Relations Between Cumulative Risk and Hostile Attributional Bias in Middle Childhood: A Preliminary Examination

by

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ABSTRACT

The goal of the current study was to examine relations between cumulative risk in early childhood and hostile attributional bias at age eight. Cumulative risk was measured using the Life Events Calendar, a semi-structured parent interview about risk factors during their child's first eight years of life. For each of the 30 children in the sample, Total, Social, and Child Mental Health Risk indices were determined. Hostile attributional bias was assessed using the Social Information Processing Application (SIP-AP), a web-based, computerized measure developed to assess social information-processing. Children answered 15 multiple choice questions after each vignette, four of which were averaged to determine a Hostile Attributions composite for each child. Preliminary correlations between risk indices were significant as were preliminary analyses of cue interpretation variables. Correlations between cumulative risk and hostile attributional bias did not support the hypothesis, suggesting that further research should examine the relationship between risk factors in childhood and hostile attributional bias at age eight in a larger sample. If a relationship exists, future research should also identify potential mediators and moderators of this relationship.

Chapter 1

INTRODUCTION

Negative childhood experiences, such as familial adversity, abuse, caregiver separation, and neglect, can have a chronic (Ackerman & Brown, 2006) and toxic effect on the psychological and physiological outcomes of individuals (Luecken, Roubinov, & Tanaka, 2013). Multiple risk factors are associated with more adverse outcomes than risk factors in isolation (Evans, Li, & Whipple, 2013). This collection of multiple risk factors is known as cumulative risk and is based on the notion that the quantity of adverse factors is more detrimental to child development than the type of risk factor (Ackerman, Izard, Schoff, Youngstrom, & Kogos, 1999a). Children with high levels of cumulative risk have higher levels of problem behaviors (Ackerman et al., 1999a).

One outcome affected by early life experiences is the quality of peer relationships (Baldwin, 1992), which are important to the development of identity and the sense of self (Luecken, Roubinov, & Tanaka, 2013). Children who experience early adversity have difficulty responding adaptively to later challenges and may misinterpret neutral social situations as threatening or hostile (Luecken, Roubinov, & Tanaka, 2013). This misinterpretation is called a hostile attributional bias, (Jacobvitz & Hazen, 1999), a social cognitive pattern in which a child over-perceives hostility in ambiguous social interactions (Orobio de Castro, Merk, Koops, Veerman, & Bosch, 2005). This misinterpretation can lead to later negative outcomes associated with aggression (Dodge et al., 2015). Similarly to cumulative risk, hostile attribution bias

predicts negative outcomes in children such as behavior problems, interpersonal conflict, and violence (Orobio de Castro et al., 2005; Dodge et al., 2015). The goal of the current study was to examine whether a higher level of risk in early child is associated with hostile attributional bias in middle childhood.

Cumulative Risk

Children's behavioral and cognitive well-being is affected by an accumulation of risk factors (Sameroff, Seifer, Baldwin, & Baldwin, 1993). Examples of risk factors include caregiver mental health problems, caregiver unemployment, and stressful life events (Sameroff et al., 1993). As Amato and Keith (1991) explain, there is a systematic distribution of environmental risk. Children who experience one risk factor are more likely to experience others (Amato & Keith, 1991). Risk factors tend to group together and influence one another; as such, more of the variance in outcomes can be attributed to a cumulative risk index than a single risk indicator (Wachs, 1996). This synergistic nature of risk factors encourages the study of multiple risk indices rather than individual risk factors (Ackerman & Brown, 2006). Furthermore, cumulative risk, or number of risk factors a child experiences, is related to problem behaviors later in life (Ackerman, Schoff, Levinson, Youngstrom, & Izard, 1999b). When a child experiences high levels of cumulative risk, he or she is at a greater than average chance of developing problems later in life (Sameroff & Seifer, 1983). Higher levels of cumulative risk are also associated with outcomes such as higher levels of violence and physiological problems (Evans & Kim, 2007; Stoddard et al., 2012).

