Listening to children in foster care

Eliciting Reliable Reports from Children: Review of Influential Factors

Socialstyrelsen

Förord

Regeringen har gett Socialstyrelsen i uppdrag att ta fram en modell för att lyssna på barn i familjehem. Syftet är att utveckla och säkerställa en trygg och säker vård för barn och unga. Som ett led i detta arbete har tre kunskaps-underlag beställts av forskare.

Forskare vid Department of Psychiatry vid David Geffen School of Medi-cine, University of California Los Angeles, har fått i uppdrag att göra en sys-tematisk översikt över experimentell forskning om faktorer som påverkar tillförlitligheten i barns svar. Ansvarig för arbetet har varit Karen Saywitz, Ph.D., Rakel Larson, M.A., M.S., Sue Hobbs, M.A. samt Christine Wells, Ph.D.

De två andra kunskapsunderlagen är dels en översikt över forskning och erfarenheter som finns vid enheten för mätteknik på Statistiska centralbyrån (av Fredrik Scheffer och Andreas Persson), dels en analys av värdemässiga och normativa ställningstaganden som är viktiga vid intervjuer med barn (av Christian Munthe och Thomas Hartvigsson).

Knut Sundell
Enhetschef
Avdelningen för kunskapsstyrning

Content

Summary

Over the last two decades, calls to promote children's participation in decisions that affect their welfare have burgeoned (Cashmore, 2002, 2014; Head, 2011; Jones, 2002; U.N. General Assembly, 1989, Article 12). Increasingly, children are being considered stakeholders, rather than merely passive objects of concern, both in national policy reform and individual case decision making. Once viewed as incapable of providing reliable information on their own lives, children are now recognized as viable informants. Consequently, the foster care literature is replete with discussions regarding how best to incorporate children's perspectives to improve policy, practice, research, and outcomes (e.g., Aubrey & Dahl, 2006; Cashmore, 2002, 2014; Fox & Berrick, 2007; Holland, 2009; Nybell, 2013).

Given the rising dependence on children's reports, the need for evidence-based methods of eliciting reliable information from children is clear. However, little attention is being paid to the efficacy of the methods used to elicit information from children. Similarly, there has been little discussion of what factors influence the reliability of children's reports or the calculus by which adults decide how to weigh children's input (Fox & Berrick, 2007; Holland, 2009). In response to this pressing need, we set out to conduct a systematic review to determine whether a core body of relevant, rigorous research exists regarding the efficacy of interview methods used to elicit reliable information from children in foster care.

According to recent reviews of the literature, the bulk of existing studies focus on the views of young adults and older adolescents formerly in care (e.g., Cashmore, 2014; Clark, 2005; Fox & Berrick, 2007). One obstacle to further research, better policy, and improved practice is the dearth of methods available to elicit reliable information from younger children currently in care (Barth, personal communication, March, 10, 2014; Cashmore, 2014; Clark, 2005; Holland, 2009; Lundström & Sallnäs, 2012). Given this gap in the knowledge base, the present study is a systematic search for experiments that include children in the 4 to 12 year age range. After searching six electronic databases and contacting experts in the field, a pool of 4,140 potentially relevant articles regarding the efficacy of child interview methods was located. The resulting pool included studies sampling subjects from birth to young adulthood.

This report is organized in five sections: (1) Introduction, including overview of major factors that affect reliability of children's reports, and rationale for narrowing the search to studies of face-to-face interviews, including children 4 to 12 years of age, with special attention to effects of interviewer support, rapport, and bias on the accuracy and quality of children's reports; (2) Methodology of a two-step search for studies of interview method efficacy with (a) children in foster care, and (b) children in the general population; (3) Results and synthesis of findings; and (4) Recommendations for research, policy, and practice.

Calls for Children's Input Outpace Development of Evidence-based Methods

This review was undertaken in two phases. First, we sought to identify whether a core body of experimental research exists on the efficacy of interview methods for eliciting reports from children in out-of-home care. The answer is no. After applying numerous filters to the 1,346 potentially relevant articles on children in foster care, we identified no experimental studies with controlled trials that assess the efficacy of interview methods on accuracy and quality of verbal reports by children currently in care. Clearly, the call for children's input and participation has outpaced the development of evidence-based interview methods for eliciting reliable information from young children in foster care.

In an ancillary effort to map the breadth, purpose, and extent of existing research activity, excluded studies were screened further. A group of 36 qualitative and descriptive studies were identified and then synthesized to serve as building blocks for future quantitative research. Recommendations discuss a research agenda that furthers development of reliable and valid methods for eliciting children's experiences in and satisfaction with out-of-home care.

Core Set of Evidence-informed Child Interviewing Principles Exists

Given the paucity of relevant research on children in foster care, we redirected our efforts to a second search for similar studies in the general population to determine whether there was a core body of controlled trials from which to extrapolate to the foster care setting. The answer is yes. This search produced a large body of relevant work, identifying studies that converge on a central set of evidence-informed child interviewing principles from which to extrapolate to the foster care setting. The report discusses these principles and their potential use in policy and practice reform.

We found that the bulk of experimental research has focused on cognitive factors related to children's memory and suggestibility, rather than socioemotional or motivational factors that are particularly relevant in the foster care setting. Hence, the literature conveys a good deal about how to phrase questions to prompt memory and minimize suggestion, but far less about how to establish a supportive, unbiased atmosphere that provides children the opportunity to report as much reliable information as they can, in their own words, despite anxiety or mistrust, fears or ambivalence, threats or secrets. In an effort to discover evidence-based guidance on how to accomplish this goal in a way that promotes ability and willingness, without jeopardizing accuracy, we narrowed our research question further to examine effects of interviewer support, rapport-building, and bias on the quality and accuracy of children's reports.

Effects of Interviewer Behaviors on Accuracy and Quality of Children's Reports

After applying numerous filters to the 2,794 potentially relevant studies of the general population, 26 studies remained. These 26 studies represent an existing evidence base of experimental studies examining how interviewers' supportiveness, rapport-building, and preconceived biases influence the accuracy and quality of children's reports. Our results suggest that interviewer supportiveness, when provided in a non-suggestive, non-contingent manner, bolsters the reliability of children's reports; interviewer preconceived biases can have the opposite effect. Although experts routinely recommend developing rapport with children as best practice and virtually all interview protocols include a rapport-building phase, far more research is needed to recommend any one particular rapport-building strategy over another.

Positive Effects of Interviewer Support

We located 15 studies of good quality showing consistent benefits of interviewer support. Children were less suggestible, and often more informative and more accurate, in supportive contexts as compared to neutral or non-supportive contexts. Researchers consistently found that when support is administered in a non-suggestive manner, not contingent on the content of children's statements, children are less suggestible; they exhibit fewer errors or more correct responses to misleading questions. This was true for studies of children 3 to 14 years of age, over short and long delays, including a delay of up to a year, talking about routine everyday activities (play) as well as experiences that were clearly stressful for children (inoculations at medical clinic).

   There was preliminary evidence worthy of further study to suggest that support may be most beneficial to children who are more anxious, are more sensitive and reactive to environmental contexts biologically, are reporting on events that are highly emotionally arousing, have insecure disrupted attachment histories, have poorer executive functioning (e.g., working memory capacity), or are more reluctant, uncooperative, or uncommunicative. There were clues across studies to suggest that effects may be more likely to operate by reducing social compliance with authority figures, (e.g., fear of disappointing or angering intimidating adults), social desirability (wanting to please adults and gain their approval) and/or anxiety, rather than improving overall cognitive and memory performance more generally. Unfortunately, investigators did not report sufficient information on the extent and content of training required to achieve implementation of support in a non-suggestive manner to prescribe practice guidelines.

Adverse Effects of Interviewer Preconceived Bias

The search located nine studies of preconceived interviewer bias. Overall, effects on accuracy were negative or non-significant. Most often children's reports were less accurate and children were more suggestible in the biased than unbiased conditions. Typically, negative effects interacted with other factors, such as age, delay, interviewer identity, or elaborative conversational style. However, the bulk of the studies were limited to very young children in a narrow age range, 4 to 5 years of age, and to discussion of mundane and

low stress events. Taken as a whole, there were a number of problems with the evidence base that are described in the report. However, when relying only on the better quality studies (as defined by scores on the Downs and Black Quality Checklist at or above the midpoint), the effects of bias on suggestibility were consistently negative. This suggests that better designed studies are warranted for generalization to foster care and to uncover the underlying mechanisms responsible for this effect.

Little Evidence Yet To Support Rapport-Building Efforts

Although experts routinely recommend developing rapport with children as best practice, and virtually all interview protocols include a rapport-building phase, the evidence base to demonstrate positive effects of rapport without jeopardizing accuracy, or to recommend any one particular rapport building strategy, is insufficient. We located only three experimental studies that assess effects on reliability of children's reports in controlled trials. Our review suggests that the area of rapport is one where there is spurious certainty; practitioners and researchers think they know more than they do, but where in reality, there is little convincing research support. Clearly, further research is needed.

Conclusions

We conclude our report with recommendations for a future research agenda and a discussion of evidenced-informed principles for interviewing children. The report discusses how these principles can be applied successfully to children in the foster care context. Research on methods for eliciting reliable reports from children is growing rapidly. If children are to be active participants in building the knowledge base on which public policies and case decisions about their welfare are predicated, then policy makers and practitioners will need to work collaboratively with researchers to implement interview procedures that reflect the best available science. Evidence-based methods for eliciting reliable information from children offer unprecedented opportunities to improve policy, practice, research, and outcomes for children in out-of-home care.

Svensk sammanfattning

De senaste två decennierna har inneburit ett ökat fokus på att främja barns deltagande i beslut som påverkar deras situation. Barn betraktas allt mer som intressenter snarare än enbart passiva objekt, både i nationella reformer och vid beslut som berör dem själva. Det tidigare synsättet om att barn är oförmögna att ge tillförlitlig information om sina egna liv har ersatts av att barn nu betraktas som relevanta informanter. Följaktligen har forskning om familjehemsbarn allt mer intresserat sig för hur man bäst ska kunna inkludera barnens perspektiv för att förbättra policy, praktik, forskning och utfall.

Därmed finns också ett ökat behov av evidensbaserade metoder för att få tillförlitlig information från barn. Litet intresse har dock ägnats åt vilka effekter metoder har för att få information från barn. Likaså har få diskuterat vad som påverkar tillförlitligheten i barns rapporter eller hur vuxna värderar barns åsikter. Därför genomförs en systematisk översikt av forskning om intervjumetoder för att få fram tillförlitlig information från familjehemsbarn.

Enligt nyare översikter så fokuserar den mesta forskningen på unga vuxna och äldre tonåringar som tidigare varit i familjehem. Däremot brister kunskapen om effektiva intervjumetoder för yngre barn. För att minska kunskapsgapet genomfördes en systematisk översikt över experimentella studier med barn i åldrarna 4 till 12 år. Översikten omfattade sökningar i sex databaser. Dessutom kontaktades experter för ytterligare referenser. Sammanlagt identifierades 4 140 potentiellt relevanta artiklar om effektiva intervjumetoder för yngre barn.

Rapporten består av fyra delar: (1) en introducerande översikt av faktorerna som påverkar tillförlitligheten i barns svar för att med dess hjälp avgränsa frågeställningen; (2) metodik för att identifiera artiklar om intervjumetoders effektivitet, dels med barn i familjehem, dels med barn i allmänhet; (3) en syntes av forskningen; samt (4) rekommendationer för framtida forskning, praktik och policy.

Brist på kunskap om tillförlitliga intervjumetoder

Översikten genomfördes i två steg. Först undersöktes om det finns experimentell forskning om effektiva intervjumetoder som riktar sig till barn i familjehem. Översikten visar att det inte fanns någon kontrollerad experimentell studie med det syftet.

Som komplement granskades de exkluderade studierna ytterligare, varvid 36 kvalitativa och beskrivande studier identifierades. Summeringen av dem kan ge förslag om framtida kvantitativ forskning.

Viktiga principer för intervjuer med barn

På grund av bristen på forskning om barn i familjehem genomfördes en ny sökning efter undersökningar om barn generellt som skulle kunna användas för att extrapolera till familjehemsbarn. Denna sökning genererade ett stort

antal relevanta studier. Majoriteten av studierna fokuserar på hur kognitiva faktorer relaterar till barns minne och påverkbarhet, snarare än socio-emotionella och motiverande faktorer som är speciellt viktiga i familjehems-vård. Således ger forskningen god kunskap om hur frågor kan formuleras för att öka barns minnesförmåga och minska risken för suggestion. Väsentligt mindre kunskap finns om hur intervjuaren kan skapa en stödjande och förut-sättningslös atmosfär så att barnet ger tillförlitlig information, trots eventuell ångest, misstro, rädsla, ambivalens, hot eller hemligheter. Det fortsatta arbe-tet fokuserades därför på hur intervjuarens stöd, etablerandet av en samar-betsrelation samt intervjuarens förutfattade meningar påverkar tillförlitlighet och kvalitet i barns svar.

Betydelsen av intervjuares agerande för tillförlitlighet och kvalitén i barns rapporter

Av 2 794 potentiellt relevanta studier av barn i allmänhet var 26 relevanta. De omfattar experimentell forskning om hur intervjuares stöd, en samarbets-relation och fördomar påverkar tillförlitlighet och kvalitet i barns rapporter. Resultaten visar att ett icke-suggestivt stöd ökar trovärdigheten i barns rap-porter. Om intervjuaren ger uttryck för förutfattade meningar kan det minska trovärdigheten. Även om experter ofta rekommenderar att intervjuaren avsät-ter tid för att etablera en samarbetsrelation med barn saknas idag kunskap om hur det ska genomföras.

Positiva effekter av intervjuarens stöd

Det fanns 15 studier av hög kvalitet som visade på fördelar med intervjuarens stöd. Barn var mindre lättpåverkade samt mer informativa och trovärdiga i stödjande sammanhang jämfört med neutrala eller icke-stödjande samman-hang. När stöd ges på ett icke-suggestivt sätt är barn mindre lättpåverkade. Resultatet baseras på studier av barn i åldrarna 3 till 14 år, med kort och lång uppföljningstid samt i vardagliga (t.ex., lek) och känslomässigt påfrestande situationer (t.ex., vaccination).

Preliminära resultat visar att stöd kan vara särskilt värdefullt för barn som är ängsliga och biologiskt känsliga, som berör känslomässigt starka upplevel-ser, som har en osäker anknytning till sina vårdnadshavare, som har nedsatta exekutiva funktioner (t ex. sämre arbetsminne), eller som är avogt inställda. Stöd från intervjuaren tycks framför allt ge effekt genom att minska risken för social följsamhet (t ex. rädsla för att göra vuxna besvikna eller arga), social önskvärdhet (söka bekräftelse från vuxna), och ängslighet, snarare än att förbättra generella kognitiva förmågor och minne. Det saknas tillräcklig kunskap om omfattning av och innehåll i utbildning av intervjuare för en vägledning om hur det ska utformas.

Negativa effekter av intervjuarens förutfattade meningar

Det fanns nio studier om hur intervjuares förutfattade meningar påverkar barn. De visade både att barn mindes sämre och var mer lättpåverkade när intervjuaren har förutfattade meningar. De negativa effekterna var ofta sam-mankopplade med andra faktorer som ålder, tid sedan händelsen ägt rum som barnet tillfrågades om, intervjuarens identitet och samtalsstil. Merparten av

studierna avsåg yngre barn mellan tre och fem år samt vid samtal om vardagliga händelser med låg stressfaktor. Som helhet fanns flera problem med dessa studier. Studier av högre kvalitet visar dock att intervjuarens förutfattade meningar var relaterat till barns påverkbarhet. Det talar för att det behövs bättre utformade studier för att kunna generalisera effekter till barn i familjehem och för att förstå de mekanismer som påverkar effekten.

Få undersökningar bekräftar vikten av att etablera samarbetsrelation

Trots att experter rekommenderar att intervjuare ska avsätta tid initialt för att etablera en samarbetsrelation med barnet, och så gott som alla intervjuprotokoll inkluderar en fas för att göra detta, så saknas vetenskapligt stöd om att detta påverkar barns svar. Tre experimentella studier har utvärderat hur det påverkar barns trovärdighet. De visar att det inte finns något övertygande stöd för en samarbetsrelation. De finns alltså ett behov av ytterligare forskning om detta.

Sammanfattning

Rapporten avslutas med förslag på evidensbaserade principer för barnintervjuer och diskuterar hur dessa kan tillämpas på barn i familjehem. Forskning om metoder för att få trovärdig information från barn växer snabbt. Om barn ska kunna ses som delaktiga i utvecklandet av en kunskapsbas som kan påverka både beslut om policy och enskilda barn måste beslutsfattare och professionella samarbeta med forskare för att implementera intervjurutiner som är baserade på bästa möjliga kunskap. Evidensbaserade metoder för att få tillförlitlig information från barn ger nya möjligheter att förbättra policy, praktik, forskning och utfall för barn i familjehem.

Acknowledgements

Introduction

Calls to promote children's participation in decisions that affect their welfare are mounting (Cashmore, 2002, 2014; Head, 2011; Jones, 2002). Increasingly, children are being considered stakeholders rather than merely passive objects of concern, both in national policy reform and individual case decision making. This movement has accelerated in concert with the adoption of the U.N. Convention on the Rights of the Child, which states that "children are entitled to participate in all decisions that affect them" and that their views should be given "due weight" (U.N. General Assembly, 1989, Article 12). Once viewed as incapable of providing reliable information on their own lives, children are now recognized as viable informants. Consequently, the foster care literature is replete with discussions regarding how best to incorporate children's experiences and perspectives to improve policy, practice, research, and outcomes (e.g., Aubrey & Dahl, 2006; Cashmore, 2002, 2014; Fox & Berrick, 2007; Holland, 2009; Nybell, 2013).

Yet, with the spotlight focused on "listening to children's voices," little attention is being paid to the efficacy of the methods used to elicit reliable information from children. Similarly, there has been little discussion of what factors influence the reliability of children's reports or the calculus by which adults decide how to weigh children's input (Fox & Berrick, 2007; Holland, 2009). Reviews of the literature have begun to highlight these gaps (Aubrey & Dahl, 2006; Cashmore, 2014; Holland, 2009). In response to this pressing need, we set out to conduct a systematic review to determine whether a core body of rigorous research on the efficacy of methods used to elicit information from children in out-of-home care exists, and what factors influence the reliability of their reports.

Why listen to children?

Children provide a unique window into the foster care experience. If reliable, they might provide meaningful information that would otherwise be overlooked by researchers and policy makers who rely on data collected exclusively from administrative records, caregivers, and professionals (Fox & Berrick, 2007). For example, adults cannot see the world through a child's eyes nor can they report on children's internal states (such as feelings, attitudes, and motivations). Moreover, care systems are likely to be in the best position to improve children's lives if they can focus services and policies, at least in part, on what matters to children. Children's viewpoints are being considered in a number of contexts from case planning and placement decisions, to court hearings, health care decisions, and educational choices (Boshier & Steel-Baker, 2007; Clark, 2005; McTavish, Streelasky, & Coles, 2012; Moore & Kirk, 2010; Nutbrown & Clough, 2009; Unrau, 2007; Weisz, Wingrove, Beal, & Faith-Slaker, 2011).

While some authors who advocate heavy reliance on children's perspectives believe that children are the "best experts on themselves"(Seita, 2004), others point out that any single participant's viewpoint will be only a partial

perspective. From this standpoint, there are multiple truths with dominant (adult and professional) and marginalized (children in care) groups bringing distinctive knowledge to the situation (See Unrau, 2007, for discussion). Ager and colleagues (2012) highlight that by considering multiple perspectives that include the experiences of children who are often deemed "too hard to reach," we may become better at identifying both harmful and protective factors that might otherwise go unnoticed. Moreover, children's reports of their experiences can fill in gaps in our understanding of dimensions of the foster care experience that can be essential for policy development. For example, Unrau (2007) argues cogently for the added value of including children's views of what makes a placement stable to the traditional cut off value of three or more placements typically used to infer placement stability or instability in many policies.

Researchers are beginning to study whether children's views are important considerations in foster care outcomes and on which issues children's input might be most useful (Barber & Delfabbro, 2005; Bessell, 2011; Chapman, Wall, & Barth, 2004; Fox, Berrick, & Frasch, 2008; Weisz et al., 2011). In addition, children's views may provide a more meaningful interpretation of outcome research (Gilligan, 2000). For example, placement stability is thought to be a potent predictor of success after care (e.g., Pecora et al., 2006; Unrau, 2007). However, Cashmore and Paxman (2006) created a new variable termed 'felt security' (i.e., a sense of being loved, belonging, and having needs met) from the interviews of 47 young people leaving care in Australia. They found that 'felt security' was a more significant predictor of positive outcomes five years after leaving care than stability per se.[1]   Not surprisingly, children in stable care who felt more secure fared significantly better than those in stable care who felt less secure. Cashmore (2014) points out that traditionally, outcome variables have been defined by researchers, without input from children; however, variables derived from children's subjective experience of care, such as their sense of security, belonging, normalcy, control, and respect, may be powerful predictors of outcome.

In addition, the process of participation alone may be beneficial for children, even if ultimately decisions were not based entirely on children's input. Benefits might accrue in the form of an increased sense of recognition, self-agency, empowerment, or self-esteem (Head, 2011; Melton, Gross-Manos, Ben-Arieh, & Yazykova, 2014). Authors point out that these issues may be particularly salient in a population of maltreated children who can come to see themselves as active agents rather than powerless victims (Weithorn, 1983), especially in a system where decisions are made not by two parents but by a wide array of changing professionals and providers over time. Also, practice participating is thought to prepare children in care for future independent, autonomous decision making (Melton, Gross-Manos, et al., 2014). Furthermore, children in care may be more satisfied with decision-making outcomes when their voices are heard (Cashmore, 2002). This hypothesis is based on the procedural justice literature which suggests that satisfaction with outcomes of decision-making processes is directly related to feeling that

---

[1] Success was inferred from a measure including data on education, employment, substance use, mental health, and criminal behavior.

one has a 'say' in the process (e.g., Lind & Tyler, 1988; Thibaut & Walker, 1975, Tyler, 2013; Tyler & Huo, 2002).

Finally, children in care express the desire to be more involved in decisions that affect them (Chapman et al., 2004; Daly, 2009; Ellermann, 2007). After reviewing the available literature, Cashmore (2002) argues "it is clear that children in care generally wish to be more involved than they usually are in the way decisions are made about them…They are not seeking self-determination or to control the decision making; they do, however, want to be informed and involved in the process. They want to 'have a say' rather 'than their own way'" (2002, p. 845).

As children become active participants in building the knowledge base on which public policies about their welfare are predicated, and they provide greater levels of input into decision making in their own case management and daily lives, the need for evidence-based methods and guidelines for eliciting reliable input is clear.

Need for Evidence-based Decision Making

Alongside the movement towards children's participation, there has been a commensurate expansion in the scientific study of the best methods for eliciting young children's input, and in particular, reliable input (See Melton, Ben-Arieh, Cashmore, Goodman, & Worley, 2014, for review). Research on child interviewing has burgeoned over the past 25 years as expectations about children's agency, competence, and participation in society have changed. This is true across diverse fields, including psychology, health care, sociology, law, social work, anthropology, and consumer marketing. This expansion in research is part of a broad movement towards evidence-based policy and decision making in the social services and health care fields generally. Evidence-informed decision making has gained momentum to serve the need for greater accountability at the level of large national policy reforms and at the level of practice in individual cases in the field, including questions about placing and managing children in foster care and in the legal system (Aubrey & Dahl, 2006; Cashmore, 2002, 2014; Chapman et al., 2004; Fox & Berrick, 2007; Holland, 2009; McWilliams et al., 2014; Moore & Kirk, 2010; Unrau, 2007).

This broad interest in translational research (translating scientific findings into policies, regulations, and practice guidelines) has motivated the growth of empirical studies of child interviewing in a wide range of settings, from eliciting children's pain levels in order to better titrate medications, to eliciting children's food choices for public health campaigns to combat childhood obesity. Concurrently, there has been a movement in academic research away from a focus on laboratory work and internal validity towards greater valuing of ecological validity and generalization to real-world settings (Melton, Gross-Manos, et al., 2014). In part, the uptick in experimental work with randomized controlled trials to test efficacy of interview strategies has been driven by an increased reliance on children's testimony in courts, especially when the child witness is the primary source of evidence, as in cases of alleged sexual abuse (Goodman, 2006). In these cases, the accuracy of children's reports is paramount. Hence, the impetus for rigorously tested, evidence-based methods of eliciting children's reports is clear.

How to Elicit Reliable Input from Children in Foster Care?

A wide range of study methods have been used to solicit input from children and youth, including paper and pencil questionnaires, focus groups, Likert-scale ratings, forced choice or multiple choice questions, computer-assisted options, online web-based surveys, observations of children, and face-to-face interviews. At one end of the continuum, there have been a few large longitudinal studies in the United States, Australia, and Canada, primarily focused on outcomes for children in care, that have also elicited some quantitative data on children's views about their experiences and placements (e.g., Chapman et al., 2004; Delfabbro, Barber, & Bentham, 2002; Lundström & Sallnäs, 2012; Schofield, 2005). In the United States, the National Study of Child and Adolescent Well Being (NSCAW) is a good example. This study utilizes a national probability sample of 727 children (birth to 14 years) who are assessed initially one year after entering care. At the other end of the spectrum are qualitative studies using ethnographic methods where the goal is to observe children by embedding oneself in their everyday lives, sometimes for months, to gain access to reliable information from difficult to reach populations (Turnbull, Hernández, & Reyes, 2009).

Clearly, some methods are only appropriate for literate adolescents or young adults, such as written postal questionnaires (Sinclair, Wilson, & Gibbs, 2001). Downward extensions to younger children would be problematic. In contrast, the literature is peppered with innovative suggestions on how to gain younger children's reflections on their lives, for example, child-led 'radio' interviews, puppetry, drawings, photo diaries, sight-seeing tours of their homes or schools, story-stem completions, and life history maps (e.g., Rasmussen, 2014; Schofield, Beek, Sargent, Thoburn, 2000). However, it is not clear whether these strategies have been tested for efficacy and effectiveness in the foster care setting.

According to recent reviews of the literature, the majority of existing studies have focused heavily on the views of young adults and older adolescents formerly in care (e.g., Cashmore, 2014; Clark, 2005; Fox & Berrick, 2007). While important in their own right, the reports of young adults looking back on their experiences in foster care through the lens of time are likely to differ significantly from the reports of younger children currently in foster care who would be providing information on their contemporaneous experience. At a minimum, retrospective studies are subject to the participants' long-term memory errors. Also, younger children are likely to require developmentally sensitive methods that differ significantly from the techniques used with older teens and young adults. One obstacle to further research, better policy, and improved practice is the dearth of methods available to elicit reliable information from younger children currently in care (Barth, personal communication, March, 10, 2014; Cashmore, 2014; Clark, 2005; Holland, 2009; Lundström & Sallnäs, 2012). In response to this pressing need, a systematic review of the existing research on the efficacy of methods to elicit reports from young children currently in care is imperative. It is a needed prerequisite to plan future research and to advance policy and practice.

The value of child interviews

Although surveys and written questionnaires are the most frequently used monitoring and evaluation tools for children outside family care (Ager et al., 2012), experts increasingly call for more child-focused and participatory methods (Ager et al., 2012; Andersson, 1999; Gardner, 2004; Gulaid, 2004). In contrast to gathering data from administrative records, social workers, or caretakers, child interviews allow children to speak for themselves and to reveal thoughts and feelings of which caretakers and other adults may not be aware (Weller, Hobbs, & Goodman, 2014). The results of Chapman et al. (2004) are a good example of the value of interviewing children in care about how they view their placement experiences. In their nationally representative sample of children in care in the United States, utilizing interviews (as well as other self-report measures), children were able to express more complex and nuanced views than expected. Two distinct yet co-existing messages for practitioners and policy makers emerged from the children—the need to build strong relationships with foster caregivers while at the same time promote continued relationships with biological families.

While individual face-to-face interviews may be more costly in terms of staff time and training than focus groups, paper and pencil questionnaires, or self-administered computerized instruments, Spyrou (2011) argues that more time spent gathering children's narratives allows access to "deeper levels" and permits exploration of "complex and multi-layered" responses. In addition, there is the possibility that children's participation in this personal and interactive process itself may promote positive development, through an increased sense of self-agency, empowerment, and autonomy, and perceived satisfaction with care (Cross, 2009). It is possible that time spent in face-to-face interaction is required for children to appreciate the benefits of being "heard".

Ager and colleagues (2012) argue that by considering children's perspectives in this way, adults will become better at identifying both harmful and protective situations they might otherwise overlook. Of particular concern is the conundrum that occurs when children report negative experiences with foster families. These can range from normative parent-child disagreements to neglect or abuse. Similarly, children who remain in high-risk biological families, receiving social support or in-home treatment services, need conscientious monitoring. Careful interviews can be a useful tool for sorting out these complex issues, even with young children (e.g., Lamb, Hershkowitz, Orbach, & Esplin, 2008; Poole & Dickinson, 2013; Peterson, 2012; Saywitz & Camparo, 2014a; 2014b).

Child interviews are not a panacea. They have advantages and disadvantages as a method for eliciting information from children. However, meaningful conversations with children can reveal unique information from an often overlooked perspective. This can be true whether for the purpose of national policy reform or for the purpose of improving daily life with caretakers. To elicit the most reliable information, such conversations must be conducted with sensitive and reliable interview methods.

Types of interviews

Before examining the experimental literature on factors that affect child interview outcomes, it is useful to take a moment to consider that child interviews vary along a continuum of structure. At one end are unstructured interviews that follow the child's lead in order to immerse the researcher or practitioner in the life of the child they seek to understand. At the other end of the continuum are highly structured interviews where the exact wording of questions are scripted, answers are often limited to one-word options (yes or no), and interviewers have little discretion, but the results are more easily quantifiable. In between are semi-structured formats using open-ended questions where interviewers follow clear guidelines and cover predetermined topics but possess a good deal of flexibility in terms of questions asked. In laboratory studies where children's reports are compared to records of staged or known events, semi-structured interviews can produce reliable results (e.g., Lamb et al., 2008).

The field of clinical psychiatry is a good example of recent trends. Until recently, there has been a longstanding tradition of unstructured clinical interviews from a psychoanalytic perspective with relatively little scientific research demonstrating their effectiveness (e.g., Greenspan & Greenspan, 1991). Over the last 25 years, there has been an explosion of research to create structured diagnostic interviews to estimate prevalence of childhood psychiatric disorders, guide development of public health policies, and arrive at diagnosis and plan treatment in individual cases (e.g., Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000).

On the one hand, standardization increases reliability and validity of interview methods. Structured interviews reduce bias and interviewer inference; each child is asked the same set of questions. They can be translated into various languages easily. Often there are self-administered, computer-assisted versions (children listen on headphones and respond to options on a tablet) that are cost effective and private. In fact, some can be administered by lay people with minimal training. On the other hand, disadvantages include the fact that the rigid format may interfere with rapport development, miss subtle but important cues and reactions, and make meaningful leads difficult to follow up. Sattler (1998) has noted that highly structured interviews may determine whether a diagnosis is present or absent but fail to address a functional analysis of the problem or identify the deeper family, identity, or other intra- and interpersonal issues often necessary for decision making in foster care.

