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Family-Level Risk Factors for Girls' Involvement in Gangs: A Systematic Review

Sanne van Dijken

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Department of Psychology

University of Groningen

Examiner/Daily supervisor:

Prof. dr. V.I. Eichelsheim

Second examiner:

dr. R.F.A. Cox

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Summary

There has long been a gender gap in the research of criminal offending, especially in the gender-specific pathways for gang involvement. Much is still unknown about the specific risk factors for girls' involvement in gangs, while it has devastating consequences in all aspects of girls' lives. The current systematic review aimed to systematically analyse the existing research into family-level risk factors for girls' involvement in gangs, because the family environment is especially influential in children's development. After conducting the literature search, twenty studies were included in a systematic coding sheet for analysis. Family-level risk factors were divided into factors relating to family structure, quality of the family environment (measured in parental control and parental warmth), substance abuse and trauma. With regard to family structure, most studies found that broken homes and gang-involved family members were associated with girls' gang involvement. Results for parental control and parental warmth were more divided, with differences in significance and direction of effect. Besides this, family substance abuse and trauma were found to be important risk factors for girls' involvement in gangs. Important limitations relate to the retrospective design of most qualitative studies, the possible interactions between family factors and other risk factors and the need for more quantitative studies in order to draw stronger conclusions. There is a need for more future research into the mechanisms of girls' gang involvement, to better fit prevention and intervention strategies to the criminogenic needs of girls.

Keywords: gangs, gang involvement, girls, gender, family, risk factors, systematic review

Abstract

Er is historisch gezien al lang sprake van een genderkloof in onderzoek naar criminaliteit, met name in de genderspecifieke trajecten voor betrokkenheid bij gangs. Nog steeds is er veel onbekend over de specifieke risicofactoren voor meisjes om betrokken te raken bij gangs, terwijl het grote gevolgen heeft voor alle aspecten van het leven van meisjes. Het doel van de huidige systematische review was om al het bestaande onderzoek naar familie risicofactoren op gangparticipatie bij meisjes te analyseren, omdat familie risicofactoren een belangrijke rol spelen in de ontwikkeling van kinderen. Na het uitvoeren van een literatuuronderzoek, zijn twintig studies geïnccludeerd in een systematisch codeerblad om geanalyseerd te kunnen worden. Familie risicofactoren zijn verdeeld in factoren gerelateerd aan familiestructuur, kwaliteit van de familie omgeving (gemeten in ouderlijke controle en warmte), middelenmisbruik en trauma. Voor familiestructuur vonden meerdere studies dat gebroken gezinnen en familieleden die betrokken waren bij gangs geassocieerd werden met meisjes' betrokkenheid bij gangs. De studies naar ouderlijke controle en warmte gaven verschillende resultaten, waarbij sommige studies een significantie associatie vonden en anderen niet. Daarnaast werden middelenmisbruik in de familie en trauma gevonden als belangrijke risicofactoren. Belangrijke limitaties relateren aan de retrospectieve aard van veel kwalitatieve studies, de mogelijke interacties tussen familiefactoren en andere risicofactoren en de behoefte aan meer kwantitatieve studies om sterkere conclusies te kunnen trekken. Er moet meer onderzoek gedaan worden naar de specifieke mechanismen voor meisjes om betrokken te raken bij gangs, zodat preventie- en interventiestrategieën beter passen bij de criminogene behoeften van meisjes.

Sleutelwoorden: gangs, gang betrokkenheid, bende, meisjes, gender, familie, risicofactoren, systematische review

Family-Level Risk Factors for Girls' Involvement in Gangs: A Systematic Review

Historically speaking, there seems to be a gender gap in the research of criminal offending. Research into the risk factors and pathways for female offending still appears to be way behind research on male offending (Gower et al., 2022). As a consequence, there is much unknown about the differences in male and female offending. The differences in male and female offending seem to be mostly focussed on the prevalence rates. A common finding in criminal research is that simply being male is a strong predictor for criminal involvement (Calderoni et al., 2022). Theories on learning (Akers, 2009) and control (Gottfredson & Hirschi, 1990) explain this by suggesting that boys are more exposed to criminal role models and experience less criminal constraint by, for example, parents. Gender socialization might explain the high prevalence of male delinquency compared to women, because it may be more expected or accepted from men to cope with stress with outward-expressed emotions that might promote criminality (Agnew, 2006). Thus, men seem to be more likely to use crime as a way of coping with negative emotions associated with negative life events.

Gender Gap in Criminal Research

Not only does there seem to be a difference in prevalence rates of offending between men and women, but the pathways into criminal behaviour may vary too, dependent on gender. Previous research suggests that there are differences in criminogenic needs of male and female offending (Gower et al., 2022), which are factors that are linked to the onset and development of criminal offending. Still, most prevention and intervention strategies are based on male research data. This might be due to the prevailing societal idea that criminal involvement is an inherently masculine act (Cayli, 2016). And thus, research on criminality is more focussed on masculinity and the male gender.