Risk factors in isolation are less detrimental than an accumulation of risk factors (Ackerman et al., 1999a). One seminal study analyzing early environmental risk was the Rochester Longitudinal Study (RLS) conducted by Sameroff, Seifer, Zax,

and Barocas (1987). During the RLS, researchers created a multiple-risk index that represented the presence or absence of ten risk factors (e.g., socioeconomic status, parental education and occupation, large family size, and stressful life events) (Sameroff et al., 1987). Compared to children with low cumulative risk scores, children with high cumulative risk scores had significantly worse outcomes involving child adjustment and socio-emotional functioning (Sameroff et al., 1987). Many studies have endorsed other risk factors that have a negative impact on child development: marital discord, legal involvement, housing transitions, parental relationship instability, caregiver transitions, substance abuse, and physical health problems (Ackerman & Brown, 2006; Rutter, 1979).

Hostile Attributional Bias

Some children also have deficits processing social information (Crick & Dodge, 1994). According to Crick and Dodge's (1994) social information-processing (SIP) model, a series of steps is involved when children process social information. More specifically, these steps include (1) encoding, (2) interpretation of cues, (3) clarification of goals, (4) response access, (5) response evaluation, and (6) behavioral enactment (Crick & Dodge, 1994).

One example of a deficit interpretation of peer intention (Step 2) that has been extensively studied is hostile attributional bias (Crick & Dodge, 1994). Hostile attributional bias is a social cognitive pattern in which some children over-perceive hostility when a peer's actions results in a negative outcome for them, but the intention of the peer was ambiguous (Orobio de Castro et al., 2005). Many interpersonal peer interactions are ambiguous, and children often use previous schemas to "fill in the blanks" with expectations based on past experiences (Baldwin, 1992). For example, if

a group of children is playing catch and a ball thrown by one of the children knocks over a child's marble tower, a child with a hostile attributional bias may interpret his or her intent as hostile even though it was actually not deliberate. Higher levels of hostile attributional bias are associated with worse outcomes, such as higher levels of reactive and proactive aggression and antisocial behavior, than are lower levels of hostile attributional bias (Orobio de Castro, 2005).

According to Pettit, Dodge, and Brown (1988), children who experience familial stress are more likely to display hostile attributional biases. Children draw on past experiences and memories when they receive, process, and respond to social cues (Crick and Dodge, 1994). In order to engage in social interactions, children indirectly use schemas and cognitive heuristics based on early life events and apply them to current situations (Crick & Dodge, 1994). It follows that children who have faced negative early experiences process social information differently than other children by filling in ambiguous information with negative cognitive schemas (Dodge, Pettit, Bates, & Valente, 1995).

Current Study

In summary, children who have experienced early adversity are at risk for developing detrimental social information processing patterns and aggression (Dodge, Bates, & Pettit, 1990). It remains unclear whether risk factors throughout childhood are related to hostile attributional bias in middle childhood. As such, the goal of the current study was to examine relations between risk factors in early childhood and hostile attributional bias at age eight. It was hypothesized that higher levels of risk would be associated with greater hostile attributional bias.

Chapter 2

METHODS

Participants

A total of 30 caregiver-child dyads participated in the current project. Children were recruited as infants to participate in a randomized clinical trial testing the efficacy of an intervention for parents involved with the child welfare system. Children were on average 8.58 years old (*SD*=.35) at the time of the present study. Nineteen of the children were female. Just under 85% of the children (*n* = 25) were African American or Biracial, and the remainder were white. Thirty percent (*n* = 9) were Hispanic or Latino, and 70% were non-Hispanic. Over half of the parents reported having completed high school (50% completed high school; 20% some college; 3.3% more than college). The average household income was approximately $25,000.

Parents were referred by child welfare agencies because their children were identified as being at high risk for maltreatment, most often due to homelessness, child neglect, domestic violence, and parental substance abuse. Research staff first contacted parents over the phone. If parents were interested in participating, a visit was scheduled at their home. After consenting, children and their parents were randomly assigned receive an attachment-based parenting program (Dozier & the Infant Caregiver Laboratory, 2013) or a program designed to help the child's motor and language development.

Procedure

Data Collection

The University of Delaware Institutional Review Board approved the conduct of this research. The data for this study were collected during a follow-up laboratory visit when the children were approximately eight-years-old. At this assessment, in addition to collecting data about cumulative risk and social information processing, children completed tasks assessing their inhibitory control, emotion regulation, and parent-child interactions were observed to assess parenting. For this study, only data measuring cumulative risk and social information processing were used.

