Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

HHS Public Access

Author manuscript

Child Dev Perspect. Author manuscript; available in PMC 2018 March 09.

Published in final edited form as:

Child Dev Perspect. 2017 June ; 11(2): 85–89. doi:10.1111/cdep.12212.

New Directions and Challenges in Preventing Conduct Problems in Early Childhood

Daniel S. Shaw and **Lindsay E. Taraban**

University of Pittsburgh

Abstract

In this article, we review advances in developing and preventing conduct problems in early childhood and identify challenges. Among the topics we address are expanding the targets of prevention programs beyond improving parenting skills, implementing family-based interventions during early childhood for families living in impoverished communities, making greater use of community platforms that serve young children at risk for early conduct problems, and incorporating techniques such as motivational interviewing to improve families' engagement in nontraditional mental health settings.

Keywords

child conduct problems; early childhood; antisocial behavior; parenting; maternal depression

During the past three decades, our understanding of the developmental course and prevention of children's early conduct problems has advanced exponentially (1). In terms of understanding risk factors and pathways leading to conduct problems that start early, beginning with the pioneering works of Campbell and colleagues (2) and Richman, Stevenson, and Graham (3), researchers have developed a richer understanding of the continuity of early conduct problems from early childhood to adolescence, and of the child, family, and community risk factors associated with their genesis and persistence. A similar developmental progression has occurred as a result of research on preventing and treating conduct problems during early childhood (4, 5), with a well-established literature on the use of parent training programs in early childhood to reduce subsequent conduct problems and more serious forms of antisocial behavior (6). These developments have been reviewed in prior work (1); in this article, we discuss recent findings that advance this work by identifying early childhood precursors of serious antisocial behavior. We also discuss challenges in using and expanding evidence-based interventions for preventing the development of conduct problems in early childhood.

Correspondence concerning this article should be addressed to: Daniel S. Shaw, 210 S. Bouquet Street, 4101 Sennott Square, University of Pittsburgh, Pittsburgh, PA 15260-0001; casey@pitt.edu.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

STUDYING AND PREVENTING CONDUCT PROBLEMS IN EARLY CHILDHOOD: WHY START SO YOUNG?

For this article, conduct problems include primarily oppositional and aggressive behaviors; these types of behaviors are often accompanied by symptoms of attention deficit hyperactivity disorder. Identifying very young children at risk for early and persistent trajectories of conduct problems is valuable because such early starters show a more persistent and chronic trajectory of antisocial behavior from middle childhood to adulthood (7) and because a subset of early-starting youth can be identified at ages 2 and 3 (2, 3, 8). In terms of prevention, children's conduct problems and parenting practices associated with their persistence appear to be more malleable during early childhood than they are later (9), with greater efficacy for treating young children with clinically elevated rates of conduct problems than for older children with such high levels (10, 11). The more positive outlook for intervening earlier may, in part, be attributable to the shorter duration of children's problem behavior at this age, the increased likelihood of parents being optimistic about changing their children's behavior, and the greater probability of children growing out of problem behavior in early childhood. However, more empirical efforts are needed to validate this hypothesis.

RISK FACTORS ASSOCIATED WITH EARLY-EMERGING CONDUCT PROBLEMS AND VIOLENT BEHAVIOR

As noted earlier, research suggests that risk factors across neurodevelopmental child, family, and community domains contribute independently and interactively to early childhood conduct problems and subsequent antisocial behavior (1, 12). Although a few studies have examined the early childhood precursors of adolescent and adult antisocial behavior beginning as young as infancy and the toddler period (8, 13), most of this research has focused on broadly defined types of disruptive behavior and has not differentiated violent forms of antisocial behavior from less serious forms. Although possessing illicit substances and trafficking, theft, and other nonviolent outcomes are important targets for prevention on their own, violent acts represent a more serious concern for perpetrators, their families, victims, and society. Hence, we examined 310 low-income boys from 1½ through 18 years who were recruited from Women, Infants, and Children Nutritional Supplement (WIC) centers in an urban community, looking at juvenile court records to determine whether different types of antisocial behavior could be differentiated from one another, with a focus on boys' violent behavior (14). First, we divided boys into three groups: those with no record of violent or nonviolent juvenile petitions (being arrested and brought to court), those with a history of petitions involving only nonviolent behavior, and those with a history of petitions for violent behavior. Violent behavior was defined by the presence of at least one of the following types of court petitions: homicide, forcible rape, sexual/physical assault, robbery, arson, or possessing weapons. Then we used early childhood indicators from child, family, and community domains, assessed from ages 1½ to 3½ years, to differentiate groups from one another, including such factors as family income, minority status, parent reports of early oppositional behavior, observations of children's emotion regulation while attempting to delay gratification, conflict between parents, neighborhood deprivation, maternal