However, this exclusionary view on masculinity in criminal involvement overlooks an entire part of the population of offenders, namely women. As Belknap (2001) describes it,

girls are still mostly invisible when it comes to gender and crime, while involvement in crime can have devastating consequences in all aspects of girls' lives. Gender differences are observed for example in the way girls and boys are treated within the criminal justice system. Puzzanchera, Adams, & Hockenberry (2012) found that delinquency cases for girls were less likely to be dismissed than those of boys. Besides, female offenders were often found to be younger than their male counterparts, getting involved in the criminal system earlier in their development than boys (Hockenberry, 2013). From thereon, once girls engage in criminal behaviour, this seems to affect all aspects of their lives, such as their academic achievements. In particular, research by Stein et al. (2014) showed that after being released, significantly more female than male offenders received poor grades in school. These examples show the importance of gender-specific criminal research, because crime involvement has distinctly damaging consequences for girls.

Women in Organized Crime Groups: Gangs

This aforementioned gender gap in criminal research continues in the research into organized crime. Organized crime groups (OCG) are a specific category of crime within the broader range of criminal involvement. Organized crime groups are defined by the United Nations (2000) as structured groups of a minimum of three people, that exist for an undefined period of time and with the main goal to commit serious crimes or offences. While this definition is quite broad, it does cover many different organized crime groups, such as mafias, drug-trafficking organisations or gangs. The current study will focus on one specific OCG, gangs, which can be defined as "durable, street-oriented groups whose identity includes involvement in illegal activity" (Calderoni, 2020). This, because of the relationship between gangs and delinquency, and, more specifically, the association between gang involvement and aggressive and violent criminal acts (Lenzi et al., 2015).

Until recently, most of the research and knowledge on gang involvement centred

around men, while women certainly do participate in gangs. Numbers from the National Youth Gang Center (2004) estimated that 10% of gang members were female, and more recently (2007) reported that over a third of interrogated gangs identified more than 25% of gang members to be female. However, knowledge of female gang involvement is limited, which results in little consensus regarding the nature of gang involvement for women (Miller, 2000). And where women did get involved in gang research, their role was mostly described in terms of objectification and victimization (Chesney-Lind & Faith, 2000). Although gang membership was always seen as primarily a male problem, female gang membership is slowly becoming more acknowledged (Snethen, 2010). Their role as active gang participants is increasingly more recognized and there is more research into the specific pathways for girls' involvement in gangs. While previous research highlights differences in general male and female offending in terms of "severity, frequency and victimology" (de Vogel & de Vries Robbé, 2012), this leads to wonder whether there are differences in specifically male and female gang involvement.

Consequences of Female Gang Involvement

Even more than with general delinquency, gang involvement can have devastating long-term consequences on women's lives in specific. It is important, in this way, to acknowledge women's roles in gangs as both active agents as well as victims. On the one hand, gang involvement for girls is associated with a higher risk of assaulting others (Park et al., 2010). On the other hand, girls who commit crimes or join gangs are often also victims of violence or (sexual) abuse (Archer & Grascia, 2006). The victimization of women is especially prevalent inside the gangs they join. Most gangs have patriarchal and misogynistic attitudes that expect female subservience (Nimmo, 2001). Female gang members are often sexually abused, sometimes as part of an initiation ritual. In these cases, women have to be 'sexed in', meaning they have to engage in sexual activity with male gang members (Miller,

2000). While girls may initially join gangs to escape threats or victimization at home, they simultaneously increase the risk of victimization within the gang they joined (Valdez, 2007). Furthermore, the consequences of gang involvement extend past the life within the gangs. Research has shown that gang membership is associated with (peer) delinquency, substance abuse and other problem behaviours (Bjerregaard & Smith, 1993).

These differences in male and female gang involvement are described by gendered pathways into gang involvement. Gendered pathways of gang involvement are gender-specific risk factors that contribute to an individual's possible involvement in gangs (Belknap, 2001). The literature seems to be divided as to whether gendered pathways into gang involvement exist. On the one hand, it is argued that risk factors for male and female gang involvement are different in nature. The other side argues that risk factors explaining male and female gang involvement do not differ and that girls and boys are similarly influenced by the same risk factors (Bjerregaard & Smith, 1993).

Family-Level Risk Factors for Girls' Gang Involvement

Numerous risk factors can influence the likelihood of gang involvement, which may influence the specific gendered pathways into gang involvement. According to Bronfenbrenner's ecological systems theory (1989), there are risk factors operating on different levels that interact with each other and accordingly influence human behaviour. The ecological systems theory emphasizes the importance of the environment, which interacts with the individual characteristics. Environmental influences, thus, possibly play an important role in predicting delinquent and gang-related behaviour. Children grow up in a multitude of microsystems that each influence each other and subsequently the child's behaviour (Bacchini et al., 2020). An important microsystem in the context of a child's behaviour is the family. Bronfenbrenner (1989) emphasizes the importance of family-level processes that influence a child's development. These family-level risk factors may potentially be gendered, because of

differences in development of girls and boys. Differences between boys and girls can exist on individual level, but can also occur from an interaction of individual characteristics and environmental influences, such as societal gender expectations and differences in parenting styles for each gender (Hoeve et al., 2009). Possible differences in how boys and girls express and cope with negative emotions or life events (Agnew, 2006) might also influence specific gendered pathways into gang involvement.

Previous research has already highlighted the influence of family-level risk factors on gang involvement. Bell (2009) stated that the parent-child relationship had a significant influence on youth gang involvement, and another study demonstrated that adolescents who perceived more parental support were less likely to claim gang membership (Lenzi et al., 2015). According to the social learning theory, the family environment is especially influential in young children's development, because it suggests that children learn social behaviour by observing as well as imitating the behaviour of others (Bandura, 1977). Especially young children are in a critical stage of development where they are highly susceptible to familial influence, where parents are expected to act as primary attachment figures and role models.