Measures

Cumulative risk. Risk is often examined by considering risk factors as present or absent, with the sum of the scores providing the cumulative risk index (Evans, Li, & Whipple, 2013). Risk factors were assessed in this manner by using the Life Events Calendar (LEC), a measure developed by Hoye, Raby, and Dozier (2014) for the Infant Caregiver Project. The LEC is a retrospective, open-ended report of the presence and duration of events that occurred during the child's first eight years of life. Information is gathered through a semi-structured interview that is administered by research staff. While completing the interview, research staff record the timing and duration of events on a calendar grid. The calendar is chronological, and is customized to the child in that the child's birthday is recorded for each year and is used as an anchor date to help the caregiver recall when other events, such as a housing transition, occurred. Interviews were audio-recorded and lasted between 30-90 minutes.

The Life Events Calendar included questions about risk factors such as housing transitions, housing overcrowding, car ownership, welfare, Child Protective Services involvement, and legal involvement. Some interview questions concerned only the caregiver, such as unemployment, romantic transitions, domestic violence, caregiver physical and mental health problems, and substance use and abuse. Questions specific to the child addressed problems with physical health, mental health, and academics.

Responses from the Life Events Calendar were then coded using a binary system (0 = not present; 1 = present) for each risk factor over developmental periods. The Life Events Calendar was divided into five distinct developmental periods (prenatal; infancy: ages 0-2; toddlerhood: ages 3-5; school age: ages 6-7; and middle childhood: age 8). For example, if a caregiver smoked cigarettes until the child turned six, there would be a '1' in the first three developmental periods and a '0' in the last two periods once the caregiver reportedly quit smoking. While listening to an audio recording of the interview, coders created a new calendar grid and scored risk factors based on timing and duration. Ambiguous coding decisions were resolved by conferencing with master coders and additional consultation of the literature when necessary.

For the current study, three indices of risk were used. All risk variables were summed across all developmental periods to generate a Total Risk score. Social Risk was calculated by adding risk scores for caregiver transitions, domestic abuse, and romantic transitions across developmental periods. The third index was a measure of a single risk factor, Child Mental Health, based on caregiver report of their child's mental health diagnoses, professional services, or medication.

Hostile Attributional Bias. At the same lab visit, children's attributions about peer intent in ambiguous situations were assessed using the Social Information Processing Application (SIP-AP), a web-based, computerized, and standardized assessment of SIP cognitions. Dodge, Pettit, McClaskey, Brown, and Gottman, (1986) created the SIP-AP vignettes, with Kupersmidt, Stelter, and Dodge (2011) modifying them for video display. For the purposes of this study, the Infant Caregiver Project and Janis Kupersmidt worked together to create videos that were as comparable as possible to the boy videos for use by and depicting elementary-school-aged girls. Child actors varied in race/ethnicity across the eight vignettes, and children of the same race/ethnicity were used in the boy and girl versions of each vignette. The SIP application consists of eight vignettes that depict everyday social situations with peers. The vignettes are filmed from the perspective of the protagonist. In each vignette, the outcome for the protagonist is negative, although the intentions of the perpetrator peer are ambiguous. Children were instructed to imagine that the situation in each vignette happened to them. After watching each vignette, the children answered a series of questions assessing various aspects of SIP.

Four different types of ambiguously aggressive behavior were portrayed in the vignettes: a) physical aggression (e.g., protagonist trips over a peer's foot), b) relational aggression (e.g., protagonist approaches a group of peers whispering about a party to which he/she is not invited), c) covert aggression (e.g., protagonist loses a basketball game to a peer who may have cheated by crossing the free throw line), and d) property destruction (e.g., peer's ball knocks over a marble-run structure the protagonist built). Vignette order was counterbalanced across participants. Female

participants watched vignettes that depicted social interactions only among girls, and male participants watch vignettes that depicted social interactions only among boys.

Each vignette was followed by 15 computerized multiple-choice questions assessing SIP. These questions assessed many different aspects of SIP, but the current study only used questions examining children's attributions about ambiguous provocations with peers. The first question asked about hostile attributional bias as it has been traditionally examined in previous research ("Do you think the boy/girl intended to be mean?"). The other three questions assessed children's interpretations of the hostility of the ambiguous provocation by asking about how rejected, disrespected, or angry it would make them feel ("How disliked or rejected [disrespected; angry] would you feel if this happened to you?"). Scores ranged from 1 (no, definitely not mean; not at all disliked or rejected; not at all disrespected; not at all angry) to 5 (yes, definitely mean; very very disliked or rejected; very very disrespected; very very angry). Scores for variables termed hostile attributional biases, rejection attributions, disrespect attributions, and anger were calculated by averaging scores for the relevant question across the eight vignettes.