Not all fields, however, have gravitated towards structured interviews. Ethnographic approaches remain largely unstructured conversations with children engaged in natural activities, typically without predefined questions (Bauman & Greenberg, 1992; LeVine, 2007; James, 2001). Children are encouraged to talk about a particular topic (e.g., a typical day at home). Researchers ask for explanations and elaborations, and they occasionally ask provocative questions. Interviewers take on the 'least-adult-like' role possible, encouraging children to take on the role of expert on their own lives, reducing the power differential that can interfere with trust and discourage self-disclosure (Christensen, 2004). Such interviews are often used in mixed methods approaches to supplement quantitative instruments.

Semi-structured interviews are common in the forensic field where accuracy of interview outcome is paramount because children may be the only witnesses or victims of a crime. Not surprisingly, semi-structured interviews have advantages and disadvantages as well. Semi-structured interviews with open-ended questions aid children to express their experiences and opinions in their own words. Without the constraints inherent in fixed alternatives, children's perspectives are less likely to be overlooked. Yet, the outcomes are highly dependent on interviewers' skills and behaviors, such as phrasing questions in a non-suggestive, developmentally sensitive manner, engaging children's trust, providing support, and building rapport without compromising accuracy with bias and suggestion (Cederborg, Orbach, Sternberg, & Lamb, 2000; Sternberg, Lamb, Orbach, Esplin, & Mitchell, 2001).

There are several semi-structured interview protocols designed for the forensic context that follow guidelines derived from randomized controlled trials of eyewitness memory.[2] In these studies, children's reports are compared across interview methods for effects on accuracy and quality. These particular protocols may be less useful in the foster care context because they narrowly focus on investigative legal issues (e.g., perpetrator identity, jurisdiction, details of the alleged offense, and timing in order to evaluate suspect alibies). Nonetheless, they embrace a set of core principles, based on the available science, that are beginning to appear in policies worldwide (see Poole & Dickinson, 2013, for discussion). Although these forensic protocols themselves may be too narrowly focused on investigative issues regarding child maltreatment to be adopted wholesale, the empirical literature from which they are derived could be useful when semi-structured interviews are employed in the foster care context for other purposes. It is possible that core principles could be extracted and extrapolated to promote reliability of information solicited on topics of importance to children in out-of-home care, such as relationships with caregivers, peers, family of origin, and children's well-being at home, in the community, and at school.

Overview of Factors that Influence Children´s Reports

Over the last two decades, research on the accuracy of children's reports and the factors that compromise their accuracy has ballooned. It has become clear that the reliability of children's reports depends on a host of factors. Researchers have identified developmental capabilities and limitations related to age that influence the quality and quantity of information children provide. A number of individual differences and motivational factors shape children's reports as well. In addition, findings consistently demonstrate that although children can report accurately on a wide range of events, a major determinant of the reliability and quality of their reports is the method by which the information is elicited. For example, young children's reports can be distorted by suggestive interviewing techniques. Hence, characteristics of the inter-

---

[2] These include the Stepwise Interview (SI), Memorandum for Good Practice (MGOP), Cognitive Interview (CI), Developmental Narrative Elaboration Interview (DNE), and National Institute of Children Development (NICHD) Investigative Interview.

view itself (e.g., setting, interviewer demeanor and bias, questioning techniques, rapport) have a profound influence on the outcome. In the next section of this report, we introduce the myriad of factors that influence the accuracy and quality of children's reports.

Developmental Differences

Researchers have identified developmental factors, related to age, that shape the accuracy and quality of the information a child is capable of providing (Brainerd, Holliday, Reyna, Yang, & Toglia, 2010; Nelson & Fivush, 2004; Peterson, 2011). There is a wealth of basic and applied child development research documenting these developmental differences in memory, communication, cognition, emotional maturity, and social skills (e.g., Ceci & Friedman, 2000; Cronch, Viljoen, & Hansen, 2006; Goodman & Melinder, 2007; Lamb & Brown, 2006). It would be beyond the scope of this project to review all of the relevant research; however, as one example of the ways that developmental trends can influence the reliability of children's reports, we highlight findings from research on the development of children's memory, suggestibility, and narrative skill below.

Studies suggest that children as young as 3 and 4 years of age can provide reliable information about their life experiences through carefully conducted interviews. (See reviews by Bauer, 2007, and Peterson, 2012.) Three to five year olds can readily talk about events that occurred more than a year previously, although these early memories may become forgotten over time. Peterson and her colleagues have interviewed children aged 2 to 13 years old about highly memorable injuries, and subsequent emergency room treatment, after two and five year delays. They concluded that the children were remarkably accurate. After a two year delay, 2 year olds correctly reported 51% of the available information; the 5 to 6 year olds reported 79%, in comparison to 81% reported by 8 to 13 year olds. Under the right conditions, even young children can provide valuable information through carefully conducted interviews.

This thesis is supported by a body of work examining scientific case studies (Bidrose & Goodman, 2000) that compare children's reports of traumatic events to documentation of what actually occurred (e.g., videotape or photograph of abusive act; audiotape of confession; computer records) with quantitative analyses (Cederborg, Lamb, & Laurell, 2007; Leander, 2010; Leander, Christianson, & Granhag, 2007, 2008; Orbach & Lamb, 2000; Sjöberg & Lindblad, 2002). These studies suggest that children can accurately recall traumatic experiences even after long delays; however, a certain percentage of children fail to disclose their traumatic experiences, or omit sensitive information, due to a number of reasons, including forgetting, fear of reprisal, pacts of secrecy, lack of parental support, and feelings of guilt, shame, and perceived responsibility (See review by Paz-Alonso, Ogle, and Goodman, 2013).

The ability to independently narrate experiences from one's life improves with age as well (Bauer 2002, 2007). Narrative skills develop alongside memory and language abilities, understanding of self and others, and time and causality. While 50% of kindergarteners can retell stories as well-formed

episodes, this percentage increases to 78% by sixth grade.[3]   Unfortunately, preschoolers' narratives are often skeletal and insufficient for social service decision making (Gordon, Jens, Shaddock, & Watson, 1991; Greenstock & Pipe, 1996; Jones & Pipe, 2002; Laimon & Poole, 2008; Poole & Lindsay, 2001; Roberts & Blades, 1996; Salmon, Price, & Pereira, 2002). Children provide more detailed information with additional prompting. A typical conversation with a 4 or 5 year old might go as follows:

"What did you do after school?" "I played."
"Who did you play with?" "Mary and Bob."
"Where did you play?" "At the playground."
"What happened?" "We went on the swings."

Often, children's independent, free recall responses to open-ended questions (as in the example above) do not convey all the information a child knows or remembers.[4] It would be tempting to move in quickly with more detailed questions to find out whether anyone was injured or whether there was adequate supervision. However, if questions are suggestive or misleading, errors increase (Bruck & Ceci, 1999). In their review of the literature, Blandon-Gitlin and Pezdek (2009) conclude that young children are more suggestible to false memories than older children, especially when events are plausible, and that both groups are more suggestible than adults. Even though children's susceptibility to adult suggestion declines with age, certain factors can increase children's susceptibility to misleading information (Blandon-Gitlin & Pezdek, 2009).

In short, a wide range of performance is typical in studies of children's eyewitness descriptions. These range from largely accurate reports (when children have not been exposed to misleading questions) to highly inaccurate reports (when multiple suggestive techniques are used simultaneously). Children as young as 4 can be resistant to suggestions about abuse-related events (Rudy & Goodman, 1991) and can freely recall as much information in unbiased interviews as 8 year olds (Lamb et al., 2003). Even so, 3 to 4 year olds are particularly vulnerable to being manipulated into falsely agreeing with suggested inaccurate details or false events (e.g., Quas et al., 2007). While older children are significantly more resistant to suggestion, it is still possible to create conditions where they report as many erroneous details as younger children. Although with requests for clarification, older children can distinguish between suggested and experienced events, and often retract their errors (Poole & Lindsay, 2001). By 9 to 10 years of age, children's independent narratives become longer, more relevant and detailed, with less extraneous information. They contain more overt markings of time, more introduction and setting information to place events in context, more concern for motivations, in-

---

[3] As the preceding percentages imply, there is a good deal of variability in narrative competence across children of the same age range. Culture, caregiver language, family experience, enrichment or deprivation, all affect narrative development (e.g., Kang, Kim, & Pan, 2009).

[4] Unfortunately, studies show interviewers in the field tend to rely more heavily detailed or suggestive prompts. (Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007; Lamb et al., 2009; Lamb, Sternberg, & Esplin, 2000; Sternberg, Lamb, Davies, & Westcott, 2001; Thoresen, Lønnum, Melinder, Stridbeck, & Magnussen, 2006). This is not surprising given that children's reticence and incompleteness can be frustrating to adults with weighty decisions to make.

ternal reactions, and causality, and more complex episode structure. Neurobiological studies have documented gains in these abilities up to 11 years of age (Saxe, Whitfield-Gabrieli, Scholz, & Pelphrey, 2009).

In short, advances in developmental research suggest that children can provide relevant and important information; however, the interviews need to be conducted carefully, with attention to recent research on children's memory and suggestibility. Even so, there is no guarantee that erroneous information will never arise. As this brief summary of developmental trends suggests, children's reports are, in part, a function of their phase of development. Developmental differences are potent influences on the accuracy and quality of interview outcomes.

Individual Differences

Recently, researchers have begun to uncover the influence of individual differences among children of the same age. Evidence is beginning to suggest that differences in language ability, temperament, attachment status, suggestibility, source monitoring, impulsiveness, executive function, shyness, and sociability may be linked to interview outcome (Alexander et al., 2002; Chae, Goodman, Eisen, & Qin, 2011; Geddie, Beer, Bartosik, & Wuensch, 2001; Roebers & Schneider, 2005). For example, Alexander et al. (2002) found that both children's and parents' avoidant and anxious attachment styles were related to children's memory accuracy for a stressful event.

Also, the effects of transient and chronic mental health symptoms may influence children's functioning during interviews. Researchers are beginning to examine the effects of symptoms on interview outcomes in autism (Diehl, Bennetto, & Young, 2006; Maras & Bowler, 2010), intellectual disability (Brown, Lewis, Lamb, & Stephens, 2012), learning disability (Nathanson, Crank, Saywitz, & Ruegg, 2007), and Post-Traumatic Stress Disorder (PTSD). For example, the effects of dissociation (a symptom of PTSD) have sometimes been related to greater inaccuracy on reports of staged events (Chae et al., 2011), but not all researchers have found this effect (Eisen, Qin, Goodman, & Davis, 2002).

Motivational Factors

Motivational factors related to a child's willingness to provide information are also influential determinants of interview outcome. These include a child's motivation to lie, deny, exaggerate, or tell the truth. Furthermore, motivation is often affected by a child's expectations about the consequences of self-disclosure for placement and adult decision making (e.g., Sim & Lamb, 2013; Talwar & Crossman, 2012). Not surprisingly, studies have shown that incentives and rewards influence the accuracy of children's reports (Roebers & Fernandez, 2002). Moreover, children's early lies are often denials of wrongdoing by self or family members (Talwar & Crossman, 2012). In fact, researchers have found that children are willing to lie to cover up transgressions by others. For example, by 6 years of age they seem to realize that parents are less likely to believe their children when accusations of wrongdoing involve another parent, as opposed to a stranger (Malloy, Quas, Lyon, & Ahern, 2014). Effects of motivational factors on children's reports are beginning to be better understood.

Past Event Characteristics

Characteristics of the events to be discussed, for example, whether traumatic or mundane, impact the amount and accuracy of information children recount. Central aspects of traumatic events may be remembered better over time and be more durable than mundane events, while details of mundane events may be forgotten (Cordon, Pipe, Sayfan, Melinder, & Goodman, 2004; Merritt, Ornstein, & Spicker, 1994). Still, traumatic events are not immune to distortion (Bruck, Ceci, Francoeur, & Barr, 1995) and some inaccuracies can persist over time (London, Bruck, & Melnyk, 2009).

Individuals of all ages forget over time. The length of the retention interval can influence children's reports (Price & Connolly, 2008). Despite widespread public perception that children's memory reports become progressively worse (and less reliable) over time, Peterson (2012) in her review of the literature concludes that the research is mixed, with some studies showing declines (Quas et al., 1999), others showing improvements (Fivush, Sales, Goldberg, Bahrick, & Parker, 2004), and still others little change (Baker-Ward, Gordon, Ornstein, Larus, & Clubb, 1993; Salmon et al., 2002). One explanation for these divergent results is that different aspects of children's reports are changing over time in different ways. No doubt, the content of the material and the length of the time that has passed will influence the quantity and quality of the report.

Bidirectional Nature of Interview

There is growing evidence that some aspects of interview outcome are determined by the dyadic and bidirectional nature of the interview. Much like a tennis match, each partner serves a question or answer to the other one; subsequent behaviors are, in part, a function of the behaviors that came before. Sometimes an interviewer's behavior is as much a reaction to a child's behavior as it is a function of interviewer's skill or technique (Gilstrap, 2004). For example, an interviewer's use of leading questions may be a response to the frustration of dealing with an uncooperative child (Gilstrap & Ceci, 2005). Individual differences (e.g., child sociability) may mediate interviewer behavior and, in turn, influence subsequent child behavior (Gilstrap & Papierno, 2004).

Contextual Factors: The Interview and Interviewer

Finally, factors that influence interview outcome include not only those inherent in the child (e.g., stage of development, life history, willingness to participate), but also those inherent in the context in which the child must function (e.g., setting, interviewer demeanor, interview method). In fact, one of the best researched contextual determinants is the method by which information is elicited.

As mentioned above, children's reports of their experiences can be distorted by suggestive and biased interviewing methods, whether intentional or inadvertent (Bruck & Ceci, 1999; Bruck, Ceci, Hembrooke, 2002). In addition, the accuracy, detail, and coherence of children's reports can be improved by factors under the interviewer's control. For example, when interviewers begin with open-ended questions (followed by nonleading prompts that help children elaborate in their own words) they are likely to elicit more

reliable results than if they start off with highly specific questions that focus in too quickly on interivewer preconceptions and limit children's answers to yes or no.

Moreover, potential benefits of participation may be related to elements of the context, such as interivewer behavior. Benefits, such as increased sense of self-agency and self-esteem, may be a function of children feeling they are being 'listened to' by adults they can trust, who respect their insights and percieve them as competent sources of information (Cashmore, 2002; Clark, 2005). This level of feedback may only be achieved with face-to-face interview techniques.

There is empirical evidence to suggest the following contextual characteristics to be influential in interview outcomes:

- *Setting of interview*
  Issues of privacy and confidentiality, familiarity, and child-centeredness (Cronch et al., 2006; Cross, Jones, Walsh, Simone, & Kolko, 2007; Pipe, Lamb, Orbach, & Esplin, 2004)
- *Rapport of Child and Interviewer*
  Importance of taking time to develop trust and get to know children (e.g., Hershkowitz, 2009; Goodman & Melinder, 2007; Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007; Teoh & Lamb, 2013)
- *Interviewer Demeanor*
  Influence of supportiveness, bias, or heightened authority status (e.g., Bottoms, Quas, & Davis, 2007; Bruck & Ceci, 1999; Bruck et al., 2002)
- *Question Types*
  The value of open-ended questions and the adverse effects of misinformation embedded into misleading questions (Bruck & Ceci, 1999; Krähenbühl & Blades, 2006a; Larsson & Lamb, 2009; Lyon, in press)
- *Pre-interview Instructions*
  Explanations that increase children's awareness of the unique interview task demands, encouraging children to tell the truth, to admit lack of knowledge, memory, or comprehension, and instructions that reassure children (e.g., Lyon, Malloy, Quas, & Talwar, 2008; Lyon & Dorado, 2008; Mulder & Vrij, 1996; Nesbitt & Markham, 1999; Price & Connolly, 2008; Saywitz & Moan-Hardie, 1994; Saywitz, Snyder, & Nathanson, 1999; Ellis, Powell, Thomson, & Jones, 2003)
- *Preliminary Procedures*
  Opportunities for narrative practice, mental context reinstatement, and source monitoring training before substantive interviewing (e.g., Brown & Pipe, 2003; Holliday, 2003; Poole & Lindsay, 2002)
- *Suggestive Techniques*
  Combinations of stereotype induction, praise, tangible rewards, positive or negative reinforcement, negative or positive feedback that challenges children's responses, pressure to conform to a peer

or parent's statements (Garven, Wood, Malpass, & Shaw, 1998; Garven, Wood, & Malpass, 2000; Leichtman & Ceci, 1995).

In summary, the reliability of children's reports is dependent on a host of developmental, individual, motivational, and contextual factors. The method by which the child's reports are elicited is a well-researched and a powerful determinant.

Three Major Interview Methods that Influence Children's Reports

A review of the experimental literature makes clear that researchers have paid far more attention to dimensions of the interview related to children's memory and suggestibility than to other variables, such as socio-emotional and motivational factors. In particular, three aspects of the interview have received a great deal of empirical attention: Question types, suggestive techniques, and preliminary procedures to prepare children for the interview.

Questions Types

One of the most well researched aspects of the interview method is the way the questions are phrased. Below we provide several examples of well-researched question types.

Open-ended Questions

Open-ended questions are questions that require multiple words to answer ("What happened?"). Whereas closed questions can be answered in a word or phrase ("What color was it?"). As mentioned previously, children respond more accurately to open-ended prompts that tap free recall as compared with specific[5] closed questions that rely on recognition memory ("Did you go to your Uncle's house after school that day?"). Open-ended questions maximize productivity and minimize suggestibility. The child does more of the talking; the interviewer does more of the listening. Developmental differences in accuracy and productivity are reduced when open-ended free recall prompts, as opposed to detailed questions, are used (Goodman, Hirschman, Hepps, & Rudy, 1991; Lamb et al., 2003). Whenever possible interviewers are encouraged to rephrase closed questions, such as "Did he hit you?" into open-ended, such as "What did he do with his hands?"

   Even so, it is important to note that open-ended questions are not a panacea and there is no guarantee of accuracy. Even older children make erroneous statements in response to open-ended questions, especially when exposed to misleading or false suggestions. Researchers have found that children, particularly boys, who are impulsive and exuberant, with lower levels of executive functions that inhibit prepotent responses, are more likely to fall into this category (Karpinski & Scullin, 2009; Poole, Dickinson, Brubacher, Liberty, & Kaake, 2014). Although these self-regulation skills typically develop rapidly between the ages of 3 and 6 years as the brain matures, some

---

[5] Unless otherwise indicated, for the purpose of this report, specific questions are questions that are focused and often detailed, but not intentionally leading.

children struggle more than others to gain cognitive control over impulses and exuberance.

Forced-Choice Questions

Particularly problematic for younger children are questions that force children to choose between predetermined options, such as yes or no ("Do you feel safe in your current home?" "Do you like living with this family?"). Older children and adolescents make fewer errors on forced-choice questions (Eisen, Goodman, Qin, Davis, & Crayton, 2007). Unfortunately, relying on yes-no questions with young children can result in short, unelaborated responses that can be misunderstood because it is difficult to interpret the child's full intent and meaning from a yes or a no, especially if the adult is not certain the child fully understood the question in the first place. Similarly problematic with young children can be questions that provide multiple choices predetermined by adults ("Do you want to live with your auntie, a group home, or with a new family?"). With these forced-choice questions, the content of the interview is driven by the interviewer's preconceptions and assumptions rather than following the child's lead. The child's perspective is more likely to be overlooked.

Moreover, children rarely respond "I don't know" to yes-no questions. Some studies show children can have a response bias towards saying "yes" or "no," depending on the way the questions is worded, although findings are mixed (Lyon, in press; Peterson, Dowden, & Tobin, 1999; Peterson & Grant, 2001). This pattern of rarely responding "I don't know" to yes-no questions can persist even when children are instructed to tell the interviewer when they do not know an answer. In contrast, children are more likely to say "I don't know" rather than guess at the answer in response to open-ended wh-questions ("Where did this happen?" "What did Bob say?").

Suggestive and Misleading Questions

The literature is clear that children's susceptibility to suggestion tends to increase when leading or misleading questions are employed (Bjorklund, Bjorklund, Brown, & Cassel, 1998; Krackow & Lynn, 2003; Portwood & Reppucci, 1996; Shapiro, Blackford, & Chen, 2005); however, definitions of suggestive questions vary from study to study. They can refer to questions where the interviewer introduces information not previously mentioned by the child ("What happened after your teacher called?" assuming the child had not mentioned a call from her teacher). Also problematic are tag questions that ask children to verify adult assumptions, for example, questions that end in "isn't that true?" or that make it difficult to disagree ("Of course you want to visit with your mother, don't you?"). Questions with inserted negatives are often leading as well ("Wasn't your foster mother there to watch you?" "Didn't you agree you wouldn't do that anymore?"). Additionally, commission errors that are produced after the presentation of misleading questions tend to persist over time (Otgaar, Candel, Smeets, & Merckelbach, 2010).

Linguistically Complex Questions

When children fail to understand the vocabulary or grammatical constructions of adults' questions, their responses are understandably less reliable (Carter, Bottoms, & Levine, 1996; Perry, McAuliff, Tan, & Claycomb, 1995;

Saywitz, Jaenicke, & Camparo, 1990; Saywitz, Nathanson, & Snyder, 1993). Communication breakdowns are responsible for a portion of the unreliability in children's interview outcomes. Studies demonstrate how children's responses are compromised when interviewers in the field fail to adapt their language to the child's developmental level (Korkman, Santtila, Drzewiecki, & Sandnabba, 2008). This is especially a problem for younger children who have difficulty monitoring whether they understand adult questions and try to answer questions they do not fully understand (e.g., Saywitz et al., 1999). Studies suggest that often the vocabulary and grammatical complexity of adult interview questions are beyond the child's stage of comprehension (Carter et al., 1996; Korkman et al., 2008; Perry et al., 1995; Saywitz et al., 1990; Saywitz et al., 1993). When adults simplify their grammar, using several short questions (one idea per utterance) instead of overloaded questions with embedded clauses and multiple verbs, communication breakdowns that lead to misunderstanding are reduced.

Suggestive Techniques

Beyond type of question, a second area of active research has focused on understanding the effects of a wide array of suggestive techniques from misinformation embedded into a few misleading questions that even preschoolers resist (Bruck et al., 2002) to packages of highly suggestive techniques that distort the reports of both younger and older children up to 9-to-10 years of age (Zajac & Hayne, 2006). Although many more of these studies have been conducted with preschoolers, it is important to remember that many suggestive techniques also produce erroneous reports in adults, hence older children are not immune (Ceci, Kulkosky, Klemfuss, Sweeney, & Bruck, 2007; Loftus, 2004).[6] Unfortunately, researchers often test multiple suggestive techniques at one time so that the independent contribution of the individual techniques to interview outcome is difficult to determine. These techniques include the following:

- Pressuring children with comments suggesting that peers or parents have already told the interviewer what happened (Erdmann, Volbert, & Böhm, 2004; Garven et al., 2000; Principe & Ceci, 2002)
- Stereotype inductions conveying incriminating or exculpating comments (e.g., "What did the bad man do to you?"; "What did the nice woman say to you?") (Leichtman & Ceci, 1995; Lepore & Sesco, 1994; Thompson, Clark-Stewart, & Lepore, 1997)
- Negative feedback that challenges or contradicts children's memories (e.g., "You got it wrong." "Are you sure about that? I don't think that is correct.") (Hünefeldt, Rossi-Arnaud, & Furia, 2009; Karpinski & Scullin, 2009; McFarlane & Powell, 2002)
- Expressing disbelief ("I don't really think that happened, but that might be the case, don't you think?") when children fail to acquiesce to milder forms of persuasion (Zajac & Hayne, 2006)

---

[6] These negative effects are not as marked for older as compared with younger children; however, a study by Zajac and Hayne (2006) found that even older children aged 9- to 10-years changed over 40% of their correct responses when challenged cross-examination style by a skeptical interviewer (e.g., "Are you sure that you got your photo taken?").

- Using positive consequences (e.g., praise, approval, agreement or other rewards contingent on specific responses) or negative consequences (e.g., disapproving statements); or using selective reinforcement of false details or responses consistent with interviewers preconceptions or inconsistent with children's prior statements (Erdmann et al., 2004; Garven et al., 2000; Sparling, Wilder, Kondash, Boyle, & Compton, 2011)
- Misinterpreting, inaccurately paraphrasing, contradicting, or distorting what children have said, even if unintentional (Hunt & Bordiga, 2001);
- Repeating questions within an interview, implying that the original answer was inaccurate or unacceptable (Melinder, Scullin, Gravvold, & Iversen, 2007) or repeating unanswerable questions until children try to answer (Krähenbühl & Blades, 2006b)
- Inviting speculation about possibilities (Erdmann et al., 2004); and/or
- Overtly trying to talk children out of their answers (e.g., "I think someone told you to say that. That's what really happened, isn't it?" "I think it happened to friend, not you." "I think you are making that up.") or trying to talk children into saying something occurred ("I think it did happen, but you weren't paying attention." "You can't quite remember it; you've forgotten it.") (O'Neill & Zajac, 2013; Zajac & Hayne, 2003; 2006).

Preliminary Strategies Designed to Improve Children's Reports

A third area of strong research interest is the development of innovative techniques to improve the accuracy and quality of children's reports. These are typically implemented at the preliminary phase of the interview before substantive questioning. They include:

- Instructions: Instructions provided at the beginning of an interview to raise awareness of the unique task demands, such as giving children permission to admit lack of knowledge ("I don't know"), memory ("I don't remember") or comprehension ("I don't understand"), and encouraging children to tell the truth, reassuring children, or instructing children to report exhaustively (to tell as much as you can from the beginning to the end) (e.g., Mulder & Vrij, 1996; Lyon & Dorado, 2008; Saywitz et al., 1999)
- Narrative Practice: Practice narrating events to prime children to provide as much information possible in their own words with the least prompting by adults. Many protocols include narrative practice: NICHD Investigative Interview (Lamb et al., 2008; Sternberg et al., 1997), Stepwise Interview (Hardy & Van Leeuwen, 2004), Cognitive Interview (McCauley & Fisher, 1995; Saywitz, Geiselman, & Bornstein, 1992), Developmental Narrative Elaboration Interview (Bowen & Howie, 2002; Camparo, Wagner, & Saywitz, 2001; Peterson, Warren, & Hayes, 2013; Saywitz & Snyder, 1996), and Event Report Training (Krackow & Lynn, 2003)

- Source Monitoring Training: Questions that help children clarify the source of their information, for example, whether it was directly experienced or overheard (Bright-Paul, Jarrold, & Wright, 2005; Giles, Gopnik, & Heyman, 2002; Poole & Lindsay, 2002; Thierry & Spence, 2002; Thierry, Spence, & Memon, 2001)
- Mental Context Reinstatement: Helping children mentally reinstate the context before engaging in retrieval of information from long term memory (Drohan-Jennings, Roberts, & Powell, 2010; Hayes & Delamothe, 1997; Holliday, 2003; Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2001; Peterson, Parsons, & Dean, 2004).

In summary, to develop methods that maximize children's ability and willingness to provide needed information, researchers, policy makers, and practitioners will need to be sensitive to children's stage of development, individual characteristics independent of age, and to the fact that children's behavior is highly dependent on the context, including the interview and interviewer characteristics.

Narrowing the Research Questions

As the preceding review suggests, experimental studies have focused far more on memory and suggestibility than on the socio-emotional and motivational factors that challenge our ability to obtain reliable data from children. We know a good deal about how questions should and should not be phrased. We know far less about how to establish a supportive, unbiased atmosphere that provides children the opportunity to report as much reliable information as they can, in their own words, despite anxiety and mistrust, fears and ambivalence, threats and secrets.

There are multiple reasons why children in foster care might be reticent, anxious, or uncommunicative. It would not be surprising to find that a child has conflicting feelings about self-disclosure to unfamiliar adults, especially when information to be discussed is private, painful, embarrassing, or confusing. Beyond worrying about interviewers' impressions of them, some children express concerns that honest, open answers will have negative implications for their relationships with foster parents and social workers (e.g., Cashmore 2002; Clark, 2005; Chapman et al., 2004; NSCAW Research Group, 2002). Others express feelings of helplessness that can impair motivation to cooperate, revealing that they are unclear about why they are in foster care in the first place and feel they have had little say in what has happened to them (Gilligan, 2000; Johnson, Yoken & Voss, 1995; Wilson & Conroy, 1999). In her review of the qualitative research, Cashmore (2002) describes children feeling alienated from the process, intimidated by professionals, and devalued by the fact that no one bothers to inform or consult them. In addition, studies have found that some children believe adult professionals have hidden agendas, inaccurate assumptions, and biases that prevent them from hearing what children have to say (Burgess, Rossvoll, Wallace, & Daniel, 2010; McLeod, 2006; 2007). Evidence-based methods for addressing these obstacles to reliable data-gathering are sorely needed.

In response to this pressing need, we have focused our systematic review on the effects of interviewer behavior, specifically interviewer support, rapport-building, and bias. In the tradeoff between breadth and depth, we chose these three factors because of their relevance for interviewing children in foster care, the fact that there has not been an exhaustive review of this experimental literature elsewhere, and the fact that the size of this literature seemed appropriate for the scope of the project given the resources allocated. Best practice guidelines often recommend that interviewers take time to build rapport and provide a supportive psycho-social atmosphere while remaining objective and unbiased. Yet, there is little evidence-based guidance on how to accomplish this goal in a way that promotes ability and willingness, without jeopardizing accuracy. Hence, a systematic review of this literature is necessary.

In addition, the reliability of children's reports has been a controversial and hotly debated topic in the press and in the scientific community. Often, practitioners and researchers have become polarized, operating in silos of academic and professional disciplines. A systematic review is appropriate to locate and synthesize relevant research, using transparent, replicable procedures with precautions to minimize error and bias that might exaggerate or underestimate effects. Moreover, there are several diverse bodies of potentially relevant research, ranging from laboratory studies in basic and applied child development to field studies with quantitative analyses. A thorough search of these knowledge bases could yield unexpected opportunities for integration and for bridging the gap between research and practice. Furthermore, previous reviews of the literature on children's ''voices" have rarely examined these bodies of work (Aubrey & Dahl, 2006; Clark, 2005; Holland, 2009; Nybell, 2013; Unrau, 2007).

There is one additional reason to suspect that interviewer attitude and behavior would be an influential factor in child interviewing. For decades the psychotherapy treatment outcome literature has made clear that a significant portion of the variance in outcome is due to a set of therapist interpersonal facilitative skills (e.g., warmth, acceptance, empathy) and a strong therapeutic alliance, independent of the specific treatment technique utilized (Lambert & Barley, 2001). Recently, researchers have begun to examine how interviewer behaviors may affect the outcomes of child interviews in a similar fashion, independent of question types and protocols. Hence, a review of the effects of these interviewer behaviors on the reliability of children's reports is both timely and essential.