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

depression, and rejecting parenting. The only factor that differentiated nonoffenders from nonviolent offenders was family income, with offenders more likely to come from families with less income. However, many more factors differentiated violent offenders from nonoffenders, including family income, children's oppositional behavior, emotion regulation, and minority status (i.e., being African American). Finally, violent versus nonviolent offenders were distinguished by high early oppositional behavior, low emotion regulation, and high levels of rejecting parenting in early childhood.

The implications of these findings are critical: Boys living in urban poverty—particularly African American boys—who have an early history of oppositional behavior and difficulty regulating emotions and whose parents show high levels of rejecting parenting appear to be at greater risk for engaging in very serious forms of antisocial behavior during adolescence. These findings suggest a need to identify such boys as early as possible and implement evidence-based interventions (10, 15–17) to prevent them from starting on this dangerous trajectory of crime and violence.

PREVENTING EARLY CONDUCT PROBLEMS THROUGH EARLY INTERVENTION

We now turn to early prevention and intervention, focusing on important issues and potential new directions. Although meta-analytic reviews of the effectiveness of psychosocial interventions to treat young children's disruptive behavior have not focused exclusively on children younger than 5—most routinely include children up to 7–10 years (6, 18–20)—in the relatively few studies of children from birth to age 4, younger children's later conduct problems were prevented or reduced at levels comparable to older children. The overall picture is promising, with effect sizes across programs ranging from 0.25 (18) to 0.83 (6). More effective programs are typically designed to address emerging conduct problems specifically, not other types of problem behavior or the general quality of parent–child relationships; these programs typically take a social learning perspective (21) and reduce parent–child coercive interactions by increasing parents' reinforcement of children's positive behavior in children and other forms of positive parenting (e.g., proactive parenting; 4, 5, 10, 17).

Rather than review this literature (see 1 for a review), in the rest of this article, we discuss challenges and opportunities for research in identifying, motivating, and treating children at risk for early-starting trajectories of conduct problems and more serious forms of antisocial behavior.

EXPANDING THE BREADTH OF TARGETS TO PREVENT EARLY-STARTING CONDUCT PROBLEMS

Although many early childhood preventive programs emphasize aspects of parenting (4, 9, 22), fewer target other family and child risk factors that independently affect early conduct problems or moderate associations between parenting and conduct problems (23). Especially relevant for families living in poverty are factors that chronically undermine parents'

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

attempts to provide sufficient economic and emotional resources for their children. Thus, family factors such as parents' well-being, feelings of satisfaction regarding social support within and outside the family, and typical parenting hassles are common correlates of living in poverty that are linked to early conduct problems (24). In addition, families living in poverty commonly struggle with extrafamilial issues such as securing affordable child care, preschool, nutritional food, and safe accommodations.

Another common correlate of poverty is maternal depression. Whereas approximately 17% of mothers with young children have elevated levels of symptoms of depression, the rate increases to approximately 50% in the context of poverty (25). In many studies of low-income families, maternal depression has been linked repeatedly to compromised caregiving and early conduct problems (16, 26). Although in some versions of the Family Stress Model (27), the effects of maternal depression on children's conduct problems are thought to be mediated by harsh and overcontrolled parenting, recent work suggests independent effects of maternal well-being on children's conduct problems after considering links to compromised caregiving (16, 23, 28). In addition to genetic transmission and mediation through compromised parenting, maternal depression may increase the probability of early-starting conduct problems through mothers' increased passivity in obtaining needed resources for the family (e.g., adequate employment, income, neighborhood quality, and child care).