Chapter 3

RESULTS

Preliminary analyses of the risk variables examined the psychometric properties of these variables, including descriptive statistics and correlations, and gender differences. Similarly, preliminary analyses for the cue interpretation variables examined the psychometric properties of these variables, including descriptive statistics and correlations. Additionally, an exploratory factor analysis examined the number of factors that best represented the cue interpretation variables. Finally, gender differences in the cue interpretation variables were examined as well.

Primary analyses addressed two questions. Pearson correlations were conducted to assess whether risk variables were associated with cue interpretation variables. Additionally, an ANOVA was conducted to assess whether children reported to have mental health problems (as indicated by the Child Mental Health risk variable) differed in their interpretation of ambiguous provocations at age eight compared to children without reported mental health problems.

Preliminary Analyses for Risk Variables

Table 1 provides descriptive statistics (mean, standard deviation, minimum, and maximum) for the composite Total Risk and Social Risk scores. Seven (22.5%) children were reported by their caregivers to have problems with mental health. The Total and Social Risk scores were positively and significantly correlated, $r = .51$, $p <$

.01. In other words, children who had encountered more social risk throughout childhood were more likely to experience risk factors in other domains, such as health.

Gender differences in the Total and Social Risk scores were examined using a multivariate analysis of variance (MANOVA). There was not a statistically significant difference in Total Risk scores based on gender, F (1, 29) = .60, p = .45. Similarly, there was not a statistically significant difference in Social Risk scores based on gender, F (1, 29) = .45, p = .51. Given the small and unbalanced group sizes for gender and parent-reported problems with mental health, gender differences were not examined with regard to the Child Mental Health risk factor.

Preliminary Analyses for Cue Interpretation Variables

Table 2 provides descriptive statistics (mean, standard deviation, minimum, and maximum) for the four cue interpretation variables. Table 3 provides zero-order correlations among the four cue interpretation variables. All correlations were positive and significant.

An exploratory factor analysis was used to reduce the cue interpretation variables. Only one factor had an eigenvalue greater than 1. This single factor loading accounted for 83% of the variance in the cue interpretation variables. Thus, the cue interpretation variables were averaged to create a composite score termed Hostile Attributions composite. Descriptive statistics are provided for this composite variable in Table 2, and correlations between this composite variable and each of the four single-variable cue interpretation scores are provided in Table 3.

Gender differences in the hostile attributions composite were examined using an ANOVA. There was not a statistically significant difference in cue interpretation scores based on gender, F (1, 28) = .001, p = .98.

Primary Analyses with Risk and Cue Interpretation Variables

Pearson correlations were conducted to examine whether the Total and Social Risk scores were associated with the Hostile Attributions composite. The Total Risk index was not significantly associated with the Hostile Attributions composite, r = -.06, p = .75. The Social Risk index was not significantly associated with the Hostile Attributions composite, r =.02, p = 0.93. Additionally, an ANOVA examined whether there were differences in the Hostile Attributions composite based on whether the child was reported to have problems with mental health. There was not a statistically significant difference in hostile attributional bias based on mental health, F (1, 28) = .21, p = .65.

Table 1 *Descriptive Statistics for Total and Social Risk Indices*

($N = 30$)	*Minimum*	*Maximum*	*Mean*	*SD*
Total Risk	5.00	48.00	26.17	10.87
Social Risk	0.00	11.00	3.77	2.82

Table 2 *Descriptive Statistics of Cue Interpretation Variables and Composite*

($N = 30$)	*Minimum*	*Maximum*	*Mean*	*SD*	*Skew*
Hostile Attributional Bias	1.75	5.00	3.64	0.88	-0.22
Rejection Attributions	1.13	5.00	3.60	1.12	-0.35
Disrespect Attributions	1.00	5.00	3.65	1.16	-0.44
Anger	1.13	5.00	3.73	1.07	-0.55
Hostile Attribution Composite	1.25	5.00	3.66	0.99	-0.45

Table 3 *Zero-Order Correlations for Cue Interpretation Variables*

	1	2	3	4	5
1. Hostile Attributional Bias	-	**.76***	**.77***	**.73***	**.86***
2. Rejection Attributions		-	**.94***	**.86***	**.96***
3. Disrespect Attributions			-	**.91***	**.97***
4. Anger				-	**.94***
5. Hostile Attribution Composite					-

Note. Correlations where $p < .05$ are in bold, and correlations where $p < .01$ are in bold*.

