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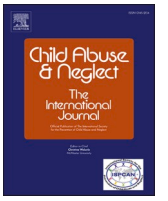

Neighborhoods and child abuse: Multiple informant perspectives

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ABSTRACT

Introduction: Using data from the nationally representative longitudinal Future of Families and Child Wellbeing Study, the current study sought to examine associations between neighborhood disorder and physical characteristics of the neighborhood at child age three with the likelihood of experiencing physical and psychological abuse and neglect at age five.
Methods: Negative binomial regression and zero inflated negative binomial regression models were used to estimate the associations.
Results: Resident perceptions of neighborhood disorder and outside observation of neighborhood physical characteristics were both found to be independently related to the likelihood of physical assault. Resident perceptions were related to psychological aggression. A more positive perception of the neighborhood environment for children (lack of neighborhood disorder) and physical characteristics of the neighborhood were protective against maltreatment. These relationships were not significant for neglect.
Discussion: Neighborhood environment is a crucial contributor to maltreatment risk. Findings from the present study showed that multiple perceptions of neighborhood quality were associated with lower risk for child physical assault and psychological aggression. Mothers' perceptions of a more positive neighborhood environment were associated with significantly lower physical assault and psychological aggression scores.

1. Introduction

Neighborhoods exert strong influences on families. Understanding the pathways through which neighborhoods serve as risk and protective factors against maltreatment is critical for informing child maltreatment prevention efforts. Residents perceptions of disorder and the external physical environment of the neighborhood may impact parents' ability to care for their children. If parents feel higher levels of stress or hopelessness, they may face more challenges in caring for their children. The current study examines mothers' perceptions of her own neighborhood in terms of crime and other disorder as well as outsider perceptions of the neighborhood physical environment. Understanding the extent to which these two sources of information relate to abuse and neglect has important implications for screening and intervention. If residents' perceptions of their neighborhood and outside observer perceptions independently relate to maltreatment, it would be unnecessary for researchers and clinicians to screen on neighborhood characteristics when external information is available. Relatedly, if both sources of data are predictive, when survey data on neighborhood perceptions are available from residents, it would not be necessary for survey proctors to record their observations of the neighborhood.

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2. Background

2.1. Child abuse

Child maltreatment is a significant problem in the United States, with 618,000 substantiated child abuse and neglect victims in federal fiscal year 2020 (United States Department of Health & Human Services, 2022). Of these 618,000 children, approximately 99,000 children were victims of physical abuse, 40,000 were victims of psychological abuse, and 470,000 were victims of neglect. Over the first 18 years of life, it is estimated that 1 in 8 U.S. children will be substantiated victims of child maltreatment (Wildeman et al., 2014). Child maltreatment has deleterious consequences for children and families, with victims of maltreatment being more likely to have academic, social, and behavioral challenges (Pei, Yoon, Maguire-Jack, & Lee, 2022), physical and mental health issues (Cicchetti, Hetzel, Rogosch, Handley, & Toth, 2016), and longer-term consequences with higher rates of involvement in other systems such as juvenile justice and adult corrections (Widom, 2017). In addition to neighborhood context, there are a number of factors associated with child abuse, including the parent-child relationship, parent perception of the child as a problem, parent anger/hyper-reactivity, child social competence, parent age, and high family conflict and low family cohesion (Stith et al., 2009).

2.2. Neighborhoods and child abuse

Neighborhoods can potentially serve as a source of risk or protection for families. The social-ecological model (Bronfenbrenner, 1976) suggests that factors at multiple levels influence individuals. It is believed that child-, parent-, family-, community-, and society-level factors influence the possibility of child abuse and neglect (Belsky, 1980). Child-, parent-, and family-level factors include age, education, relationship, and prior experiences, while community-level factors include aspects such as neighborhood rates of poverty and unemployment, interactions with other residents, crime, and physical characteristics. Prior research suggests that the neighborhood in which families live impacts the likelihood that a parent maltreats, with stronger bonds between neighbors serving a protective role (Maguire-Jack, Yoon, & Hong, 2021; McLeigh, McDonell, & Lavenda, 2018).

