting at age 6 is allowed when children up to at least the age of 13 are included in the study population. A higher upper age limit of age 21 is allowed when children starting at minimally age 14 are included in the study population. Studies including a broader age range than between 10 and 17 are accepted, as long as a group in this specific age range is also tested separately.
- (6) *Outcome measure*. The outcome measure has to include criminal involvement of adolescents (e.g. stealing, using illegal drugs, being physically cruel to people). This means that (1) the study population clearly has to have a criminal record (e.g. because the studied group is a prison sample) or that (2) in the questionnaire assessing the outcome measure, at least 50% of items have to address criminal behavior instead of merely juvenile delinquency items (e.g. truancy, smoking cigarettes). When there are two or more sets of items about different types of criminal behavior in the same study, the items of the sets are cumulated and it is checked whether at least 50% of the items concern criminal behavior. In these instances, the publication must include a list of the items to be able to check the items into more detail. For example, if 0 out of 7 items about status offenses, 6 out of 7 items about property offenses, and 6 out of 7 items about violent offenses include criminal behavior, we include ($\approx 57\%$) the study in the systematic review.

- (7) *Exposure measure.* The adolescents have to be raised in a single-parent family, meaning that children grow up in a family with only one biological parent present. If the study only looks at single-parent families in general (i.e. no distinction between single-parent families with and without an additional caregiver, such as a stepparent), the study is included as well. No lower limit to the amount of time adolescents have spent in a single-parent family is imposed.
- (8) *Study design.* The study could either be designed as a (longitudinal) cohort study (used to study incidence, causes, and prognosis), a cross-sectional study (used to determine prevalence), or a case-control study (used to compare groups retrospectively), including control groups.
- (9) *Correct relation.* The study has to assess the relation between growing up in a single-parent family and the criminal involvement of adolescents.
- (10) *Aggregation level.* The constructs have to be measured at the individual level instead of at a supra-individual level (e.g. municipalities), to ensure that the actual relation is measured at the appropriate level of analysis and to prevent aggregation bias, which can lead to the 'ecological fallacy', the conclusion that what is true for the group must be true for the sub-group or individual (Robinson, 1950).

After duplicates were removed, studies were independently screened for eligibility by two researchers. First, titles and abstracts were scanned to check whether studies seemed to match the topic of the systematic review. The two researchers (the first author and a research assistant) discussed the results and in case of disagreements tried to reach consensus. If consensus could not be reached, the final decision was made by a third researcher (the second author). In case of doubt, the full-text of studies was retrieved. Second, the full-text of the studies were scanned to check whether studies met the eligibility criteria, and if not, what the reason for exclusion was, in the order of the criteria mentioned earlier. Disagreements were again discussed between the two researchers (the first author and a research assistant) and if no consensus could be reached, a third researcher made the final decision (the second author). In the case of the Dutch, German, and French studies, the process of study screening was comparable. However, one of the original researchers (the first author) screened these studies together with two different researchers (the second author screened the Dutch and German studies and the third author screened the French studies). Cross-references of the included studies were also screened, which means that reference lists of the included studies were checked to identify additional relevant studies, and these studies were also included if they met the above-mentioned criteria.

We conducted a systematic review instead of a meta-analysis because the selected studies show too much heterogeneity with regard to the outcome variable (e.g. incarcerated or not, item scales about different types of crime), resulting in constructs with different measurement levels that cannot be reliably compared and would potentially give rise to inaccurate or even misleading findings.

Results

Figure 1 presents a flow chart of the study selection process. The database search identified 3,102 studies, of which 45 studies were included (containing 3 extra studies because 3

of the 42 articles included 2 studies). By means of cross-referencing, 3 more studies were included in the systematic review. From these 48 studies, relevant data were extracted with regard to study design, study population, sample size, assessment of exposure and