In one study (29) after considering factors such as race, parents' criminality, and socioeconomic status, maternal depression in a group of low-income families independently predicted downward mobility—moving from moderately low-income neighborhoods to project neighborhoods and remaining in versus leaving project neighborhoods. In turn, living in project neighborhoods was related to more persistent conduct problems among children from 2 to 6 years. Another study, of an intervention (30), suggests that addressing maternal depression in isolation can have positive collateral effects on children's psychopathology: Mothers diagnosed with major depression disorder who had children with an internalizing disorder were treated with interpersonal psychotherapy or brief supportive psychotherapy. Therapy for the mother was associated with improvements in their school-age child's or adolescent's internalizing problem behavior. Children's behavior improved 3–6 months after their mothers improved independent of any treatment for the youth. And yet another study of early childhood and disruptive problem behavior (16) demonstrated similar effects on children's conduct problems from 2 to 4 years by improving maternal symptoms of depression. In that study, of low-income families recruited through WIC centers at three U.S. sites (urban, suburban, and rural communities; Early Steps Multisite Study), families who also met criteria for educational, family (e.g., maternal depression), or child (early conduct problems) risk were randomly assigned to the family check-up (FCU), a family-focused preventive intervention that incorporates motivational interviewing and evidence-based family management practices to prevent early-starting conduct problems. After considering changes associated with improvements in parenting, intervention effects on the growth of conduct problems were mediated by improvements in maternal depression from ages 2 to 3 years.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

MODERATORS OF INTERVENTION RESPONSE: LIVING IN URBAN POVERTY

Based on studies of contextual influences on emerging conduct problems and antisocial behavior from early childhood through adolescence, parental influence remains important from early childhood onward, but extrafamilial sources such as peers, schools, and neighborhood grow in importance in influencing the development, maintenance, and exacerbation of problem behavior (31–33). Can interventions initiated in early childhood have lasting protective effects on antisocial behavior that appears in youth when children live in high-risk neighborhoods with poorly resourced schools and many peers engaging in antisocial behavior? In fact, a common moderator of intervention effectiveness for conduct problems and later antisocial behavior is contextual stress, including poverty and its correlates (34). We challenged this notion using the same Early Steps Multisite cohort described earlier, with follow-up assessments of children's adjustment through age 9½. Consistent with previous work showing reduced intervention effects based on socioeconomic risk, intervention effects on teachers' reports of children's conduct problems at age 9½ were found only in the two thirds of families living in the relatively less deprived, albeit still low-income, neighborhoods, not for families living in the most deprived, primarily urban neighborhoods. However, and somewhat surprisingly, for families living in the most deprived, largely urban neighborhoods, the FCU indirectly reduced conduct problems at age 9½ by increasing positive parenting between 2 and 3 years (35). These findings suggest that instead of giving up on families of children with early-starting conduct problems that live in the most deprived neighborhoods, investing in the quality of their caregiving when they are toddlers (if not earlier) may prevent the emergence of long-term conduct problems and more serious forms of antisocial behavior.

EXPANDING THE ACCESSIBILITY AND PLATFORMS OF EVIDENCE-BASED PRACTICES

Another issue is identifying ways to increase the accessibility of parent training for families with children demonstrating early conduct problems or risk factors associated with emerging conduct problems (e.g., maternal depression), especially children and families living in poverty. Despite the greater risk for low-income children to demonstrate conduct problems, accessibility to parenting programs is a challenge. Thus, to reduce levels of early-starting conduct problems at the *population* level, identifying new ways to reach and engage low-income families with young children should be a priority. Fortunately, outreach programs exist, including research in Head Start centers (9) and at WIC centers (10, 17). Primary care centers, including maternity and pediatric units, are places where parents might be open to receiving behavioral health services because of the trust they typically place in physicians. One intervention, Durham Connects (36), uses nurses at birthing hospitals to assess the needs of parents with newborns and connect them to needed services. Similarly, another program, Video Interaction Project (37), has capitalized on the popularity and credibility of the Reach Out and Read program to initiate a video feedback intervention for parents; the intervention takes place at well-checkup visits for infants at pediatric centers and focuses on

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

increasing parents' contingent responsivity and sensitivity while teaching them to play with new toys with their children.