Thus, previous research has shown the importance of family-level risk factors on gang involvement. However, research seems to be divided as to whether these family-level risk factors for gang involvement are gender-specific and thus differ between boys and girls. Therefore, identifying family-level risk factors for girls' gang involvement may provide more insight into the specific pathways for girls' involvement in gangs. Besides, focussing on family-level risk factors may be beneficial for improving prevention and intervention strategies of gang involvement, because these often target the family, such as Functional Family Therapy (FFT) or Parent Management Training (PMT). Knowing how these family-level risk factors specifically impact girls' involvement in gangs, could help to tailor

prevention and intervention strategies to girls' needs.

Family Structure and Quality of the Family Environment

Family-level risk factors can be broadly divided into two types of family factors: more structural factors on the one hand, and substantive quality of family relationships on the other hand. Family structure characteristics encompass more practical factors such as how the family is organized, the absence of one or more parents (single parenthood, divorced parents) or other more practical characteristics of families. The quality of the family environment focusses on the quality of relationships within the family, such as with parents or siblings. The literature has many different ways of conceptualizing family functioning, such as parent-child relationship (Bell, 2009), family processes (Bjerregaard & Smith, 1993) or parental management (Alleyne & Wood, 2014). The framework of parenting styles by Baumrind (1971) categorizes these different conceptualizations of the family environment on two dimensions: parental warmth and parental control. Parents can score high or low on these axes and this creates four different categories of parenting styles: permissive (low control, high warmth), authoritative (high control, high warmth), authoritarian (high control, low warmth) or uninvolved (low control, low warmth). Thus, family-level risk factors can be identified by looking at both family structure and the quality of the family environment to see which family-level risk factors influence girls' involvement in gangs.

The Importance of Researching Female Gang Involvement

By systematically analysing the available evidence on family level risk factors that may specifically contribute to girls' involvement in gangs, this review provides information on potential successful strategies to prevent and intervene in girls' problematic development. The current knowledge on family-level risk factors for girls' gang involvement is not consistent and has not been systematically organized and analysed. This is necessary, because on the one hand, getting a better idea of how to prevent girls' involvement in gangs can help

professionals who are working with female offenders or girls who are at-risk of gang involvement. On the other hand, it can help develop effective interventions for girls who are already involved in gangs. Besides, existing interventions and taxonomies, should be improved to fit the possibly different criminogenic needs of both boys and girls. This is important, because the consequences of gang involvement for girls can be destructive in all aspects. As mentioned before, gang involvement for girls heightens the risk of general delinquency, victimization, substance abuse and risky sexual behaviours (Voisin et al., 2014).

The aim of the current study is to systematically analyse the existing research into family-level risk factors for girls' involvement in gangs. This will be done by means of a systematic literature study followed by a systematic review. The research question is as follows: "In general, which family-level risk factors are the most significant in explaining girls' involvement in gangs?" This will provide more insight into the specific pathways for female gang involvement and consequently help improve prevention and intervention strategies for helping girls who are either at-risk for gang involvement or already involved in gangs.

Method

Search Strategy

In order to answer the research question, a systematic review of the current literature is conducted in order to investigate possible family-level risk factors that might explain girls' involvement in gangs. A literature search was conducted in PsychINFO, Scopus and Web of Science in November 2022. The search was limited to three databases because this was deemed fitting for the limited time and scope of the project. These specific databases were chosen because of their relevance to the topic and their large capacity. The search strategy consists of a combination of the following search terms: ("gang" OR "gangs" OR "gangster*" OR "gangland*" OR "gang involvement" OR "gang member*") AND ("girl*"

OR “woman*” OR “women” OR “female*” OR “young women” OR “young woman”) AND (“famil*” OR “family-level” OR “parent*” OR “parent-child*” OR *parent child*”) AND (“risk*” OR “at risk” OR “risk factor*” OR “risk-factor*” OR “predictor*” OR “driver*” OR “determinant*” OR “correlate*”).

Eligibility Criteria

In this initial stage, only title, abstract and keywords were used in the search to decide upon the eligibility of studies. To be eligible for inclusion, the following criteria had to be met: (1) the studies had to specifically focus on the category of gangs within organized crime groups, (2) the studies had to specifically focus on girls (both compared to boys as well as solely relying on a sample of girls), (3) the studies had to identify so-called family-level risk factors, categorised under either family structure, quality of family environment or other family-level risk factors such as trauma or substance abuse. This systematic review aimed to include both quantitative, qualitative and mixed-method studies. Studies were excluded if: (1) the studies were not published in English or Dutch, (2) the studies were published before 1990, because these may be outdated and less relevant to the state of current research (3) the studies were not peer-reviewed, and (4) they were not original empirical studies containing primary data sources.

Study Selection

The initial search was conducted in PsycINFO, Scopus and Web of Science, and, after removing duplicates, resulted in 606 records that were eligible for screening. These records were screened by title and abstract to assess which would be included for full-text screening, based on the eligibility criteria. This led to 135 articles being screened full-text. Seven articles could not be located full-text. Out of the remaining 126 articles, 108 were excluded for different reasons: the study did not specify gang involvement, they did not study girls or gender in specific, it was not focussed on family-level risk factors, it was not an empirical

study, the study was not peer-reviewed, or the study was published before 1990. Eighteen studies met the inclusion criteria and were included. After doing a final reference check of these eighteen studies, two additional studies were found and included. In the end, twenty studies met the inclusion criteria and were therefore included in the systematic review for further analysis. A flow diagram of the selection process is presented in figure 1.