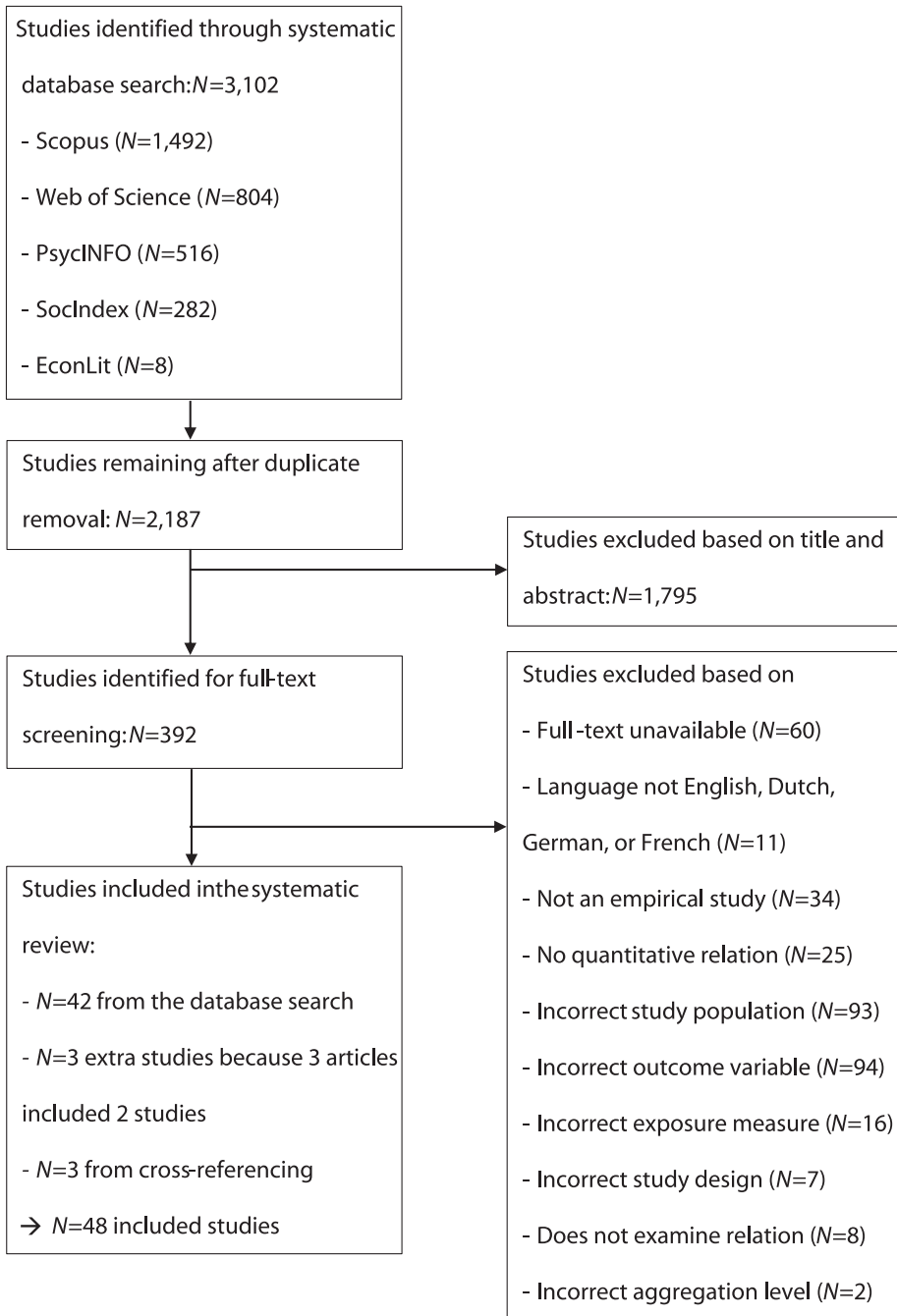


Figure 1. Flow chart of the study selection process.

outcome, and statistical analysis. A full list of all included studies and their main features is presented in [Table 1](#).

The 48 included studies covered information on 36 distinct datasets. All studies were written in English. The oldest studies covered the period from 1939 to 1948 and the newest studies the period from 2012 to 2014. The data were obtained by (a combination of) self-report by the adolescent, other-report by a parent/guardian, from census data,

Table 1. Overview of the studies included in the systematic review.