Chapter 4

DISCUSSION

The current study was an exploratory examination of the relation between risk factors in childhood and hostile attributional bias at age eight. It was hypothesized that higher risk indices would be associated with greater hostile attributional bias at age eight. Results of the current study did not provide support for this hypothesis. However, major strengths of the study include the graphical calendar interview, the standardized social information processing measure, and the use of a unique sample.

Results of the current study did not provide support for my hypothesis. It is possible that cumulative risk is not directly associated with hostile attributional bias. For example, even though risk factors tend to group together, disadvantaged children often grow up in stable environments which results in diverse child outcomes (Ackerman & Brown, 2006). It could be that variables such as maternal sensitivity have a protective effect that might modify the relationship between cumulative risk and hostile attributional bias by muting the effects of risk on problem behaviors (Ackerman, 1999a).

Strengths

There were several strengths of the current study. Although retrospective report is often a limitation, the graphical calendar method has been shown to improve the completeness, consistency, and accuracy of an individual's recollection of events

(Glasner & van der Vaart, 2009; Sutton, 2010). Calendars such as these are reliable retrospective interviews that reduce the problem of social desirability (Sarason, Johnson, & Siegel, 1978).

A strength of this study was the use of a standardized Social Information Processing-Application with strong psychometric qualities, internal consistency, and concurrent validity (Kupersmidt et al., 2011). This measure was a comprehensive assessment of children's hostile attributions. Another strength is that this is a unique sample to use when examining social information processing and hostile attributional bias. Social information processing is often studied in samples of clinically referred aggressive children (Orobio de Castro et al., 2005) The children in this study were a culturally diverse group of children who were referred due to risk of maltreatment. It could be that children from culturally diverse populations process social information differently than the typically studied population. The current study adds to our understanding of social information processing and hostile attributional bias in a culturally diverse population.

Limitations and Future Directions

There were several limitations to this study. One limitation is the small sample size. This is an initial study of the relation between early risk and social information processing, so a necessary step for future studies is to use a larger sample size to address similar questions. Another limitation is that the Life Events Calendar is a retrospective interview that could be subject to recall bias (Niedźwieńska, 2002). Additionally, the risk factors for the Life Events Calendar were coded and summed across developmental periods rather than discrete years. Future studies might consider examining risk factors for each year rather than grouping risk factors into

developmental periods. This would provide a more nuanced measure of risk that could account for distinct changes from year to year. There could also be problems with the Social Information Processing-Application such as children having trouble sustaining attention or responding differently to videos of strangers than they would to peers in real life. Future studies could develop interventions targeting social information processing in culturally diverse samples. Additionally, it could be that cumulative risk is not correlated with hostile attributional bias but with other stages of social information processing. Further research could examine the relation between cumulative risk and other steps in social information processing.

Conclusion

Results from the current study indicate that higher levels of cumulative risk in early childhood are not related to greater hostile attributional bias at age eight. However, the present study advances our understanding by using psychometrically sound measures to examine cumulative risk and hostile attributional bias in an ethnically-diverse group of children who have a history of maltreatment. Future research should examine the relation between risk factors in childhood and hostile attributional bias at age eight in a larger sample. Future research should also examine whether maternal sensitivity buffers children with high levels of cumulative risk from developing hostile attributional bias.

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Appendix A

LIFE EVENTS CALENDAR INTERVIEW

Life Event Calendar Interview

Note for interviewer: The calendar grid should be used to track duration of events. The interviewer and caregiver should work side by side to complete the calendar together. For each question, the interviewer should plot accurate durations using anchor events such as child's birthday, sibling's birthdays, changes in housing, major holidays, etc. (e.g., "How old was (child) when DFS came out to see you? So that was right around Halloween?"). Prior to beginning interview, you should obtain child's birthday from Filemaker, and complete calendar grid with anchor events.

Introduction:
This is the LEC interview with (child and caregiver codes). Today's date is _____ and this is (interviewer's name).

As children grow and develop, they experience a variety of different events in their lives, some that are positive and some that may be more difficult for them. Today, I am going to ask you to think about these different types of events in [child]'s life.