Influence of Interviewer Supportiveness on Interview Outcome

We sought to address the following questions: Is there a core body of experimental research with randomized controlled trials that examines the effects of interviewer support on the reliability of children's reports? What factors are critical for engaging children in meaningful conversations about topics on which children in care want to be heard (e.g., relationships with biological families, support networks, adjustment difficulties) as well as topics that might be associated with positive outcomes (e.g., quality of care, well-being,

safety)? Which children benefit most from supportive contexts and what factors moderate outcomes?

Davis and Bottoms (2002) define interviewer support as a "socio-emotional variable conceptualized as a form of social interaction or communication that fosters a feeling of well-being in the target" (p. 186). While some authors suggest support will improve interview outcomes, others are concerned that support reduces children's accuracy and promotes suggestibility effects. Consider the issue of praise (e.g., "You're doing a good job."). On the one hand, praise can be viewed as an important component of supportiveness and rapport-building. Praise is thought to encourage children--to help them feel accepted and to be more forthcoming on sensitive topics. On the other hand, there is concern (and some evidence) that praise can act as selective reinforcement of inaccurate content, leading children to report more of what they perceive interviewers want to hear than the truth (Garven et al., 2000; Garven et al., 1998). Similarly, unsupportive interviewer behaviors, such as disapproval or disappointment, could have an opposite effect, inhibiting children from telling what they know and promoting denial or reticence.

There are a number of reasons why interview outcomes could be improved by a supportive context, if it could be implemented in a non-suggestive, unbiased fashion. First, both neo-Piagetian and information processing theories predict that a supportive context may improve overall cognitive and memory functioning, helping a child to perform at a more advanced level than would otherwise be possible (Fischer & Farrar, 1987; Vygotsky, 1978). Second, supportiveness might reduce social compliance with interviewer suggestion, lowering intimidation and the power differential between children and adults. Third, interviewer supportiveness could raise a child's sense of confidence and self-efficacy in the interview, empowering children to contradict adults' preconceptions and resist suggestion. More confident children may be less likely to change their answers after adult feedback or perceived criticism because they do not trust their own judgment and have low self-esteem (Pipe & Salmon, 2002; Scullin & Ceci, 2001).

Fourth, there may be a subgroup of children particularly sensitive to the benefits of support. The evolutionary-neurodevelopmental theory of child development predicts that some children possess evolutionary-based markers for heightened sensitivity to social and environmental influences. Sensitivity occurs on many levels--from the child's immune system to his or her level of neuropsychological functioning (Ellis, Boyce, Belsky, Bakermans-Kranenburg, & Van IJzendoorn, 2011).[7] Moreover, the benefits of support may be especially relevant with children who exhibit a shy, slow-to-warm-up temperament, as well as children who experience insecure, disorganized, or disrupted attachment histories with caregivers.

Fifth, the benefits of support may be particularly potent when children are anxious. If children experience realistic or unrealistic fears or worries about the consequences of an interview, a supportive interviewer may have a calming, rather than an anxiety-provoking effect, thereby reducing negative emo-

---

[7] Ellis et al. (2011) make the analogy that some children are more like dandelions, they thrive under most conditions; others are like orchids, while they are more likely to deteriorate under stressful conditions, they are also likely to benefit more than most from supportive conditions. This theory predicts that heightened environmental sensitivity can act as a risk or protective factor, depending on the context.

tional states that interfere with cognition and compete for mental resources. In more supportive contexts, anxious children may be better able to regulate emotional states and deploy attention and cognitive abilities. This may be especially true in a group of allegedly maltreated children who are at higher risk for attentional and learning difficulties and other disorders that affect cognitive function, such as fetal alcohol syndrome, intrusive thoughts associated with post-traumatic distress, or symptoms of depression, such as poor concentration, social withdrawal, anhedonia (indifference), and low energy.

Finally, support could improve cooperation and motivation. Many children have valid reasons for their unwillingness to talk or their need to deny, minimize, or exaggerate. In some cases, children have been threatened or bribed not to disclose adult wrong-doing. Other times, a child may feel ashamed, embarrassed, assume responsibility or blame, or fear real and imagined negative outcomes (e.g., jeopardizing placement). A child might believe that her continued survival depends on protecting an adult or sibling, especially when issues of confidentiality and consequence are unclear. Children often have both realistic and unrealistic fears of what will happen if they reveal private information or perceived secrets.

One aim of this review is to locate and synthesize experimental studies that examine the effects of interviewer support on interview outcome (accuracy and quality of children's reports). These studies may help us to understand how to create a supportive psycho-social atmosphere in a non-suggestive manner, to identify which children will be most sensitive to the positive or negative effects of interviewer support, and to understand how much training interviewers might need to provide support in a non-suggestive manner.

Influence of Rapport on Interview Outcome

While there is a large clinical literature replete with advice on how to develop rapport with children, it is not clear what effects rapport-building has on the accuracy or quality of information provided by children in an interview. Although it is assumed that rapport has a positive impact on interview outcome, some researchers have raised doubts about the value of rapport building. Specifically, there is concern about a negative association between length of rapport building and children's productivity in subsequent substantive questioning (Davies, Westcott, & Horan, 2000; Hershkowitz, 2009; Teoh & Lamb, 2010). That is, children may not have enough attentional resources to apply to substantive questioning if rapport building is too extensive. Protocols vary dramatically. Some devote an entire session to developing rapport before children return for a second session with the same interviewer for substantive questioning (Carnes, Wilson, & Nelson-Gardell, 1999; Carnes, Nelson-Gardell, Wilson, & Orgassa, 2001). Authors speculate that, in this way, there is sufficient rapport to promote honest, open self-disclosure, without exhausting children's attention span. Yet, in other studies rapport is limited to two minutes of introductions.

While too little rapport is thought to leave children without the incentive to be open and honest with unfamiliar adults, it is also possible that too much rapport, or certain kinds of rapport, may increase young children's suggestibility out of a desire to please the interviewer and avoid adult disappointment or rejection. Moreover, there are interviewer behaviors that might impair,

rather than promote rapport, including flippant sarcastic remarks, disbelief, challenging children's comments, or devaluing children's stated feelings (e.g., telling children who feel anxious or worried "Don't feel nervous. There is nothing to worry about."). Little is known about how these behaviors might influence children's reports.

In addition, definitions of rapport vary dramatically across studies. According to Sattler's (1998) definition in his seminal book on child interviewing, "Interviewers must establish an accepting atmosphere in which interviewees feel comfortable talking about themselves…without fear of judgment or criticism" (p. 18). "Rapport is based on mutual confidence, respect, and acceptance."(p. 60). Sattler's definition implies that the child's subjective experience of the interview is an important criterion for successful rapport development. In a study of the effects of rapport on preschoolers' self-disclosure, Rotenberg et al. (2003) found that children's ratings of adult trustworthiness and likability were positively related to greater rapport and that rapport was positively correlated with self-disclosure.

To further complicate matters, studies often make little distinction between support and rapport. Some researchers include building good rapport as a component of supportiveness, others include being supportive as part of building good rapport. Definitional issues become murky. Rapport is a multidimensional concept. There are verbal and nonverbal, behavioral and emotional components that do not always act in unison. For instance, Rotenberg et al. (2003), found that adult smiling, but not eye gaze, promoted rapport with preschoolers. Some of the components of rapport often noted in the literature include friendly conversation, eye gaze, smiling, uncrossed arms, posture mirroring, and open-ended questions asking for self-description and feeling states (e.g., Keller, Ford, & Meacham, 1978).

Izard (1990) proposed secure attachment as a model for good rapport. Mothers of securely attached infants are sensitive and responsive to the signals of their infants and engage in mutual gazing and synchronous behavior (de Wolff & van IJzendoorn, 1997). Rotenberg et al. (2003) suggest by analogy that good rapport is characterized by trust, warmth, and low levels of anxiety, disclosure of personal information, calmness, and children's perceptions of likeability and trustworthiness. Extrapolating from attachment theory one could predict that children who have experienced harsh parenting, or overly lax parenting (i.e., neglect) may have low expectations about developing high levels of rapport and communication with adults (Bowlby, 1969/1982, 1980; Bretherton & Munholland, 2008). Moreover, there is reason to believe that the population of children in foster care may have a greater need for rapport-building efforts than other children. Eltz, Shirk, and Sarlin (1995) found that maltreated children had more difficulty establishing an alliance with a mental health professional than a comparison group, even when level of psychopathology was controlled.

Authors have suggested that higher levels of rapport improve communication, motivation (Feldman & Sullivan, 1971), and verbal productiveness (Sternberg et al., 1997). Others have hypothesized that it reduces anxiety (Sattler, 1998) and suggestibility (Teoh & Lamb, 2010). In one study, Feldman and Sullivan (1971) provided a few moments of rapport building at the beginning of each subtest of the Weschlser Intelligence Scale for Children.

They found significantly higher intelligence quotients in the enhanced versus standard rapport conditions. In a field study examining style of building rapport, Sternberg et al. (1997) varied rapport building scripts by youth investigators conducting forensic interviews of suspected child abuse victims in Israel. They found children exposed to the open-ended rapport style provided 2 ½ times as many details in the subsequent interview as children in the direct question rapport style.

In summary, virtually every protocol, guideline, and literature review suggests that rapport is critical to successful interviewing of children, yet it is not clear whether there is an experimental evidence base to support this assumption. The amount of time spent, the exact techniques utilized, and the criteria by which interviewers judge high levels of rapport to be successfully achieved, vary widely or are not addressed in the literature (e.g., Abbe & Brandon, 2013; Cepeda, 2010; Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2006; Morrison & Anders, 2001; Poole & Lamb, 1998; Sattler, 1998; Saywitz & Camparo, 2014a). Thus, a systematic review of this literature is necessary.

Influence of Interviewer Preconceived Bias on Interview Outcome

Bruck and Ceci (1997) have proposed that interviewer bias is the "defining feature" of suggestive interviews. According to their definition "interviewer bias characterizes those interviewers who hold a priori beliefs about the occurrence of certain events and, as a result of such beliefs, mold the interview to elicit statements from the interviewee that are consistent with these prior beliefs" (Bruck, Ceci, & Principe, 2006, p. 782). The notion that interviewer preconceptions influence interview outcomes is based, in part, on robust findings of psychological research on confirmation bias. The research is clear that we select, evaluate, and remember information in ways that support our individual preferences; we often fail to look for evidence that disconfirms our preferred hypotheses (e.g., Klayman & Ha, 1987). What is not clear, however, is under what conditions these tendencies in turn influence the way we question children and the reliability of children's reports. Underlying mechanisms could operate through increased use of misleading questions by interviewers or selective reinforcement of information that concurs with interviewer preconceptions.

This type of bias may be particularly relevant for a foster care population. McLeod (2007) argues that the practice of listening to children is rarely straightforward, and that children's input is often marginalized due to preconceptions. Her study of 100 "looked-after" children in Northern England highlights how often social workers believed they were listening, but young people did not feel they had been heard. For example, workers may reasonably believe that certain options are in the child's best interest, regardless of child input. Whether inadvertent or intentional, true or untrue, interviewer assumptions may become evident in the leading way interviewers phrase questions and in the subtle, and not so subtle, behaviors that pressure children to respond consistently with interviewer preconceptions. Similarly, there may be limits on the professionals' power to enact children's wishes

that could lead to avoidance of certain topics that children may want to talk about, resulting in distortion of a different type.

One example is the issue of contact with biological parents. In studies, children express positive, negative, and conflicted feelings about parental visits (Burgess et al., 2010; Chapman et al., 2004; Morrison, Mishna, Cook, & Aitken, 2011). Professionals may have their own views about visitation that conflict with the views of the foster children themselves. In such instances, if professionals are not open to children's viewpoints differing from their own, interviews may become less about eliciting children's input reliably or promoting children's sense of participation, and more about convincing children to go along with a predetermined agenda.

Of particular concern is the conundrum that occurs when children report negative experiences with foster families. These can range from typical parent-child conflicts to neglect or abuse. There is concern that unless interviewer biases are kept in check, interviewer preconceptions can distort children's reports-- either in the direction of exaggerating problems and promoting false claims, or in the direction of minimizing and denying problems that exist.

Although the literature on accuracy of children's reports is replete with studies of interviewers using biasing techniques, these techniques vary widely from study to study. As previously mentioned, these suggestive techniques are often lumped together in research paradigms and the independent effects are not tested. Yet, it is likely that different biasing methods operate with divergent underlying mechanisms. In the present review, we focus on one clearly, if narrowly, defined paradigm referred to as preconceived bias (prior knowledge) to examine its independent effects on interview outcome.

There are a number of hypotheses in the literature regarding the underlying mechanisms responsible for how interviewer bias distorts children's reports. These include both cognitive and social-emotional factors. In terms of cognitive factors, a number of researchers have postulated that children's memories are actually altered by the introduction of misinformation from biased interviewers' leading questions (Bruck et al., 2006). Memories are not exact replicas of experience; they are reconstructed as part of an interactive process as adult questions drive the conversation, providing structure and guidance for the child's memory search and narrative retelling. For example, it is possible that younger children's memories fade faster, leaving weaker memory traces that are more vulnerable to suggestion and misinformation later in the reconstructive process (Brainerd et al., 2010).

With regard to social factors, bias may operate through social compliance with authority figures, perhaps because of intimidation or social desirability. For example, children as young as 3 years of age understand that adults possess a superior knowledge base (Taylor, Cartwright, & Bowden, 1991) and trust adults' knowledge. Hence, children may simply defer to the adult (Moston, 1990). This may be compounded by the authoritative role adults play in children's lives and the very real power differential over case outcomes (e.g., placement, visitation). A few studies have found that more self-confident children (Vrij & Bush, 2000) and those with higher self-esteem (Baxter, Jackson, & Bain, 2003) are better able to resist suggestive techniques. Similarly, better source monitoring (Leichtman, Ceci, & Morse,

1997; Thierry et al., 2001), understanding of theory of mind tasks (Templeton & Wilcox, 2000), and knowledge base (Goodman, Quas, Batterman-France, Riddlesberger & Kuhn, 1997) may promote resistance to adult bias and suggestion. Some researchers have re-conceptualized suggestibility as a result of bidirectional aspects interview (Gilstrap & Ceci, 2005), such that individual differences in children mediate differential responses by interviewers which then, in turn, influence the child's subsequent responses (Gilstrap, 2004; Gilstrap & Papierno, 2004). Hence, bias effects may be exacerbated with reluctant or uncooperative children.

We are aware of no other reviews that examine the independent contribution of interviewer preconception bias on interview outcome, yet it seems particularly important for generalization to the foster care context.

The present study

The aim of the present study is to twofold. First, we examine the foster care literature to identify experimental studies with controlled trials testing the efficacy of interview methods used with children in out-of-home care to elicit their experiences and perceptions. Second, we seek to determine whether there is a core knowledge base, derived from randomized controlled trials, in the general population, comparing the efficacy of various interview strategies from which to extrapolate to the foster care setting. This second search will provide an understanding of the breadth, purpose, and extent of research activity.

Given the volume of research we anticipate in the second search of the general population, we narrow our focus in the second search to the effects of interviewer behaviors of support, rapport, and preconceived bias on the reliability of children's reports. We seek to identify the experimental literature that addresses how adults can best interview children in care to elicit reliable reports--how best to engage children in the interview process, helping them to be open, self-disclosing, cooperative, and forthcoming, without jeopardizing the accuracy of the information they provide.

According to recent reviews of the literature, the bulk of existing studies focus heavily on the views of young adults and older adolescents formerly in care (e.g., Cashmore, 2014; Clark, 2005; Fox & Berrick, 2007). However, younger children are likely to require developmentally sensitive interview methods that differ significantly from the techniques used with teens and young adults. In addition, while important in their own right, the reports of young adults looking back on their experiences in foster care through the lens of time are likely to differ significantly from the reports of children about their contemporaneous experience in care. At a minimum, retrospective reports are subject to the participants' memory errors. Numerous authors make clear that one obstacle to further research, better policy, and improved practice is the dearth of methods available to elicit reliable information from younger children currently in foster care (Barth, personal communication, March, 10, 2014; Cashmore, 2014; Clark, 2005; Holland, 2009; Lundström & Sallnäs, 2012). Given this gap in the knowledge base, we focused our search on studies that included subjects in the 4 to 12 year age range. Ulti-

mately, this resulted in locating a group of potentially relevant studies in which subjects ranged in age from birth to young adulthood.

Method

Data Sources and Search Strategy

Six electronic databases (PsycInfo, PubMed, Sociological Abstracts, Social Services Abstracts, Web of Knowledge, Cochrane Central) were searched to identify experimental studies published in articles in peer-reviewed journals evaluating the effects of interview strategies on the reliability of interview outcomes (i.e., accuracy or quality of verbal report). Additional studies were identified by hand searching the reference lists from 30 authoritative reviews, contacting leading scholars, and consulting with our advisory board. Authors presenting relevant work at two recent scholarly conferences were contacted for additional studies.

Research published between 1990 and February 2014 was considered. The year of 1990 was selected because of the surge in research since the ratification of the U.N. Convention on the Rights of the Child in 1989, a document that promotes the use of children's input into decisions that affect their lives. Appropriate filters were added to each search strategy as necessary (publication date, age range, language). With the assistance of expert library scientists and a master's level graduate student in library sciences, care was taken to ensure comparable searches in each database. Searches were conducted using both subject headings (e.g., foster home care; interviews as topic; interview, psychological; mental recall; questioning; reproducibility of results; child) and key words (e.g., child*, youth, interview*, question*, foster child, foster care, out-of-home care, reliab*, suggest*, valid*, bias, accuracy, mental recall, memory, and recall, where* indicates truncation). The full search strategies for each of the electronic databases appear in Appendix A.

Two searches were undertaken. First, the databases were searched for experimental studies of the efficacy of interview methods in a population of children currently in foster care. A second comparable search was constructed and implemented for studies of children in the general population.

Study Selection (exclusion criteria)

All studies generated by the search of the electronic databases were included until a reason was found to exclude them. The list of reasons for exclusion is provided below:

1. The article is not in English.
2. The article is not published in printed peer-reviewed journal between 1990 and 2014.
3. The focus of the research is not on the efficacy of verbal face-to-face interview strategies.
4. The research does not include subjects between 4 to 12 years of age.
5. None of the outcome variables are a measure of accuracy or quality of verbal report.

6. The primary focus of the research is on the efficacy of nonverbal props or visual aids.
7. The subjects are recruited because of existing medical or psychological conditions.
8. The article is not an empirical research study.
9. The children are not the informants (e.g., a study of caretaker perceptions).
10. The research does not use an experimental design.
11. The children's responses are not compared to known, objective documentation of true live events/experiences (i.e., videotaped, audiotaped, photographs, or adult report).
    Criterion 12 was only employed in the search of studies from the general population.
12. The focus of the study is not on interview characteristics related to interviewer support, rapport development, or interviewer bias.

Development and Limitations of Exclusion Criteria

While some of the exclusion criteria are self-explanatory, a few require further explanation. In narrowing the criteria, the review team kept in mind which interview methods and factors would be most applicable to a foster care setting. First, studies that did not include subjects within the 4 to 12 year age range, currently in foster care, were excluded for two reasons. Young children require developmentally sensitive interview methods due to developmental limitations in communicative, cognitive, academic, social, and emotional maturity that differ from the methods used with adolescents and young adults. Second, the reports of alumnae looking back on their experiences in foster care are likely to differ significantly from the reports of children reporting on their contemporaneous experience, which is our focus. Hence, studies restricted to adolescents and young adults were excluded. This criterion is a limitation on the generalizability of our results. Consequently, Appendix B discusses factors that influence reports from older subjects and selected excluded studies.

Second, we excluded studies in which subjects were recruited on the basis of their medical or psychiatric diagnosis because we were concerned that it would be difficult to disentangle effects on cognitive functioning due to symptoms and medications. In addition, this would produce a volume of irrelevant studies that would not be feasible to screen within the time and resources of this project. However, this exclusion criterion is another significant limitation on generalizability of findings. Children in foster care can be at higher risk for certain clinical diagnoses that affect cognitive functioning, such as depression, attention deficit disorder, learning disorder, reactive attachment disorder, sleep disorders, stress related disorders, and fetal alcohol syndrome (Brosky & Lally, 2004; Justin, 2005; McMillen et al., 2005; Pasztor, Hollinger, Inkelas, & Halfon, 2006). Future reviewers will want to review the evidence base relevant to special populations.

Finally, we focused on studies of children's reports of known live events in order to evaluate outcome measures related to accuracy of children's re-

sponses. There is a growing literature to suggest that children's memories for live participatory events are more durable, contain more descriptive detail (Thierry & Spence, 2004), and are more resistant to suggestion and misleading questions (Gobbo, Mega, & Pipe, 2002) than recall for other types of information. Hence, we excluded studies involving recall for other information (e.g., wordlists) because they might overestimate children's suggestibility and underestimate the amount of accurate detail children can report about autobiographical events, especially in non-suggestive interviews using open-ended questions (Ornstein, Baker-Ward, Gordon, & Merritt, 1997; Roebers, Gelhaar, & Schneider, 2004).[8]

Search Result

Exclusion and inclusion of studies from the review are detailed in the flow diagram on page 33.

Search of Foster Care Literature

First, two raters independently applied exclusion criteria #1 through #10 to 1,299 titles and abstracts of studies located in the electronic search that were conducted with children currently in foster care. In addition, 47 potentially relevant studies were located through a hand search of the literature and contacting experts in the field. Raters achieved 100% agreement in determining that there were no studies for data extraction or synthesis that remained after these exclusion criteria were applied.

Then, in an ancillary screening, two raters (using criteria 1, 2, 3, 4, 6, 7, and 9) identified 35 of the excluded articles where the primary focus was a research study on the reports of children currently in care who were interviewed about their experiences in or satisfaction with foster care in a face-to-face interview format. These were primarily qualitative and descriptive studies flagged to identify directions for future research. Study characteristics are listed in a table in Appendix C and summarized in the results section.

Search of General Population Literature

Second, one rater applied exclusion criteria #1 through #9 to 2,761 titles and abstracts identified by the electronic search of studies from the general population. There were 2,322 ineligible studies excluded in this first round of screening titles and abstracts due to reasons listed in exclusion criteria #1 through #9. A subset of 10% of these excluded studies (randomly selected from each database) was coded by two independent raters who achieved 100% agreement to be certain no studies were excluded that should have remained. There were 439 potentially appropriate studies retrieved from the electronic databases for further review. In addition, 33 potentially appropriate studies were located through a hand search of the literature and contacting experts in the field.
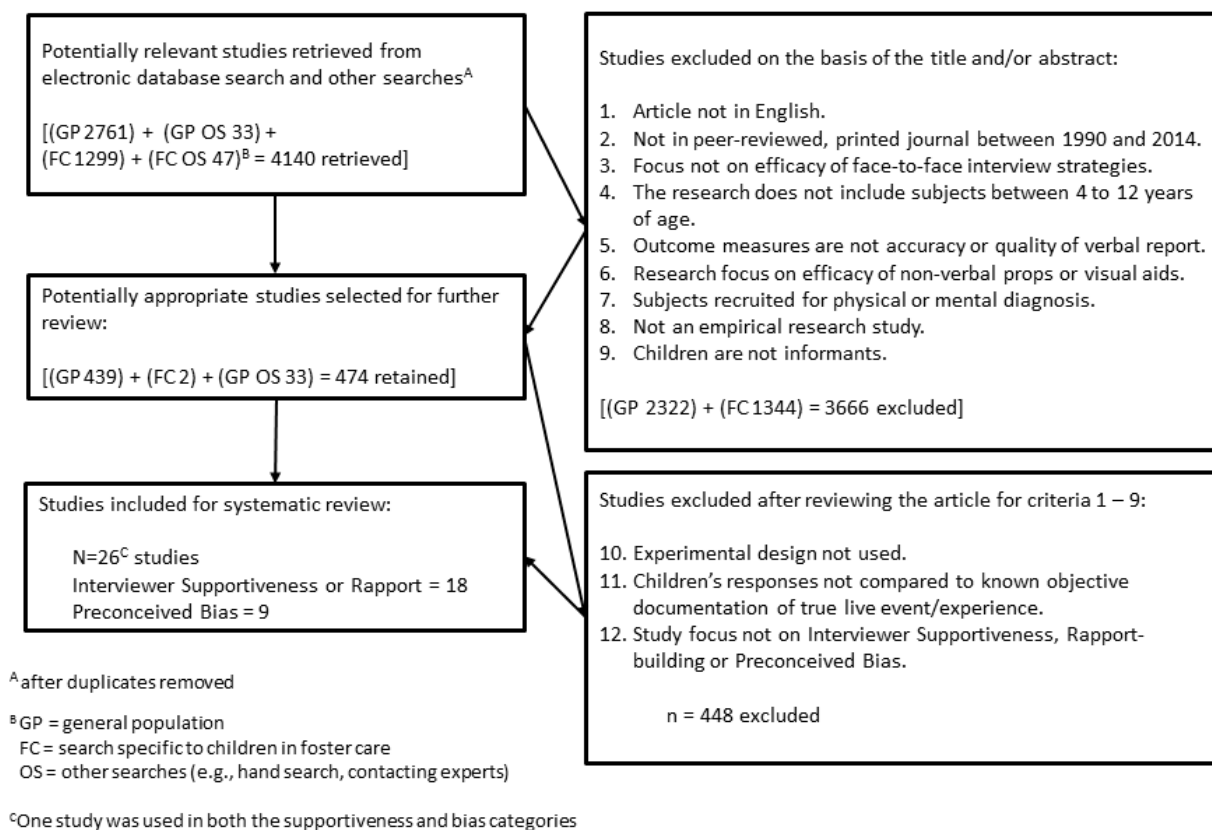
Then, these remaining 472 studies were reviewed by two independent raters, applying the full set of exclusion criteria, reading the full text of the article as needed. These raters achieved 98% agreement and differences were

---

[8] In the end, raters included three studies of children's reports of watching a movie because these studies met all other criteria.

resolved by discussion with a third member of the review team. Twenty-six studies remained for data extraction and review.

Flow Chart of Identified Studies and Review Process

Potentially relevant studies retrieved from electronic database search and other searches[A] [(GP 2761) + (GP OS 33) + (FC 1299) + (FC OS 47)[B] = 4140 retrieved]	Studies excluded on the basis of the title and/or abstract: 1. Article not in English. 2. Not in peer-reviewed, printed journal between 1990 and 2014. 3. Focus not on efficacy of face-to-face interview strategies. 4. The research does not include subjects between 4 to 12 years of age. 5. Outcome measures are not accuracy or quality of verbal report. 6. Research focus on efficacy of non-verbal props or visual aids. 7. Subjects recruited for physical or mental diagnosis. 8. Not an empirical research study. 9. Children are not informants. [(GP 2322) + (FC 1344) = 3666 excluded]
Potentially appropriate studies selected for further review: [(GP 439) + (FC 2) + (GP OS 33) = 474 retained]	
Studies included for systematic review: N=26[C] studies Interviewer Supportiveness or Rapport = 18 Preconceived Bias = 9	Studies excluded after reviewing the article for criteria 1 – 9: 10. Experimental design not used. 11. Children's responses not compared to known objective documentation of true live event/experience. 12. Study focus not on Interviewer Supportiveness, Rapport-building or Preconceived Bias. n = 448 excluded

[A] after duplicates removed

[B] GP = general population
FC = search specific to children in foster care
OS = other searches (e.g., hand search, contacting experts)

[C] One study was used in both the supportiveness and bias categories

Study Quality Assessment

The Checklist for Measuring Quality (Downs and Black, 1998) was utilized to help assess the quality of the research being included in this synthesis. In this review, the Checklist for Measuring Quality (Downs & Black, 1998) was applied to 26[9] studies.[10]   It is a 27 item scale (possible values range from 0 to 28 because one item is scored 0-to-2 instead of 0-or-1). The score on the quality checklist can be used in one of several ways: as part of the inclusion/exclusion criteria, as a descriptive measure, as a weight in the meta-regression, or as a predictor in the meta-regression. We have used the score as a descriptive measure of the quality of each study. Higher scores indicate better quality.

---

[9] One study included data on both bias and support; hence it is included in both data sets but was only scored once on the Downs and Black Checklist.

[10] We altered the scoring of the last item on the Downs and Black Quality Checklist. This item has to do with the power of the study. This item is to be measured on a scale from 0 to 5, with higher scores associated with more power. However, this item was particularly difficult to use in our sample, so we recoded it to have a score of 0 or 1. A score of 0 was given if the study did not mention conducting a power analysis before collection of the data. A score of 1 was given to studies that did indicate that a power analysis was conducted.

Items on the Downs and Black Checklist assess both the quality of the research design (e.g., "Was an attempt made to blind study subjects to the intervention they have received?") as well as the quality of the reporting of the research (e.g., "Is the hypothesis/aim/objective of the study clearly described?"). The Downs and Black Checklist has been evaluated for its reliability and validity in terms of internal consistency, test-retest reliability and inter-rater reliability. It has been used in other systematic reviews in the foster care field (e.g., Kinsey & Schlösser, 2012; Ziviani, Feeney, Cuskelly, Meredith, & Hunt, 2012).

In the present review, two raters scored 30% of the studies on the Downs and Black Quality Checklist. The inter-rater reliability was very high: kappa = .94 and 97% agreement. Differences were resolved by discussion with a third judge. Then, each rater scored half of the remaining studies. Three articles reported limited information. First authors were contacted for additional information, but only one was able to provide more information at the present time. We were concerned that eliminating these studies would bias the results of the search, so the studies were not excluded. This produced three low scores on the Downs and Black Quality Index. The range including these scores was from 4 to 23 (M = 17.81; SD = 4.50). Without these scores, the range for the remaining 23 studies was from 14 to 23 (M = 19.17; SD = 2.29). Twelve studies achieved a Downs and Black score of 70% or more (equivalent to score of 19.6).

The Downs and Black Quality Index score is comprised of five sub-scales: reporting (nine items), external validity (three items), bias (seven items), confounding (six items) and power (one item). We chose to report the total score rather than the sub-scale scores for simplicity and for the reasons given below. As with any measure used, some caveats should be considered. First of all, some items on the Downs and Black Quality Index were not particularly well-suited to the types of research designs utilized in these studies.

Another point to consider is the change in standards in both statistical analyses and reporting over time. For several of items on the Downs and Black Checklist, a score of one required a reporting standard that was not in place at the time the article was published. For example, standards regarding the reporting of p-values have changed. Previously, tests of statistical significance were reported as being either statistically significant or not statistically significant; researchers were discouraged from reporting exact p-values (Publication Manual of the American Psychological Association, Third Edition, 1983). Today, the preference is to report exact p-values (Publication manual of the American Psychological Association, Sixth Edition, 2010). Studies that do not do so, receive lower scores on the index. Also, in the past, it was more acceptable to use proportions as an outcome variable in an analysis of variance model. Today, use of a count model is preferable (Cameron & Trivedi, 2013; Hilbe, 2011; Long & Freese, 2006). Similarly, today many journals require that researchers perform a power analysis to inform the number of subjects that may be needed to detect an effect of a given size; in the past, this was not always the case. Studies that did not do so, receive lower scores on the index. These and other changes in acceptable practices should be considered when evaluating the scores on the Downs and Black Quality Index.