Neighborhood disorder relates to perceptions of social problems within a neighborhood, such as the presence of crime, criminals, substance misuse, loitering, and graffiti (Coulton, Crampton, Irwin, Spilsbury, & Korbin, 2007). Social control, on the other hand, relates to the ability of residents to intervene on behalf of the common good (Sampson, 1986). Neighborhood disorder is believed to be related to social control, in that residents may feel powerless or afraid to take a prosocial role in their own communities when they perceive high levels of danger (Gracia & Herrero, 2006). One of the pathways through which neighborhood disorder is thought to impact the likelihood of child maltreatment is through diminished social control within the neighborhood. That is, when there are high rates of crime and other social problems occurring within the neighborhood, residents have more difficulty intervening on such issues (Coulton et al., 2007). Parents may also be more likely to maltreat in neighborhoods with high levels of social disorder because of increased stress on parents in their day-to-day lives. Parents may fear allowing their child to play outdoors, leading to increased rambunctiousness of children and reduced respite time for parents. Physical characteristics of neighborhoods may also contribute to the likelihood of maltreatment. Research has indicated vacant housing as a strong predictor of child abuse and neglect (Coulton, Richter, Korbin, Crampton, & Spilsbury, 2018; Deccio, Horner, & Wilson, 1994; Zuravin, 1989). Vacant housing may be the result of "population loss, neighborhood deterioration, and can attract social disorder" (Coulton et al., 2018). To examine how caregivers linked their neighborhood built environment to potential child maltreatment, a qualitative analysis of interviews of 400 adult residents was completed (Haas, Berg, Schmidt-Sane, Korbin, & Spilsbury, 2018, p. 12). Findings included housing density being seen as promoting a natural defense against maltreatment, the built environment shaping family dynamics by providing places to lower caregivers' stress, and internalizing the neighborhood environment. Haas et al. speculate that "the absence of a recreational center or park, crowded living conditions, exposed to deteriorating infrastructure - contributed to a sense of restricted agency, which may erode caregivers' internal resources, and in turn, increase the risk of child maltreatment" (p. 175, Haas et al., 2018). Latkin & Curry had previously made a similar finding where depression showed a strong association between perceived neighborhood characteristics and depression (Haas et al., 2018). Depression has been linked with child maltreatment in primary caregivers receiving home visiting services (Easterbrooks et al., 2013). Additionally, physical disorder, such as litter, graffiti, and abandoned houses has been linked to neighborhood crime and violence (Chen & Rafail, 2022; Hoyle, Chamberlain, & Wallace, 2022; Wei, Hipwell, Pardini, Beyers, & Loeber, 2005). Higher perceived levels of violence in neighborhoods has been associated with higher rates of child abuse and neglect (Lynch & Cicchetti, 1998).

2.3. Additional factors contributing to child abuse

Whereas high levels of neighborhood disorder may be associated with increased child maltreatment, families living in the same neighborhoods experience vastly differing risks. Independent of neighborhood quality, for example, maltreatment rates vary by household poverty status as well as race and ethnicity (Kim & Drake, 2018). Poor maternal mental health has also been associated with increased risk for child maltreatment (Turney, 2011). A systematic review and meta-analysis found that mothers who struggled with anxiety or depression when children were young displayed an approximately threefold risk for maltreatment (Ayers, Bond, Webb, Miller, & Bateson, 2019). Maternal depression has been associated with increased physical abuse, (Chung, McCollum, Elo, Lee, & Culhane, 2004; Shin & Stein, 2008), psychological abuse (Conron, Beardslee, Koenen, Buka, & Gortmaker, 2009), and neglect (Turney, 2011). Unique household-level factors may contribute risk to which households experience maltreatment in context of neighborhood disorder.