Coding the Studies

After the selection process was finalised, a systematic coding sheet¹ was created in Excel. From the included articles, information on study characteristics, such as the study design, sample characteristics such as the sample size and type, as well as the relevant variables for answering the research questions were derived, coded and saved in the coding sheet. The variables of interest were gang involvement, gender and family risk factors. As mentioned previously, familial risk factor encompasses a rather broad and diverse spectrum. The variables were therefore categorised and coded as either family structure, quality of the family environment, or other.

Variables were coded as 'family structure variables' when they were referring to the structure of the household, such as the absence of one or more parents, or referring to family gang involvement, such as having a gang-involved sibling. With regard to variables referring to a measurement of the 'quality of the family environment', a distinguishment was made between variables measuring parental control and parental warmth. The 'other' variables that were included as family risk factors were related to trauma or substance abuse. In order to answer the research question, finally, the systematic coding sheet presented the general conclusion of each study with regard to the association between family risk factors, gang involvement and the gender-related conclusions.

Analysing the Studies

¹ Can be obtained upon request from the first author

Creating a systematic coding sheet allowed for the studies to be analysed and compared in a systematic way. In the analysis of the outcomes of the included studies, the coding sheet provided information on the association between family risk factors, gang involvement and the role of gender. The different aspects of family risk factors (i.e. family structure, quality of family environment measured by parent control and warmth and the other variables of trauma and substance abuse) served as a thematic grouping of results. Within these categories, results were coded in terms of direction of effects. The included studies could be either in line with expectations, or in unanticipated directions. For quantitative studies, results were also coded in terms of significance, to show whether the effect was found to be significant. By ordering, structuring or grouping the results according to the direction of effects, information could be obtained of general patterns in the sample of studies, or contrasting results as described in the results section.

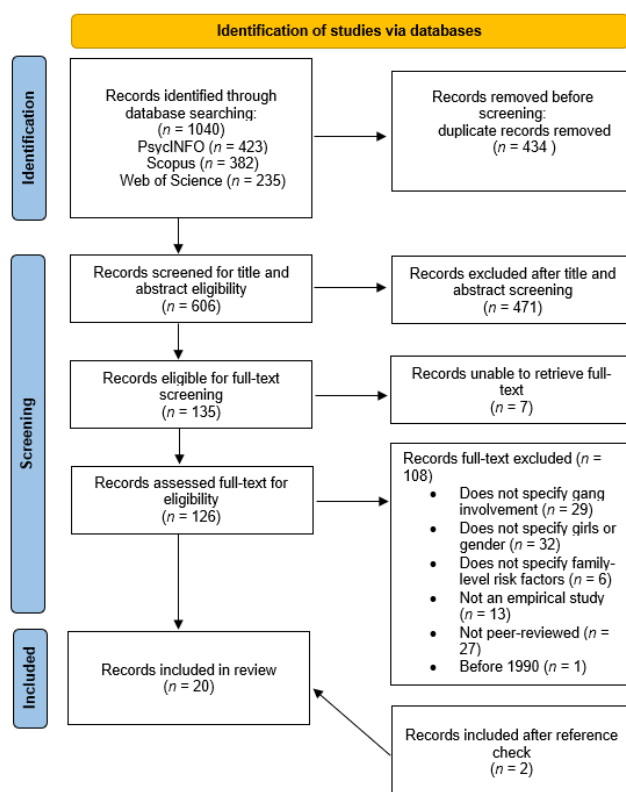


Figure 1

Results

Description of Studies

The studies eventually included in this systematic review were published between 1993 and 2021. With regard to the study design, the included studies were designed in the following ways: eight cross-sectional studies, seven were longitudinal studies, and five were group or individual interviews. Fifteen studies used a quantitative design, three were qualitative, and two were mixed. Out of these 20 studies, eight used an all-girls sample, whereas the other 12 used a mixed-gender sample. The included studies used different kinds of participants. Ten studies described their sample as high-risk or at-risk for gang involvement, six studies used representative samples for the general population of adolescents, and the remaining four used participants who were incarcerated or involved in the juvenile system. An overview of all included studies is given in table 1 at the end of the paper.

Family Structure: Household and Family Gang-Involvement

From the 20 articles included in this systematic review, eight researched family-level risk factors that were related to the family structure [3, 6, 8, 9, 10, 15, 17, 19]. Family structure refers to the way a family is organized. Family structure was defined in different ways, such as family structure [8, 9, 10], family disadvantage [3] or broken homes [19]. These measures of family structure were operationalised by either using questionnaires or conducting interviews that informed about things such as participants' household composition or their parents' marital situation.