Data Extraction

Information collected from studies includes author, publication date, publication title, country, research design, sample characteristics, characteristics of experiences to be reported on, description of interview strategy or method under investigation, main variables examined, outcome measures, and key findings.

Data Synthesis

Meta-analysis was not appropriate due to heterogeneity between the three topic areas that we have included in this synthesis (i.e., interviewer support, rapport-building, and interviewer bias).

Results

Preliminary Overview of Study Pool

The 4,140 articles located by our searches originated from wide range of countries, including Malaysia, Australia, New Zealand, England, Wales, Canada, Germany, Norway, Netherlands, Sweden, Romania, Japan, South Africa, Tanzania, Sri Lanka, Senegal, Pakistan, Zambia, Malawi, Kenya, and the United States. Researchers employed a variety of methods on a diverse range of topics. Our search identified studies of children interviewed about their memories of symptoms and treatment of illness (e.g., asthma, diabetes), injuries and treatment in emergency rooms, painful or distressing medical procedures (e.g., VCUG, surgery), exposure to second hand smoke, poverty, stressful life events (e.g., family violence, natural disasters), bereavement, drug use, sexual behavior, chronic pain (e.g., juvenile arthritis, recurrent headaches), obscene telephone calls, instances of child abuse, HIV/AIDS, alcohol use, perceptions of foster care, as well as perceptions of their own psychosocial well-being, and more mundane play activities, classroom events, and academic material, as well as dietary intake, physical activity, consumer product placements, advertising, and museum exhibits. The vast majority of studies, however, did not examine the efficacy of the interview methods utilized in these studies.

Results from Studies Interviewing Children in Foster Care

Search Results

Out of the 1,299 studies of children currently in foster care that were located by the electronic search, there were no experimental studies with randomized controlled trials that assessed efficacy of interview methods on children's verbal reports. Contacting experts in the field did not result in additional studies meeting our criteria. Indeed, the call for children's input and participation appears to have outpaced the development of well-tested methods for eliciting reliable information from young children in care.

Summary of Existing Literature (Excluded Studies)

In an ancillary effort to map the breadth, purpose, and extent of research activity on methods of eliciting children's experiences in, and satisfaction with, foster care, our raters applied a second set of less rigorous criteria to the excluded studies. This effort was undertaken to begin to understand what we know, what we don't know, and what more we need to know to plan future research. Raters screened the excluded studies to identify those where the primary focus was on eliciting experiences in, or satisfaction with, foster care through face-to-face interviews with children currently in care.[11] This

---

[11] We applied criteria 1, 2, 3, 4, 6, 7, and 9.

screening did not include the requirement that the method itself and the children's accuracy be evaluated systematically. This ancillary process resulted in two raters identifying 36 studies.[12] The table in Appendix C lists the authors, countries of origin, sample sizes and age ranges, and interview methods in this body of work which is summarized briefly below.

Subjects

Sample sizes varied from 5 to 1,100 subjects, ranging from 2 to 18 years of age.[13] Most studies included children who had been in care for at least 6 months. Although some studies included very young children, for the most part, these younger children were not interviewed; data were collected about these younger subjects in other ways (e.g., from records, caregivers, or observation). By and large, interviews were conducted only with older children, usually 11-12 years of age or older, especially in the more scientifically rigorous studies. (For discussion of failed attempts to interview younger children in pilot testing, see discussions in Chapman et al., 2004; Lundström & Sallnäs, 2012; Sallnäs, Wiklund, & Lagerlöf, 2012; NSCAW Research Group, 2002). Countries from which children hailed included Australia, England, Scotland, Ireland, Norway, Sweden, Finland, USA, Canada, and Cambodia. A majority of studies employed small non-representative samples; however, there were exceptions of greater methodological rigor as highlighted below.

Interview topics

In screening these studies, we identified the kinds of experiences children had been asked to remember, discuss, rate, or endorse. The topics of the interviews varied widely. Most studies examined positive and negative experiences in and satisfaction with placement in out-of-home care (e.g., Barber & Delfabbro, 2005; Chapman et al., 2004; Delfabbro et al., 2002; Mitchell, Kuczynski, Tubbs, & Ross, 2010; Wilson & Conroy, 1999), relationships with caregivers and biological families (e.g., Burgess et al., 2010; Chapman et al., 2004; Wilson & Conroy, 1999), children's perceived role in decision making (e.g., Aubrey & Dahl, 2006; Block, Oran, Oran, Baumrind, & Goodman, 2010; Daly, 2009; Dolan, Smith, Casanueva, & Ringeisen, 2011), relationships with social workers (e.g., Aubrey & Dahl, 2006; Dolan et al., 2011; Lundström & Sallnäs, 2012; McLeod, 2006, 2007), and advice to other children and to professionals (e.g., Blower, Addo, Hodgson, Lamington, & Towlson, 2004; Daly, 2009). Two studies focused on children's experiences with child protective services systems (Morrison et al., 2011; Pölkki, Vornanen, Pursianinen, & Riikonen, 2012); two studies focused on children's experiences in court hearings (Block et al., 2010; Weisz et al., 2011). Some studies focused exclusively on kinship care (Altshuler, 2003; Messing, 2006), residential care (Emond, 2010), or narrow topics, like 'going missing' (Biehal & Wade, 2000).

Emerging themes across studies included (a) quality of life (i.e., safety, clothing, food, living environment, level of enjoyment, access to friends and afterschool activities, home life structure or chaos, emotional climate of

---

[12] These 36 studies were reported in 35 articles because one article reported on two studies with independent samples.
[13] Although our criteria focused this review on studies that included subjects between 4 and 12 years of age, typically these studies also included subjects below and above this age range.

home, discipline, and level of supervision); (b) child well- being (i.e., how well medical, educational, social, and emotional needs are met); (c) relation-ships with caregivers and family; (d) importance of social support networks; (e) feelings of being loved, safe, secure, and accepted; (f) inclusion in deci-sion making and respect for children's views; (g) issues of fairness, stigma and normalcy; and (h) felt security and perceived emotional support.

Interview methods
Children's viewpoints were elicited in a variety of ways. Methods included (a) individual, private interviews conducted at home or a child development center (e.g., Andersson, 1999; Biehal & Wade, 2000; Burgess et al., 2010; Wilson & Conroy, 1999), (b) focus groups (e.g., Altshuler, 2003; Daly, 2009; Ellermann, 2007; Rostill-Brookes, Larkin, Toms, & Churchman, 2011), and (c) audio-computer assisted self- interviewing (A-CASI) with responses made on a laptop. Although excluded because they were not face-to-face interviews or subjects were too old, we also located studies using online web-based surveys (McDowall, 2013), telephone surveys (McDowall, 2013; Per-ry, 2006), questions prerecorded on CDs to be answered wearing headphones (Lündstom & Sallnäs, 2012), and written postal questionnaires (Sinclair et al., 2001). A number of studies used multiple methods (e.g., Blower et al., 2004; Chapman et al., 2004). Interviews varied from 15-30 minutes to 1-4 hours over multiple sessions.

Protocols ranged from unstructured ethnographic interviews, to semi-structured interviews with open-ended and forced-choice questions, to highly structured interviews requiring single word responses and Likert scale rat-ings. Interview methods for each study are listed in Appendix C. Unfortu-nately, a number of authors failed to describe the interview protocols in any detail. A minority of studies reported pilot testing of the interview and scales utilized (e.g., Aubrey & Dahl, 2006; Dolan et al., 2011; Fox et al., 2008; NSCAW Research Group, 2002; Wilson & Conroy, 1999). A small number employed techniques whose psychometric properties had been tested in pre-vious studies, (e.g., Kvebaek Family Sculpture Technique, Gardner, 2004). However, by and large, more extensive tests of reliability (inter-rater, internal consistency, test-retest) and validity (construct, face, content) were rare. For exceptions, see the NSCAW studies (Dolan et al., 2011, Chapman et al., 2004; NSCAW Research Group, 2002), or Wilson and Conroy (1999).[14] Although the majority of studies use interview questions and scales devised specifically for that study, a few research teams did derive some of their measures from instruments used in previous studies (Barber & Delfabbro, 2005; Chapman et al., 2004; Delfabbro et al., 2002; Dunn, Culhane, & Taussig, 2010; Fernandez, 2007; Lundström and Sallnäs, 2012) and/or se-lected items from more standardized scales (e.g., Barber & Delfabbro, 2005; Chapman et al., 2004; Delfabrro et al., 2002; Dolan et al., 2011; Fernandez, 2007; Fox et al., 2008; Lundström & Sallnäs, 2012).

For example, in the United States, Fox et al. (2008) created a community advisory committee to aid in developing the research questions and instru-

---

[14] In addition, instructive pilot testing can be found in the work of four research teams excluded due to age range or lack of face-to-face interaction, including Cashmore and Paxman (2006), Perry (2006), McDowall (2013), and Lundström and Sallnäs (2012).

mentation package. They conducted considerable pilot testing with the same population, employing extensive interviewer training and supervision to insure fidelity. They developed creative ways to engage the younger children while keeping the interview to no more than an hour. They created a 69 question interview comprised of yes/no questions and Likert scale ratings. They also employed standardized measures, such as the Things I Have Heard and Seen Scale of exposure to violence (Richters & Martinez, 1993), the Rochester Assessment Package for Schools-Student Relatedness Scale (RAPS), and selected questions from the US National Longitudinal Study of Adolescent Health (ADD-Health).

This interview protocol served as a starting point for the investigation of a large national probability sample utilized in the NSCAW studies (Chapman et al., 2004; Dolan et al., 2011; NSCAW Research Group, 2002). The NSCAW research team revised, augmented, and pilot tested their protocol, the CAPI interview. Although data were collected from children over 7 years of age, the consumer satisfaction and foster care specific aspects of this interview were administered only to children 11 to 14 years of age with the A-CASI method. Interviews ranged from 25 to 150 minutes (NSCAW Research Group, 2002).

In similar efforts, Wilson and Conroy (1999) designed and pilot tested their own instrument, a semi-structured interview of satisfaction with children's lives, relationships, and services before and after placement resulting in 49 close-ended questions (Likert scale ratings, multiple-choice and yes/no questions). Dunn et al. (2010) used the Foster Care Questionnaire (FCQ) comprised of open-ended questions and ratings of current placement, as well as the People in My Life measure (PML) regarding caregiver attachments derived from Cook, Greenberg, & Kusch (1995). In Australia, Barber and Delfabbro and their colleagues developed scales of satisfaction (derived form Stuntzner-Gibson, Koren, & DeChillo, 1995) and caregiving, as well as a scale rating the occurrence and helpfulness of 56 daily activities validated with a large group of adolescents from the general population, and a rating scale of happiness in placement (Barber & Defalbbro, 2005; Delfrabbro et al., 2002).

Of interest, a number of research teams developed innovative techniques for working with young children that represent initial steps in the effort to accommodate developmental limitations of younger children in attention, communication, cognition, and motivation. Even so, these techniques were rarely tested for reliability or validity, or replicated or extended by other research teams. Some interviewers employed visual and graphic aids to make tasks concrete, explicit, and to hold children's attention. They used props or gave children the opportunity to draw maps that described their experiences in care, family relationships, and social networks, or they asked children to respond to pictures with stories or to use storyboards where children fill in graphics and text (e.g., Fox et al., 2008; Holtan, 2008; McLeod, 2006; Heptinstall, Bhopal, & Brannen, 2001; Pölkki et al., 2012; Whiting & Lee, 2003).

Several studies mixed a variety of strategies. For example, Weisz et al. (2011) created an interview about participation in the court process with pictures of faces to identify affect states, graphics with thumbs in up or down orientations to represent a scale of very bad to very good, and 31 statements

with response options on a Likert scale from disagree completely to agree completely. Aubrey and Dahl (2006) employed decision charts along with open-ended questions and forced-choice questions, using Likert scale response options along a 3 point scale where children dropped one to three beans into a jar to indicate their response, as well as dictating a message to a social worker on a postcard about what the child would like to change. Emond (2010) used flash cards with key words to guide interview topics. Lee and Whiting (2007) solicited stories in response to pictures of animal families. These methods, although sorely in need of rigorous tests of their efficacy, are innovative approaches that represent beginning building blocks for future research.

Study Designs

There are a myriad of methodological challenges inherent in this kind of research, including difficulty gaining access to unbiased, representative samples; lack of access to information about the population from which the sample is drawn; developing population-specific research questions; collaborating with stakeholders in the community; low response rates; selecting scales and designing instruments tailored to the needs and unique characteristics of a foster care population; minimizing social desirability of responses; selecting, training, supervising, and monitoring of interviewers; fidelity to the protocol despite unexpected revelations (e.g., unreported abuse); managing the emotional reactions of both interviewers and children; and ethical dilemmas. (See Berrick, Frasch, & Fox, 2000, and NSCAW Research Group, 2002, for further discussion.) Frequently, these issues are threats to generalizability of findings that need to be taken into account.

An informal perusal of the studies suggests the following: Over half the studies involved non-representative samples of 25 subjects or less, with a qualitative approach to data coding, sometimes employing software packages, to categorize children's responses into emerging themes that were discussed with exemplars. Sometimes the number or percentage of children mentioning each theme, or responding in a certain direction, was reported. These data provide the initial steps for developing the content and coding systems for more rigorous experimental future research. In contrast, two studies stood out for their focus on consumer satisfaction, representative sampling, and methodological rigor. These include the NSCAW studies (Chapman et al., 2004; Dolan et al., 2011; NSCAW Research Group, 2002) and WiIson and Conroy (1999).

In addition to interviewing foster youth, some of the studies included interviews or focus groups of foster parents and professionals, providing insight into the discrepancies between what was of importance to the children and what was of importance to adults (e.g., McLeod, 2006, 2007).

Positive Impact of Participation

As mentioned earlier in this report, experts have increasingly speculated that children derive benefits from participating in the act of providing information to decision makers or contributing to the knowledge base on which polices are predicated (Cashmore, 2002, Head, 2011; Melton et al., 2014). Our search located very little empirical evidence to confirm or disconfirm this hypothesis. A couple of researchers did employ explicit strategies to help

children understand that their participation was valued, that they were competent to contribute, and they were respected and heard (Daly, 2009; Mitchell et al., 2010). However, there were no manipulation checks to insure interventions operated as intended and no tests of effects on positive development outcomes. In short, there was a decided lack of rigorous investigation into the potential upsides and downsides of participation or the effects of interview strategies intended to promote positive development.

Theoretical Grounding

Theories relied upon to design studies and interpret results varied widely. Clearly, there was no sense of convergence in the field regarding theoretical models. Although there are some excellent think pieces regarding conceptual frameworks (Holland, 2009), children's rights perspectives (Checkoway, 2011), developmental (Schofield, 2005) and procedural justice models (Cashmore, 2011), very few of the empirical studies we located relied on the same theories. The most common mentioned were attachment theory (Bell, 2002; Cashmore & Paxman, 2006; Fernandez, 2007), resilience frameworks (Delfabbro et al., 2002; Fernandez, 2007), and a life-course perspective (Gardner, 2004). Also, utilized were family theories (Gardner, 2004; Holtan, 2008), ecological theories (Whiting & Lee, 2003), standpoint theory (Mason, 2008; Rostill-Brookes et al., 2011), a strength-based approach (Daly, 2009), psychoanalytic theory (Delfabbro et al., 2002; Lee & Whiting, 2007), Maslow's hierarchy of needs (Fleming, Bamford, & McCaughley, 2005), social integration theory (Holtan, 2008), cognitive appraisal and life transition theory (Mitchell et al., 2010) and other sociological and field theories (Heptinstall et al., 2001).

A number of investigators approached the research with the aim of understanding the child's subjective 'lived experience' from a 'children's rights-based model' where children were seen as co-constructors of the knowledge base (Emond, 2010; Mason, 2008; Rostill-Brookes et al., 2011). These studies tended to focus on rapport development to elicit more open and honest information, reducing the power differential between the child and the adult, and following the children's leads to guide questioning (e.g., Mason, 2008). For example, one study used an ethnographic, participant-observation approach (Törrönen, 2006) to accomplish this goal; another involved the children in creating the interview questions themselves (Daly, 2009; Fleming et al., 2005). In Canada, Mitchell et al., (2010) developed the "We Care" workshop as method of rapport development followed by the "Sharing Ideas" interview protocol from this perspective.

In summary, this brief, informal, ancillary screening of the literature provides a rich picture of methods, theories, and research designs from which to surmise directions for future research. Taken together, these studies reflect an expanding field of both qualitative and quantitative work. They highlight the need for more representative samples, greater convergence of theoretical formulations, and the development of quantitative measures derived from qualitative building blocks. One notion that emerges from the literature is the value of mixed methods approaches that incorporate both semi-structured interview methods with open-ended questions (that allow children to describe experiences and express percep-

tions and opinions in their own words so that their perspectives are not overlooked), combined with standardized instruments and structured interview methods with quantitative scales. One direction for future research is to subject these formats to controlled trials and experimental tests of their effectiveness in eliciting children's "voices" in out-of-home care.

Conclusions

Our search identified no experimental studies with randomized controlled trials that assessed the efficacy of interview methods on verbal reports of children currently in care. Clearly, the call for children's input and participation has outpaced the development of evidence-based methods for eliciting reliable information from young children in care. As a result, we constructed a similar search for studies of interview methods in the general population in order to determine whether there was a core body of research from which to extrapolate to the foster care setting. The results of that search follow.

Results From Search of Interview Methods in General Population

Interviewer Support and Rapport-building Effects

Search Results

The search of studies from the general population utilized all 12 exclusion criteria. This search yielded 18 studies of the effects of interviewer support and/or rapport-building strategies on the accuracy or quality of children's reports. Study characteristics are found in Table 1. Fifteen studies examined the effects of interviewer supportiveness and three examined the effects of rapport, although not all investigators distinguished between support and rapport. In fact, in a number of studies, support conditions included brief time spent in rapport development, sometimes limited to two minutes of introductions (Almerigogna, Ost, Bull, & Akehurst, 2007; Davis & Bottoms, 2002; Goodman, Bottoms, Schwartz-Kenny, & Rudy, 1991; Hershkowitz et al., 2006). Hence, not all studies made conceptual distinctions between support and rapport nor manipulated these constructs in controlled ways to ascertain the independent contributions of each to the outcome. Thus, we combined these studies for data extraction and synthesis. (The three studies focused on rapport-building strategies are listed separately at the end of Table 1.) Also, it is important to note we found that five research teams figured prominently in the study sample as "hot spots" of research on this topic.[15]

Overview of Study Methodologies

There were 16 experimental studies where children participated in objectively known events and were interviewed later in either a supportive or non-supportive context or with a particular type of rapport-building technique

---

[15] Two studies were conducted by Almerigogna and colleagues in the UK and two by Hershkowitz and colleagues in Israel. In the US, two studies were conducted by Goodman and colleagues, three by Bottoms and colleagues, and five studies by Quas and her colleagues.

versus another type of rapport building technique. Then accuracy and quality of children's reports of the known event were compared across support or rapport conditions. Additionally, there were two quasi-experimental studies of exceptionally high quality conducted in the field that met all of the other criteria except for the requirement of an experimental design (Hershkowitz et al., 2006; Hershkowitz, Lamb, Katz, & Malloy, 2013).[16] After much discussion among the research team members, we included these two studies in our review because we were interested (a) in increasing ecological validity of our conclusions, (b) in whether the findings of field studies would be similar to those of the experimental studies conducted in the laboratory, and (c) in whether field studies could provide a unique view of the effects unsupportive interviewer behaviors that would not be ethical to induce in the laboratory.

In all but one study, researchers defined support as non-suggestive, that is, interviewers were instructed to implement supportive comments and behaviors in ways that were not contingent on the child's response. This was done in order to avoid biasing children's responses through selective reinforcement. However, definitions of support varied across studies, as Table 2 exemplifies. For example, Hershkowitz et al. (2013) defined support as "non-suggestive encouragement of children's efforts but not the contents (topics) of their statements" and addressing the child by name. Bottoms and her colleagues (2007) included the following as indicative of support: introductions, rapport development, open body posture, warmth, friendliness, smiling, and eye contact (Carter et al., 1996; Davis & Bottoms, 2002, Goodman, Bottoms, et al., 1991). Non-supportive conditions varied from neutral to intimidating and unsupportive. Typically, interviewers in the low support conditions did not spend time or emotional energy to engage children, lacked warmth, failed to express empathy or encouragement or use the child's first name, were distracted by other demands, made limited eye contact, and avoided smiling and any type of praise or positive feedback. One study examined interviewers' natural use of supportive comments without instructions to be non-suggestive (Goodman, Sharma, Thomas, & Considine, 1995).

Delays from time of event to time of interview ranged from immediate recall to a one year delay, with most studies in the one to four week range. Training and identity of interviewers ranged widely from professionals in the field who specialized in child interviewing and received months of ongoing supervision (Hershkowitz et al., 2013) to untrained undergraduate students (Hardy & Van Leeuwen, 2004).

Researchers investigated effects of a number of individual difference factors, including anxiety/distress (as measured by heart rate, cortisol level, autonomic reactivity, or state and trait anxiety questionnaire), temperament, attachment status, social reserves, resistance efficacy, language ability, parenting attitudes, task engagement, suggestibility trait, working memory ca-

---

[16] Hershkowitz et al. (2013) used a pre/post quasi-experimental design to study effects of a standard protocol compared to a protocol with enhanced interviewer rapport-building and supportiveness. Subjects were matched on age, gender, type of suspected abuse, and relationship to suspect. Researchers reviewed 1,424 interviews to select the final matched group of 200 in order to compare 100 who received the standard interview protocol to 100 who received the enhanced protocol. In the second field study, Hershkowitz et al. (2006) sampled interviews from the entire population of abuse allegations made between 1998 and 2003 in the country of Israel to locate a sample 100 with very strong evidence of abuse, comprised of 50 children who disclosed abuse and 50 children who had not. The effects of supportive and unsupportive efforts on quality of children's reports were examined.

pacity, and reluctance. The most common of these was anxiety measured by a questionnaire or physiological measure, such as heart rate or autonomic reactivity.

Children were interviewed about a variety of experiences, including mildly arousing events (sad movie), mildly stressful events (unexpected fire alarm), and moderately stressful events (inoculations at a medical clinic). For the two field studies, the topics under discussion were incidents of alleged abuse in highly credible cases, presumably constituting highly stressful events. Children's reports were compared to videotapes, transcripts, or adult witness reports of what occurred, except for the two field studies.[17] The outcome was measured in terms of accuracy and quality of children's reports. Typically, outcome measures were derived from number or proportion correct or incorrect responses to detailed questions that were a mixture of misleading and neutral questions. Suggestibility was defined as making more errors or providing fewer correct responses to misleading questions or falsely assenting to a fictitious events or event details. In addition, some studies assessed accuracy or volume of children's free recall in response to open-ended prompts.

Sample Characteristics

Studies originated in the United States, United Kingdom, and Israel. Although a majority of studies were conducted in the United States, the samples were drawn from diverse geographic regions. When data regarding socioeconomic status were reported, most children came from middle class families. The percentage of the sample identified as ethnic minorities ranged from 8% to 58% (one third of studies included 43% or greater percentage ethnic minorities in the sample). The children ranged in age from 3 to 14 years. Sample sizes ranged from 40 to 200 children.

Quality Assessment Results

Scores on the Downs and Black Quality Checklist appear in Appendix D. Downs and Black scores ranged from 10 to 23 (M = 18.61, SD = 3.11). Of the 16 experimental analogue studies where random assignment would have been expected, only half the articles clearly stated random assignment was employed.[18] To their credit, the bulk of studies included manipulation checks to see if manipulations were working as intended. However, researchers were often lax in reporting whether coders and interviewers were blind to hypotheses of the study or condition assignment. In more than one instance, the first author (who was presumably aware of the hypotheses of the study) was directly involved in the interviewing process, the staged event, and/or the coding of the data, complicating interpretation of the results.

---

[17] In Hershkowitz et al. (2006), cases were rated with respect to the strength of evidence or the basis for suspicion using the "Ground Truth" scheme (e.g., medical evidence, eyewitness accounts, suspect confessions, material/physical evidence) as described by Lamb, Sternberg, Esplin, Hershkowitz, & Orbach (1997). In Hershkowitz et al. (2013) a similar scheme was employed with additional criteria, including child protective services substantiation, sibling report, and victim disclosure to unbiased professionals.

[18] For the studies that compared different rapport-building strategies, none reported completely random assignment. One study used a quasi-random method of assignment within school to balance gender and assigned three times more children to one condition than the other two (Brown et al., 2013); one failed to say whether children were randomly assigned to condition or not (Roberts, Lamb, Sternberg, 2004); and the third assigned all children in one classroom to one rapport condition and all the children in another classroom to other condition (Hardy & Van Leeuwen, 2004).

Key Findings: Effects of Interviewer Support on Accuracy and Suggestibility[19]

There were 15 studies that compared children's reports when interviewed in supportive context to those of children interviewed in a non-supportive context (or in some cases unsupportive/intimidating context). Table 3 summarizes the results. All but two studies found consistently positive effects as determined by investigators ($p < .05$). Appendix D displays effect sizes calculated by our research team as well as Downs and Black Index scores for these same studies.

The consistent findings across a wide range of methodologies suggest the positive effects of support on interview outcome are robust and that support can be administered successfully in ways that do not distort or contaminate children's reports. Unfortunately, investigators rarely reported how much training and monitoring was required to achieve implementing support in a non-suggestive manner.

Support conditions were consistently associated with reduced errors on misleading and suggestive questions, indicating that support reduced suggestibility effects. Adverse effects of support were rare. Positive effects on free recall and non-leading questions were a less consistent with a number of studies reporting no significant effects (Davis & Bottoms, 2002; Carter et al., 1996; Hershkowitz et al., 2013; Quas, Wallin, Papini, Lench, & Scullin, 2005). This pattern might suggest there is less evidence for a pervasive improvement in overall cognitive performance due to interviewer support than there was evidence that support may operate by reducing social compliance or social desirability, perhaps increasing children's willingness or motivation to contradict the interviewer and resist suggestions when interviewers are more supportive.

Returning to the two studies that failed to find differences or found mixed results, Imhoff and Baker-Ward (1999) suggested that their failure to detect a difference between support conditions might be due to the fact that their non-supportive condition was still fairly supportive (e.g., smiling and occasional praise).[20] Goodman et al. (1995) found mixed results which may be due to the fact that researchers examined spontaneous supportive comments. Hence, this was the only study that did not instruct interviewers in advance to use support in a non-suggestive, non-contingent manner. Of interest, this is also the only study in which supportive comments were negatively correlated with accuracy (i.e., children's answers to detailed questions), although this was only true when interviewers were strangers, not mothers. However, it is important to remember these data are correlational in nature and we cannot infer that support caused inaccuracy. The authors note that further analyses suggest just the opposite might be true--interviewers tended to become more supportive in an effort to engage uncooperative, and possibly more inaccurate, children. This could be a function of the dyadic and bidirectional nature of the interview.

---

[19] Unless otherwise indicated, the dependent variable of accuracy refers to number or proportion correct or incorrect in free recall or specific questions; the dependent variable of suggestibility refers to errors on misleading questions or number or rate of assents to false events.

[20] There were no trends in the data to suggest support increased suggestibility or decreased accuracy; the means were in the predicted direction.

The pattern of interviewers reacting differentially to children's individual differences was apparent in other studies in this review as well. For example, Hershkowitz and her colleagues (2006) reported that although support had a positive effect on the amount of information children provided overall,[21] when children expressed reluctance, interviewers responded in a counterproductive fashion, with less rather than more support. As a result, children's reports deteriorated. In this situation, interviewers became less supportive over time and asked fewer open-ended questions and more closed-ended questions, perhaps out of frustration with uncooperative children. These researchers argue that the reluctant and uncooperative children could have been identified early in the rapport-building stage and should have been offered more, rather than less, support throughout the interview (See Teoh & Lamb, 2013, for similar findings in a field study).

One more caveat is warranted. Although Quas, Rush, Yim, Nikolayev (2014) found children in the supportive condition were less suggestible than children in the non-supportive condition overall, they also reported a novel effect of fewer factual details provided by children in the supportive condition. Researchers speculated that perhaps children questioned by an unsupportive interviewer tended to recount more factual details to impress the interviewer to try to get her to change her demeanor to be more supportive. Again, this explanation highlights the importance of future research examining the dynamic, transactional process between children and adults, as children try to elicit more support from unsupportive interviewers and interviewers try to cope with uncooperative children.

Conclusions

In summary, there was no evidence for the notion that support, when provided in a non-suggestive, non-contingent manner, leads to greater inaccuracy or suggestibility. In fact, the results were consistently in the opposite direction. Support was associated with less suggestibility, not more.[22] This was true in both short and long delays, including a delay of up to a year after the target event. This was true of studies examining reports of experiences not intended to be stressful (play event in an unfamiliar laboratory) and reports of events that were clearly stressful for children (inoculations at medical clinic). It is unfortunate investigators did not provide enough information to determine the extent of training required to achieve this desired effect. Similarly, this finding was robust despite the variability across studies in terms of how researchers operationalized supportive and non-supportive contexts. It was true for the field studies as well as the analogue laboratory studies. It was also true for studies of children from 3 to 14 years of age.

With regard to children's individual differences, there is some evidence worthy of further study to suggest that support may be most helpful to children who (a) are more anxious (Davis & Bottoms, 2002), (b) are more sensitive and reactive to environmental contexts generally (Quas, Bauer, & Boyce, 2004), (c) are reporting on events that are highly emotionally arousing (Klemfuss, Milojevich, Yim, Rush, & Quas, 2013), (d) have insecure dis-

---

[21] Children provided more details, more informative responses, and less uninformative responses.

[22] Suggestibility is defined in this context as more errors or fewer correct responses to misleading or suggestive questions.

rupted attachment histories (Peter-Hagene, Bottoms, Davis, & Nysse-Carris, 2014), (e) have poorer executive functioning (e.g., working memory capacity) (Peter-Hagene et al., 2014), or (f) are more reluctant, uncooperative, or uncommunicative (Hershkowitz et al., 2006).

Noteworthy is the fact that six studies examined the association the between support and anxiety/distress. The results were complex, but suggested overall that the benefits of support might be related to reduction in emotional distress. Not all instances of self-reported stress, nor all measures of physiological arousal, showed significant effects. However, it is not uncommon to find that different measures of anxiety fail to operate in unison (Bauer, Quas, & Boyce, 2002; Cacioppo, Uchino, & Berntson, 1994). In many of the studies that examined anxiety, researchers found some evidence that children were less anxious in the supportive conditions and children performed better in more supportive contexts (see Almerigogna et al., 2007, for one exception). For example, Quas et al. (2004) found autonomic reactivity associated with increased accuracy when children were interviewed in the supportive condition, but decreased accuracy if interviewed in the non-supportive condition.

Klemfuss et al. (2013) found children who were most stressed at the time of the target event showed the largest benefit of interviewer support in disclosing information about their internal states (thoughts). Davis and Bottoms (2002) found children in the supportive condition were less anxious, and less suggestible. Quas and Lench (2007) found that when children were interviewed in the non-supportive condition, higher heart rates (indicative of a stress response) were associated with poorer memory, but this was not the case in the supportive condition where heart rate was unrelated to memory. Taken as whole, the findings on individual differences and anxiety illustrate the complex nature of the relation between interviewer support and children's accuracy and suggestibility.