2.4. Contributions of the current study

Although prior research has focused on either the built environment or neighborhood disorder, it is unknown whether these two factors independently influence maltreatment once the other is controlled. The current study builds on the prior work by concurrently examining neighborhood disorder and external neighborhood physical characteristics and their relationship to child abuse. The study is strengthened by the use of multiple informants for understanding the neighborhood. While much of the previous work has focused on residents own perceptions of the neighborhood, the current study utilizes both parent perspective of neighborhood disorder in a measure of neighborhood environment for children and outsider perspective of the neighborhood physical characteristics in a measure of external environment. The use of multiple informants allows for understanding whether studies relying on a single type of information (e.g. parents' perceptions only or outside observers only) is accurate in understanding the key aspects of neighborhoods important for child maltreatment. The specific research questions examined were: (1) Does a mother's perception of the disorder within her neighborhood relate to physical abuse, psychological abuse, and neglect? and (2) Does an outside observer's perception of the physical neighborhood environment relate to physical abuse, psychological abuse, and neglect? We hypothesize that both perspectives will be related to physical abuse, psychological abuse, and neglect.

3. Methods

3.1. Data and sample

The data source for this paper was the Future of Families and Child Wellbeing Study (FFCWS), a longitudinal birth cohort study of 4898 children born in large U.S. cities (population size of over 200,000) between the years 1998 and 2000. Mothers were interviewed shortly after the child's birth, and fathers were interviewed by phone. Follow-up interviews were conducted at the child ages of 1, 3, 5, 9, 15, and 22. The sampling strategy included oversampling births to unmarried mothers by 3 to 1. This paper focuses on predictors at child age 3 and outcomes at child age 5. We limited the sample to 1401 families with complete data on all study variables. Unrestricted data are available from Future of Families.

Measures.

3.1.1. Key dependent variables

The key variables of interest were physical assault, psychological aggression, and neglect experienced at child age 5. These three variables were measured from the Conflict Tactics Scales Parent-Child (CTSPC) (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). It included five questions on physical assault with behaviors the mother may have done in the past year, such as “slapping ‘the child’ on the bottom with something like a belt, hairbrush, a stick, or some other hard object” or “shook ‘the child.’” The interim reliability for the physical assault subscale was 0.55 (Straus et al., 1998). There were five questions on psychological aggression. For example, the number of times the mother “shouted, yelled, or screamed at” the child or “said they would send ‘the child’ away or would kick ‘the child’ out of the house.” The interim reliability for the psychological aggression subscale was 0.60 (Straus et al., 1998). There were also five questions related to child neglect, for example the number of times the mother “was too drunk or high to care for the child.” The inter-item reliability for the neglect subscale was 0.25. The inter-item reliabilities for these three subscales are lower than the commonly accepted standards for use. However, maltreatment measures (including the CTSPC specifically) commonly have low inter-item reliability, due to the phenomenon that maltreatment behaviors do not “hang together,” that is, a parent who slaps their child may not also hit them with a hairbrush (Straus et al., 1998). Possible responses for each subscale included “once”, “twice,” “3 to 5 times,” “6 to 10 times,” “11 to 20 times,” “more than 20 times,” “this has never happened,” or “this has happened but not in the past year.” Response options were scaled so that a higher number related to more incidents. As recommended by the scale developer, for all three subscales, responses were scored by finding their midpoint. When parents indicated “this has happened before,” or “this has never happened” a 0 was assigned. Responses for once and twice are assigned numbers equal to their response category. For 3–5 times, 6–10 times, and times the midpoint is assigned. Finally, for more than 20 times, the suggested midpoint is 25 (Straus et al., 1998).

3.1.2. Key independent variables

Predictor variables were taken from when the child was age 3. These variables included the mother's neighborhood perception and the outside observer's neighborhood impression.

Neighborhood Environment for Children was measured from 8 items from the neighborhood disorder subscale of the Neighborhood Environment for Children Scale (Coulton, Korbin, & Su, 1999; Coulton, Korbin, Su, & Chow, 1995). It was measured as the mother's self-report of her perception of various problems in her neighborhood. The scale consists of statements that assess the safety of the neighborhood environment including, “how often does this happen – drug dealers or users hanging around?” and “how often does this happen – gang activity?” Answer options are “frequently,” “sometimes,” “rarely,” and “never” with the less often an item occurs being associated to a higher number response. This scale was reverse coded, to indicate a positive environment for children.