For the majority of the studies, results showed that family structure was (significantly) associated with gang involvement, in the sense that broken homes seemed to increase the risk for girls' involvement in gangs. Several studies found that female participants who grew up in a family structure with either a single parent, stepparents or no parents at all had a higher risk

of gang involvement. For example, Hill et al. (1999) found that family structure predicted gang membership. In their study, participants who lived with either one parent, stepparents or no parents had greater odds of joining a gang than participants who lived with two biological parents. On top of that, this effect was stronger for female gang involvement than for males. Similarly, Martin (1994) concluded that family structure better predicted gang involvement for girls than for boys. However, other studies, such as Bell (2009), did not find any significant gender differences in the risk of family structure on gang involvement. Contrarily to the findings mentioned above, female respondents in the study by Walker-Barnes and Mason (2001) found that simply the number of parents present in the homes was not necessarily a risk factor, but that the family quality was more important. Studies looking at parents' marital situation reported divorce as a substantial risk factor on gang involvement. Fleisher and Krien (2004) found that in a sample of female gang members, 67% reported that their parents had no matrimonial ties. Both De Vito (2019) and Molidor (1996) conducted qualitative interviews with (former) female gang members. Respondents in both studies reported a history of parental divorce and described this as a contributing factor for their involvement in gangs.

Besides the structure of the household and matrimonial ties, six studies investigated family structure by means of looking at family gang involvement as a risk factor of youth's gang involvement [1, 7, 12, 13, 16, 20]. All of these studies found a positive relationship between family gang involvement and girls' involvement in gangs. De La Rue and Espelage (2014) even concluded that having a gang-involved family member was an especially strong predictor of gang membership. Research by Bloom et al. (2003), Gilman et al. (2014) and Hennigen et al. (2015) consistently showed that either having a gang-involved family member or living with a gang member was an important risk factor for female gang involvement. According to Miller (2000), a reason for this could be that girls look up to gang-involved

family members and thus want to follow in their footsteps. While most studies do not specify the specific type of family member, Hashimi et al. (2016) investigated sibling gang affiliation. They reported a positive correlation between sibling gang affiliation and the gang-involvement of respondents, where the effect was even stronger for same-sex siblings. Studies that specifically compared boys and girls [12, 16], did not find significant differences in gender. Thus, the risk factor of family gang-involvement does not seem to vary between boys and girls.

All in all, family structure seems to be an important risk factor for girls' involvement in gangs. In specific, studies showed that broken homes are associated with gang involvement for girls. While some studies found this effect to be stronger for girls than boys, others did not find any gender differences. Next to this, family gang involvement acts as a significant risk factor for girls' gang involvement. This relationship seems to be as strong for boys as girls.

Family Environment: Parental Warmth and Control

Nearly all studies included in this systematic review researched the quality of the family environment as a risk factor for gang involvement [2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 17, 18, 20]. The studies studying parental warmth in relationship to girls' gang involvement showed mixed results as to whether parental warmth is a distinct risk factor for female gang involvement. On the one hand, research such as Bell's (2009), found that less parental attachment was associated with a greater likelihood of involvement in gangs. Likewise, other studies found that poor parental communication, lack of parental love and warmth and a lack of attachment to caregivers were significantly associated with girls' involvement in gangs [6, 11, 13, 15]. A study by Jagers et al. (2013), looking at maternal and paternal warmth, showed that lower levels of maternal warmth were associated with higher risk of gang involvement. While there were no gender differences in maternal warmth, paternal warmth had different effects on girls and boys. Whereas boys were more susceptible

for paternal warmth at older ages, girls were more affected by lower levels of paternal warmth at a younger age. Lower levels of paternal warmth increased the risk of initial gang involvement for younger girls than older girls, whereas the opposite was the case for boys.

On the other hand, several studies concluded that variables of parental warmth did not act as risk factors for girls' involvement in gangs. Studies by Bjerregaard and Smith (1993) and Hill et al. (1999) did not find a significant correlation between parental attachment and gang membership. In similar ways, neither parental rejection nor level of conflict in the family were found to significantly predict future gang membership [4, 9]. However, while individual risk factors related to parental warmth may not have a significant effect on predicting gang membership, both Gilman et al. (2014) and Thornberry (2002) concluded that it may be the interaction of several individual risk factors that increase the risk of gang involvement. These multiple individual risk factors may have a cumulative effect that increases the odds of joining a gang. With regard to gender, some studies found that family environment was a more significant predictor for girls than for boys [9, 20]. In contrast, other studies did not find any significant gender differences, concluding that parental warmth similarly affects male and female risk of gang involvement [3, 5, 12].

Similar to the studies researching parental warmth, the studies that looked at parental control came to different conclusions regarding parental control as a risk factor for gang involvement. Studies by Hill et al. (1999), Voisin et al. (2014) and Hennigen et al. (2015) reported that low levels of parental involvement was associated with female gang involvement. De La Rue and Espelage (2014) did find that gang-involved girls reported less parental monitoring, but this was not significant. Bell (2009) found that not less, but more parental control and involvement increased the risk of gang membership. Other studies, however, stated that parental control was not a significant predictor of gang membership [1, 3, 7, 9]. The research by Walker-Barnes and Mason (2001) might explain this disparity in

results. In their qualitative study, respondents say that girls may join gang because they rebel against parents who exert too much control over them, or because parents were not strict enough which led girls to join gangs to replace the lack of parental monitoring at home.

In conclusion, studies investigating the relationship between quality of the family environment and girls' gang involvement reported contrasting results. With regard to parental warmth, some studies reported a significant association between lower levels of parental warmth and female gang involvement. Some studies found this effect to be stronger for girls, others did not find a gender difference. Others, however, do not see parental warmth as a significant risk factor on girls' gang involvement. Similarly, studies found different results with regard to parental control. Different studies found different directions of effect, with some reporting a significant association between parental control and female gang involvement, whereas others did not.