Although providing accessibility to services is one challenge for the field, engaging families with high levels of conduct problems in nontraditional settings represents another. Parents who use WIC services do so primarily to obtain food vouchers, pregnant women come to hospitals to give birth to their children, and parents typically make pediatric visits to address children's physical maladies. Thus, engaging families in mental health services using such nontraditional platforms is a challenge. In work using the FCU at WIC Centers, we have engaged about 90% of families with toddlers in two trials with children of varying urbanicity (10, 17). An important component of this success is embedding motivational interviewing into the intervention. Motivational interviewing (38) is a core feature of the FCU, used to promote changes in parenting, especially among high-risk families. This approach is particularly useful during developmental periods of biological or social transitions, most notably adolescence and the so-called terrible twos (39), when parents can find children's behavior challenging to manage. Motivational interviewing is just one example of a strategy that could be used to engage parents of at-risk toddlers and preschoolers in preventive interventions in nontraditional mental health settings. In the next decade, more innovative and creative methods will need to be developed to identify *and* engage parents of young children (including expectant parents) who are at risk for early-starting conduct problems.

CONCLUSION

Findings reviewed in this article suggest that child, family, and community risk factors for conduct problems in childhood and more serious forms of antisocial behavior in adolescence, including violent behavior, can be identified reliably in the first 3 years for boys in urban communities. We have highlighted some remaining challenges in using evidence-based, family-focused interventions to prevent such early-starting trajectories of conduct problems and antisocial behavior for children living in poverty. The four challenges are expanding the substantive targets of prevention programs to focus not only on parenting but also on factors that compromise caregiving quality and independently affect children's conduct problems, highlighting the need to optimize the quality of parent–child relationships in early childhood to buffer children from exposure to extrafamilial sources of risk in impoverished communities, making greater use of community platforms that serve low-income children to affect young children at risk for early-starting conduct problems, and incorporating techniques such as motivational interviewing in novel community platforms to improve our ability to engage families in preventative mental health services for their young children. Addressing these remaining challenges can significantly advance our understanding, prevention, and treatment of children's conduct problems in the coming years.

References

1. Shaw DS. Future directions for research on the development and prevention of early conduct problems. Journal of Clinical Child and Adolescent Psychology. 2013; 42:418–428. DOI: 10.1080/15374416.2013.777918 [PubMed: 23534691]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

2. Campbell SB, Pierce EW, March CL, Ewing LJ, Szumowski EK. Hard-to-manage preschool boys: Symptomatic behavior across contexts and time. Child Development. 1994; 65:836–851. DOI: 10.2307/1131422 [PubMed: 8045171]

3. Richman, M., Stevenson, J., Graham, PJ. Preschool to school: A behavioral study. London, UK: Academic Press; 1982.

4. Eyberg S. Parent–child interaction therapy: Integration of traditional and behavioral concerns. Child & Family Behavior Therapy. 1988; 10:33–46. DOI: 10.1300/J019v10n01_04

5. Webster-Stratton C, Hammond M. Treating children with early-onset conduct problems: A comparison of child and parent training interventions. Journal of Consulting and Clinical Psychology. 1997; 65:93–109. DOI: 10.1037/0022-006x.65.1.93 [PubMed: 9103739]

6. Comer JS, Chow C, Priscilla T, Chan MA, Cooper-Vince C, Wilson LAS. Psychosocial treatment efficacy for disruptive behavior problems in very young children: A meta-analytic examination. Journal of the American Academy of Child and Adolescent Psychiatry. 2013; 52:26–36. DOI: 10.1016/j.jaac.2012.10.001 [PubMed: 23265631]

7. Moffitt TE. Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. Psychological Review. 1993; 100:674–701. DOI: 10.1037/0033-295x.100.4.674 [PubMed: 8255953]

8. Shaw DS, Hyde LW, Brennan LM. Early predictors of boys' antisocial trajectories. Development and Psychopathology. 2012; 24:871–888. DOI: 10.1017/s0954579412000429 [PubMed: 22781860]

9. Webster-Stratton C, Reid JM, Stoolmiller M. Preventing conduct problems and improving school readiness: Evaluation of the Incredible Years Teacher and Child Training Programs in high-risk schools. Journal of Child Psychology and Psychiatry. 2008; 49:471–488. DOI: 10.1111/j.1469-7610.2007.01861.x [PubMed: 18221346]