This interview will be audio-recorded, but as we discussed when you signed the consent form, your responses will be kept confidential and your name will not be attached to them. However, I do want to remind you that if you provide me with <u>any</u> information that leads me to believe that your child is in any <u>current, imminent</u> danger, then I will need to discuss this with you further. In such cases, I may need to notify someone to ensure the safety of your child.

If there's anything that you're uncomfortable talking about, just let me know and we can skip that question.

Background Info:
Okay, let's get started. We are going to use this chart to fill in information about different events that have happened in your life since you became pregnant with (child). I'll start by asking you questions and together we will record the information on the chart. Across the top I've labeled some dates.

Just to confirm, (child's) birthday is (birth date). Right?

(*Point to line)* So this line is when (child) was born.
(Show line at start of pregnancy) So this line is when you became pregnant with (child). Was {child} born around 40 weeks?
Make note on calendar if caregiver did not have a full-term pregnancy.
And do you remember when you find out you were pregnant with (child)?
(*Show second prenatal line)* This line represents when you found out you were pregnant.
(Show line at yearly birthdays) And this is when (child) turned one, two, three, etc.
(Show line at the current month) And this is today.

Refer back to these lines and other anchor events such as major holidays (Christmas, Halloween, Fourth of July, Easter, etc.)

Siblings
Does (child) have any siblings?
And when were they born?
If you learn during the Social Support interview that the caregiver is currently pregnant, mark start point and duration of pregnancy.

Gather birthdays of siblings born after (child)

Housing
When you became pregnant with (child) where were you living?
If needed: And was that an apartment or a house? *(Record)*
Do you remember how many (bed)rooms were in that house/apartment?
Are you still living there?
NO - Where did you move after that? When was that?
Repeat until you gather information for residence

Number of people in house *(Feel free to combine these questions with those in "Housing".)*
When you were living in that first (apartment/house) when (child) was born, who all was living there with you?
*If parent does not specifically mention child's father, ask "*And what about child's father, was he living with you?
And when you moved to (next residence), who all was living there?
Repeat until you gather information for current living situation

Car
And this may seem like a silly question, but do you now or have you ever owned a car?
YES - *Gather timing and duration of owning car*

IF ANY PERIODS WITHOUT CAR –When you didn't own a car, did you have access to one you could borrow, or did you depend on public transportation to get to things like doctor's appointments, etc. – *Label "A" for access or "PT" for public transportation for durations without a car*

School / Work

Since (child) was born, have you been in school?

YES – *Gather times and school levels (i.e. GED program, tech school, college, etc.)*

And since (child) was born, have you been working?

YES – When did you start working there? *(gather all periods of employment)*

Assistance

When (child) was an infant, did you receive any welfare benefits? *(gather duration)*

Check the following types of benefits:

- Food stamps
- Cash assistance
- Housing assistance
- Insurance (Medicaid, SSI)

IF YES: Have you consistently received these benefits, or have there been times when they were cut back?

Gather durations

Separations = >2 weeks with a caregiver other than mom

Have there ever been periods of time where (child) has been with a caregiver other than you for an extended period of time (more than two weeks)? Like with grandma or an aunt or anything like that?

IFYES - When/how long (record on calendar)

- Who with?
- And why did (child) stay with (new caregiver)?

Other Caregivers = adult living with the child and assisting with around 50% of caretaking responsibilities; Record duration in "Other CG" row using colored pens; Record relation to parent.

We talked earlier about who helps you co-parent your child/children. As (child) has grown up, have there been other adults that have helped you co-parent? (By co-parent, we mean help with 50% of caretaking responsibilities.)

FOLLOW UP QUESTIONS ABOUT FATHER

We talked earlier about (biological father).

How involved has {child}'s father been?

How often does {child} see {his/her} father?

Has this been consistent throughout (child's) life? Are there times where he hasn't been as involved in your child's life?

Romantic Partners = committed partner of 3 or more months

Now I'd like to ask some more questions about (child's) father. When you became pregnant, were you together? How long had you been together when you found out your were pregnant?

And are you still with (father's name)?

YES - Have there been any times where you broke up for a month and then got back together?

Record any separations on calendar

NO – When did you guys break up?

Have you had other relationships since (child's father)?

YES – *Gather duration of relationship(s)*

When you were together, did you consider him to be a co-parent?