Other Family-Level Risk Factors: Substance Abuse and Trauma

Finally, several studies focussed on two other important family-level risk factors for girls' involvement in gangs [10, 15, 19, 20]. First of all, studies by Fleisher and Krien (2004), Molidor (1996) and De Vito (2019) identified parental substance abuse as a risk factor for gang membership. Respondents in Molidor's (1996) study, who identified as female gang members, reported extensive alcohol and drug use by their parents as a contributing factor of their gang membership. In similar ways, another respondent mentioned parental substance abuse as a risk factor, because they were unable to depend on their parents due to their addiction (De Vito, 2019). Fleisher and Krien (2004) researched female gang members and showed that alcohol drug use was common in both parents. Thus, it appeared that several studies found parental substance abuse as a possible risk factor of girls' involvement in gangs.

Lastly, seven studies investigated the role of trauma as a risk factor for female gang membership [6, 7, 11, 14, 17, 19, 20]. Most of these studies looked into physical and sexual

abuse and found varying results. While Wang (2000) did not find sexual or physical abuse to be an important factor for female gang involvement, De La Rue and Espelage (2014) found that sexual abuse was a significant predictor of gang involvement. However, physical abuse did not appear to be a significant risk factor. Both Voisin et al. (2014) and Thornberry (2002) found that trauma and child maltreatment respectively increased the risk of gang involvement for girls. Other studies corroborated these conclusions and added that abused girls join gangs to escape their violent and abusive families [17, 19, 20].

After analysing all the studies, two other important family-related risk factors emerged for girls' gang involvement: substance abuse and trauma. While these are not direct family-level risk factors, these can have an indirect effect on girls' gang involvement through the quality of the family environment. Several studies reported that substance abuse in the family was associated with girls' involvement in gangs. Trauma, especially sexual abuse, was found to be an important risk factor for female gang involvement.

Discussion

The aim of the current study was to take together the evidence on the impact of family-level risk factors and girls' involvement in gangs. There-with the aim has been to address the persistent gender gap in research into development of criminal behaviour. There has long been a gender gap in the criminal research, with limited research on specific pathways for women into delinquency. This is similarly the case for research into female gang involvement. Since the family is a crucial part of children's development, and seems to play an important role in both the prevention of gang involvement as well as the intervention strategies, the current systematic review focussed on family-level risk factors. From the existing literature, several possible family-level risk factors emerged: family structure, quality of the family environment (divided into parental control and parental warmth), substance abuse and trauma.

The systematic review aimed to answer the following research question: "In general, which family-level risk factors are the most significant in explaining girls' involvement in gangs?" It is relevant to identify family-level risk factors for girls' gang involvement, because this may help to gain more insight into possible gender-specific pathways into gang involvement. This knowledge of female gang involvement can help develop more beneficial prevention and intervention strategies for girls' involvement in gangs, because gang involvement can have a devastating and long-lasting impact on girls' lives.

Family Structure

Studies on the relationship between family structure and female gang involvement yielded mixed results. While the majority of studies agreed on the fact that broken homes seemed to be a significant risk factor for girls' involvement in gangs, studies disagreed on whether these effects were different for boys and girls. While some stated that household structure has a stronger effect on gang involvement for girls, others did not find a significant gender difference. Similarly, studies found a significant association between family gang involvement and girls' gang involvement. However, none of the studies found a gender difference in this effect. According to these studies, it seemed that having a gang-involved family member has similar effects for boys and girls. Both boys and girls could in similar ways be influenced by their family members, who have important functions as role models. However, almost none of these studies identified specific characteristics of the type of family member that influenced gang involvement. Only Wang's study (2000) looked at specific family members; siblings, and concluded that the influence of gang-involved siblings was bigger for same-sex siblings than for different-sex siblings. It would be interesting to investigate whether this is similar for other same-sex family members, or if this effect is only found in sibling relationships. Besides, since siblings are usually close in age and thus resemble more of a peer relationship (Wang, 2000), this leads to wonder whether the age of

the gang-involved family member is of importance on the effect on girls' gang involvement.

Thus, future research could investigate whether factors such as gender, age or relationship to the family gang member are important for girls' gang involvement.

Parental Warmth

Similar to family structure, the studies on the relationship between quality of the family environment and girls' gang involvement found different results. Some studies concluded that there was a relationship between low parental warmth and girls' gang involvement, while others did not find a significant association between low parental warmth and gang involvement. Only one study (Jagers et al., 2013) differentiated between maternal and paternal warmth, and found that these have different effects on boys and girls. Thus, while a lot of studies did not find significant gender differences in the effect of parental warmth on gang involvement, there might in reality be a difference when there is a distinction between maternal and paternal warmth. Studies that did not find a significant association between parental warmth and gang involvement, explained this by stating that perhaps no single factor acts as a significant risk factor. Rather, it is the combination of multiple risk factors that significantly increases the risk of girls' gang involvement. This may have a cumulative effect on the odds of joining a gang (Thornberry, 2002). However, in this context, Thornberry refers specifically to the possibility of interacting variables of the family environment. Future research could investigate which family-level risk factors are particularly prone to interact and strengthen each other. Besides, it leads to wonder whether the cumulative effect is the strongest if just variables of parental control and warmth interact with each other, or if this cumulative effect also happens if risk factors in both the family structure and the quality of the family environment interact with one another. Next to that, future research could look into this cumulative effect of individual risk factors and if these effects are different for boys or girls. Perhaps boys or girls need a different amount of individual risk

factors in order for it to have a significant effect on gang involvement.