Key Findings: Studies of Rapport-building Strategies

Despite the ubiquitous belief that good rapport is critical for successful interviewing, studies with randomized controlled trials of the effects of rapport-building strategies on interview outcomes of accuracy and quality were rare. It is striking to note that out of the 474 studies of the efficacy of various interview methods we located, there were 68 articles that mentioned rapport development, usually as an essential component of a protocol; however, only three of these studies actually tested the independent effects of rapport on interview outcome using experimental designs (Brown et al., 2013; Hardy & Van Leeuwen, 2004; Roberts et al., 2004).[23]

All of the well-researched interview protocols we located recommend efforts to develop rapport with children before substantive questioning; yet, re-

---

[23] The search identified a few field studies using the NICHD protocol (Hershkowitz, 2009; Katz et al., 2012; Malloy, Brubacher, & Lamb, 2013; Teoh & Lamb, 2010; 2013) as well as some qualitative studies (Jobe & Gorin, 2013) that met our full set of exclusion criteria, thus are not included in the review, but were singled out by independent raters as studies that provide interesting directions for future research. Although our focus was on verbal methods, the search located over a dozen studies of drawing techniques whose purposes varied from a method of rapport-building to a memory retrieval aid. In addition, there were studies of nonverbal techniques like game playing (Rassin, VanDer Sleen, Van Amelsvoort, & Buttingher, 2006) and life story boards (Chase, Medina, & Mignone, 2012). A review of these nonverbal methods was beyond the scope of this report; however, it would be a useful endeavor in the future.

searchers rarely examined the effects of various rapport-building techniques separately from the effects of the rest of the interview protocol.[24] There were two exceptions: One study of the Stepwise Interview (Hardy & Van Leeuwen, 2004) and one study of the NICHD Investigative Interview (Brown et al., 2013).

Table 3 includes the results of the three experimental studies of rapport-building strategies. The findings of these three studies were somewhat mixed. Appendix D includes the effect sizes and the Downs and Black Index scores for these studies. None compared a rapport-building strategy to a control group who spent no time in rapport- building prior to the interview. All of the studies treated rapport as part of the preliminary phase rather than assessing whether rapport levels waxed and waned throughout the interview. None of the studies conceptualized rapport as relational, nor examined the subjective experience of the participants, or collected observations of their nonverbal behaviors. The primary focus of all three studies was on the effects of question types and narrative practice during the preliminary phase before substantive questioning.

First, Hardy and Van Leeuwen (2004) investigated two versions of the Stepwise interview comparing rapport-building conversation about a past personal specific event (e.g., last birthday party attended) to a conversation about a general event (e.g., favorite activities). Younger children were least accurate when rapport focused on discussing a specific event rather than a generic event. Older children were less affected by type of rapport strategy.

Second, Roberts et al. (2004) compared effects of two types of rapport building styles in 3 to 9 year olds-- open-ended questions or direct questions. Researchers reported that the open-ended rapport-building style was superior; however, it is possible that the amount of time the interviewer spent with the child engaged in rapport building was confounded with the type of rapport building method utilized. When open-ended prompts were used, interviewers spent on average 16 minutes developing rapport with children before substantive questioning. When direct questions were used, interviewers spent on average only 6 minutes with children developing rapport before substantive interrogation. So it is not clear whether spending more time getting to know children or using open-ended prompting was the active ingredient in the outcome.

In the last study, Brown et al. (2013) investigated the effects of rapport-building method on reports of a true and false event using the NICHD Investigative Interview and quasi-random assignment of 5 to 7 year olds to one of three conditions: (1) rapport development conversation using open-ended prompts to talk about activities and interests, (2) rapport development as described above complemented by narrative practice on a neutral event using open-ended prompts, and (3) rapport building and narrative practice using direct closed-ended questions and option-posing (yes-no) prompts. The au-

---

[24] These included studies of the Cognitive Interview (Memon, Wark, Bull, & Koehnken, 1997), NICHD Investigative Interview (Katz et al., 2012; Malloy et al., 2013; Sternberg, Lamb, Orbach, et al., 2001; Lamb, Orbach, Hershkowitz, & Esplin et al., 2007), the Memorandum of Good Practice in the UK (Davies et al., 2000), the RATAC protocol in the US (Carnes et al., 1999; 2001), the Child Sexual Abuse Interview Protocol (Cheung & Boutte-Queen, 2010), a protocol designed for LGBT and questioning youth (Welle & Clatts, 2007) and a child interview intervention in the Netherlands (Rots-de Vries, van de Goor, Stronks, & Garretsen., 2011; Snoeren, Hoefnagels, Lamers-Winkelman, Baeten, & Evers, 2013).

thors report that the results tended to favor the rapport-building style with open-ended prompts, as it was associated with more detailed responses to interviewer utterances. Researchers hypothesized that practicing narration of an event with open-ended prompts during rapport building would benefit later substantive questioning, as children would be primed to provide more information with less prompting from adults. However, this was not the case. Finally, an interaction between rapport condition and order of true or false event interview suggested that preparing children during rapport building with practice narration using open-ended questions (rather than closed questions) may mitigate the negative influence of being asked about something that did not occur.

Conclusions

In summary, these findings do not make a convincing evidence base for guidelines on developing rapport. All three studies test a preliminary approach rather than techniques that can be used over the course of the entire interview as rapport waxes and wanes and children's attention, anxiety, and resistance fluctuate from getting-to-know you questions to sensitive topics of personal importance. Furthermore, these studies do not clarify the tradeoff between providing enough rapport to achieve benefits without diminishing children's subsequent responses due to exhaustion or inattention.

Researchers need to re-examine their conceptualization of rapport and broaden the concept from cursory conversations before an interview to viewing rapport as a multi-dimensional, dynamic, and relational construct. In this regard, predictions from communication theory and attachment theory may be particularly helpful. Studies could be conducted to examine the effects of rapport on children's reliability, while at the same time examining effects on self-disclosure, and the participants' subjective experience of the interview. The latter effort may serve a dual purpose. Given the speculation that participating in the interview process might be beneficial for children in foster care, measures of children's subjective experience may help determine whether interviews can be conducted in ways that leave children feeling as if their views were valued and respected--that they have contributed to an important process.

Future studies would be improved if they contained conditions where levels of rapport were varied (high, medium, low) and included observations of participants' nonverbal behaviors, as well as subjective experience, to assess when high levels of rapport have been achieved. Given the pervasive view that rapport is a critical component of interview outcome, one could argue that this is an area of spurious certainty. In short, these three studies are a beginning; however, they are not an impressive body of work to support the degree to which both clinical and forensic experts agree that rapport development is a key ingredient of science-based best practice.

Results of Search for Studies of Interviewer Bias Effects

Search Results

This search yielded nine studies of preconceived interviewer bias (prior knowledge) on accuracy and quality of children's reports with experimental designs. In this paradigm, interviewers were provided a priori information about a staged event and investigators evaluated the effect of "preconceived bias" on accuracy of children's reports and/or interviewer questions. Descriptive characteristics of the studies are found in Table 4.

Overview of Preconceived Bias Study Methodologies

As a function of our exclusion criteria, all nine studies of preconceived bias employed an experimental design. Children participated in game-like activities and then were interviewed approximately one to three weeks later, although delays varied from interviews conducted immediately after the event to three months later. Typically, children were interviewed by an adult who had been misinformed (biased) or uninformed (neutral). No two studies manipulated bias similarly. Table 5 details the bias manipulations used in each study. Interviewer identities ranged from police officers with extensive experience in the field, to graduate students, social workers, teachers, and mothers.

The types of interviews conducted varied across studies. In five of the nine studies, interviewers conducted "free interviews" in which they were instructed to elicit as much information as possible, formulating their own questions (e.g., Powell, Hughes-Scholes, & Sharman, 2012). In some studies, this was followed by a scripted set of detailed questions provided by the experimenter (e.g., Goodman et al., 1995). Other paradigms involved free recall questions followed by scripted, detailed questions, both crafted by the experimenter (Tobey & Goodman, 1992), or only a scripted set of questions without a free recall task (Schwarz & Roebers, 2006). Often questions were either misleading or specific, that is detailed and direct but not intentionally leading.

Typically, outcome measures were accuracy of children's reports, children's resistance to suggestion, false assents to suggested events, types of questions asked by interviewers, and children's confidence in their answers, or some combination thereof. In some studies, children were asked about fictitious events as well as true ones (Principe, Dipuppo, & Gammel, 2013; Quas et al., 2007).

Although all studies utilized experimental designs, only four of the nine studies explicitly reported that children were randomly assigned to experimental and control groups. Only four of nine studies reported that interviewers were blind to hypotheses and condition assignment, when possible. Surprisingly, only one study reported that coders of questions and answers were blind to hypotheses of the study or to children's condition assignment. Five of nine studies included manipulation checks to be certain the manipulations were working as intended.

Sample Characteristics

The children sampled ranged from 3 to 10 years of age. The majority of the studies were conducted in the United States, although one study was conducted in Australia and one in Germany. Five of nine studies reported data on socio-economic status. When reported, children sampled were from middle class families. Ethnicity was reported in three studies. The proportion children from ethnic minorities varied from 6% to 25% of the samples.

Quality Assessment Results

All studies used experimental designs with a comparison group, however, as a whole, these articles fail to report critical details, such as whether random assignment was utilized, whether coders of the data were blind to the hypotheses of the study and condition assignment, as well as sample characteristics that would be important for generalization to children in care (e.g., SES, ethnicity). Downs and Black Quality assessment scores appear in Appendix E.

Key Findings: Studies of Interviewer Bias

Effects of Bias on Children's Accuracy and Suggestibility

Table 6 summarizes the effects of bias on accuracy and suggestibility of children's responses. Taken as a whole, the primary effects of preconceived bias on accuracy of children's verbal reports were negative or non-significant. No positive effects on verbal report were found.[25] Most often children's recall was less accurate and children were more suggestible in the biased conditions as compared to children in the unbiased conditions. Typically, negative effects were moderated by other factors, such as age, delay, interviewer identity, or elaborative conversational style.

Appendix E displays effect sizes and Downs and Black Index scores for the studies of preconceived bias. Downs and Black scores ranged from 4 to 21 (M = 16.33, SD = 6.24). When we examine the studies of higher quality (those scoring at or above the mean of the Downs and Black Index scores), we find clues regarding the conditions that exacerbate or diminish interviewer bias effects. For example, Quas et al. (2007) found that bias negatively affected children's accuracy, and resistance to suggestion, but that bias was particularly detrimental after longer delays, presumably when the memory trace was weak. Principe et al. (2013) found that interviewers with preconceived bias who used a more elaborative conversational style were more effective in perpetuating the bias effect in a future interview. Similarly, Goodman et al. (1995) found negative effects only when the biased interviewer was an unfamiliar adult, not when the biased interviewer was the child's mother. Tobey and Goodman (1992) found somewhat mixed and nuanced results, with bias effects appearing on certain kinds of content but not others; however this study had a small sample size and may not have had the statistical power necessary to detect differences.

Two studies systematically examined the effects of suggesting a false event in the preconceived bias paradigm (Principe et al., 2013; Quas et al.,

---

[25] In one study, there was a positive effect of bias on age identification using a line up task where children pointed to a picture of someone of a similar age. Authors speculate that this effect could be explained by the fact that the bias was administered by a police officer who increased the perceived seriousness of the task (Tobey & Goodman, 1992).

2007). Principe et al. reported that 20% of children in the biased condition subsequently made a false report compared to none of the children in the unbiased condition. Quas et al. also found that false reports occurred only in the biased condition, and that children's accounts of the false events were plausible, not fantastic or bizarre. There was a similar pattern in a third study; spontaneous comments to parents after the interview about false events, although rare, only occurred in the biased condition (Tobey & Goodman, 1992). While the accuracy of true event details and answers to non-leading questions were unaffected by the biased suggestion in some studies (Prinicipe et al., 2013), this was not always the case (Quas et al., 2007).

With regard to age effects, most studies involved a narrow age range of preschoolers and did not compare different age groups. In one exception, Schwarz and Roebers (2006) examined older children and found conformity to interviewer preconception varied as a function of age. Bias was associated with a negative effect on the 8 year olds' resistance to suggestion, while the 10 year olds remained highly resistant in both biased and unbiased conditions. There was some indication in two studies that 3 year olds were easier to manipulate into false claims when directly questioned by the biased interviewer, although this was not always the case (Quas et al., 2007). In one study with a similar trend, the small sample size (with some cells below 10 subjects per cell) and the four-way interaction made results difficult to interpret. Authors suggest their results are preliminary (White, Leichtman, & Ceci, 1997).

When we limit our conclusions to research teams that explicitly state they randomly assigned children to conditions and examined bias effects on children's accuracy and suggestibility, we are relying on only four studies (Goodman et al., 1995; Principe et al., 2013; Quas et al., 2007; White et al., 1997).[26] Nevertheless, the results reported by investigators for all four studies are consistent in demonstrating adverse effects on responses to misleading questions in the biased compared to unbiased conditions (Goodman et al., 1995; Principe et al., 2013; Quas et al., 2007). However, researchers in one study suggest trends be viewed as preliminary due to small sample size and low power to detect differences (White et al., 1997). This leaves us with an evidence base of three rigorous studies. Finally, it is important to note that effects of bias on free recall were not nearly as consistently negative, and children's responses to open-ended questions remained fairly accurate.

Effects of Bias on Interviewer Questions
It is often assumed that the children's reduced accuracy is a function of the biased interviewer asking more misleading questions as opposed to other mechanisms, such as selective reinforcement. Five studies investigated this issue (Bruck, Ceci, Melynk, & Finkelberg, 1999; Ceci & Huffman, 1997; Goodman et al., 1995; Powell et al., 2012; White et al., 1997). Two of these research teams found that bias negatively affected interviewer question types.

---

[26] One of the limitations of this review is that two studies did not provide enough information for clear evaluation of results (Ceci & Huffman, 1997; Bruck et al., 1999). In both cases, first authors were contacted; however, they were unable to provide additional information at the present time.

The other studies that examined this issue did not provide sufficient detail to evaluate their results.[27]

Goodman et al. (1995) found that biased interviewers asked more questions consistent with biased misinformation than unbiased interviewers. Goodman et al. (1995) and White et al. (1997) found some evidence that biased interviewers focused their interview questions more tightly around their preconceptions. Again, results in the study by White et al. (1997) should be interpreted with caution and are described by the authors as preliminary. Consequently, the evidence that misleading question types are the underlying mechanism by which bias affects children's reports is limited.

Powell et al. (2012) discovered the effect of bias depended upon whether interviewers had a good or poor interviewing style prior to the study. The interviewers were experienced police officers in the field, and researchers pre-tested each officer's interview style. The effect of preconceived bias was evident only for interviewers who tended to use less desirable interview techniques at baseline in a pretest mock interview (less open-ended questions, more yes-no questions). The bias condition exacerbated these 'poor' interviewers' tendency to use fewer open-ended and more yes-no leading questions.

Conclusions

In summary, while the studies on preconceived bias reviewed were not large in number, there was consistent evidence that interviewer preconceived bias can have a negative effect on young children's reports. Still, key findings should be replicated. As a group, there was insufficient use of random assignment, manipulation checks, blinding of coders, and ample sample sizes with sufficient power to test for important differences. These deficiencies should be rectified. Studies with greater ecological validity are warranted, using wider age ranges, participants from varying SES levels, and recall for less mundane events, over longer retention intervals. Further work needs to be done to uncover the underlying mechanisms responsible for this effect.

There are three striking problems with this evidence base. First, the bulk of the findings are limited to very young children in a narrow age range—3 to 5 years of age. The results hint that 3 year olds are disproportionately vulnerable to having their interview outcomes seriously manipulated by interviewer bias. We know very little about the effects on older children, although one study does suggest negative effects were found up through 8 years of age, but not at 10 years of age. Replication and extension in further research is necessary.

Second, findings are limited to reports of rather plausible, mundane play events, not sensitive, personal topics that are emotionally arousing. These are not topics that are personally meaningful experiences in the child's life history, or events important to their future, or to their sense of self, as is the case

---

[27] Bruck et al. (1999) reported that their study "provides evidence that interviewers' beliefs about an event can influence their judgments as well as their style of questioning," (p. 783). However, the published article does not provide information on interviewer question types. Similarly, Ceci and Huffman (1997) report relevant findings, suggesting that a second interviewer relying on the notes of a previously biased interviewer "got the children to continue to assent to false events that she assumed had occurred" (p. 952). Unfortunately, the published report does not provide sufficient detail to evaluate this conclusion. Both authors were contacted but unable to provide additional information at this time.

in the foster care setting. Moreover, the most well-designed and implemented studies of false reports with adequate sample sizes were limited to either biasing children to report a rabbit in a magic show had gotten loose in the classroom (Principe et al., 2013) or that children had played with a man rather than a woman (Quas et al., 2007). One study did attempt to examine children's reports for recent punishable misdeeds, comparing their reports to parent report; however, this study had a very small sample size (less than 10 subjects per cell) and a four way interaction making findings difficult to interpret (White et al., 1997).

Furthermore, researchers did not investigate the use of follow-up questions that might have clarified the true state of affairs when children did accept a suggestion. None of these studies examine the children's perceptions of interviewer bias, objectivity, or trustworthiness. None of the studies examine variables related to children's situational, motivational, or individual differences that might result in reluctance, resistance, or anxiety. Consequently, for generalization to foster care setting, it would be important to study effects of bias under conditions of high and low seriousness of consequences of interview outcome. In the field, children expectations about potential interview outcomes may influence their susceptibility to bias. No studies attempted to understand the interviewer's mindset or included conditions where interviewers are asked to keep biases in check to see if any reduction in adverse effects could be achieved. In short, this evidence base is limited, but still provides important building blocks for future studies.

Third, the evidence demonstrating that interviewer question types are responsible for children's errors and false assents was limited to two studies. As a group, these studies do not fully demonstrate that the mechanism by which bias degrades children's accuracy is through the increased use of misleading questions by biased interviewers.

In summary, the evidence base on preconceived bias reviewed is small and deficient, yet results of the studies suggest that preconceived bias is a problem with which interviewers will likely need to contend. Clearly, interviewers will want to make every effort to be objective and to be open to children providing alterative perspectives and explanations that might challenge interviewer assumptions. However, we located little research on how interviewers might accomplish this task. There is little evidence to begin to develop science-informed guidelines for an objective, nonjudgmental approach.

It is also important not to stray too far in the other direction, that is, one cannot assume that effects of preconceived bias totally invalidate what children have to say--often the accuracy of the rest of the information children provided, unrelated to the biased suggestions, was unaffected. Most importantly, these data provide direction for future research in that they hint that the negative effects of preconceived bias are heightened over longer delays, with very young children, when adults elaborate more and listen less, and when interviewers use few open-ended questions and more yes-no questions.

Limitations of this review

First, generalizations of the findings of this review are limited by the search strings and exclusion criteria utilized. We limited our search to articles published in English between 1990 and February 2014 testing efficacy of verbal face-to-face interview methods in studies that included children in the 4 to 12 year age range. Although the pool of studies located was quite large (N = 4, 140) and diverse, we did exclude studies of nonverbal techniques, and it is clear that there is a small but growing body of work on the efficacy of nonverbal techniques worthy of review. Also, we excluded studies in which subjects were recruited on the basis of their medical or psychiatric diagnosis because we were concerned that it would be difficult to disentangle effects on cognitive functioning due to symptoms and medications. Future reviewers will want to review the evidence base without this limit in order to better generalize to populations at high risk for medical and psychological difficulties.

Second, our findings also are limited by the quality and characteristics of the studies located by the search. For example, even with our requirement that studies include children in the 4 to 12 year age range, that is, we excluded studies devoted only to adolescents or young adults, researchers seem to have focused more heavily on the younger children even within this range. Too often our conclusions are limited by deficient reporting of important methodological and sample characteristics. In addition, there was considerable missing data that impaired our evaluation of results. Although we contacted a number of authors, we were unable to collect the missing data within the time period allotted. As a field, researchers ought to observe a higher standard of reporting design features intended to control for confounding variables.

Third, our findings regarding effects of interviewer bias are limited by our narrow definition of preconceived bias. For example, often multiple forms of bias are tested as a package and the independent contributions of the different biasing strategies to the outcome are not clear. Hence, we limited our review to one particular strategy-- the effects of interviewer prior knowledge/preconception on child interview outcomes. As a result, the number of bias studies reviewed is smaller than might be expected. Future reviews of other biasing paradigms are warranted.

Fourth, this review is limited by the publication bias inherent in the fact that we relied primarily on studies to be found in peer-reviewed journals where non-significant results are less likely to be submitted or published. Positive and negative effects may be overestimated. In addition, this publication bias can propel researchers, when effects are marginal or non-significant, to increase the intensity of the manipulation towards the extremes, until the effects become clear. This can result in a literature that is top heavy with studies of more extreme manipulations and less examination of subtle, but potentially important trends. This may be one reason why the studies located focused more heavily on younger rather than older children, and on packages of suggestive techniques rather than examining the independent contribution of individual techniques.

General Discussion

In this review we sought to identify a core body of experimental research on the efficacy of interview methods relevant for eliciting reliable information from children about their experiences in foster care. After searching six electronic bases for peer reviewed publications, and contacting experts in the field, we failed to locate a core body of relevant controlled trials. Nonetheless, the foster care literature is replete with calls for children's participation in decisions that affect their welfare (e.g., Cashmore, 2002; 2014; Head, 2011). Qualitative and descriptive studies suggest that children in out-of-home care want to be heard on topics of importance to them (e.g., Daly, 2009; McLeod, 2007). Furthermore, experts hypothesize that children can provide unique information that might improve outcomes and have a positive impact on children's subjective experience and development (e.g., Cashmore, 2014; Chapman et al., 2004; Head, 2011). And yet, our search results suggest that the call for participation from children in out-of-home has outpaced the development of well-tested methods for eliciting their input reliably.

To address this pressing need, we conducted a similar search of the experimental literature on the reliability of child interviewing methods in the general population. Here we found a large and expanding body of experimental work using randomized controlled trials to investigate the efficacy of various interview strategies. From this body of work, directions for future research and guidelines for developmentally sensitive interviewing of children in foster care can be extrapolated.

Foster Care Studies Search

Returning momentarily to our search of the foster care literature, we found that the bulk of the research has been conducted with older teens and young adults formerly in care, confirming that there is a gap in the literature where younger children are concerned. Although there were a few studies in which younger children were interviewed, these were confined to children over 11 to 12 years of the age. By and large, studies utilizing more innovative techniques to accommodate the developmental limitations of younger children were limited to study specific instruments or protocols that were rarely replicated by independent research teams, nor extended to other samples. Similarly, tests of reliability and validity were scant.

However, our ancillary screening of excluded studies, undertaken to map the breadth, purpose, and extent of research activity, did identify a small body of qualitative and descriptive work that can serve as building blocks for creating more quantitative methods in the future. These studies are described in Appendix C. The screening identified emerging themes regarding content areas of importance, as well as attempts to create new variables that may be important predictors of outcome (e.g., felt security, Cashmore & Paxman, 2006). At the same time, we found that the use of theoretical models in this field varied widely from study to study without convergence on central for-

mulations. Similarly, interview methods were diverse, including unstructured ethnographic approaches, semi-structured interviews with open-ended questions, and highly structured interviews comprised of statement endorsements or yes/no questions. And yet, there were also far too many reports that a failed to detail the interview methods sufficiently for evaluation at all.

We located a few research teams that have developed more quantitative instruments for children over 11 years of age to serve as springboards for further research (Cashmore and Paxman, 2006, 2007; Chapman et al., 2004; Barber & Delfabbro, 2005; Delfabbro et al., 2002; Dolan et al., 2011; Lundström & Sallnäs, 2012; Fox et al., 2008; McDowall 2013 NSCAW Research Group, 2002; Perry, 2006; Wilson & Conroy, 1999). Collectively, one goal for future research ought to be improved reporting standards for peer-reviewed publications to allow for testing of reliability and validity, as well as replication and extension of innovative methods. And, given that some qualitative studies suggest discrepancies between adults believing they have listened and children believing they were heard (McLeod, 2007), it seems important for the literature to further clarify and operationalize what it means for children to "be heard."

Taken together, the body of research screened reflects an expanding field of both qualitative and quantitative work in the early stages. On the one hand, our ancillary screening found large gaps in the literature. For example, although the youth participation movement has outlined a variety of ways children could potentially benefit from providing input into decision making (Cashmore, 2002; Checkoway, 2011; Head, 2011), our search revealed few, if any, empirical studies that address how the process of providing input might result in a positive subjective experience, that is, an experience where children feel they have made a contribution to the process, that their views were respected and valued. Two researchers mentioned explicit strategies to help children understand that their participation was valued (Daly, 2009; Mitchell et al., 2010), however, there was no empirical investigation of the effects of such efforts. Further research is needed to address whether interviews can be conducted in ways that elicit reliable information and are also beneficial for children, generating an increased sense of respect, fairness, self-agency, empowerment, self-esteem, or satisfaction with decision-making outcomes.

Our search suggests that one fruitful avenue for future research is the investigation of mixed methods approaches. This might incorporate both semi-structured methods (that allow children to express experiences and perceptions in their own words) so that children's perspectives are not overlooked, combined with standardized rating scales and/or structured interview methods that are more easily quantifiable. With these mixed methods approaches, often researchers were able to elicit more complex and nuanced views than expected.

In this context, interviews appear to be a viable means for eliciting meaningful, multi-layered communications from young children--communications that can facilitate more meaningful interpretation of outcome research, participation in case decision making, and greater contribution to the knowledge base on which public policies are predicated. Next steps, however, will require a research agenda that pursues the systematic development of psycho-

metrically sound, reliable and valid techniques and protocols that promote children's willingness and ability to provide personally significant, emotionally arousing, and reliable information about their experiences in out-of-home care.

General Population Studies Search

Given the paucity of controlled trials and rigorous psychometric work in the foster care literature, we conducted a similar search on the efficacy of interview methods with young children in the general population. We sought to understand how interview methods influence children's ability and willingness to provide reliable information, and what factors affect the reliability of children's reports. We learned that there is a large expanding literature on the reliability of child interview methods that can be extrapolated to design future research in the foster care setting. This body of work suggests that children's reliability is influenced by a host of factors: Some are inherent in the children, both developmental limitations (e.g., immaturities in communication and cognition) and individual differences (e.g., temperament and attachment history). Other factors are inherent in the context, including aspects of the interview itself, such as whether the questions are open-ended, closed with fixed options, or suggestive, and whether the interviewer provides a supportive and unbiased psycho-social atmosphere.

Generalizing from Core Set of Evidence-Informed Child Interview Principles

While we located no single interview protocol designed specifically for the foster care context tested in randomized controlled trials, we did identify a core set of robust research findings from studies of the general population that converge on a central set of evidence-informed child interviewing principles from which to extrapolate. These principles could be used in designing a survey of foster children that includes face-to-face interview strategies, alone or as part of mixed methods approach. As a group, these experimental studies provide compelling evidence to suggest that interviews should:

Adopt a developmentally sensitive approach
- Studies reviewed highlight the importance of a developmental perspective when relating to and communicating with children of all ages to elicit reliable statements and accurately interpret children's responses.
- There were robust developmental trends in communicative competence, memory, and suggestibility noted in the studies reviewed and in the larger literature screened.

Adopt a supportive psycho-social atmosphere
- Experimental studies show consistently positive effects on reducing children's suggestibility when support is offered in a non-suggestive manner that is not contingent on the content of children's statements; and support may reduce reluctance and promote self-disclosure. Benefits of non-suggestive support were evident across a wide range of ages and topics from the stressful to the routine.

Adopt an objective, unbiased, nonjudgmental approach
- Although the relevant evidence base located by the search was small and somewhat flawed, studies consistently reveal adverse effects of interviewer preconceptions on children's suggestibility. Maximizing open-ended questions and minimizing yes-no questions is one factor that may mitigate effects of interviewer bias. However, it is important to note that researchers have focused far more on the effects of bias and suggestion than on strategies that promote objectivity.

Adopt questioning techniques that phrase questions
- in the most non-leading, non-suggestive manner possible,
- in simple vocabulary and grammar children can understand, and
- in open-ended ways that require multi-word responses to encourage young children to say as much as possible in their own words with the least prompting from adults.

Positive Effects of a Supportive Approach

There was no evidence for the notion that support, when provided in a non-suggestive, non-contingent manner, leads to greater inaccuracy or suggestibility. In fact, the results were consistently in the opposite direction. Support was associated with less suggestibility, not more. This was true for studies of children 3 to 14 years of age, over short and long delays, including a delay of up to a year. This was true of studies examining reports of mundane (play) and stressful (inoculations) events. This finding was true despite the variability across studies in terms of how researchers operationalized supportive and non-supportive contexts. It was true for the field studies as well as the analogue laboratory studies.

Although the evidence base is clear that support can be administered successfully in ways that do not distort or contaminate children's reports; unfortunately, investigators did not report sufficient information on the extent and content of training required to achieve implementation of support in a non-suggestive manner to prescribe practice guidelines.

There was preliminary evidence worthy of further study to suggest that support may be most beneficial to children who (a) are more anxious, (b) are more sensitive and reactive to environmental contexts biologically, (c) are reporting on events that are highly emotionally arousing, (d) have insecure disrupted attachment histories, (e) have poorer executive functioning (e.g., working memory capacity), or (f) are more reluctant, uncooperative, or uncommunicative. There were clues across studies to suggest that effects may be more likely to operate by reducing social compliance with authority figures, (e.g., fear of disappointing or angering intimidating adults), social desirability (wanting to please adults and gain their approval) and/or anxiety, rather than improving overall cognitive and memory performance more generally.

Adverse effects of support were rare and might be explained by the bidirectional nature of the interview (Goodman et al., 1995; Hershkowitz et al., 2006; Quas et al., 2014). Much like a tennis match, each partner serves a question or answer to the other one; subsequent behaviors are, in part, a function of the behaviors that came before. These transactional patterns may be a function of individual differences, as interviewers try to cope with uncooper-

ative or reluctant children and children try to elicit more support from unsupportive or frustrated interviewers. Further research is needed to build on the methods of providing non-suggestive support in ways that lead to positive impacts on children's growth and development while preserving, if not improving, the reliability of children's reports.

Adverse Effects of Preconception Bias

The search located a small number of experimental studies testing the effects of interviewers' preconceived bias on interview outcomes of accuracy and suggestibility. Taken as a whole, there were a number of problems with the evidence base. Hence, we relied primarily on the higher quality studies (scoring at or above the midpoint of the Downs and Black Quality Index scores). There was consistent evidence that interviewer preconceived bias can have a negative effect on young children's reports, although the evidence base is small. For some of our conclusions, there were only three rigorous studies on which we could rely. The findings hint that the negative effects of preconceived bias are heightened over longer delays, with younger children, when adults elaborate more and listen less, and when interviewers use fewer open-ended questions and more yes-no questions. Yet, key findings should be replicated and then extended to wider age ranges, varying SES levels, recall for more emotionally meaningful events, and longer retention intervals. Better designed studies using randomization of subjects to conditions, blinding of coders, and larger sample sizes to increase power should be conducted.