Domestic Abuse

Do you ever feel like you ever experienced any emotional abuse in any of these relationships - and by emotional abuse I mean things like your partner degrading or criticizing you, trying to control or shame you, trying to cut you off from friends and family – things like that

YES – *Identify the relationships during which this occurred*

And have you ever felt like you experienced any physical abuse - and by this I mean you or your partner slapping, kicking, shoving – anything like that?

YES – *Identify the relationships during which this occurred*

Other violence If lifetime presence, record notes regarding type and timing on calendar (e.g., PA, childhood)

Outside of these romantic relationships, have you ever been physically attacked or abused (not just since [child] was born; this includes when you were a child)?

Have you ever been sexually assaulted or abused (not just since [child] was born; this includes when you were a child)?

YES - *Gather type of assault and timing*

And have you ever experienced severe emotional abuse (not just since [child] was born; this includes when you were a child)?

YES - *Gather type of assault and timing*

Parent physical health

How was your health when you were pregnant with (child)? Were you on bed rest for any reasons?

Gather information regarding abnormal medical conditions/risk

And how about since (child) was born – how's your physical health been?

Gather information about chronic conditions

Have you had any hospitalizations or trips to the ER?

Gather information about duration of separation from child

If mother is co-parenting with father, grandparent, etc.:

And when you were living with (co-parent) did they have any health issues?

Parent mental health = times when parent symptoms of psychopathology were severe enough to seek or receive health

Since you became pregnant with (child), have you ever had any mental health concerns, things like anxiety, depression, bipolar, PTSD, or ADHD?

YES – Did anyone ever recommend that you seek help?

Did you ever seek any help for this? Did you receive a diagnosis?

Gather timing of diagnosis/treatment

What type of services did you receive (medication or therapy)?

Have you ever been hospitalized for psychiatric reasons?

Has (child's Dad) ever had any mental health concerns things like anxiety, depression, bipolar, PTSD, or ADHD? Do you know of any concerns like that when he was growing up?

YES – Did anyone ever recommend that he seek help?

Did he ever seek any help for this? Did he receive a diagnosis?

Gather timing of diagnosis/treatment

What type of services did he receive (medication or therapy)?

Have you ever been hospitalized for psychiatric reasons?

If mother is co-parenting with father, grandparent, etc.:

And when you were living with (co-parent), did they have any mental health issues like this? Do you know if they've ever had issues like this?

Has (co-parent) ever been hospitalized for psychiatric reasons?

Alcohol use Record periods of use where parent/other believes their level of use was inappropriate. Record and note periods of treatment

Do you drink alcohol?
    How often do you drink alcohol?
    How many drinks do you typically have?

Have you ever felt that you ought to cut down on your drinking?
Have other people ever told you that you ought to cut down on your drinking?
Have you ever received outpatient drug or alcohol treatment?

Have you (used) pretty consistently throughout (child's) life or has there been a stretch of more than 3 months where you haven't (used)?
    Record durations of alcohol use and treatment

Before you found out you were pregnant with (child) did you drink alcohol?
Gather ANY amount and duration – until they found out, throughout pregnancy, etc.

Biological Father:
    Do you know if {child}'s father drinks alcohol?
        If needed: How often does he drink?
            How many drinks does he typically have?
            Has this been consistent throughout {child}'s life?
            Have you ever been concerned by how much he drinks?
            Has he ever received outpatient alcohol treatment?

If relevant: When (co-parent) was living with you, did (he/she) drink?
    Gather information above

Cigarette use Record periods of consistent use (near daily use for one month or more). Record and note periods of treatment/attempts at quitting

Do you smoke cigarettes?
    How often do you smoke cigarettes?
    How many packs per day (or week) do you typically smoke?

Have you ever felt that you ought to cut down on your smoking?
Have other people ever told you that you ought to cut down on your smoking?
Have you ever received any treatment for smoking?

Have you smoked that amount pretty consistently throughout (child's) life or has there been a stretch of more than 3 months where you haven't?
    Record durations of use

Before you found out you were pregnant with (child) did you smoke?
Gather amount and duration – until they found out, throughout pregnancy, etc.

Biological Father:

Do you know if {child}'s father smokes cigarettes?

If needed: How often does he smoke?

How many packs per day (or week) does he typically have?

Has this been consistent throughout {child}'s life?

Has he ever received any treatment for smoking?

If relevant: When (co-parent) was living with you, did (he/she) smoke?

Gather information above

Marijuana use Record periods of consistent use (weekly use for one month or more). Record and note periods of treatment/attempts at quitting

Do you smoke pot?