A subscale related to the exterior environment of the neighborhood from the Home Observation Measurement of the Environment (HOME) Scale (Bradley, Caldwell, & Corwyn, 2003) was used to understand the neighborhood further. The HOME scale which is used to measure the family environment (Bradley et al., 2003). It consists of 5 questions which assess the neighborhood surrounding the participant's home. The first question, “garbage, litter, or broken glass in street, sidewalk, or in yards” has the answer choices of “yes, almost everywhere,” (4) “yes, quite a bit,” (3) “yes, but not a lot,” (2) and “almost none.” (1). The second question, “general condition of most of the buildings on the block,” has the answer choices of “badly deteriorated,” (4) “poor condition with peeling paint and need

of repair," (3) "fair condition," (2) and "well-kept with good repair and exterior surface" (1). The third question, "Graffiti on buildings/walls of buildings on block" has the answer options of "yes, almost everywhere," (4) "yes, quite a bit," (3) "yes, but not a lot," (2) and "none" (1). "Vacant, abandoned, or boarded-up buildings on block" has the answer choices of "yes, 4 or more buildings," (4) "yes, 2 to 3 buildings," (3) "yes, one building," (2) and "no" (1). Finally, the fifth question "abandoned vehicles on the block" has the answer choices of "4 or more," (4) "2 or 3," (3) "only one," (2) and "no" (1). Higher totals on the HOME subscale indicate more unsafe environmental factors.

3.1.3. Control variables

Control variables used were economic hardship, number of children in the home, number of adults in the home, maternal age, maternal education, maternal partner status, maternal anxiety, maternal depression, and maternal racial and ethnic identity. Economic hardship was measured as the count of 8 hardships experienced within the last year. For example, "in the past year, did you not pay your full rent or mortgage?" Number of children in the home, the number of adults in the home, and maternal age were all measured as continuous variables. Maternal age indicated the age of the mother at the time of the focal child's birth. Maternal education was measured as a dichotomous variable with "0" indicating education below that of a high school education, GED, or equivalent and "1" indicating a high school education, GED, or equivalent, or above. Maternal partner status was also measured as a dichotomous variable with "1" indicating living with or married to a partner and "0" indicating not living with or married to a partner. Maternal anxiety and maternal depression were both dichotomized with "1" indicating that mother meets anxiety or depression criteria and "0" meaning that mother does not meet those criteria. Maternal race or ethnic identity Race was included as a series of dichotomous variables for Black or African American, Hispanic or Latinx, and other race or identity, with White serving as the reference group.

3.2. Analysis

Negative binomial models were conducted to account for the count nature and overdispersion of the outcome variables. Psychological aggression did not have an overabundance of zeroes; only 72 out of 1403 responses indicated "never" or "not in the past year" on all questions regarding psychological aggression. On the other hand, physical assault had 255 zeroes and neglect had 1248 zeroes. As a result, the psychological aggression model was tested using a standard negative binomial regression while physical assault and neglect were tested using a zero-inflated negative binomial regression.

4. Results

The descriptive statistics are provided in Table 1. In terms of physical assault, the average level was 13.59, indicating an average of about 14 acts within the past year. For psychological aggression, the average was 28.01, indicating an average of 28 acts in the past year. For neglect, the average was 0.50, indicating <1 act in the past year. In terms of the neighborhood environment for children, the average level was 3.11, which indicates that across children, the problematic neighborhood conditions, such as gang presence, were rarely seen within the study neighborhoods. On the HOME Scale, the average score was 1.39, indicating that the exterior of homes within the study neighborhoods had low levels of disrepair. The average number of economic hardships mothers experienced at age 3 was 0.94 or about 1 instance of economic hardship in the past year. The average number of children in the home at child age 3 was 2.4. The average number of adults in the home at child age 3 was 1.96. Average maternal age at child age 3 was 28. In terms of education, 73.20 % of mothers in the sample had at least a high school diploma and 60.37 % were living with a partner at child age 3. 5.06 % of mothers reported anxiety and 23.02 % reported depression at child age 3. Of the participants, 54.74 % identified as Black or African American, 21.24 % identified as Latinx or Hispanic and 2.99 % identified as another racial identity.