The limited evidence base reviewed does suggest that preconceived bias is a potential problem with which interviewers will need to contend. Although, the evidence to suggest that bias operates by interviewers using higher rates of misleading questions was scant, and underlying mechanisms need to be further researched. Clearly, interviewers will want to make every effort to be objective and to be open to children providing alterative perspectives and explanations that might challenge interviewer assumptions. However, we located little research on how interviewers might accomplish this task, other than favoring open-ended questions over yes-no questions, which is a finding worthy of further investigation. Overall, there was little evidence to begin to develop science-informed guidelines for an objective, nonjudgmental approach.

Moreover, one cannot assume that effects of preconceived bias totally invalidate what children have to say, this was not the case. Effects of bias on free recall were not consistently negative, and children's responses to open-ended questions remained fairly accurate even in the bias conditions. Furthermore, no studies attempted to understand the interviewer's mindset or to include conditions where interviewers are asked to keep biases in check in order to see what degree of reduction could be achieved. In fact, we suggest that future researchers build on the positive results of the support studies to counteract bias. This might be done by developing methods that encourage children to express alternative viewpoints to adults who welcome their insights as one source of information to consider in making decisions. In short, in order to generalize from controlled experimental studies to the foster care setting, we will need to broaden the research agenda to identify not only underlying mechanisms that result in adverse effects, but also those that might

result in positive developments and children feeling as if their voices are "heard."

Little Evidence Yet to Guide Rapport-Building

Experts routinely recommend developing rapport with children as best practice, and virtually all interview protocols include a rapport-building phase, yet we found insufficient experimental evidence to guide this practice while protecting the accuracy of children's reports. This is not to say that any negative effects of rapport building were identified; however, the evidence base to demonstrate positive effects of rapport without jeopardizing accuracy, or to recommend any one particular rapport building strategy, is slim. We located only three experimental studies of rapport-building strategies that assessed the reliability of children's reports. Our review suggests that the area of rapport is one where there is spurious certainty, that is, where researchers and practitioners think they know more than they do, but where in reality there is little convincing evidence to support their beliefs.

For the most part, researchers treated rapport as a cursory conversation at the beginning of the interview, or an opportunity to practice narrating a past event or responding to open-ended, instead of closed-ended, questions. While this preliminary phase can certainly serve multiple purposes that are equally important, these studies do not address the notion that rapport is relational— that developing rapport means developing a relationship of trust and affinity, where both participants' subjective experiences are pivotal. There is a sizable literature in the developmental and clinical fields to suggest that rapport includes children feeling comfortable talking about themselves without fear of judgment or criticism, where participants enter an alliance towards the mutual goal of information exchange. Certainly, there is more conceptual as well as methodological work to be done in this area of research.

Further research is needed to examine participants' subjective experiences and nonverbal behaviors to determine the criteria needed for achieving high levels of rapport. This is an important gap in methodology since children's perceptions of adult behaviors, such as trustworthiness or likeability, have been linked to self-disclosure in young children in other contexts (Rotenberg et al., 2003). These three studies do not treat rapport as a dynamic process that waxes and wanes as interviewers move from getting-to-know-you questions to sensitive topics of importance in the child's life. This was true despite the fact that there was evidence in several studies to suggest this might be the case, given the bidirectional nature of the interview and the fact that levels of attention, cooperation, trust, resistance, and frustration are bound to fluctuate.

Even with the limited definition of rapport utilized in these studies, results were mixed and potentially confounded. These studies are a beginning, but they provide limited guidance on the development of non-suggestive techniques that achieve sufficient rapport for open, honest communication. Perhaps, greater investigation of the effects of various clinical techniques, like active listening, on the reliability of children's reports would be beneficial.

Recommendations

1. Promote research agenda that furthers development of reliable and valid methods for eliciting experiences in and satisfaction with out-of-home care from children currently in foster care. Such an agenda would:

   - Promote systematic experimental investigation to test effects of innovative, developmentally-sensitive interview techniques on reliability of responses from children in foster care;

   - Investigate effects of mixed methods approaches that incorporate both semi-structured interview methods with open-ended questions that allow children to describe experiences in their own words as well as standardized instruments and structured interview methods with quantitative scales. This will necessitate systematic investigation of psychometric properties of instruments and rating scales developed;

   - Develop interview strategies to promote benefits of participation and then experimentally investigate effects of these positive impact strategies on children's development, for example, on their sense of competence, respect, fairness, self-agency, empowerment, self-esteem, or satisfaction with decision-making outcomes; this should include developing measures of children's perceptions of 'being heard' since definitions vary across studies;

   - Take advantage of ongoing national probability sample studies of younger children currently in care to test effects of interview strategies and instruments that solicit children's experiences in foster care, and conduct pilot testing of methods with sample from same population;

   - Use existing content analyses from qualitative studies to guide development of reliable coding systems and systematic, rigorous testing of quantitative methods and instruments;

   - Consider whether accommodations are needed for children at risk for medical, behavioral, and socio-emotional delays and disorders.

2. Extrapolate to the foster care setting from evidence-based interview strategies derived from randomized controlled trials with the general population.

   - Further research will be needed to insure evidence-based interview strategies derived from the general population are sensitive to issues important in foster care, such as quality of relationships with caregivers and biological families, quality of life, well-being, adjustment to neighborhoods and schools, maintaining social support networks, perceptions of fairness, stigma, and inclusion in decision making.

- In practice, the use of evidence-based interview strategies are likely to require an infrastructure to support staff training and ongoing supervision to implement and bring to scale.[28]

3. Distinguish between various levels of participation that could be made available to children in care through the use of evidence-based interview strategies. Meaningful conversations with children according to evidence-based guidelines will elicit more reliable information and could serve multiple purposes:
   - On the level of input to caregivers: Children could provide information that makes a meaningful difference in their daily lives, such as small adjustments (snacks, after-school activities, pocket money) that are important to children, doable, and may make a large difference in children's subjective experience and satisfaction.
   - On the level of input to professionals: Children could provide information to improve case management, to evaluate complaints about harsh parenting or maltreatment, to identify early warning signs of problems before they escalate; or to monitor safety when children remain in high-risk situations.
   - On the level of local and national policy: Children can add to the knowledge base through surveys that include evidence-informed approaches to questioning children on topics of importance to them and relevance to outcomes.

4. Promote translational research to bridge the gaps between research, policy, and practice with regard to the efficacy of interview methods and the factors that influence interview outcomes. Recommendations for future research on interviewer behaviors, such as support, rapport, and bias, are detailed in the preceding results and discussion sections of this report. In summary, these findings suggest broadening the research agenda to:
   - Develop methods to promote objective, unbiased approaches. Clearly, the focus of suggestibility researchers has been on understanding the dangers of combining multiple suggestive techniques over time. Further research is needed on strategies for promoting an objective, nonjudgmental approach. Perhaps strategies could be explored that create an atmosphere where children are encouraged and even appreciated for bringing alternative viewpoints to the interviewer's attention. In this latter regard, there may be overlap with strategies that develop rapport and support.
   - Given the consistent positive effects of support in laboratory and field studies, next steps for research include studies of the transactional, bidirectional aspects of support effects on un-cooperative and reluctant children, adolescents, and self-

---

[28] A few studies are beginning to suggest that even with checklists and protocols, interviewers tend to drift back towards less desirable interview methods over time (Lamb, Sternberg, Orbach, Esplin, & Mitchell, 2002; Poole & Dickinson, 2013). This is not surprising given that interviewing behavior tends to involve engrained skills that have become habits; hence, brief training workshops alone may not to improve child interviewing to a sufficient degree (Lamb et al., 2008; Poole & Lamb, 1998; Rischke, Roberts, & Price, 2011).

disclosure of topics important to foster care outcomes and policies. In addition, further research on individual differences is necessary to determine who will benefit most from supportive efforts (e.g., neurobiological and motivational factors, anxiety, temperament, attachment history, executive function, etc.).

- Given the paucity of controlled trials testing rapport-building strategies, and the ubiquitous belief that high levels of rapport are critical for successful interviewing, there needs to be a systematic investigation of the effects of various rapport-building strategies on children's accuracy, perceptions of interviewer trustworthiness, child anxiety, and other socio-emotional variables in addition to child accuracy. The notion that rapport is a cursory conversation before the interview needs to be replaced with the understanding that rapport is a multi-dimensional, dynamic and relational construct.

- Next steps include conducting randomized controlled trials of rapport-building strategies with greater attention to theoretical underpinnings and outcome measures that include participants' subjective experience in order determine how interviews can be conducted in ways that leave children feeling as if their views are valued and respected--that they have contributed to an important process.

Conclusions

Research on methods for eliciting reliable reports from children is growing rapidly. If children are to be active participants in building the knowledge base on which public policies and case decisions about their welfare are predicated, then policy makers and practitioners will need to work collaboratively with researchers to implement interview procedures that reflect the best available science. Evidence-based methods for eliciting reliable information from children offer unprecedented opportunities to improve policy, practice, research, and outcomes for children in out-of-home care.

References

Abbe, A., & Brandon, S.E. (2013). The role of rapport in investigative interviewing: A review. Journal of Investigative Psychology and Offender Profiling, 10, 237-249.

Achenbach, T. M., & Edelbrock, C. (1983) Manual for the Child Behavior Checklist and Revised Child Behavior Profile. Burlington: University of Vermont.

Ager, A., Zimmerman, C., Unlu, K., Rinehart, R., Nyberg, B., Zeanah, C., Strottman, K. (2012). What strategies are appropriate for monitoring children outside of family care and evaluating the impact of the programs intended to serve them? Child Abuse & Neglect, 36, 732-742. doi: 10.1016/j.chiabu.2012.09.006

Alexander, K. W., Goodman, G. S., Schaaf, J. M., Edelstein, R. S., Quas, J. A., & Shaver, P. R. (2002). The role of attachement and cognitive inhibition in children's memory and suggestibility for a stressful event. Journal of Experimental Child Psychology, 83, 262-290. doi: 10.1016/S0022-0965(02)00149-2

Almerigogna, J., Ost, J., Akehurst, L., & Fluck, M. (2008). How interviewers' nonverbal behaviors can affect children's perceptions and suggestibility. Journal of Experimental Child Psychology, 100, 17–39. doi: 10.1016/j.jecp.2008.01.006

Almerigogna, J., Ost, J., Bull, R., & Akehurst, L. (2007). State of high anxiety: How non-supportive interviewers can increase the suggestibility of child witnesses. Applied Cognitive Psychology, 21, 963–974. doi: 10.1002/acp.1311

Altshuler, S. J. (2003). From barriers to successful collaboration: Public schools and child welfare working together. Social Work, 48, 52–63.

Andersson, G. (1999). Children in permanent foster care in Sweden. Child and Family Social Work, 4, 175-186.

Aubrey, C., & Dahl, S. (2006). Children's voices: The views of vulnerable children on their service providers and the relevance of services they receive. British Journal of Social Work, 36, 21-39. doi: 10.1093/bjsw/bch249

Baker-Ward, L., Gordon, B. N., Ornstein, P. A., Larus, D. M., & Clubb, P. A. (1993). Young childen's long-term retention of a pediatric examination. Child Development, 64, 1519-1533.

Barber, J., & Delfabbro, P. (2005). Children's adjustment to long-term foster care. Children and Youth Services Review, 27, 329-340. doi: 10.1016/j.childyouth.2004.10.010

Bauer A. M., Quas J. A., Boyce W. T. (2002). Associations between physiological reactivity and children's behavior: Advantages of a multi-system approach. Journal of Developmental and Behavioral Pediatrics, 23, 102–113.

Bauer, P. J. (2002). Long-term recall memory: Behavioral and neuro-developmental changes in the first 2 years of life. Current Directions in Psychological Science, 11, 137-141.

Bauer, P. J. (2007). Remembering the times of our lives: Memory in infancy and beyond. Mahwah, NJ: Erlbaum.

Bauman, L. J. & Greenberg, L. (1992). The use of ethnographic interviewing to inform questionnaire construction. Health Education and Behavior, 19, 9-23

Baxter, J. S., Jackson, M., & Bain, S. A. (2003). Interrogative suggestibility: interactions between interviewees' self-esteem and interviewer style. Personality and Individual Differences, 35, 1285–1292. doi:10.1016/S0191-8869(02)00349-5

Bell, M. (2002). Promoting children's rights through the use of relationship. Child and Family Social Work, 7, 1-11.

Berrick, J. D., Frasch, K., & Fox, A. (2000). Assessing children's experiences of out-of-home care: Methodological challenges and opportunities. Social Work Research, 24, 119-127.

Bessell, S. (2011). Participation in decision-making in out-of-home care in Australia: What do young people say. Children and Youth Services Review, 33, 496-501. doi: 10.1016/j.childyouth.2010.05.006

Bidrose, S., & Goodman, G. S. (2000). Testimony and evidence: A scientific case study of memory for child sexual abuse. Applied Cognitive Psychology, 14, 197–213. doi:10.1002/(SICI)1099-0720(200005/06)14:3

Biehal, N., & Wade, J. (2000). Going missing from residential and foster care: Linking biographies and contexts. British Journal of Social Work, 30, 211–225. doi:10.1093/bjsw/30.2.211

Bjorklund, D. F., Bjorklund, B. R., Brown, R. D., & Cassel, W. S. (1998). Children's susceptibility to repeated questions: How misinformation changes children's answers and their minds. Applied Developmental Science, 2, 99-111. doi: 10.1207/s1532480xads0202_4

Blandon-Gitlin, I., & Pezdek, K. (2009). Children's memory in forensic contexts: Suggestibility, false memory, and individual differences. In B. L. Bottoms, C. J. Najdowski, & G. S. Goodman (Eds.), Children as victims, witnesses, and offenders (pp. 57–80). New York, NY: Guilford Press.

Block, S. D., Oran, H., Oran, D., Baumrind, N., & Goodman, G. S. (2010). Abused and neglected children in court: Knowledge and attitudes. Child Abuse & Neglect, 34, 659-670.

Blower, A., Addo, A., Hodgson, J., Lamington, L., & Towlson, K. (2004). Mental health of "looked after" children: A needs assessment. Clinical Child Psychology and Psychiatry, 9, 117–129. doi:10.1177/1359104504039176

Boshier, P., & Steel-Baker, D. (2007). Invisible parties: Listening to children. Family Court Review, 45, 548-559. doi: 10.1111/j.1744-1617.2007.00170.x

Bottoms, B. L., Quas, J. A., & Davis, S. L. (2007). The influence of interviewer-provided social support on children's suggestibility, memory, and disclosures. In M. E. Pipe, M. E. Lamb, Y. Orbach, & A.-C. Cederborg (Eds.), Child sexual abuse: Disclosure, delay, and denial (pp. 135-157). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Bowen, C. J., & Howie, P. M. (2002). Context and cue cards in young children's testimony: A comparison of brief narrative elaboration and context reinstatement. Journal of Applied Psychology, 87, 1077–1085. doi: 10.1037/0021-9010.87.6.1077

Bowlby, J. (1969/1982). Attachment and loss: Vol. 1 Attachment. New York: Basic Books.

Bowlby, J. (1980). Attachment and loss: Vol. 3 Loss: Sadness and depression. New York: Basic Books.

Brainerd, C. J., Holliday, R. E., Reyna, V. F., Yang, Y., & Toglia, M. P. (2010). Developmental reversals in false memory: Effects of emotional valence and arousal. Journal of Experimental Child Psychology, 107, 137-154. doi: 10.1016/j.jecp.2010.04.013

Bretherton, I. & Munholland, K.A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy & P. Shaver (Eds.), Handbook of attachment: Theory, Research, and Clinical Applications. (pp. 102-130). New York: Guildford Press.

Bright-Paul, A., Jarrold, C., & Wright, D. B. (2005). Age-appropriate cues facilitate source-monitoring and reduce suggestibility in 3- to 7-year-olds. Cognitive Development, 20, 1–18. doi:10.1016/j.cogdev.2004.06.001

Brosky, B. A., & Lally, S. J. (2004). Prevalence of trauma, PTSD, and dissociation in court-referred adolescents. Journal of Interpersonal Violence, 19, 801-814.

Brown, D. A., Lamb, M. E., Lewis, C. N., Pipe, M.-E., Orbach, Y., & Wolfman, M. (2013). The NICHD Investigative Interview Protocol: An analogue study. Journal of Experimental Psychology: Applied, 19, 367–382. doi: 10.1037/a0035143

Brown, D. A., Lewis, C. N., Lamb, M. E., & Stephens, E. (2012). The influences of delay and severity of intellectual disability on event memory in children. Journal of Consulting and Clinical Psychology, 80, 829-841. doi: 10.1037/a0029388

Brown, D. A., & Pipe, M.-E. (2003). Variations on a technique: Enhancing children's recall using narrative elaboration training. Applied Cognitive Psychology, 17, 377–399. doi:10.1002/acp.876

Bruck, M., & Ceci, S. J. (1997). The suggestibility of young children. Current Directions in Psychological Science, 6, 75–79.

Bruck, M., & Ceci, S. J. (1999). The suggestibility of children's memory. Annual Review of Psychology, 50, 419-439. doi: 10.1146/annurev.psych.50.1.419

Bruck, M., Ceci, S. J., Francoeur, E., & Barr, R. (1995). "I hardly cried when I got my shot!" Influencing children's reports about a visit to their pediatrician. Child Development, 66, 193–208.

Bruck, M., Ceci, S. J., & Hembrooke, H. (2002). The nature of children's true and false narratives. Developmental Review, 22, 520–554. doi: 10.1016/S0273-2297(02)00006-0

Bruck, M., Ceci, S. J., Melnyk, I., & Finkelberg, D. (1999). The effect of interviewer bias on the accuracy of children's reports and interviewers' reports. Paper presented at the biennial meeting of the Society for Child Development, Albuquerque, NM.

Bruck, M., Ceci, S. J., & Principe, G. F. (2006). The child and the law. In K. A. Renninger, I. E. Sigel, W. Damon, & R. M. Lerner (Eds.), Handbook of Child Psychology, 6th edition, Vol 4 (pp. 776-816). Hoboken, NJ: John Wiley & Sons Inc.

Burgess, C., Rossvoll, F., Wallace, B., & Daniel, B. (2010). "It's just like another home, just another family, so it's nae different" Children's voices in kinship care: A research study about the experience of children in kinship care

in Scotland. Child & Family Social Work, 15, 297–306. doi:10.1111/j.1365-2206.2009.00671.x

Cacioppo J. T., Uchino B. N., Berntson G.G. (1994). Individual differences in the autonomic origins of heart rate reactivity: The psychometrics of respiratory sinus arrhythmia and pre-ejection period. Psychophysiology, 31, 412–419.

Cameron, A. C., & Trivedi, P. K. (2013). Regression analysis of count data. New York, NY: Cambridge University Press.

Camparo, L. B., Wagner, J. T., & Saywitz, K. J. (2001). Interviewing children about real and fictitious events: Revisiting the narrative elaboration procedure. Law and Human Behavior, 25, 63–80. doi: 10.1023/A:1005691926064

Carnes, C. N., Nelson-Gardell, D., Wilson, C., & Orgassa, U. O. (2001). Extended forensic evaluation when sexual abuse is suspected: A multisite field study. Child Maltreatment, 6, 230–242. doi:10.1177/1077559501006003004

Carnes, C. N., Wilson, C., & Nelson-Gardell, D. (1999). Extended forensic evaluation when sexual abuse is suspected: A model and preliminary data. Child Maltreatment, 4, 242–254.

Carter, C. A., Bottoms, B. L., & Levine, M. (1996). "Linguistic and socioemotional influences on the accuracy of children's reports": Erratum. Law and Human Behavior, 20, 579. doi: 10.1007/BF01499044

Cashmore, J. (2002). Promoting the participation of children and young people in care. Child Abuse and Neglect, 26, 837-847.

Cashmore, J. (2014). Children living away from home. In G. Melton, A. Ben-Arieh, J. Cashmore, G. S. Goodman, & N. K. Worley (Eds.), The Sage handbook of child research (pp. 197-207). London: Sage.

Cashmore, J., & Paxman, M. (2006). Predicting after-care outcomes: the importance of "felt" security. Child and Family Social Work, 11, 232–241.

Ceci, S. J., & Friedman, R. D. (2000). The suggestibility of children: Scientific research and legal implications. Cornell Law Review, 86, 33-108.

Ceci, S. J., & Huffman, M. C. (1997). How suggestible are preschool children? Cognitive and social factors. Journal of the American Academy of Child & Adolescent Psychiatry, 36, 948–958. doi:10.1097/00004583-199707000-00017

Ceci, S. J., Kulkofsky, S., Klemfuss, J. Z., Sweeney, C. D., & Bruck, M. (2007). Unwarranted assumptions about children's testimonial accuracy. Annual Review of Clinical Psychology, 3, 311–328. doi: 10.1146/annurev.clinpsy.3.022806.091354

Cederborg, A.-C., Lamb, M. E., & Laurell, O. (2007). Delay of disclosure, minimization, and denial when the evidence is unambiguous: A multi-victim case. In M.-E. Pipe, M. E. Lamb, Y. Orbach, & A.-C. Cederborg (Eds.), Child sexual abuse: Disclosure, delay, and denial (pp. 159–174). New York, NY: Taylor and Francis Group.

Cederborg, A.-C., Orbach, Y., Sternberg, K. J., & Lamb, M. E. (2000). Investigative interviews of child witnesses in Sweden. Child Abuse & Neglect, 24, 1355–1361. doi: 10.1016/S0145-2134(00)00183-6

Cepeda, C. (2010). Clinical manual for the psychiatric interview of children and adolescents. Arlington, VA: American Psychiatric Publishing, Inc.

Chae, Y., Goodman, G. S., Eisen, M. L., & Qin, J. (2011). Event memory and suggestibility in abused and neglected children: Trauma-related psycho-pathology and cognitive functioning. Journal of Experimental Child Psychology, 110, 520-538. doi: 10.1016/j.jecp.2011.05.006

Chapman, M. V., Wall, A., & Barth, R. P. (2004). Children's voices: The perceptions of children in foster care. American Journal of Orthopsychiatry, 74, 293-304. doi: 10.1037/0002-9432.74.3.293

Chase, R. M., Medina, M. F., & Mignone, J. (2012). The life story board: A feasibility study of a visual interview tool for school counsellors. Canadian Journal of Counselling and Psychotherapy, 46, 183–200.

Checkoway, B. (2011). What is youth participation? Children and Youth Services Review, 33, 340–345. doi:10.1016/j.childyouth.2010.09.017

Cheung, M. & Boutte-Queen, N. (2010). Assessing the relative importance of the child sexual abuse interview protocol items to assist child victims in abuse disclosure. Journal of Family Violence, 25, 11-22.

Christensen, P. H. (2004). Children's participation in ethnographic research: Issues of power and representation. Children & Society, 18, 165–176. doi:10.1002/chi.823

Clark, A. (2005). Listening to and involving young children: A review of research and practice. Early Child Development and Care, 175, 489-505. doi: 10.1080/03004430500131288

Cook, E., Greenberg, M., & Kusche, C. (1995, March). People in my life: Attachment relationships in middle childhood. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Indianapolis, Indiana.

Cordón, I. M., Pipe, M.-E., Sayfan, L., Melinder, A., & Goodman, G. S. (2004). Memory for traumatic experiences in early childhood. Developmental Review, 24, 101–132. doi:10.1016/j.dr.2003.09.003

Cronch, L. E., Viljoen, J. L., & Hansen, D. J. (2006). Forensic interviewing in child sexual abuse cases: Current techniques and future directions. Aggression and Violent Behavior, 11, 195-207. doi: 10.1016/j.avb.2005.07.009

Cross, B. (2009). Hearing out children's narrative pathways to adulthood: Young people as interpreters of their own childhoods in diverging working class Scottish community. Childhood, 16, 335-353.

Cross, T. P., Jones, L. M., Walsh, W. A., Simone, M., & Kolko, D. (2007). Child forensic interviewing in children's advocacy centers: Empirical data on a practice model. Child Abuse & Neglect, 31, 1031-1052. doi: 10.1016/j.chiabu.2007.04.007

Daly, W. (2009). "Adding their flavour to the mix:" Involving children and young people in care in research design. Australian Social Work, 62, 460–475. doi:10.1080/03124070903265732

Damon, W. & Lerner, R. (2008). Child and adolescent development. Hoboken, NJ: Wiley.

Davies, G. Westcott., Horan, N. (2000). The impact of questioning style on the content of investigative interviews with suspected child sexual abuse victims. Psychology, Crime & Law, 6, 81-97. doi: 10.1080/10683160008410834

Davis, S. L., & Bottoms, B. L. (2002). Effects of social support on children's eyewitness reports: A

test of the underlying mechanism. Law and Human Behavior, 26, 185–215. doi: 10.1023/A:1014692009941

de Wolff, M., & van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. Child Development, 68, 571–91.

Delfabbro, P. H., Barber, J. G., & Bentham, Y. (2002). Children's satisfaction with out-of-home care in South Australia. Journal of Adolescence, 25, 523–533. doi:10.1006/jado.2002.0497

Diehl, J. J., Bennetto, L., & Young, E. C. (2006). Story recall and narrative coherence of high-functioning children with autism spectrum disorders. Journal of Abnormal Child Psychology, 34, 87–102. doi:10.1007/s10802-005-9003-x

Dolan, M., Smith, K., Casanueva, C., & Ringeisen, H. (2011). NSCAW II baseline report: Caseworker characteristics, child welfare services, and experiences of children placed in out-of-home care. (OPRE Report #2011-27e). Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Downs, S. H. Black, N. (1998). The feasibility of creating a checklist for the assessment of the methodological quality of both randomised and non-randomised studies of heathcare interventions. Journal of Epidemiology and Community Health, 52, 377-384.

Drohan-Jennings, D. M., Roberts, K. P., & Powell, M. B. (2010). Mental context reinstatement increases resistance to false suggestions after children have experienced a repeated event. Psychiatry, Psychology and Law, 17, 594-606. doi: 10.1080/13218711003739110

Dubowitz, H., English, D., Kotch, J., Litrownik, A., Runyan, D., Thompson, R., . . . Lewis, T. (2006). Research Briefs Volume 2. Chapel Hill, North Carolina: LONGSCAN Coordinating Center.

Dunn, D. M., Culhane, S. E., & Taussig, H. N. (2010). Children's appraisals of their experiences in out-of-home care. Children and Youth Services Review, 32, 1324–1330. doi:10.1016/j.childyouth.2010.05.001.

Dunn, L. M., & Dunn, L. M. (1981). Peabody Picture Vocabulary Test-Revised. Manual for Forms L and M. Circle Pines, MN: American Guidance Service.

Egelund, T., & Hestbæk, A (2006). Young children in care: A Danish longitudinal study on children from the 1995 cohort placed in care. Copenhagen: The Danish National Centre for Social Research (SFI).

Eisen, M. L., Goodman, G. S., Qin, J., Davis, S. L., & Crayton, J. (2007). Maltreated children's memory: Accuracy, suggestibility, and psychopathology. Developmental Psychology, 43, 1275–1294. doi:10.1037/0012-1649.43.6.1275

Eisen, M. L., Qin, J., Goodman, G. S., & Davis, S. L. (2002). Memory and suggestibility in maltreated children: Age, stress arousal, dissociation, and psychopathology. Journal of Experimental Child Psychology, 83, 167–212.

Ellermann, C. R. (2007). Influences on the mental health of children placed in foster care. Family & Community Health, 30, S23–S32.

Ellis, B. J., Boyce, W. T., Belsky, J., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2011). Differential susceptibility to the environment: An

evolutionary-neurodevelopmental theory. Development and Psychopathology, 23, 7–28. doi:10.1017/S0954579410000611

Ellis, L. M., Powell, M. B., Thomson, D. M., & Jones, C. (2003). Do simple "groundrules" reduce preschoolers' suggestibility about experienced and nonexperienced events? Psychiatry, Psychology and Law, 10, 334-345. doi: 10.1375/pplt.2003.10.2.334

Eltz, M. J., Shirk, S. R., & Sarlin, N. (1995). Alliance formation and treatment outcome among maltreated adolescents. Child Abuse & Neglect, 19, 419–431.

Emond, R. (2010). Caring as a moral, practical and powerful endeavor: Peer care in a Cambodian orphanage. British Journal of Social Work, 40, 63-81.

Erdmann, K., Volbert, R., & Böhm, C. (2004). Children report suggested events even when interviewed in a non-suggestive manner: What are its implications for credibility assessment? Applied Cognitive Psychology, 18, 589-611. doi: 10.1002/acp.1012

Feldman, S. E., & Sullivan, D. S. (1971). Factors mediating the effects of enhanced rapport on children's performance. Journal of Consulting and Clinical Psychology, 36, 302. doi:10.1037/h0030768

Fernandez, E. (2007). How children experience fostering outcomes: Participatory research with children. Child & Family Social Work, 12, 349–359. doi:10.1111/j.1365-2206.2006.00454.x

Fischer, K. W., & Farrar, M. J. (1987). Generalizations about generalization: How a theory of skill development explains both generality and specificity. International Journal of Psychology, 22, 643–677.

Fivush, R., Sales, J. M., Goldberg, A., Bahrick, L., & Parker, J. F. (2004). Weathering the storm: Children's long-term recall of Hurricane Andrew. Memory, 12, 104–118. doi:10.1080/09658210244000397

Fleming, P., Bamford, D., & McCaughley, N. (2005). An exploration of the health and social wellbeing needs of looked after young people--A multimethod approach. Journal of Interprofessional Care, 19, 35–49. doi:10.1080/13561820400021775

Fox, A., & Berrick, J. D. (2007). A Response to no one ever asked us: A review of children's experiences in out-of-home care. Child and Adolescent Social Work Journal, 24, 23-51. doi: 10.1007/s10560-006-0057-6

Fox, A., Berrick, J. D., & Frasch, K. (2008). Safety, family, permanency, and child well-being: What we can learn from children. Child Welfare, 87, 63-90.

Gardner, H. (2004). Perceptions of family: Complexities introduced by foster care part 1: Childhood perspectives. Journal of Family Studies, 10, 170-187.

Garven, S., Wood, J. M., & Malpass, R. S. (2000). Allegations of wrongdoing: The effects of reinforcement on children's mundane and fantastic claims. Journal of Applied Psychology, 85, 38–49. doi:10.1037//002I-90IO.S5.1.38

Garven, S., Wood, J. M., Malpass, R. S., & Shaw, J. S. (1998). More than suggestion: The effect of interviewing techniques from the McMartin Preschool case. The Journal of Applied Psychology, 83, 347–359.

Geddie, L. F., Beer, J., Bartosik, S., & Wuensch, K. L. (2001). The relationship between interview characteristics and accuracy of recall in young children: Do individual differences matter? Child Maltreatment, 6, 59-68. doi: 10.1177/1077559501006001006

Giles, J. W., Gopnik, A., & Heyman, G. D. (2002). Source monitoring reduces the suggestibility of preschool children. Psychological Science, 13, 288-291

Gilligan, R. (2000). The importance of listening to children in foster care. In G. Kelly and R. Gilligan (Eds.), Issues in foster care: Policy, practice, and research (pp. 40-58). London: Jessica Kingsley.