Parental Control

Studies investigating parental control did not only report different results in whether parental control is significantly associated with girls' gang involvement, but also reported different results in the direction of the effect. Some studies found that higher levels of parental control were associated with girls' gang involvement, whereas other studies found the opposite and concluded that low levels of parental control acted as a significant risk factor for gang involvement. An important factor in this might be the girls' perceived parental legitimacy (Trinkner et al., 2012). If the level of parental control is not seen as legitimate, it may be a more significant risk factor than when the parental control is actually perceived as a legitimate level of control. Future research could focus on the perceived legitimacy of parental control and how this affects the risk for female gang involvement.

Substance Abuse and Trauma

With regard to the found risk factors of substance abuse and trauma, two things are important to mention. First of all, several studies found a significant association between parental substance abuse and girls' gang involvement. However, this raises the question of whether it is the actual substance abuse that is associated with girls' gang involvement, or whether it is the effect that substance abuse has on parental control and warmth that explains the association. Participants in Molidor's (1996) study reported that parental substance abuse was an important risk factor for gang involvement, because the parent was never present. Even if the parents were physically present, the substance abuse made them mentally absent and not much involved. Thus, future research could investigate whether it is the actual substance abuse that acts as a risk factor, if this eventually comes down to parental control and warmth or if there is some indirect relationship at play.

Finally, several studies investigated trauma as a significant risk factor for girls' gang

involvement. These concluded that trauma, such as physical or sexual abuse, was significantly associated with girls' involvement in gangs. Girls may seek refuge in gangs after growing up in an abuse family environment. However, these girls often risk being victimized again once they are inside a gang. This is one of the destructing consequences that gang involvement can have on girls' lives and one of the reasons why it is so important to identify specific pathways for girls into gang involvement. Gangs are often ruled by patriarchal values and women are frequently treated in objectifying and sexualizing ways. The available literature indeed shows that trauma and victimization are an especially significant risk factor for girls. Be that as it may, a point of consideration in this is the societal views on victimization and gender in a broader sense. Victimization is usually seen as something that happens to women, and is therefore perhaps more readily identified as a female risk factor. However, victimisation as a risk factor might also be more socially accepted for women. For boys, delinquent behaviour is more often linked to factors such as authority issues or problems with emotion regulation. While there may be actual differences in boys and girls, part of these differences may also be socially or culturally driven. Thus, while it seems that certain factors, such as trauma and victimization, is especially salient in girls, the possible social-cultural influences on the gender gap should not be forgotten.

However, victimization is not the only devastating consequence of gang involvement for girls. Other consequences of girls' gang involvement include higher risk of delinquency, substance abuse and poorer academic performance. These consequences can impact girls' lives on both short and long term, which is why it is important to identify these possible family-level risk factors. The family is a place where, throughout the development, a lot of socialization processes take place. It is a place where children usually form their first attachment and look at their family as role models, subsequently imitating their behaviour. Targeting possible family-level risk factors can be important for preventing girls' initial

involvement in gangs. Besides, intervention strategies often target family related factors. Popular family-based treatments include Functional Family Therapy (FFT) or Parent Management Training (PMT). By identifying which specific family-level risk factors are associated with girls' gang involvement, these interventions can be designed to better fit the specific needs of girls.

General Limitations

The aforementioned results should be interpreted in the light of some general limitations. Naturally, the quality of the results of a systematic review is highly dependent on the quality of studies that were included. In the current field, a lot of the existing knowledge is based on retrospective studies. The majority of the studies are qualitative and collect data by conducting interviews where female participants were asked about their past and their pathways into gang involvement in hindsight. The limitation with using these retrospective studies is that female respondents might claim in retrospect that, for example, their broken homes or lack of parental control acted as a risk factor for their gang involvement. However, it is difficult to know for certain if these were initial factors of gang involvement, and if family factors actually precede gang involvement. The effects may be more complex than the qualitative studies show, with variables on different levels interacting and influencing each other. While the current study focusses solely on family factors, it can be assumed that these always exist in interaction with other characteristics, such as individual characteristics, the broader social environment and cultural influences. Next to this, it is difficult to draw strong conclusions from qualitative studies without statistical inferences. Thus, while qualitative studies can be very informative on identifying possible risk factors, future research should focus more on conducting quantitative, preferably longitudinal studies in researching family-level risk factors on girls' involvement in gangs.

Conclusion

All in all, the aim of this systematic review was to collect and analyse the evidence on the impact of family-level risk factors and gang involvement, to investigate which are the most significant in explaining girls' involvement in gangs. The literature search resulted in twenty relevant studies that could be included and subsequently coded and analysed. These studies found some significant family-level risk factors, related to family structure, quality of the family environment measured by parental control and warmth, substance abuse and trauma. However, these twenty studies yielded mixed results, either in significance or the direction of the effect. This shows the need for more research into family-level risk factors in explaining specifically girls' gang involvement. Many studies still focus solely on a male population, while it is clear that gang involvement can have serious, long-lasting consequences on girls' lives. More research focussed on women is crucial to close the gender-gap in criminal research. Girls get told often enough that they are not important, the last thing they deserve is to be invisible in criminal research too.