Author (year)	N	Country	Design	Results	Only included bivariate analyses
Adlaf and Ivis (1997)	964	USA	CS	0	X
Banyard et al. (2006)	980	USA	CS	+	
Brown (2006)	11,201	USA	CS	+	
Brown (2006)	11,201	USA	C	0	
Bryant et al. (1995)	180	USA	CS	0	
Champion et al. (2008)	13,422	USA	CS	+	
Chilton and Markle (1972)	8944	USA	CC	+	X
Conseur et al. (1997)	51,960	USA	C	+	
Coughlin and Vuchinich (1996)	194	USA	C	0	
Crawford and Novak (2008)	10,704	USA	C	+	
Demuth and Brown (2004)	16,304	USA	C	0	
Erdelja et al. (2013)	200	Croatia	CC	+	
Foster et al. (2010)	1319	USA	C	0	
Gibson (1969)	411	UK	C	+	X
Goldstein (1984)	6768	USA	CS	+	X
Gregory (1965)	11,329	USA	C	+	X
Hay et al. (2006)	1423	USA	C	+	X
Hoffmann (2002)	11,749	USA	CS	+	
Hoffmann (2002)	11,749	USA	C	+	
Hollist and McBroom (2006)	15,455	USA	C	+	
Isir et al. (2007)	232	Turkey	CC	+	X
Juby and Farrington (2001)	411	UK	C	+	
Keller et al. (2002)	67	USA	C	0	
Kierkus and Hewitt (2009)	3499	USA	CS	+	
Knoester and Haynie (2005)	16,910	USA	CS	+	
Laub and Sampson (1988)	1000	USA	CC	0	
Leiber et al. (2009)	9636	USA	CS	0	
Mack et al. (2007)	9636	USA	CS	0	
Margari et al. (2015)	93	Italy	CC	+	X
Mützell (1995a)	527	Sweden	CC	+	X
Mützell (1995b)	528	Sweden	CC	+	X
Neumann et al. (2010)	4597	UK	C	+	
Offord et al. (1979)	118	Canada	CC	+	X
Offord et al. (1978)	146	Canada	CC	+	X
Pagani et al. (1999)	497	Canada	C	+	
Pagani et al. (1998)	427	Canada	C	0	X
Pedersen (2000)	2436	Norway	C	+	
Pitt-Aikens and McKinnon (2000)	120	UK	CC	+	X
Rankin (1983)	2242	USA	CS	0	X
Rebellion (2002)	1725	USA	CS	+	
Rebellion (2002)	1725	USA	C	+	
Salts et al. (1995)	1192	USA	CS	0	
Smith and Walters (1978)	330	USA	CC	+	X
Spohn and Kurtz (2011)	4023	USA	CS	+	
Vanassche et al. (2014)	1688	Belgium	CS	+	
Voorhis et al. (1988)	152	USA	CS	0	
Wubishet and van Leuween (2016)	179	Ethiopia	CC	+	
Zimmerman et al. (1995)	254	USA	CS	0	X

Note: C, cohort study; CS, cross-sectional study; CC, case-control study; +, positive relation; 0, no statistically significant relation.

from criminal records, or from official institutions. As described in Table 2, the 48 studies contained 18 studies based on a longitudinal cohort design, 18 studies based on a cross-sectional design, and 12 studies based on a case–control design. Respectively 36 and 11 of the 48 included studies were conducted in North America and Europe; only one study was conducted in a non-western country. One study only included girls, 14 studies only included boys, 30 studies included girls and boys, and three studies did not describe the sex distribution of the sample.

There was homogeneity regarding the exposure measure, which means that ‘single-parent family’ is often measured in the same way. Most studies made a general comparison between adolescents from intact and non-intact families.¹ However, there was considerable heterogeneity with regard to the outcome variable. Adolescents’ engagement in criminal behavior was assessed via different measurement tools, including different types of crime over varying age ranges. Often composite measures of crime were used, making it impossible to assess associations with different types of crime.

To answer the first research question, we examined in general whether a relation exists between growing up in a single-parent family and crime by adolescents. The assessment of the data showed that 34 studies reported a statistically significant positive relation between single-parent families and crime (i.e. growing up in a single-parent family is related to a higher level of crime by adolescents), while 14 studies showed no statistically significant relation. No studies reported a statistically significant negative relation. The assessment of the data without other covariates (i.e. the studies that performed bivariate analyses) showed that 27 studies reported a positive relation between single-parent families and crime, 4 showed no statistically significant relation, 0 studies showed a negative relation, while 17 studies did not report results without covariates. The assessment of the data including the covariates (i.e. the studies that performed multivariate analyses) showed that 21 studies reported a positive relation between single-parent families and crime, 10 showed no statistically significant relation, 0 studies showed a negative relation, and 17 studies did not report results including covariates.