How often do you smoke?

How much do you typically smoke?

Have you ever felt that you ought to cut down on your smoking?

Have other people ever told you that you ought to cut down on your smoking?

Have you ever received any treatment for smoking?

Have you smoked that amount pretty consistently throughout (child's) life or has there been a stretch of more than 3 months where you haven't?

Record durations of use

Before you found out you were pregnant with (child) did you smoke?

Gather amount and duration – until they found out, throughout pregnancy, etc.

Biological Father:

Do you know if {child}'s father smokes marijuana?

If needed: How often does he smoke?

How much does he typically smoke?

Has this been consistent throughout {child}'s life?

Has he ever received any treatment for smoking?

If relevant: When (co-parent) was living with you, did (child's caregiver) smoke?

Gather information above

Other drug use Record periods of consistent use (weekly use for one month or more). "Experimental" use (i.e. low frequency, less than one month) should not be recorded. Record and note periods of treatment/attempts at quitting

Do you use any other drugs that aren't prescribed to you by a doctor?

Which ones?

How often do you use them?
How much?

Have you ever felt that you ought to cut down on your drug use?
Have other people ever told you that you ought to cut down?
Have you ever received any treatment for this drug use?

Have you used that amount pretty consistently throughout (child's) life or has there been a stretch of more than 3 months where you haven't?
Record durations of use

Before you found out you were pregnant with (child) did you use these other drugs?
Gather amount and duration – until they found out, throughout pregnancy, etc.

Biological Father:
Do you know if {child}'s father uses any other drugs?
If needed: Which ones?
How often does he use them?
How much does he typically use?
Has this been consistent throughout {child}'s life?
Has he ever received any treatment for this drug use?

If relevant: When (co-parent) was living with you, did (child's caregiver) use other drugs?
Gather information above

Child physical health
How is (child's) health?
Allow parent to discuss general concerns
Does he/she have any chronic health issues?
YES – When did that first become a concern? How does he/she manage the condition? (e.g., medication, physical therapy, etc)
Has (he/she) ever been hospitalized?
YES - *Gather timing*
Has he/she ever had a concussion or hit his/her head and lost consciousness?

Child academic problems
Did (child) ever receive special education or remedial service or attend a special school?
YES – When? What kind of services, class, or school?
Has (child) ever repeated any grades?
YES – When?
Has {child} had any other academic problems at school?

YES – When did these problems start? Have these problems ended?

Does {child} have an IEP?

YES – When was it created?

Child mental health = times when child's symptoms of psychopathology were severe enough to warrant diagnosis or intervention

Have you ever had concerns about (child)'s mental health – again, things like anxiety, depression, ADHD?

YES – Has (child) ever received a diagnosis?

Gather diagnosis and timing

Has (child) ever received any services for this (medication, therapy, etc.)?

Gather type and duration

Has (child)'s teachers ever contacted you with concerns about (child's) any emotional or behavioral problems at school?

YES - Has (child) ever received any services for this (IEP or 504 plan, pull out services, etc.)

Gather type and duration

Death

Since (child) was born, have you lost any family members or friends that had a close relationship (i.e. child was personally affected by the loss, realized they were gone, etc.) with (child)?

Gather timing

DHS Involvement

You were recruited for this study through the Department of Human Services. Can you tell me about what led to your involvement with DHS?

If needed: For this instance, do you remember how many times DHS visited your house? How long did the visits continue?

Record duration on calendar.

Since that time, has your family ever received any other services through DHS?

a. If so, please tell me about when and why this occurred.
b. Again, do you remember how many times DHS visited your house? How long did the visits continue?
c. What was the outcome?
    i. *Record duration on calendar*

Legal involvement

Have you or (child's father or coparent) ever been involved in any legal proceedings – things like getting arrested, spending time in jail, anything like that? Have you had to go to court for any reason?

Gather timing of event, duration.

And have you ever needed legal involvement for anything related to parenting – I'm thinking about things like going to court for child support payments, or a protective order against (father) or (other romantic partners)?

Gather timing

Other

Has {child} ever experienced any other severe threat to his/her life or safety?

Is there anything that we haven't talked about today that you think has been an important factor in (child)'s life?

Ending

Those are all the questions I have. I really appreciate you being so open and willing to talk with me about things that I know may be difficult. If you're interested in continuing to talk about these things with someone, just let me know and we can refer you to someone.