Gilstrap, L. L. (2004). A missing link in suggestibility research: What is known about the behavior of field interviewers in unstructured interviews with young children? Journal of Experimental Psychology: Applied, 10, 13-24. doi: 10.1037/1076-898x.10.1.13

Gilstrap, L. L., & Ceci, S. J. (2005). Reconceptualizing children's suggestibility: Bidirectional and temporal properties. Child Development, 76, 40–53. doi:10.1111/j.1467-8624.2005.00828.x

Gilstrap, L. L., & Papierno, P. B. (2004). Is the cart pushing the horse? The effects of child characteristics on children's and adults' interview behaviours. Applied Cognitive Psychology, 18, 1059–1078. doi: 10.1002/acp.1072

Gobbo, C., Mega, C., & Pipe, M.-E. (2002). Does the nature of the experience influence suggestibility? A study of children's event memory. Journal of Experimental Child Psychology, 81, 502-530. doi: 10.1006/jecp.2002.2662

Goodman, G. S. (2006). Children's eyewitness memory: A modern history and contemporary commentary. Journal of Social Issues, 62, 811-832. doi: 10.1111/j.1540-4560.2006.00488.x

Goodman, G. S., Bottoms, B. L., Schwartz-Kenney, B. M., & Rudy, L. (1991). Children's testimony about a stressful event: Improving children's reports. Journal of Narrative & Life History, 1, 69–99.

Goodman, G. S., Hirschman, J. E., Hepps, D., & Rudy, L. (1991). Children's memory for stressful events. Merrill-Palmer Quarterly, 37, 109-157.

Goodman, G. S., & Melinder, A. (2007). Child witness research and forensic interviews of young children: A review. Legal and Criminological Psychology, 12, 1-19. doi: 10.1348/135532506X156620

Goodman, G. S., Quas, J. A., Batterman-Faunce, J. M., Riddlesberger, M. M., & Kuhn, J. (1997). Children's reactions to and memory for a stressful event: Influences of age, anatomical dolls, knowledge, and parental attachment. Applied Developmental Science, 1, 54–75. doi:10.1207/s1532480xads0102

Goodman, G. S., Sharma, A., Thomas, S. F., & Considine, M. G. (1995). Mother knows best: Effects of relationship status and interviewer bias on children's memory. Journal of Experimental Child Psychology, 60, 195–228. doi:10.1006/jecp.1995.1038

Gordon, B. N., Jens, K. G., Shaddock, A. J., & Watson, T. E. (1991). Children's ability to remember activities performed and imagined: Implications for testimony. Child Psychiatry and Human Development, 21, 301-314. doi: 10.1007/BF00705934

Greenspan, S. and Greenspan, N.T. (1991) Clinical interview of the child. Washington, DC: American Psychiatric Press.

Greenstock, J., & Pipe, M. E. (1996). Interviewing children about past events: The influence of peer support and misleading questions. Child Abuse & Neglect, 20, 69-80.

Gulaid, L. (2004). The framework for protection, care and support of orphans and vulnerable children living in a world with HIV and AIDS. New York, NY: UNICEF.

Hardy, C. L., & Van Leeuwen, S. A. (2004). Interviewing young children: Effects of probe structures and focus of rapport-building talk on the qualities of young children's eyewitness statements. Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement, 36, 155–165. doi: 10.1037/h0087226

Hayes, B. K., & Delamothe, K. (1997). Cognitive interviewing procedures and suggestibility in children's recall. Journal of Applied Psychology, 82, 562-577. doi: 10.1037/0021-9010.82.4.562

Head, B. W. (2011). Why not ask them? Mapping and promoting youth participation. Children and Youth Services Review, 33, 541–547. doi:10.1016/j.childyouth.2010.05.015

Heptinstall, Bhopal, & Brannen (2001). Adjusting to foster family: Children's perspectives. Adoption & Fostering, 25, 6-16. doi: 10.1177/030857590102500403

Hershkowitz, I. (2009). Socioemotional factors in child sexual abuse investigations. Child Maltreatment, 14, 172-181. doi: 10.1177/1077559508326224

Hershkowitz, I., Lamb, M. E., Katz, C., & Malloy, L. C. (2013). Does enhanced rapport-building alter the dynamics of investigative interviews with suspected victims of intra-familial abuse? Journal of Police and Criminal Psychology. doi:10.1007/s11896-013-9136-8

Hershkowitz, I., Orbach, Y., Lamb, M. E., Sternberg, K. J., & Horowitz, D. (2001). The effects of mental context reinstatement on children's accounts of sexual abuse. Applied Cognitive Psychology, 15, 235-248. doi: 10.1002/acp.699

Hershkowitz, I., Orbach, Y., Lamb, M. E., Sternberg, K. J., & Horowitz, D. (2006). Dynamics of forensic interviews with suspected abuse victims who do not disclose abuse. Child Abuse & Neglect, 30, 753–769. doi: 10.1016/j.chiabu.2005.10.016

Hilbe, J. M. (2011). Negative binomial regression (2nd ed.). New York, NY: Cambridge University Press.

Holland, S. (2009). Listening to children in care: A review of methodological and theoretical approaches to understanding looked after children's perspectives. Children & Society, 23, 226-235. doi: 10.1111/j.1099-0860.2008.00213.x

Holliday, R. E. (2003). The effect of a prior cognitive interview on children's acceptance of misinformation. Applied Cognitive Psychology, 17, 443-457. doi: 10.1002/acp.879

Holtan, A. (2008). Family types and social integration in kinship foster care. Children and Youth Services Review, 30, 1022–1036. doi:10.1016/j.childyouth.2008.01.002

Hünefeldt, T., Rossi-Arnaud, C., & Furia, A. (2009). Effects of information type on children's interrogative suggestibility: Is theory-of-mind involved? Cognitive Processing, 10, 199–207. doi:10.1007/s10339-009-0269-8

Hunt, J. S., & Borgida, E. (2001). Is that what I said? Witnesses' responses to interviewer modifications. Law and Human Behavior, 25, 583-603. doi: 10.1023/A:1012754207074

Imhoff, M. C., & Baker-Ward, L. (1999). Preschoolers' suggestibility: Effects of developmentally appropriate language and interviewer supportiveness.

Journal of Applied Developmental Psychology, 20, 407–429. doi: 10.1016/S0193-3973(99)00022-2

Izard, C. E. (1990). Personality, emotion, expressions, and rapport. Psychological Inquiry, 1, 315–317.

James, A. (2001) Ethnography in the study of childhood. In P.A. Atkinson, A. Coffey, S. Delemont, J. Lofland and L. Lofland (Eds.), Handbook of ethnography (pp. 246-257). London: Sage.

Jobe, A., & Gorin, S. (2013). "If kids don't feel safe they don't do anything": Young people's views on seeking and receiving help from Children's Social Care Services in England. Child and Family Social Work, 18, 429–438. doi:10.1111/j.1365-2206.2012.00862.x

Johnson, P. R., Yoken, C., & Voss, R. (1995). Family foster care placement: The child's perspective. Child Welfare League of America, 74, 959–975.

Jones, C. H., & Pipe, M.-E. (2002). How quickly do children forget events? A systematic study of children's event reports as a function of delay. Applied Cognitive Psychology, 16, 755-768. doi: 10.1002/acp.826

Jones, D. P. H. (2002). Editorial: Listening to children. Child Abuse & Neglect, 26, 833-835. doi: 10.1016/S0145-2134(02)00352-6

Justin, R. G. (2005). Medical needs of foster children. American Family Physician, 67, 474-475.

Kang, J. Y., Kim, Y.-S., & Pan, B. A. (2009). Five-year-olds' book talk and story retelling: Contributions of mother--child joint book reading. First Language, 29, 243–265. doi:10.1177/0142723708101680

Karpinski, A. C., & Scullin, M. H. (2009). Suggestibility under pressure: Theory of mind, executive function, and suggestibility in preschoolers. Journal of Applied Developmental Psychology, 30, 749–763. doi: 10.1016/j.appdev.2009.05.004

Katz, C., Hershkowitz, I., Malloy, L. C., Lamb, M. E., Atabaki, A., & Spindler, S. (2012). Non-verbal behavior of children who disclose or do not disclose child abuse in investigative interviews. Child Abuse & Neglect, 36, 12–20. doi:10.1016/j.chiabu.2011.08.006

Keller, A., Ford, L. H., & Meacham, J. A. (1978). Dimensions of self-concept in preschool children. Developmental Psychology, 14, 483–489. doi:10.1037//0012-1649.14.5.483

Kinsey, D., & Schlösser, A. (2012). Interventions in foster and kinship care: a systematic review. Clinical Child Psychology and Psychiatry, 18, 429–63. doi:10.1177/1359104512458204

Klayman, J., & Ha, Y.-W. (1987). Confirmation, disconfirmation, and information in hypothesis testing. Psychological Review, 94, 211–218. doi:10.1037/0033-295X.94.2.211

Klemfuss, J. Z., Milojevich, H. M., Yim, I. S., Rush, E. B., & Quas, J. A. (2013). Stress at encoding, context at retrieval, and children's narrative content. Journal of Experimental Child Psychology, 116, 693–706. doi:10.1016/j.jecp.2013.07.009

Korkman, J., Santtila, P., Drzewiecki, T., & Sandnabba, N. K. (2008). Failing to keep it simple: Language use in child sexual abuse interviews with 3–8-year-old children. Psychology, Crime & Law, 14, 41–60. doi:10.1080/10683160701368438

Krackow, E., & Lynn, S. J. (2003). Is there touch in the tame of Twister®? The effects of innocuous touch and suggestive questions on children's eyewitness memory. Law and Human Behavior, 27, 589-604. doi: 10.1023/B:LAHU.0000004888.52210.35

Krähenbühl, S., & Blades, M. (2006a). The effect of interviewing techniques on young children's responses to questions. Child: Care, Health, and Development, 32, 321-331. doi: 10.1111/j.1365-2214.2006.00608.x

Krähenbühl, S., & Blades, M. (2006b). The effect of question repetition within interviews on young children's eyewitness recall. Journal of Experimental Child Psychology, 94, 57-67.

Kuhn, D. & Franklin, S. (2008). The second decade: What develops (and how)? In W. Damon & R. Lerner (Eds.), Child and adolescent development (pp. 517-550). Hoboken, NJ: Wiley.

Laimon, R. L., & Poole, D. A. (2008). Adults usually believe young children: The influence of eliciting questions and suggestibility presentations on perceptions of children's disclosures. Law and Human Behavior, 32, 489-501. doi: 10.1007/s10979-008-9127-y

Lamb, M. E., & Brown, D. A. (2006). Conversational apprentices: Helping children become competent informants about their own experiences. British Journal of Developmental Psychology, 24, 215–234. doi: 10.1348/026151005X57657

Lamb, M. E., Hershkowitz, I., Orbach, Y., & Esplin, P. W. (2008). Tell me what happened: Structured investigative interviews of child victims and witnesses. Hoboken, NJ: Wiley.

Lamb, M.E., LaRooy, D.J., Malloy, L.C., & Katz, C. Children's testimony: A handbook of psychological research and forensic practice. Malden, MA: Wiley-Blackwell.

Lamb, M. E., Orbach, Y., Hershkowitz, I., Esplin, P. W., & Horowitz, D. (2007). A structured forensic interview protocol improves the quality and informativeness of investigative interviews with children: A review of research using the NICHD Investigative Interview Protocol. Child Abuse & Neglect, 31, 1201-1231. doi: 10.1016/j.chiabu.2007.03.021

Lamb, M. E., Orbach, Y., Hershkowitz, I., Horowitz, D., & Abbott, C. B. (2007). Does the type of prompt affect the accuracy of information provided by alleged victims of abuse in forensic interviews? Applied Cognitive Psychology, 21, 1117–1130. doi:10.1002/acp.1318

Lamb, M. E., Orbach, Y., Sternberg, K. L., Aldridge, J., Pearson, S., Stewart, H. L., Bowler, L. (2009). Use of a structured investigative protocol enhances the quality of investigative interviews with alleged victims of child sexual abuse in Britain. Applied Cognitive Psychology, 23, 449-467. doi: 10.1002/acp.1489

Lamb, M. E., Sternberg, K. J., & Esplin, P. W. (2000). Effects of age and delay on the amount of information provided by alleged sex abuse victims in investigative interviews. Child Development, 71, 1586-1596. doi: 10.1111/1467-8624.00250

Lamb, M. E., Sternberg, K. J., Esplin, P. W., Hershkowitz, I., & Orbach, Y. (1997). Assessing the
credibility of children's allegations of sexual abuse: A survey of recent research. Learning and Individual Differences, 9, 175–194

Lamb, M. E., Sternberg, K. J., Orbach, Y., Esplin, P. W., & Mitchell, S. (2002). Is ongoing feedback necessary to maintain the quality of investigative interviews with allegedly abused children? Applied Developmental Science, 6, 35-41. doi: 10.1207/S1532480XADS0601_04

Lamb, M. E., Sternberg, K. J., Orbach, Y., Esplin, P. W., Stewart, H., & Mitchell, S. (2003). Age

differences in young children's responses to open-ended invitations in the course of forensic interviews. Journal of Consulting and Clinical Psychology, 71, 926-934. doi: 10.1037/0022-006X.71.5.926

Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. Psychotherapy: Theory, Research, Practice, Training, 38, 357-361. doi: 10.1037/0033-3204.38.4.357

Larsson, A. S., & Lamb, M. E. (2009). Making the most of information-gathering interviews with children. Infant and Child Development, 18, 1–16. doi: 10.1002/icd.573

Leander, L. (2010). Police interviews with child sexual abuse victims: Patterns of reporting, avoidance and denial. Child Abuse & Neglect, 34, 192–205. doi: 10.1016/j.chiabu.2009.09.011

Leander, L., Christianson, S.-Å., & Granhag, P. A. (2007). A sexual abuse case study: Children's memories and reports. Psychiatry, Psychology and Law, 14, 120–129. doi:10.1375/pplt.14.1.120

Leander, L., Christianson, S. A., & Granhag, R. A. (2008). Internet-initiated sexual abuse: Adolescent victims' reports about on- and off-line sexual activities. Applied Cognitive Psychology, 22, 1260–1274. doi:10.1002/acp

Lee, R. E., & Whiting, J. B. (2007). Foster children's expressions of ambiguous loss. The American Journal of Family Therapy, 35, 417–428. doi:10.1080/01926180601057499

Leichtman, M. D., & Ceci, S. J. (1995). The effects of stereotypes and suggestions on preschoolers' reports. Developmental Psychology, 31, 568-578. doi: 10.1037/0012-1649.31.4.568

Leichtman, M. D., Ceci, S. J., & Morse, M. B. (1997). The nature and development of children's event memory. In P. S. Appelbaum, L. A. Uyehara, & M. R. Elin (Eds.), Trauma and memory: Clinical and legal controversies (pp. 158-187). New York, NY: Oxford University Press.

Lepore, S. J., & Sesco, B. (1994). Distorting children's reports and interpretations of events through suggestion. Journal of Applied Psychology, 79, 108-120. doi: 10.1037/0021-9010.79.1.108

Lind, E. A., & Tyler, T. R. (1988). The social psychology of procedural justice. New York: Plenum Press.

LeVine, R. A. (2007). Ethnographic studies of childhood: A historical overview. American Anthropologist, 109, 247–260. doi:10.1525/AA.2007.109.2.247.248

Loftus, E. F. (2004). Memories of things unseen. Current Directions in Psychological Science, 13, 145-147.

London, K., Bruck, M., & Melnyk, L. (2009). Post-event information affects children's autobiographical memory after one year. Law and Human Behavior, 33, 344–55. doi:10.1007/s10979-008-9147-7

Long, J. S., & Freese, J. (2006). Regression models for categorical dependent variables using Stata (2nd ed.). College Station, TX: Stata Press.

Lundström, T., & Sallnäs, M. (2012). Sibling contact among Swedish children in foster and residential care-Out of home care in a family service system. Children and Youth Services Review, 34, 396-402. doi: 10.1016/j.childyouth.2011.11.008

Lyon, T. D. (in press). Interviewing children. Annual Review of Law and Social Science.

Lyon, T. D., & Dorado, J. S. (2008). Truth induction in young maltreated children: The effects of oath-taking and reassurance on true and false disclosures. Child Abuse & Neglect, 32, 738–48. doi:10.1016/j.chiabu.2007.08.008

Lyon, T. D., Malloy, L. C., Quas, J. A., & Talwar, V. A. (2008). Coaching, truth induction, and young maltreated children's false allegations and false denials. Child Development, 79, 914–929.

Malloy, L. C., Brubacher, S. P., & Lamb, M. E. (2013). "Because she's one who listens": Children discuss disclosure recipients in forensic interviews. Child Maltreatment, 18, 245–251. doi:10.1177/1077559513497250

Malloy, L. C., Quas, J. A., Lyon, T. D., Ahern, E. C. (2014). Disclosing adult wrongdoing: Maltreated and non-maltreated children's expectations and preferences. Journal of Experimental Child Psychology, 124, 78-96.

Maras, K. L., & Bowler, D. M. (2010). The cognitive interview for eyewitnesses with autism spectrum disorder. Journal of Autism and Developmental Disorders, 40, 1350–1360. doi: 10.1007/s10803-010-0997-8

Martin, R. P. (1988). Temperament assessment battery for children. Brandon, VT: Clinical Psychology Publishing.

Mason, J. (2008). A children's standpoint: Needs in out-of-home care. Children & Society, 22, 358-369.

McCauley, M. R., & Fisher, R. P. (1995). Facilitating children's eyewitness recall with the revised cognitive interview. Journal of Applied Psychology, 80, 510-516. doi: 10.1037/0021-9010.80.4.510

McDowall, J. D. (2013). Experiencing out-of-home care in Australia: The views of children and young people (CREATE Report Card 2013). Sydney: CREATE Foundation.

McFarlane, F., & Powell, M. B. (2002). The Video Suggestibility Scale for Children: How generalizable is children's performance to other measures of suggestibility? Behavioral sciences & the law, 20, 699–716. doi:10.1002/bsl.492

McMillen, J. C., Zima, B. T., Scott, L. D., Auslander,W. F., Munson, M. R., Ollie, M. T., & Spitznagel, E. L. (2005). Prevalence of psychiatric disorders among older youths in the foster care system. Journal of American Academy of Child Adolescent Psychiatry, 44, 88–95.

McLeod, A. (2006). Respect or empowerment?: Alternative understandings of "listening" in childcare social work. Adoption & Fostering, 30, 43–52. doi:10.1177/030857590603000407

McLeod, A. (2007). Whose agenda? Issues of power and relationship when listening to looked-after young people. Child and Family Social Work, 12, 278-286. doi: 10.1111/j.1365-2206.2007.00493.x

McTavish, M., Streelasky, J., & Coles, L. (2012). Listening to children's voices: Children as participants in research. International Journal of Early Childhood, 44, 249-267. doi: 10.1007/s13158-012-0068-8

McWilliams, K., Augusti, E.M., Dion, J., Block, S., Melinder, A., Cashmore, J., and Goodman, G. S. (2014). Children as witnesses. In G. Melton, A. Ben-Arieh, J. Cashmore, G. S. Goodman, & N. K. Worley, (Eds.), The Sage handbook of child research (pp. 285-300). London: Sage.

Melinder, A., Scullin, M., Gravvold, T., & Iversen, M. (2007). The stability and generalizability of young children's suggestibility over a 44-month interval. Psychology, Crime & Law, 13, 459-468. doi: 10.1080/10683160601092997

Melton, G.B., Gross-Manos, D., Ben-Arieh, A., & Yazykova, E. (2014). The nature and scope of child research: Learning about children's lives. In G. Melton, A. Ben-Arieh, J. Cashmore, G. S. Goodman, & N. K. Worley, (Eds.), The Sage handbook of child research (pp. 3-28). London: Sage.

Melton, G. B., Ben-Arieh, A., Cashmore, J., Goodman, G. S., & Worley, N. K. (Eds.). (2014). The Sage handbook of child research. London, UK: Sage.

Memon, A., Wark, L., Bull, R., & Koehnken, G. (1997). Isolating the effects of the cognitive interview techniques. British Journal of Psychology, 88, 179-197.

Merritt, K. A., Ornstein, P. A., & Spicker, B. (1994). Children's memory for a salient medical procedure: Implications for testimony. Pediatrics, 94¸17-23.

Messing, J. T. (2006). From the child's perspective: A qualitative analysis of kinship care placements. Children and Youth Services Review, 28, 1415-1434.

Mitchell, M. B., Kuczynski, L., Tubbs, C. Y., & Ross, C. (2010). We care about care: Advice by children in care for children in care, foster parents and child welfare workers about the transition into foster care. Child & Family Social Work, 15, 176–185. doi:10.1111/j.1365-2206.2009.00657.x

Moore, L., & Kirk, S. (2010). A literature review of children's and young people's participation in decisions relating to health care. Journal of Clinical Nursing, 19, 2215–25. doi:10.1111/j.1365-2702.2009.03161.x

Morrison, J., & Anders, T. F. (2001). Review of interviewing children and adolescents: Skills and strategies for effective DSM-IV diagnosis. Family Therapy, 28, 118–119.

Morrison, J., Mishna, F., Cook, C., & Aitken, G. (2011). Access visits: Perceptions of child protection workers, foster parents and children who are Crown wards. Children and Youth Services Review, 33, 1476–1482. doi:10.1016/j.childyouth.2011.03.011

Moston, S. (1990). How children interpret and respond to questions: Situational sources of suggestibility in eyewitness interviews. Social Behavior, 5, 155–167.

Mulder, M. R., & Vrij, A. (1996). Explaining conversation rules to children: An intervention study to facilitate children's accurate responses. Child Abuse & Neglect, 20, 623–631. doi: 10.1016/0145-2134(96)00050-6

Nathanson, R., Crank, J. N., Saywitz, K. J., & Ruegg, E. (2007). Enhancing the oral narratives of children with learning disabilities. Reading & Writing Quarterly: Overcoming Learning Difficulties, 23, 315-331. doi: 10.1080/10573560701501610

NSCAW Research Group (2002). Methodological lessons from the National Survey of Child and Adolescent Well-Being: The first three years of the USA's first national probability study of children and families investigated for abuse and neglect. Children and Youth Services Review, 24, 513-541.

Nelson, K., Fivush, R. (2004). The emergence of autobiographical memory: A social cultural developmental theory. Psychological Review, 111, 486-511.

Nesbitt, M., & Markham, R. (1999). Improving young children's accuracy of recall for an eyewitness event. Journal of Applied Developmental Psychology, 20, 449–459.

Nutbrown, C., & Clough, P. (2009). Citizenship and inclusion in the early years: Understanding and responding to children's perspectives on 'belonging.' International Journal of Early Years Education, 17, 191-206. doi: 10.1080/09669760903424523

Nybell, L. M. (2013). Locating "youth voice:" Considering the contexts of speaking in foster care. Children and Youth Services Review, 35, 1227-1235. doi: 10.1016/j.childyouth.2013.04.009

O'Neill, S., & Zajac, R. (2013). The role of repeated interviewing in children's responses to cross-examination-style questioning. British Journal of Psychology, 104, 14–38. doi:10.1111/j.2044-8295.2011.02096.x

Orbach, Y., & Lamb, M. E. (2000). Enhancing children's narratives in investigative interviews. Child Abuse & Neglect, 24, 1631–1648. doi: 10.1016/S0145-2134(00)00207-6

Ornstein, P., Baker-Ward, L., Gordon, B. & Merritt, K. (1997). Children's memory of medical experiences: Implications for testimony. Applied Cognitive Psychology, 11, 87-104.

Otgaar, H., Candel, I., Smeets, T., & Merckelbach, H. (2010). 'You didn't take Lucy's skirt off': The effect of misleading information on omissions and commissions in children's memory reports. Legal and Criminological Psychology, 15, 229-241. doi: 10.1348/135532509X471951

Owens, R. (2012). Language development. Upper Saddle River, NJ: Pearson.

Pasztor, E. M., Hollinger, D. S., Inkelas, M., Halfon, N. (2006). Health and mental health services for children in foster care: The central role of foster parents. Child Welfare, 85, 33-57.

Paz-Alonso, P. M., Ogle, C. M., & Goodman, G. S. (2013). Children's memory and testimony in "scientific case studies" of child sexual abuse: A review. In M. Ternes, D. Griesel, & B. Cooper (Eds.), Applied issues in investigative interviewing, eyewitness memory, and credibility assessment (pp. 143-171). New York, NY: Springer.

Pecora, P. J., Kessler, R. C., O'Brien, K., White, C. R., Williams, J., Hiripi, E. . . . Herrick, M. A. (2006). Educational and employment outcomes of adults formerly placed in foster care: Results from the Northwest Foster Care Alumni Study. Children and Youth Services Review, 28, 1459-1481.

Perry, B. L. (2006). Understanding social network disruption: The case of youth in foster care. Social Problems, 53, 371–391.

Perry, N., McAuliff, B., Tan, P., and Claycomb, C. (1995). When lawyers serve children: Is justice served? Law and Human Behavior, 19, 609-629.

Peter-Hagene, L., Bottoms, B. L., Davis, S. L., Nysse-Carris, K. L (2014, March). Social support effects on children's suggestibility after one year. Poster presented at the American Psychology-Law Conference, New Orleans, LA.

Peterson, C. (2011). Children's memory reports over time: Getting both better and worse. Journal of Experimental Child Psychology, 109, 275-293. doi: 10.1016/j.jecp.2011.01.009

Peterson, C. (2012). Children's autobiographical memories across the years: Forensic implications of childhood amnesia and eyewitness memory for stressful events. Developmental Review, 32, 287-306. doi: 0009-3920/2009/8002-0015.

Peterson, C., Dowden, C., & Tobin, J. (1999). Interviewing preschoolers: Comparisons of yes/no and wh- questions. Law and Human Behavior, 23, 539-555. doi: 10.1023/A:1022396112719

Peterson, C., & Grant, M. (2001). Forced-choice: Are forensic interviewers asking the right questions? Canadian Journal of Behavioural Science/Revue canadienne des Sciences du Comportement, 33, 118-127. doi: 10.1037/h0087134

Peterson, C., Parsons, T., & Dean, M. (2004). Providing misleading and reinstatement information a year after it happened: Effects on long-term memory. Memory, 12, 1-13. doi: 10.1080/09658210344000468

Peterson, C. B., Warren, K. L., & Hayes, A. H. (2013). Revisiting narrative elaboration training with an ecologically relevant event. Journal of Cognition and Development, 14, 154–174.

Pipe, M.-E., Lamb, M. E., Orbach, Y., & Esplin, P. W. (2004). Recent research on children's testimony about experienced and witnessed events. Developmental Review, 24, 440-468. doi: 10.1016/j.dr.2004.08.006

Pipe, M. E., Salmon, K. (2002). What children bring to the interview context: Individual differences in children's event reports. In M. L. Eisen, J. A. Quas, & G. S. Goodman (Eds.), Memory and suggestibility in the forensic interview (pp. 235-261). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Pölkki, P., Vornanen, R., Pursiainen, M. & Riikonen, M. (2012). Children's participation in child-protection processes as experienced by foster children and social workers. Child Care in Practice, 18, 107-125.

Poole, D. A., & Dickinson, J. J. (2013). Investigative interviews of children. In R. E. Holliday & T. A. Marche (Eds.), Child forensic psychology: Victim and eyewitness memory (pp. 157-178). New York, NY: Palgrave Macmillan.

Poole, D. A., Dickinson, J. J., Brubacher, S. P., Liberty, A. E., & Kaake, A. M. (2014). Deficient cognitive control fuels children's exuberant false allegations. Journal of Experimental Child Psychology, 118, 101–9. doi:10.1016/j.jecp.2013.08.013

Poole, D. A., & Lamb, M. E. (1998). Investigative interviews of children: A guide for helping professionals. Washington, D.C.: American Psychological Association.

Poole, D. A., & Lindsay, D. S. (2001). Children's eyewitness reports after exposure to misinformation from parents. Journal of Experimental Psychology: Applied, 7, 27-50. doi: 10.1037/1076-898X.7.1.27

Poole, D. A., & Lindsay, D. S. (2002). Reducing child witnesses' false reports of misinformation from parents. Journal of Experimental Child Psychology, 81, 117-140. doi: 10.1006/jecp.2001.2648

Portwood, S. G., & Reppucci, N. D. (1996). Adults' impact on the suggestibility of preschoolers' recollections. Journal of Applied Developmental Psychology, 17, 175-198. doi: 10.1016/S0193-3973(96)90024-6

Powell, M. B., Hughes-Scholes, C., & Sharman, S. J. (2012). Skill in interviewing reduces confirmation bias. Journal of Investigative Psychology and Offender Profiling, 9, 126–134. doi: 10.1002/jip.1357

Price, H. L., & Connolly, D. A. (2008). Children's recall of emotionally arousing, repeated events: A review and call for further investigation. International Journal of Law and Psychiatry, 31, 337-346. doi: 10.1016/j.ijlp.2008.06.002

Principe, G. F., & Ceci, S. J. (2002). "I saw it with my own ears": The effects of peer conversations on preschoolers' reports of nonexperienced events. Journal of Experimental Child Psychology, 83, 1-25. doi: 10.1016/S0022-0965(02)00120-0

Principe, G. F., DiPuppo, J., & Gammel, J. (2013). Effects of mothers' conversation style and receipt of misinformation on children's event reports. Cognitive Development, 28, 260–271. doi:10.1016/j.cogdev.2013.01.012

Publication manual of the American Psychological Association (3rd ed.). (1983). Washington, DC: American Psychological Association.

Publication manual of the American Psychological Association (6th ed.). (2010). Washington, DC: American Psychological Association.

Quas, J. A., Bauer, A., & Boyce, W. T. (2004). Physiological reactivity, social support, and memory in early childhood. Child Development, 75, 797–814. doi:10.1111/j.1467-8624.2004.00707.x.Physiological

Quas, J. A., & Lench, H. C. (2007). Arousal at encoding, arousal at retrieval, interviewer support, and children's memory for a mild stressor. Applied Cognitive Psychology, 305, 289–305. doi:10.1002/acp

Quas, J. A., Goodman, G. S., Bidrose, S., Pipe, M. E., Craw, S., & Ablin, D. S. (1999). Emotion and memory: Children's long-term remembering, forgetting, and suggestibility. Journal of Experimental Child Psychology, 72, 235-270. doi: 10.1006/jecp.1999.2491

Quas, J. A., Malloy, L. C., Melinder, A., Goodman, G. S., D'Mello, M., & Schaaf, J. M. (2007). Developmental differences in the effects of repeated interviews and interviewer bias on young children's event memory and false reports. Developmental Psychology, 43, 823–837. doi:10.1037/0012-1649.43.4.823

Quas, J. A., Rush, E. B., Yim, I. S., & Nikolayev, M. (2014). Effects of stress on memory in children and adolescents: testing causal connections. Memory, 22, 616–632. doi:10.1080/09658211.2013.809766

Quas, J. A., Wallin, A. R., Papini,, S., Lench, H. C., & Scullin, M. H. (2005). Suggestibility, social support, and memory for a novel experience in young children. Journal of Experimental Child Psychology, 91, 315–341. doi:10.1016/j.jecp.2005.03.008.