Table 2. Comparison between studies with and without statistically significant positive results.

Variable	Variable labels	<i>N</i> studies	% of studies with statistically significant positive results
Continent	North America	36	61.11
	Europe	11	100.00
	Other	1	100.00
Study design	Cohort	18	72.22
	Cross-sectional	18	55.56
	Case–control	12	91.67
Year(s) of data collection	Before 2000	32	71.88
	2000 and later	5	100.00
	Unknown	11	54.55
Sex	Boys	14	71.43
	Girls	1	100.00
	Mixed	30	66.67
Sample size	Unknown	3	100.00
	0–499	17	70.95
	500–999	4	75.00
	1000 or more	27	70.37
Total		48	70.83

To examine whether specific characteristics of the studies can explain the different outcomes of the studies, the studies were checked in more detail (see [Table 2](#) for a comparison between the studies with and without a statistically significant positive relation). In Europe, all studies showed a statistically significant positive relation, while in North America, results were mixed. Regarding the design of the study, most studies with a case-control design showed a statistically significant positive relation. This was true to a lesser extent for studies with a cohort design. Studies with a cross-sectional design showed the lowest percentage of statistically significant positive relations. Studies with datasets from the year 2000 and later showed statistically significant positive relations only, whereas studies before the year 2000 also showed some non-significant relations. The sex distribution of the sample did not affect the results. Studies that only focused on boys and studies that had a mixed-sex sample showed approximately the same amount of significant and non-significant results (the studies with only girls or a missing sex distribution, did not include enough studies to be able to draw comparative conclusions). The percentage of studies with statistically significant positive relations were evenly distributed across the different categories of sample sizes, meaning that the sample size of a study did not seem to affect the results.

Moreover, we checked whether the covariates parental resources, parental attachment, and parental resentment (in line with the four theoretical models explaining the relation between (the different types of) single-parent families and crime) were considered in the 31 studies that included multivariate analyses. In respectively 77 and 84% of the studies indicators of parental resources and parental attachment were included. Parental resentment was not considered in any study.

To answer the second research question, we checked whether the likelihood of criminal behavior differed between the three different constituting events of single-parent families (i.e. parental divorce or separation, parental decease, or being born to a single-parent family). It turned out that hardly any studies on differences in criminal behavior by type of single-parent families have been conducted. Only one study reported on the issue. Based on reports on juvenile convictions, Juby and Farrington (2001) found that families disrupted by disharmony (i.e. divorce or separation) were more criminogenic than families disrupted by parental death. However, no statistically significant results between these two types of single-parent families were found when delinquency was self-reported.

Discussion

This systematic review provides an overview of 48 empirical studies on single-parent families and crime of adolescents. Two general conclusions can be drawn. First, the results suggest that growing up in a single-parent family and adolescent involvement in crime are related since a large majority of the studies shows a positive relation between single-parent families and the level of crime. Second, since only one study reports on the effects of the different constituting events of single-parent families on crime, it is clear that more research is needed.

With respect to the first research question, the results of the systematic review strongly suggest the existence of a positive association between growing up in a single-parent family and crime by adolescents. This is in accordance with previous literature reviews conducted a couple of decades ago (e.g. Wells & Rankin, 1991), or that were more limited or

broader in scope (e.g. Price & Kunz, 2003; Savage, 2014). The majority of the studies containing multivariate analyses also controlled for parental resources and parental attachment, but adding these constructs did not alter the results. This implies that the social control theory, the social control/parental absence model, and the economic strain model cannot (fully) explain the results of this review.

The second research question involved the different constituting events of single parenthood. Juby and Farrington (2001) showed that reports on juvenile convictions suggest that the adolescents in families disrupted by divorce/separation displayed higher levels of crime than adolescents in families disrupted by parental decease. This finding is in line with expectations from the family crisis model (although parental resentment was not included as a control variable in the analyses, so it cannot be checked whether resentment toward the parents after the divorce is a relevant factor increasing crime). However, no relationships were found in this study when delinquency was self-reported. Since there is only one study on this topic and this study also shows contradictory results, it is important to investigate this issue in more detail in future research.