Table 1
Demographic characteristics ($N = 1401$).

Variable	Mean (Std. dev.) or %	Range
Conflict Tactics Scale: physical assault	13.604 (0.448)	0–125
Conflict Tactics Scale: psychological aggression	28.045 (0.567)	0–100
Conflict Tactics Scale: neglect	0.501	0–35
Neighborhood Environment for children	3.222 (0.016)	1–4
Neighborhood HOMEs external appearance	1.375 (0.011)	1–4
Economic hardship	0.885 (0.02)	0–7
Number of children	2.3 (0.021)	0–10
Number of adults	2.054 (0.014)	1–9
Maternal age	28.2 (0.093)	16–50
Mothers with at least a high school diploma	71.866 %	n/a
Mothers living with a partner	63.657 %	n/a
Maternal anxiety	4.57 %	n/a
Maternal depression	20.593 %	n/a
Maternal race/ethnicity: Black and/or African American	48.136 %	n/a
Maternal race/ethnicity: Hispanic and/or Latinx	26.69 %	n/a
Maternal race/ethnicity: another identity	3.763 %	n/a

Table 2 displays the results of the negative binomial regression models. The results show that a one-unit increase in positive neighborhood environment for children is associated with an expected decrease in physical assault by a factor of 0.91 and psychological aggression by a factor of 0.90 in the past year. This relationship was not significant for neglect. A one-unit increase in positive neighborhood HOMEs exterior appearance was associated with an expected decrease in physical assault by a factor of 0.86 in the past year. This relationship was not significant for psychological aggression or neglect. In terms of control variables, maternal age was associated with a lower level of physical assault and psychological aggression. economic hardship and depression were associated with higher levels of both physical and psychological abuse, while maternal age was associated with lower levels of both. Compared to White mothers, Black mothers reported higher levels of physical assault. Higher levels of education were related to lower levels of neglect.

5. Discussion

Neighborhood environment is a crucial contributor to maltreatment risk. Findings from the present study showed that multiple perceptions of neighborhood quality were associated with lower risk for physical assault and psychological aggression, controlling for race, ethnicity, economic hardship, and a number of other maternal- and household-level characteristics. Mothers' perceptions of a more positive neighborhood environment – marked by less drug and gang activity – were associated with significantly lower physical assault and psychological aggression scores. Outsiders' observations of the condition of household's surrounding block – marked by the absence of trash, graffiti, drug paraphernalia, and significant deterioration – were related to significantly lower physical assault. The present study thus contributes important insights into the unique environmental drivers of abuse.

Findings converge with earlier research pointing to the significance of neighborhood environment for child well-being and family functioning. High levels of neighborhood disadvantage have been previously linked with child maltreatment (Pei et al., 2022; Seon, 2021), and neighborhood built environment has been associated with maltreatment risk in complex ways (Haas et al., 2018). Others have found no association between neighborhood economic disadvantage and physical abuse when accounting for perceptions of neighborhood dangerousness (Kotlaja, Fagan, & Wright, 2020). The present study finds that even accounting for preexisting household-level risk factors, perceptions of neighborhood safety and positive environment are associated with lower maltreatment. It is possible that the stress of living in poor quality, dangerous environments increases the likelihood of caregivers engaging in maltreatment behaviors. Highly distressed and under-resourced neighborhoods may lack the supports for parents to engage in healthy, positive parenting; similarly, neighborhoods with high levels of problems may lack opportunities for children to play outside and engage with peers, increasing behavior problems that strain caregivers. By incorporating multiple perspectives of neighborhood quality, the present study informs understanding of the ways in which neighborhood environment relates with maltreatment.