10. Dishion TJ, Shaw DS, Connell A, Wilson MN, Gardner F, Weaver C. The family check up with high-risk families with toddlers: Outcomes on positive parenting and early problem behavior. Child Development. 2008; 79:1395–1414. DOI: 10.1111/j.1467-8624.2008.01195.x [PubMed: 18826532]

11. Olds D. Prenatal and infancy home visiting by nurses: From randomized trials to community replication. Prevention Science. 2002; 3:153–172. DOI: 10.1023/a:1019990432161 [PubMed: 12387552]

12. Poulton R, Moffitt TE, Silva PA. The Dunedin Multidisciplinary Health and Development Study: Overview of the first 40 years, with an eye to the future. Social Psychiatry and Psychiatric Epidemiology. 2015; 50:679–693. DOI: 10.1007/s00127-015-1048-8 [PubMed: 25835958]

13. Aguilar B, Sroufe A, Egeland B, Carlson E. Distinguishing the early-onset/persistent and adolescence-onset antisocial behavior types: From birth to 16 years. Development and Psychopathology. 2000; 12:109–132. DOI: 10.1017/s0954579400002017 [PubMed: 10847620]

14. Sitnick S, Shaw DS, Weaver C, Shelleby EC, Choe DE, Reuben J, … Taraban L. Early childhood predictors of extreme youth violence. Child Development. in press. Advance online publication.

15. Dishion TJ, Brennan LM, McEachern A, Shaw DS, Wilson MN, Weaver CM. The prevention of early onset problem behavior through periodic family check-ups in early childhood: A health maintenance model with indigent, high risk families. Journal of Abnormal Child Psychology. 2014; 42:343–354. DOI: 10.1007/s10802-013-9768-2 [PubMed: 24022677]

16. Shaw DS, Dishion TJ, Connell A, Wilson MN, Gardner F. Improvements in maternal depression as a mediator of intervention effects on early child problem behavior. Development and Psychopathology. 2009; 21:417–439. DOI: 10.1017/s0954579409000236 [PubMed: 19338691]

17. Shaw DS, Dishion TJ, Supplee LH, Gardner F, Arnds K. A family-centered approach to the prevention of early-onset antisocial behavior: Two-year effects of the family check-up in early childhood. Journal of Consulting and Clinical Psychology. 2006; 74:1–9. DOI: 10.1037/0022-006x.74.1.1 [PubMed: 16551138]

18. Kaminski JW, Valle LA, Filene JH, Boyle CL. A meta-analytic review of components associated with parent training program effectiveness. Journal of Abnormal Child Psychology. 2008; 36:567–589. DOI: 10.1007/s10802-007-9201-9 [PubMed: 18205039]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