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* Studies marked with an asterisk are included in the current systematic review

GIRLS' GANG INVOLVEMENT

| Study ID | Study | Country | Design | Qualitative/ Quantitative | Sample size (% female) | Sample type | Family structure | Quality of family environment | Other |
|-----------------|----------------------------|----------------|-----------------|--------------------------------------|-----------------------------------|--|-------------------------|--|--------------|
| 1 | Bloom et al. (2003) | USA | Interviews | Qualitative | N/S (100%) | Girls and young women involved in the juvenile system in ten California counties | Family gang affiliation | - | - |
| 2 | Alleyne & Wood (2014) | UK | Cross-sectional | Quantitative | 798 (29%) | Participants from five London schools | - | Parental management (control) | - |
| 3 | Bell (2009) | USA | Cross-sectional | Quantitative | 7212 (% N/S) | A nationally representative adolescent sample | Household structure | Parent-child relationship (control & warmth) | - |
| 4 | Bacchini et al. (2020) | Italy | Cross-sectional | Quantitative | 817 (53%) | Adolescents from a high-risk urban area | - | Parental rejection (control & warmth) | - |
| 5 | Bjerregaard & Smith (1993) | USA | Cross-sectional | Quantitative | 969 (27%) | Students at high-risk for delinquency | - | Family processes (control & warmth) | - |
| 6 | Voisin et al. (2014) | USA | Cross-sectional | Quantitative | 188 (100%) | Incarcerated women in a short-term detention | Household structure | Parental monitoring and communication | Trauma |

GIRLS' GANG INVOLVEMENT

| Study ID | Study | Country | Design | Qualitative/ Quantitative | Sample size (% female) | Sample type | Family structure | Quality of family environment | Other |
|-----------------|-----------------------------|----------------|-----------------|--------------------------------------|-----------------------------------|--|-------------------------|--|---------------|
| 7 | De La Rue & Espelage (2014) | USA | Cross-sectional | Quantitative | 7977 (100%) | Non-urban, diverse, school-based sample | Family gang affiliation | Parental monitoring (control) | Abuse |
| 8 | Hill et al. (1999) | USA | Longitudinal | Quantitative | 808 (49%) | Ethnically diverse, gender-balanced sample from the Seattle Social Development Project | Household structure | Parent drinking, management, attachment and parent proviolent attitudes (control & warmth) | - |
| 9 | Martin (1994) | USA | Cross-sectional | Quantitative | 2621 (6%) | Data from the Survey of Youth in Custody | Household structure | Parent-child attachment (warmth) | - |
| 10 | Molidor (1996) | USA | Interviews | Qualitative | 15 (100%) | Female gang members in a residential treatment facility | Household structure | - | Substance use |
| 11 | Wang (2000) | USA | Cross-sectional | Quantitative | 216 (100%) | At-risk students participating in a facility | - | Parental care, guidance and love | Abuse |

GIRLS' GANG INVOLVEMENT

| Study ID | Study | Country | Design | Qualitative/ Quantitative | Sample size (% female) | Sample type | Family structure | Quality of family environment | Other |
|-----------------|------------------------|----------------|---------------|--------------------------------------|-----------------------------------|--|-------------------------|---|--------------------|
| | | | | | | summer program | | (control & warmth) | |
| 12 | Gilman et al. (2014) | USA | Longitudinal | Quantitative | 808 (49%) | Students from elementary schools in high-crime neighbourhoods, from the Seattle Social Development Project | Household structure | Prosocial family environment (control & warmth) | - |
| 13 | Hennigen et al. (2015) | USA | Longitudinal | Quantitative | 391 (33%) | High risk youths referred by probation officers | Family gang affiliation | Parental monitoring (control & warmth) | - |
| 14 | Thornberry (2002) | USA | Longitudinal | Quantitative | N/S (100%) | Students from public schools in Rochester New York | - | Parent-child relationship (control & warmth) | Child maltreatment |
| 15 | De Vito (2019) | USA | Interview | Qualitative | 14 (14%) | Former gang members referred by school professionals and a rehabilitation centre | Household structure | Lack of family consistency (warmth) | Substance use |

GIRLS' GANG INVOLVEMENT

| Study ID | Study | Country | Design | Qualitative/ Quantitative | Sample size (% female) | Sample type | Family structure | Quality of family environment | Other |
|-----------------|------------------------------|----------------|-----------------------------|--------------------------------------|-----------------------------------|--|-------------------------|---|----------------------|
| 16 | Hashimi et al. (2021) | USA | Longitudinal | Quantitative | 4035 (48%) | Representative sample of American youth | Family gang affiliation | - | - |
| 17 | Walker-Barnes & Mason (2001) | USA | Cross-sectional + interview | Mixed | 31 (100%) | High risk girls from a school in a high crime, urban neighbourhood with high levels of youth gang activity | Household structure | Family affective characteristics (control & warmth) | Abuse |
| 18 | Jagers et al. (2013) | USA | Longitudinal | Quantitative | 5919 (50%) | Adolescents living in extreme poverty, from the Mobile Youth Service | - | Family cohesion (warmth) | - |
| 19 | Fleisher & Krien (2004) | USA | Longitudinal | Quantitative | 74 (100%) | Sample of female gang members in a poor, Black community | Household structure | - | Abuse, substance use |
| 20 | Miller (2000) | USA | Cross-sectional + interview | Mixed | 94 (100%) | Female gang and non-gang members in two cities | Family gang affiliation | Family problems (control & warmth) | Abuse, substance use |