We did not find an association between neighborhood quality and child neglect. This may be due, in part, to the low incidence of reported neglect within the study sample. Although neglect makes up approximately 80 % of all child welfare cases (United States Department of Health and Human Services, 2022) in this study of self-reported neglect, 89 % of parents reported zero neglectful acts in the past year. Detecting predictors of something with such a low incidence is very difficult.

Beyond neighborhood quality, economic hardship was associated with increases in both maltreatment types. Low-income families

Table 2
Negative binomial regression results estimating the relationship between neighborhood variables and child abuse ($N = 1401$).

Variable	Physical assault Zero inflated negative binomial regression model IRR (95 % CI)	Psychological aggression Negative binomial regression model IRR (95 % CI)	Neglect Zero inflated negative binomial regression model IRR (95 % CI)
Neighborhood environment for children	0.90** (0.84, 0.97)	0.90*** (0.84, 0.95)	1.08 (0.89, 1.30)
Neighborhood HOMEs external appearance	0.86* (0.77, 0.97)	0.91 (0.82, 1.01)	0.90 (0.63, 1.27)
Economic hardship	1.04 (0.99, 1.08)	1.05* (1.01, 1.09)	0.96 (0.84, 1.10)
Number of children	1.02 (0.97, 1.07)	1.03 (0.99, 1.07)	1.11 (0.98, 1.25)
Number of adults	0.97 (0.91, 1.04)	0.98 (0.93, 1.04)	1.04 (0.89, 1.22)
Maternal age	0.98*** (0.97, 0.99)	0.98*** (0.98, 0.99)	0.99 (0.96, 1.02)
Mothers with at least a high school diploma	1.07 (0.94, 1.23)	1.04 (0.93, 1.17)	0.64* (0.44, 0.94)
Mothers living with a partner	0.93 (0.82, 1.05)	1.00 (0.90, 1.12)	0.72 (0.51, 1.01)
Maternal anxiety	1.00 (0.77, 1.31)	1.02 (0.81, 1.29)	0.99 (0.50, 1.97)
Maternal depression	1.13 (0.98, 1.30)	1.10 (0.98, 1.25)	1.13 (0.75, 1.70)
Maternal race/ethnicity: Black and/or African American	1.23** (1.05, 1.43)	1.06 (0.92, 1.21)	1.37 (0.77, 2.44)
Maternal race/ethnicity: Hispanic and/or Latinx	1.02 (0.85, 1.23)	0.95 (0.81, 1.10)	1.10 (0.59, 2.03)
Maternal race/ethnicity: another identity	0.98 (0.69, 1.40)	0.99 (0.74, 1.33)	2.22 (0.89, 5.59)
	LR $\chi^2(13)$: 61.82 P(χ^2) = 0.00	LR $\chi^2(13)$: 52.63 P(χ^2) = 0.00	LR $\chi^2(13)$: 21.86 P(χ^2) = 0.06

Note: IRR = incidence rate ratio, CI = confidence interval.
* $p \leq 0.05$.
** $p \leq 0.01$.
*** $p \leq 0.001$.

display higher rates of maltreatment and are disproportionately represented in the child welfare system (Jonson-Reid, Drake, & Kohl, 2009), likely due to a combination of increased need and reporting bias. Difficulty meeting basic needs causes extreme stress and interferes with healthy, positive parenting (Berger, Font, Slack, & Waldfogel, 2016; Marçal, 2022a; Warren & Font, 2015). It is possible that household-level economic hardship and neighborhood quality correlate such that families struggling to make ends meet are also more likely to live in poorer quality neighborhoods; on the other hand, it is possible that families strain their finances in order to afford living in higher quality neighborhoods, thus inversing the relationship. Little is known about the complex tradeoffs weighed by low-income families in order to maximize inadequate resources, or how these complexities drive risk for maltreatment. Increased maltreatment risk may be a direct function of caregiver financial strain (Marçal, 2022a), or lack of resources and supports for families. The present study points to the unique roles of both household- and neighborhood-level indicators of socioeconomic stability, highlighting multiple leverage points for intervention.