19. Lundahl B, Risser HJ, Lovejoy MC. A meta-analysis of parent training: Moderators and follow-up effects. Clinical Psychology Review. 2006; 26:86–104. DOI: 10.1016/j.cpr.2005.07.004 [PubMed: 16280191]
20. Piquero AR, Jennings WG, Diamond B, Farrington DP, Tremblay RE, Welsh BC, Reingle Gonzalez JM. A meta-analysis update on the effects of early family/parent training programs on antisocial behavior and delinquency. Journal of Experimental Criminology. 2016; 12:229–248. DOI: 10.1007/s11292-016-9256-0
21. Patterson, GR., Capaldi, DM., Bank, L. An early starter model for predicting delinquency. In: Pepler, D., Rubin, RK., editors. The development and treatment of childhood aggression. Hillsdale, NJ: Erlbaum; 1991. p. 139-168.
22. Lieberman AF, Van Horn P, Ippen CG. Toward evidence- based treatment: Child-parent psychotherapy with preschoolers exposed to marital violence. Journal of the American Academy of Child & Adolescent Psychiatry. 2005; 44:1241–1248. DOI: 10.1097/01.chi.0000181047.59702.58 [PubMed: 16292115]
23. Shaw DS, Shelleby EC. Early-onset conduct problems: Intersection of conduct problems and poverty. Annual Review of Clinical Psychology. 2014; 10:503–528. DOI: 10.1146/annurev-clinpsy-032813-153650
24. Shaw DS, Bell RQ, Gilliom M. A truly early starter model of antisocial behavior revisited. Clinical Child and Family Psychology Review. 2000; 3:155–172. DOI: 10.1023/a:1009599208790 [PubMed: 11225751]
25. Chung EK, McCollum KF, Elo IT, Lee HJ, Culhane JF. Maternal depressive symptoms and infant health practices among low-income women. Pediatrics. 2004; 113:e523–e529. DOI: 10.1542/peds.113.6.e523 [PubMed: 15173532]
26. Gross H, Shaw DS, Burwell RA, Nagin DS. Transactional processes in child disruptive behavior and maternal depression: A longitudinal study from early childhood to adolescence. Development and Psychopathology. 2009; 21:139–156. DOI: 10.1017/s0954579409000091 [PubMed: 19144227]
27. Conger RD, Conger KJ, Elder GH Jr, Lorenz FO, Simons RL, Whitbeck LB. A family process model of economic hardship and adjustment of early adolescent boys. Child Development. 1992; 63:526–541. DOI: 10.2307/1131344 [PubMed: 1600820]
28. Yoshikawa H, Aber JL, Beardslee WR. The effects of poverty on mental, emotional, and behavioral health of children and youth. American Psychologist. 2012; 67:272–284. DOI: 10.1037/a0028015 [PubMed: 22583341]
29. Winslow EB, Shaw DS. The impact of neighborhood context on boys' early conduct problem trajectories in a low-income sample. Aggressive Behavior. 2007; 33:207–219. DOI: 10.1002/ab.20178 [PubMed: 17444527]
30. Swartz HA, Cyranowski JM, Yu C, Zuckoff A, Brent DA, Markowitz JC, … Frank E. Brief psychotherapy for maternal depression: Impact on mothers and children. Journal of the American Academy of Child and Adolescent Psychiatry. 2016; 55:495–503. DOI: 10.1016/j.jaac.2016.04.003 [PubMed: 27238068]
31. Dishion TJ, Ha T, Véronneau MH. An ecological analysis of the effects of deviant peer clustering on sexual promiscuity, problem behavior, and childbearing from early adolescence to adulthood. An enhancement of the life history framework. Developmental Psychology. 2012; 48:703–717. DOI: 10.1037/a0027304 [PubMed: 22409765]
32. Ialongo N, Werhamer L, Kellam S, Brown CH, Wang S, Lin Y. Proximal impact of two first-grade preventive interventions on the early risk behaviors for later substance abuse, depression, and antisocial behavior. American Journal of Community Psychology. 1999; 27:599–641. DOI: 10.1023/a:1022137920532 [PubMed: 10676542]
33. Leventhal T, Brooks-Gunn J. The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. Psychological Bulletin. 2000; 26:309–337. DOI: 10.1037/0033-2909.126.2.309
34. Evans GW. Child development and the physical environment. Annual Review of Psychology. 2006; 57:423–451. DOI: 10.1146/annurev.psych.57.102904.190057

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

35. Shaw DS, Sitnick S, Brennan LM, Choe DE, Dishion TJ, Wilson MN, Gardner F. The long-term effectiveness of the family check-up on school-age conduct problems: Moderation by neighborhood deprivation. Development and Psychopathology. in press.

36. Dodge KA, Goodman WB, O'Donnell K, Sato J, Guptill S. Implementation and randomized controlled trial of universal postnatal nurse home-visiting. American Journal of Public Health. 2014; 104:36–43. DOI: 10.2105/ajph.2013.301361

37. Mendelsohn AL, Valdez PT, Flynn V, Foley GM, Berkule SB, Tomopoulos S, … Dreyer BP. Use of videotaped interactions during pediatric well-child care to promote child development: A randomized, controlled trial. Journal of Developmental & Behavioral Pediatrics. 2005; 26:34–41. [PubMed: 15718881]

38. Miller, WR., Rollnick, S. Motivational interviewing: Preparing people to change addictive behavior. New York, NY: Guilford; 1991.

39. Shaw DS, Bell RQ. Developmental theories of parental contributors to antisocial behavior. Journal of Abnormal Child Psychology. 1993; 21:493–518. DOI: 10.1007/bf00916316 [PubMed: 8294650]