This systematic review also has revealed some limitations of the included literature. First, almost all adolescent behavioral data were self-reported. These data are likely to involve underestimation of true levels of crime because of social desirability. Second, in almost 30% of the studies, only boys were included as participants, although it is possible that boys and girls respond differently to growing up in single-parent families. Third, the same datasets were used a couple of times in different studies. Five datasets were used twice, one dataset was used three times, and one dataset was used six times. When the duplicate datasets were removed, however, the results stayed approximately the same.

There are several suggestions for future research. First, because the majority of the included studies were conducted in the USA, research should also be conducted in other cultural contexts. Second, this review contains many studies that were conducted a couple of decades ago. It is possible that the effects in more recent time periods differ from those found a couple of decades ago because of new regulations, such as co-parenting regulations after a divorce. However, since the studies conducted after the year 2000 show only positive relations, it has to be investigated in more detail why the recent studies more often displayed a higher level of crime by adolescents from single-parent families. Third, this review only contains studies looking at the environmental effects of the family on the criminal behavior of the adolescents. However, it may also be interesting to look at the genetic influences.

Concluding, this systematic review provides insights into the positive relation between single-parent families and crime by adolescents. However, this systematic review also shows that research is lacking regarding the consequences of growing up in different types of single-parent families. Therefore, we recommend researchers to expand these results and policy makers to wait for those results before making programs that target all children in single-parent families, while maybe these increased levels of crime were only caused by adolescents of one type of single-parent family. Given the fact that a relatively high percentage of western children grow up in a single-parent family and that the consequences of crime are detrimental, it is important to investigate into more detail how this relation between single-parent families and crime works to ensure that criminal behavior by adolescents is minimized.

Note

1. Some studies made additional distinctions, e.g. by including stepparents. Of the 48 included studies, 26 studies did not report on including or excluding single-parent families with an additional caregiver. In the remaining 22 studies, we checked whether adolescents in single-parent families and the adolescents in single-parent families including an additional caregiver differed with regard to their level of criminal behavior. Seven studies showed no differences between the two types of single-parent families, and the other studies showed mixed results.

Acknowledgement

The authors thank Tuan Cassim for his valuable assistance during the screening and selection process of the studies. Support was provided by the Amsterdam Law and Behavior Institute (A-LAB) and the Netherlands Institute for the Study of Crime and Law Enforcement (NSCR).

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Appendix

Search string in Scopus

TITLE-ABS-KEY (((("single parent" OR "single-parent" OR "single parents" OR "single-parents" OR "single parenthood" OR "single-parenthood" OR "broken home" OR "broken homes") OR ("divorce" OR "divorced" OR "separation" OR "separated" OR "split-up" OR "breakup" OR "break up" OR "broke up") OR ("out-of-wedlock" OR "out of wedlock" OR "born outside marriage" OR "unmarried childbearing") OR ("decease" OR "deceased" OR "die" OR "died" OR "pass away" OR "passed away" OR "death" OR "widow" OR "widower" OR "widowed")) AND ("parent" OR "parents" OR "parental" OR "mother" OR "mothers" OR "maternal" OR "father" OR "fathers" OR "paternal") AND ("children" OR "child" OR "childhood" OR "offspring" OR "adolescent" OR "adolescents" OR "adolescence" OR "teenager" OR "teenagers" OR "youth" OR "youths" OR "youngster" OR "youngsters" OR "young people" OR "juvenile" OR "minor" OR "minors" OR "son" OR "sons" OR "daughter" OR "daughters") AND ("criminal" OR "crime" OR "criminality" OR "felony" OR "felonies" OR "delinquency" OR "delinquent" OR "problem behavior" OR "problem behaviour" OR "lawbreaking" OR "law-breaking" OR "offender" OR "offenders" OR "offending" OR "offence" OR "offense" OR "offences" OR "offenses")) AND (LIMIT-TO (DOCTYPE, "ar ")) AND (LIMIT-TO (SRCTYPE, "j"))