Maternal depression was likewise associated with significant increases in both maltreatment scores, but had nearly double the effect on psychological aggression compared to physical assault. A large body of research links maternal mental health problems with maltreatment (Marçal, 2018, 2022a; Wolford, Cooper, & McWey, 2019), particularly psychological abuse (Conron et al., 2009). Up to one in three mothers of young children experience depression (Turney, 2012; Wang, Wu, Anderson, & Florence, 2011) with low-income mothers at greatest risk (Mayberry, Horowitz, & Declercq, 2007), impacting millions of women's well-being and family functioning. Prior research on the link from maternal depression and parenting behaviors suggest a complex relationship (Cuijpers, Weitz, Karyotaki, Garber, & Andersson, 2015; Turney, 2011) that requires further study. The present study highlights the role of maternal depression in increasing risk for adverse parenting above and beyond household- and neighborhood-level conditions, suggesting that increased supports for vulnerable mothers are needed to promote maternal mental health and protect children.

A number of implications for maltreatment prevention emerge from the present study. First, investments in low-income neighborhoods that prioritize the built environment, poverty reduction, and adequate housing and services to reduce perceptions of danger and promote a positive environment for children may mitigate maltreatment risk for at-risk communities. Lack of affordable housing throughout the United States forces low-income families to make complex tradeoffs between neighborhood quality, housing quality, and meeting a range of other basic needs that may compromise healthy family functioning (Marçal, 2022b). Revising zoning laws that allow greater density of housing and addressing historically racist real estate practices can help reduce isolation and marginalization of low-income, minority populations in distressed neighborhoods (Schuetz et al., 2019; Turner, 2015). Place-based interventions that remediate unused land and vacant buildings can reduce neighborhood violence and promote safe, child-friendly environments (Hohl et al., 2019). Second, routine maternal mental health screenings should continue past the postpartum period given the association between depression and maltreatment. Accessible community supports for mothers struggling with poor mental health such as peer support groups and telehealth can alleviate the burden of mental disorder on low-income households. Measures that offer support throughout early childhood such as paid maternity leave policies, affordable childcare, and Medicaid coverage for a range of treatment options can promote well-being for mothers and their children (Knitzer, Theberge, & Johnson, 2008).

5.1. Limitations

Findings must be considered in context of study limitations. First, Future of Families sampled exclusively urban families (Reichman, Teitler, Garfinkel, & McLanahan, 2001), and findings cannot be generalized to those in suburban or rural settings. It is possible that observable indicators of neighborhood quality – or that the function of neighborhood quality – differs in less densely populated areas. Second, the key dependent variable for the study, maltreatment behaviors, relied on mothers' self-report. While Future of Families procedures took measures to protect mothers' confidentiality, it is possible that maltreatment prevalence was underreported due to social desirability bias. Additionally, this measure excluded more severe forms of abuse captured by the CTSPC, for example burning a child. As a result, the measure more accurately captures harsh physical discipline as opposed to child abuse per se. The measure is not a measure of maltreatment that would be considered abuse or neglect by the child protective services system. Third, it is possible that maternal depression relates with mothers' perceptions of neighborhood quality; although the inclusion of outside observations counteracts this bias, the impact of reporter mental health is an important consideration for the reliability of perceived measures. Fourth, neighborhood quality cannot be considered an entirely exogenous factor; families may choose where to live, and widespread racial residential segregation in U.S. cities contributes to non-random clustering of families in certain neighborhoods (Boustan, 2013). Low-income families make complex tradeoffs about where to live that may remain largely unseen (Rosenblatt & DeLuca, 2012). More research is needed into the ways neighborhood choice interacts with household-level characteristics in relation to maltreatment risk. Finally, there may be other important variables related to family functioning that were not available in the Future of Families data, and therefore not included in our analyses.

6. Conclusion

The present study builds on a body of research showing the importance of neighborhood factors in predicting maltreatment risk. Living in a neighborhood with more positive environments for children and less physical deterioration was associated with lower physical and psychological maltreatment two years later. Investment in low-income, marginalized neighborhoods may aid in reducing maltreatment risk, child welfare involvement, and family separation.

Data availability

Data will be made available on request.

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