Rasmussen, K. (2014). Children taking photos and photographs: A route to children's involvement and participation and a "bridge" to exploring children's everyday lives. In G. Melton, A. Ben-Arieh, J. Cashmore, G. S., & N. K. Worley, (Eds.), The Sage handbook of child research (pp. 285-300). London: Sage.

Rassin, E., VanDer Sleen, J., Van Amelsvoort, A.G., & Buttingher, E., (2006). Boys will be boys: A pre-line up gameplay has beneficial effects on boys' but not girls' identification performance. J of Investigative Psychology and Offender Profiling, 3, 157-163.

Richters, J. E., & Martinez, P. (1993). The NIMH Community Violence Project: I. Children as victims of and witnesses to violence. Psychiatry, 56, 7-21.

Rischke, A. E., Roberts, K. P., & Price, H. L. (2011). Using spaced learning principles to translate knowledge into behavior: Evidence from investigative interviews of alleged child abuse victims. Journal of Police and Criminal Psychology, 26, 58–67.

Roberts, K. P., & Blades, M. (1996). Do children confuse memories of events seen on television and events witnessed in real life? Issues in Criminological & Legal Psychology, 26, 52-57.

Roberts, K. P., Lamb, M. E., & Sternberg, K. J. (2004). The effects of rapport-building style on children's reports of a staged event. Applied Cognitive Psychology, 18, 189–202. doi:10.1002/acp.957

Roebers, C. M., & Fernandez, O. (2002). The effects of accuracy motivation and children's and adults' event recall, suggestibility, and their answers to unanswerable questions. Journal of Cognition and Development, 3, 415-443. doi: 10.1207/S15327647JCD3,4-03

Roebers, C. M., Gelhaar, T., & Schneider, W. (2004). "It's magic!" The effects of presentation modality on children's event memory, suggestibility, and confidence judgments. Journal of Experimental Child Psychology, 87, 320–35. doi:10.1016/j.jecp.2004.01.004

Roebers, C. M., & Schneider, W. (2005). The strategic regulation of children's memory performance and suggestibility. Journal of Experimental Child Psychology, 91, 24-44. doi: 10.1016/j.jecp.2005.01.001

Rostill-Brookes, H., Larkin, M., Toms, A., & Churchman, C. (2011). A shared experience of fragmentation: Making sense of foster placement breakdown. Clinical Child Psychology and Psychiatry, 16, 103–127. doi:10.1177/1359104509352894

Rotenberg, K., Eisenberg, N., Cumming, C., Smith, A., Singh, M., & Terlicher, E. (2003). The contribution of adults' nonverbal cues and children's shyness to the development of rapport between adults and preschool children. International Journal of Behavioral Development, 27, 21–30. doi:10.1080/01650250143000571

Rots-de Vries, C., van de Goor, I., Stronks, K., & Garretsen, H. (2011). Evaluation of an assertive outreach intervention for problem families: Intervention methods and early outcomes. Scandinavian Journal of Caring Sciences, 25, 211–219. doi:10.1111/j.1471-6712.2010.00811.x

Rudy, L., & Goodman, G. S. (1991). Effects of participation on children's reports: Implications for children's testimony. Developmental Psychology, 27, 527-538. doi: 10.1037/0012-1649.27.4.527

Salmon, K., Price, M., & Pereira, J. K. (2002). Factors associated with young children's long-term recall of an invasive medical procedure: a preliminary investigation. Journal of Developmental Behavioral Pediatrics, 23, 347-352.

Sallnäs, M., Wiklund, S., & Lagerlöf, H. (2012). Welfare recourses among children in care. European Journal of Social Work, 15, 467-483. doi: 0.1080/13691457.2012.70231

Sattler, J. M. (1998). Clinical and forensic interviewing of children and families: Guidelines for the mental health, education, pediatric, and child maltreatment fields. La Mesa, California: Jerome M. Sattler Publisher.

Saxe, R. R., Whitfield-Gabrieli, S., Scholz, J., & Pelphrey, K. A. (2009). Brain regions for perceiving and reasoning about other people in school-aged children. Child Development, 80, 1197–1209.

Saywitz, K. J., & Camparo, L. B. (2014a). Evidence-based child forensic interviewing: The developmental narrative elaboration interview. New York, NY: Oxford University Press.

Saywitz, K. J., & Camparo, L. B. (2014b). Interviewing children: A primer. In G. B. Melton, A. Ben-Arieh, J. Cashmore, G. S. Goodman, & N. K. Worley (Eds.), The Sage handbook of child research (pp. 371–390). Thousand Oaks, CA.

Saywitz, K. J., & Geiselman, R. E. & Bornstein, G. K. (1992). Effects of cognitive interviewing and practice on children's recall performance. Journal of Applied Psychology, 77, 744-756.

Saywitz, K. J., Jaenicke, C., & Camparo, L. B. (1990). Children's knowledge of legal terminology. Law and Human Behavior, 14, 523–535. doi:10.1007/BF01044879

Saywitz, K. J., & Moan-Hardie, S. (1994). Reducing the potential for distortion of childhood memories. Consciousness and Cognition, 3, 408–425. doi:10.1006/ccog.1994.1023

Saywitz, K. J., Nathanson, R., & Snyder, Lynn, S. (1993). Credibility of child witnesses: The role of communicative competence. Topics in Language Disorders, 13, 59.78. doi: 10.1097/00011363-199308000-00009.

Saywitz, K. J., & Snyder, L. (1996). Narrative elaboration: test of a new procedure for interviewing children. Journal of Consulting and Clinical Psychology, 64, 1347-1357.

Saywitz, K. J., Snyder, L., & Nathanson, R. (1999). Facilitating the communicative competence of the child witness. Applied Developmental Science, 3, 58–68. doi:10.1207/s1532480xads0301

Schaefer, E. S., & Edgerton, M. (1984). Parent and child correlates of parental modernity. In I. E. Sigel (Ed.), Parental belief systems: The psychological consequences for children (pp. 287–318). Hillsdale, NJ: Erlbaum.

Schofield, G. (2005). The voice of the child in family placement decision-making: A developmental model. Adoption & Fostering, 29, 29–44. doi:10.1177/030857590502900105

Schofield, G., Beek, M., Sargent, K., and Thoburn, J. (2000). Growing up in foster care. London: British Agencies for Adoption and Fostering.

Schwarz, S., & Roebers, C. M. (2006). Age differences in the effects of social influence on children's eyewitness performance and their metacognitive monitoring. Journal of Experimental Child Psychology, 94, 229–48. doi:10.1016/j.jecp.2006.01.003

Scullin, M. H., & Ceci, S. J. (2001). A suggestibility scale for children. Personality and Individual Differences, 30, 843–856. doi:10.1016/S0191-8869(00)00077-5

Seita, J. R. (2004). Strength based approaches expand into leadership. Reclaiming Children and Youth, 13, 22-26.

Shaffer, D., Fisher, P., Lucas, C., Dulcan, M. & Schwab-Stone, E. (2000). NIMH Diagnostic Interview Schedule for Children Version IV : Description, differences from previous versions and reliability of some common di-

agnoses. Journal of the American Academy of Child and Adolescent Psychiatry, 39, 228-38.

Shapiro, L. R., Blackford, C., & Chen, C.-F. (2005). Eyewitness memory for a simulated misdemeanor crime: The role of age and temperament in suggestibility. Applied Cognitive Psychology, 19, 267-289. doi: 10.1002/acp.1089

Sim, M. P. Y., & Lamb, M. E. (2013). Children's disclosure of child sexual abuse : How motivational factors affect linguistic categories related to deception detection. Psychology, Crime & Law, 19, 649–660.

Sinclair, I., Wilson, K., & Gibbs, I. (2001). "A life more ordinary": What children want from foster

placements. Adoption & Fostering, 25, 17-26. doi: 10.1023/A:1014692009941

Sjöberg, R. L., & Lindblad, F. (2002). Limited disclosure of sexual abuse in children whose experiences were documented by videotape. The American Journal of Psychiatry, 159, 312–314.

Snoeren, F., Hoefnagels, C., Lamers-Winkelman, F., Baeten, P., Evers, S. M. (2013). Design of a quasi-experiment on the effectiveness and cost-effectiveness of using the child-interview intervention during the investigation following a report of child abuse and/or neglect. BMC Public Health, 13, 1164.

Sparling, J., Wilder, D. A., Kondash, J., Boyle, M., & Compton, M. (2011). Effects of interviewer behavior on accuracy of children's responses. Journal of Applied Behavior Analysis, 44, 587–92. doi:10.1901/jaba.2011.44-587

Spielberger, C.D., Edwards, C.D., Lushene, R., Montuori, J., & Platzek, D. (1973). STAI-C preliminary manual for the state-trait anxiety inventory for children. Palo Alto, CA: Consulting Psychologists Press.

Spyrou, S. (2011). The limits of children's voices: From authenticity to critical reflexive representation. Childhood, 18, 151-165.

Sternberg, K. J., Lamb, M. E., Davies, G. M., & Westcott, H. L. (2001). The Memorandum of Good Practice: Theory versus application. Child Abuse & Neglect, 25, 669–681. doi: 10.1016/S0145-2134(01)00232-0

Sternberg, K. J., Lamb, M. E., Hershkowitz, I., Yudilevitch, L., Orbach, Y., Esplin, P. W., & Hovav, M. (1997). Effects of introductory style on children's abilities to describe experiences of sexual abuse. Child Abuse & Neglect, 21, 1133–1146. doi: 10.1016/S0145-2134(97)00071-9

Sternberg, K. J., Lamb, M. E., Orbach, Y., Esplin, P. W., & Mitchell, S. (2001). Use of a structured investigative protocol enhances young children's responses to free-recall prompts in the course of forensic interviews. Journal of Applied Psychology, 86, 997-1005. doi: 10.1037/0021-9010.86.5.997

Strolin-Goltzman, J., Kollar, S., & Trinkle, J. (2010). Listening to the voices of children in foster care: Youths speak out about child welfare workforce turnover and selection. Social Work, 55, 47-53.

Stuntzner-Gibson, D., Koren, P. E., & DeChillo, N. (1995). The youth satisfaction questionnaire: What kids think of services. Families in Society, 76, 614-624.

Sylwester, R. (2007). The adolescent brain: Reaching for autonomy. Thousand Oaks, California: Corwin Press.

Talwar, V., & Crossman, A. M. (2012). Children's lies and their detection: Implications for child witness testimony. Developmental Review, 32, 337–359. doi:10.1016/j.dr.2012.06.004

Taylor, M., Cartwright, B. S., & Bowden, T. (1991). Perspective taking and the-
ory of mind: Do children predict interpretive diversity as a function of dif-
ferences in observers' knowledge? Child Development, 62, 1334-1354.

Teoh, Y.-S., & Lamb, M. E. (2010). Preparing children for investigative inter-
views: rapport-building, instruction, and evaluation. Applied Developmen-
tal Science, 14, 154–163. doi:10.1080/10888691.2010.494463

Teoh, Y.-S., & Lamb, M. E. (2013). Interviewer demeanor in forensic interviews
of children. Psychology, Crime & Law, 19, 145–159.
doi:10.1080/1068316X.2011.614610

Templeton, L. M., & Wilcox, S. A. (2000). A tale of two representations: The
misinformation effect and children's developing theory of mind. Child De-
velopment, 71, 402-416.

Thibaut. K. & Walker, L. (1975). Procedural justice. Hillsdale, New Jersey:
Lawrence Erlbaum.

Thierry, K. L., & Spence, M. J. (2002). Source-monitoring training facilitates
preschoolers' eyewitness memory performance. Developmental Psycholo-
gy, 38, 428–437. doi:10.1037//0012-1649.38.3.428

Thierry, K. L., & Spence, M. J. (2004). A real-life event enhances the accuracy
of preschoolers' recall. Applied Cognitive Psychology, 18, 297-309. doi:
10.1002/acp.965

Thierry, K. L., Spence, M. J., & Memon, A. (2001). Before misinformation is
encountered: Source monitoring decreases child witness suggestibility.
Journal of Cognition and Development, 2, 1-26. doi:
10.1207/S15327647JCD0201_1

Thompson, W. C., Clarke-Stewart, K. A., & Lepore, S. J. (1997). What did the
janitor do? Suggestive interviewing and the accuracy of children's accounts.
Law and Human Behavior, 21, 405-426. doi: 10.1023/A:1024859219764

Thoresen, C., Lønnum, K., Melinder, A., Stridbeck, U., & Magnussen, S. (2006).
Theory and practice in interviewing young children: A study of Norwegian
police interviews 1985-2002. Psychology, Crime & Law, 12, 629-640. doi:
10.1080/10683160500350546

Tobey, A. E., & Goodman, G. S. (1992). Children's eyewitness memory: Effects
of participation and forensic context. Child Abuse & Neglect, 16, 779–796.
doi:10.1016/0145-2134(92)90081-2

Törrönen, M., (2006). Community in a children's home. Child and Family Social
Work, 11, 129-137.

Turnbull, B., Hernández, R., and Reyes, M. (2009). Street children and their
helpers: An actor-oriented approach. Children and Youth Services Review,
31, 1283-1288.

Tyler, T. R. (2013). Why people cooperate: The role of social motivations.
Princeton, N.J.: Princeton University Press.

Tyler, T. R., & Huo, Y. J. (2002). Trust in the law: Encouraging public coopera-
tion with the police and courts. New York, NY: Russell Sage.

U.N. General Assembly (1989). Convention on the Rights of the Child, 20 No-
vember 1989. United Nations Treaty Series, Vol. 1577, p.3, available at:
http//www.refworld.org/docid/3ae6b38f0.html [accessed 10 October 2013].

Unrau, Y. A. (2007). Research on placement moves: Seeking the perspective of
foster children. Children and Youth Services Review, 29, 122-137.

Vrij, A., & Bush, N. (2000). Differences in suggestibility between 5–6 and 10–11 year olds: The relationship with self-confidence. Psychology, Crime & Law, 6, 127–138. doi:10.1080/10683160008410837

Vygotsky, L.S. (1978). The development of higher psychological processes. (M. Lopez-Morillas & M. Cole, Trans.). Cambridge, MA: Harvard University Press (Original work published in 1934).

Walsh, D. (2004). Why do they act that way? New York: Free Press.

Weisz, V., Wingrove, T., Beal, S. J., & Faith-Slaker, A. (2011). Children's participation in foster care hearings. Child Abuse & Neglect, 35, 267-272. doi: j.chiabu.2010.12.007

Weithorn, L. (1983). Involving children in decision-making affecting their own welfare: Guidelines for professionals. In G. Melton, G. Koocher, & M. Saks, (Eds.), Children's competence to consent (pp. 235-260). New York, New York: Plenum Press.

Welle, D. L., & Clatts, M. C. (2007). Scaffolded interviewing with lesbian, gay, bisexual, transgender, queer, and questioning youth: A developmental approach to HIV education and prevention. Journal of the Association of Nurses in AIDS Care, 18, 5–14. doi: 10.1016/j.jana.2007.01.004

Weller, D., Hobbs, S., Goodman, G. S. (2014). Challenges and innovations in research on chlidhood. In G. Melton, A. Ben-Arieh, J. Cashmore, G. S. Goodman, & N. K. Worley, (Eds.), The Sage Handbook of Child Research (pp. 363-371). London: Sage.

White, T. L., Leichtman, M. D., & Ceci, S. J. (1997). The good, the bad, and the ugly: Accuracy, inaccuracy, and elaboration in preschoolers' reports about a past event. Applied Cognitive Psychology, 11, S37–S54. doi:10.1002/(SICI)1099-0720(199712)11:7<S37::AID-ACP546>3.0.CO;2-4

Whiting, J. B., & Lee III, R. E. (2003). Voices from the system: A qualitative study of foster children's stories. Family Relations, 52, 288–295.

Wilson, L., & Conroy, J. (1999). Satisfaction of children in out-of-home care. Child Welfare League of America, 78, 53–69.

Woolfson, R. C., Hefferman, E., Paul, M., & Brown, M. (2010). Young people's views of the child protection system in Scotland. British Journal of Social Work, 40, 2069-2085.

Zajac, R., & Hayne, H. (2003). I don't think that's what really happened: The effect of cross-examination on the accuracy of children's reports. Journal of Experimental Psychology: Applied, 9, 187–195. doi:10.1037/1076-898X.9.3.187

Zajac, R., & Hayne, H. (2006). The negative effect of cross-examination style questioning on children's accuracy: Older children are not immune. Applied Cognitive Psychology, 20, 3–16. doi:10.1002/acp.1169

Ziviani, J., Feeney, R., Cuskelly, M., Meredith, P., & Hunt, K. (2012). Effectiveness of support services for children and young people with challenging behaviours related to or secondary to disability, who are in out-of-home care: A systematic review. Children and Youth Services Review, 34, 758-770. doi: 10.1016/j.childyouth.2012.01.002

Table 1. Descriptive Characteristics of Support and Rapport studies

Authors, Year	Country Ethnicity SES	N	Age Range (years)	Event Type	Delay	Study Design	Interview
DESCRIPITVE CHARACTERISTICS OF SUPPORT STUDIES							
Almerigoga, Ost, Akehurst, & Fluck (Study 2), 2008	UK NR[29] Middle class	86	8 to 10	Classroom learning event about vocal chords	1 week	Variables examined: ° Interviewer supportiveness[30] ° Question detail (central vs. peripheral) Outcomes examined: ° Child memory accuracy	Detailed questions ° Specific[31], misleading
Almerigoga, Ost, Bull, & Akehurst, 2007	UK NR NR	69	8 to 11	Film depicting a boy scaring a group of girls by screaming at a window	none	Variables examined: ° Interviewer supportiveness ° State and Trait Anxiety (STAI-C)[a] Outcomes examined: ° Child memory accuracy ° Child suggestibility	Detailed questions ° Specific, misleading
Carter & Bottoms, 1996	USA 12% ethnic minority Lower to middle class	60	5 to 7	Scripted play activities with research assistant: Played with toys, photograph taken	none	Variables examined: ° Interviewer supportiveness ° Complexity of interviewer questions ° Receptive vocabulary (PPVT-R)[a] Outcomes examined: ° Child memory accuracy ° Child suggestibility ° Children's requests for clarification	Free recall Detailed questions ° Open-ended, yes/no, specific, misleading

---

[29]Not reported in published manuscript.

[30] Each study had its own definition of interviewer supportiveness (see Table 2). These definitions were collapsed into supportive or non-supportive categories.

[31] For the purposes of this table, specific questions are defined neutral questions that are not intentionally leading.

[a] STAI-C = State-Trait Anxiety Inventory for Children (Spielberger, Edwards, Lushene, Montuori, & Platzek, 1973); PPVT-R = Peabody Picture Vocabulary Test, Revised (Dunn & Dunn, 1981); CBCL = Child Behavior Checklist (Achenbach & Edelbroch, 1983); MLU = mean length of utterance; TABC = Temperament Battery for children (Martin, 1988); PM = Paternal Modernity (Schaefer & Edgerton, 1984); HR = heart rate; HPA = hypothalamic pituitary adrenal (axis activation); VSSC = Video Suggestibility Scale for Children (Scullin & Ceci, 2001).

Authors, Year	Country Ethnicity SES	N	Age Range (years)	Event Type	Delay	Study Design	Interview
DESCRIPITVE CHARACTERISTICS OF SUPPORT STUDIES (continued)							
Davis & Bottoms, 2002	USA 12% ethnic minority Middle class	81	6 to 7	Scripted play activities with babysitter: Played with toys, photograph taken, innocuous body touch	none	Variables examined: ° Interviewer supportiveness ° Child Age ° Children's social support reserves ° Children's perceived self-efficacy ° Children's state anxiety (STAI-C) Outcomes examined: ° Child memory accuracy ° Child suggestibility	Free recall Detailed questions ° Specific, misleading
Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991	USA 58% ethnic minority Lower to middle class	70	3 to 7	Inoculation in medical clinic	2 & 4 weeks or 4 weeks	Variables examined: ° Interviewer supportiveness ° Child age ° Parental reported stress ° Psychological adjustment (CBCL)[a] ° Memory ability (digit-span task) ° Repeated interviewing and delay Outcomes examined: ° Child memory accuracy ° Child suggestibility	Free recall Detailed questions ° Specific, misleading Photo identification

| Goodman, Sharma, Thomas, & Considine, 1995 | USA

NR

NR | 40 | 3 to 5 | Scripted play activities with research assistant:
    Played with toys, hygiene activities | none | Variables examined:
° Interviewer bias
° Interviewer familiarity

Outcomes examined:
° Interviewer question types
° Child memory accuracy
° Child suggestibility
° Adult description of child report | Free interview

Detailed questions
 ° Specific, misleading, person, room, actions |

Authors, Year	Country Ethnicity SES	N	Age Range (years)	Event Type	Delay	Study Design	Interview
DESCRIPITVE CHARACTERISTICS OF SUPPORT STUDIES (continued)							
Hershkowitz, Lamb, Katz, & Malloy, 2013	Israel NR NR	200	4 to 13	Suspected abuse in highly credible cases[b]	NR	Variables examined: ° Abuse disclosers vs. non-disclosers Outcomes examined: ° Interviewer supportiveness ° Volume of report of forensic details ° Interviewer utterance type ° Child reluctance	Standard NICHD protocol Revised NICHD protocol with enhanced support and rapport efforts throughout interview
Hershkowitz, Orbach, Lamb, Stern-berg, & Horowitz, 2006	Israel NR NR	100	4 to 13	Suspected abuse in highly credible cases[b]	NR	Variables examined: ° Abuse disclosers vs. non-disclosers Outcomes examined: ° Interviewer supportiveness ° Volume of report of forensic details ° Interviewer utterance type ° Child utterance type	NICHD protocol ° Rapport ° Free Recall ° Open ended questions ° Detailed questions[32]
Imhoff & Baker-Ward, 1999	USA 6% ethnic minority Middle class	64	3 to 4	Classroom learning activity about volcanoes	2 weeks	Variables examined: ° Interviewer supportiveness ° Linguistically complex vs. simple questions ° Child task engagement ° Child verbal ability (MLU)[a] ° Child temperament (TABC)[a] ° Parenting attitudes (PM)[a] Outcomes examined: ° Child memory accuracy ° Child suggestibility ° Children's changes in responses	Detailed questions ° Included either high or low social pressure

---

[b] Highly credible cases used the "Ground Truth" scheme, as described in the text.
[32] The NICHD protocol includes the following detailed question types: directive, option posing, and suggestive.

Authors, Year	Country Ethnicity SES	N	Age Range (years)	Event Type	Delay	Study Design	Interview
DESCRIPITVE CHARACTERISTICS OF SUPPORT STUDIES (continued)							
Klemfuss, Milojevich, Yim, Rush, & Quas, 2013	USA 47% eth-nic minor-ity Middle class or above	162	7 to 14	Public speaking and math stress test (TSST-M)[a]	2 weeks	Variables examined: ° Interviewer supportiveness ° Child age ° Child gender ° Physiological markers of stress at encoding and retrieval Outcomes examined: ° Quality of children's narrative responses (volume, content) in free recall	Free recall Detailed questions ° Specific, misleading

Peter-Hagene, Bottoms, Da-vis, & Nysse-Carris, 2014	USA
	
	10% eth-nic minor-ity
	
	Middle class
		72	7 to 8	Scripted play activities with babysitter:
				   Played with toys, had
				   photograph taken, innocuous body touch
					1 year	Variables examined:
						° Interviewer supportiveness
						° Children's working memory capacity
						° Parental attachment style
						
						Outcomes examined:
						 ° Child memory accuracy
							Free recall
							Detailed questions
							 ° Specific, misleading

Quas, Bauer, & Boyce, 2004	USA
	
	29% eth-nic minor-ity
	
	Middle class
		63	4 to 6	Reactivity protocol:
				   Interview about child,
				   their family and school, digit-span task, taste test,
				   watched two emotionally arous-ing
				   video clips, fire alarm
					2 weeks	Variables examined:
						° Interviewer supportiveness
						° Child age
						° Children's physiological arousal (autonomic reactivity, cortisol levels)
						
						Outcomes examined:
						 ° Child memory accuracy
						 ° Child suggestibility
							Free recall
							Detailed questions
							 ° Specific, misleading

Authors, Year	Country Ethnicity SES	N	Age Range (years)	Event Type	Delay	Study Design	Interview
DESCRIPITVE CHARACTERISTICS OF SUPPORT STUDIES (continued)							
Quas & Lench, 2007	USA 41% ethnic minority Middle class or above	100	5 to 6	Film depicting a group of children narrowly missing being hit by a train	1 week	Variables examined: ° Interviewer supportiveness, ° Physiological arousal (HR)[a] ° Verbal ability (PPVT-R)[a] Outcomes examined: ° Child memory accuracy	Free recall Detailed questions ° Yes/no, short answer, misleading
Quas, Rush, Yim, & Nikolayev, 2014	USA 47% ethnic minority Middle class or above	73	7 to 14	Public speaking and math stress test (TSST-M)	2 weeks	Variables examined: ° Interviewer supportiveness ° Child age ° Children's physiological arousal (HPA)[a] ° Children's self-reported stress Outcomes examined: ° Child memory accuracy ° Child suggestibility	Free recall Detailed questions ° Specific, misleading
Quas, Wallin, Papini, Lench, & Scullin, 2005	USA 43% ethnic minority Lower to middle class	106	5 to 6	Reactivity protocol: Interview about positive and negative experiences, IQ test, watched three emotionally arousing video clips, story completion task	1 week	Variables examined: ° Interviewer supportiveness ° Receptive vocabulary (PPVT) ° Suggestibility trait (VSSC)[a] Outcomes examined: ° Child memory accuracy ° Child suggestibility	Free recall Detailed questions ° Specific, misleading

Authors, Year	Country Ethnicity SES	N	Age Range (years)	Event Type	Delay	Study Design	Interview
DESCRIPITVE CHARACTERISTICS OF RAPPORT STUDIES							

Brown, Lamb, Lewis, Pipe, Orbach, & Wolfman, 2013	UK
	
	NR
	
	NR
		128	5 to 7	Scripted play activities:
				   Dressed in costume, had photograph taken
					4 to 6 weeks	Variables examined:
						° Rapport
						° Type of prompt[33]
						° Event order of prompt
						Outcomes examined:
						  ° Volume of event report details
						  ° Type of information elicited[34]
						  ° Child memory accuracy
							NICHD protocol
							  ° Rapport
							  ° Free Recall
							  ° Open ended questions
							  ° Detailed questions

Hardy & Van Leeuwen, 2004	Canada
	
	NR[35]
	
	NR
		141	3 to 8	Observed live skit of mildly frightening story	1 to 2 weeks	Variables examined:
						  ° Rapport (specific past vs. general event)
						  ° Child age
						
						Outcomes examined:
						  ° Child memory accuracy
						  ° Child suggestibility
						  ° Volume of event report details
							Step-Wise Interview
							  ° Rapport
							  ° Introduce topic
							  ° Free recall
							  ° Specific questions
							  ° Closure

Roberts, Lamb, & Sternberg, 2004	USA
	
	NR
	
	NR
		144	3 to 9	Scripted play activities:
				   Dressing and undressing with costume, photograph taken
					1 week or 1 month	Variables examined:
						  ° Rapport (open-ended vs. direct)
						  ° Child age
						  ° Delay
						
						Outcomes examined:
						  ° Child memory accuracy
						  ° Richness of children's narrative reports
							Ground rules
							Rapport
							Free Recall
							Detailed questions
							  ° Specific, misleading
							Photo prompts
							Closure

---

[33] Prompt types included invitations, directives, option-posing, and suggestive questions.

[34] Central or peripheral information.

[35] The authors noted that "participating children were from diverse ethnic and socioeconomic backgrounds and reflected the diversity of the community in which the study was conducted" (Hardy & Van Leeuwen, 2004, p. 159).

Tabell 2. Characteristics of Support (gray columns) and Non-support (white columns) Conditions

	Introductions	No introductions	Simple rapport	No rapport-building	Open posture	Closed posture	Warm, friendly, smiling	Formal, stern, no smiling	Eye contact	Minimal eye contact	Casual clothing	Formal clothing	Warm voice	Monotone voice	Sit near, face child	Sit away from child	Positive feedback, praise	Neutral, no feedback	Negative consequences	Use child's name	Rarely use/no child names	No eyeglasses	Eyeglasses	No fidgeting	Fidgeting	Empathy, interest	Confrontation, criticism	Comprehension inquiry	No comprehension moni-
Almerigoga, Ost, Akehurst, & Fluck (Study 2), 2008							X	X																X	X				
Almerigoga, Ost, Bull, & Akehurst, 2007			X	X	X	X	X	X	X	X	X	X										X	X						
Carter & Bottoms, 1996[36]	X	X			X	X	X	X	X	X			X	X															
Davis & Bottoms, 2002	X	X	X	X	X	X	X	X	X	X			X	X	X	X													
Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991	X	X	X	X	X	X	X	X	X	X			X	X	X	X													
Goodman, Sharma, Thomas, & Considine, 1995																	X	X											
Hershkowitz, Lamb, Katz, & Malloy, 2013																	X			X						X			

[36] Carter and Bottoms (1996) state that in the supportive condition the interviewer "introduced himself at the beginning of the interview to establish rapport with the child and to signal that he was not assuming a power position in the dyad" and in the non-supportive conditions, the "interviewer did not establish rapport" (p. 342). For the purposes of this table, we separated the interviewers' use of introductions and rapport, classifying these authors' support definition as more in line with the classifications "introductions" or "no introductions" rather than "simple rapport" or "no rapport-building."

	Introductions	No introductions	Simple rapport	No rapport-building	Open posture	Closed posture	Warm, friendly, smiling	Formal, stern, no smiling	Eye contact	Minimal eye contact	Casual clothing	Formal clothing	Warm voice	Monotone voice	Sit near, face child	Sit away from child	Positive feedback, praise	Neutral, no feedback	Negative consequences	Use child's name	Rarely use/no child names	No eyeglass	Eyeglasses	No fidgeting	Fidgeting	Empathy, interest	Confrontation, criticism	Comprehension inquiry	No comprehension moni-
Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2006[37]																	X		X	X	X					X	X		
Imhoff & Baker-Ward, 1999[38]			X	X	X	X	X	X	X	X					X		X	X		X	X							X	X
Klemfuss, Milojevich, Yim, Rush, & Quas, 2013	X	X					X	X	X	X	X						X	X											
Peter-Hagane, Bottoms, Davis, & Nysse-Carris, 2014	X	X	X	X	X	X	X	X	X	X			X	X	X	X													
Quas, Bauer, & Boyce, 2004			X	X			X	X	X	X	X	X	X	X	X	X	X	X											
Quas & Lench, 2007	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X											
Quas, Rush, Yim, & Nikolayev, 2014	X	X					X	X	X	X	X						X	X											
Quas, Wallin, Papini, Lench, & Scullin, 2005			X	X			X	X	X	X	X	X	X	X	X	X	X	X											

---

[37] This study was conducted in the field, and therefore, involved a wider range of unsupportive comments than was captured in laboratory studies, including warnings of potential negative consequences if the child did not cooperate and reference to positive outcomes that would occur if the child cooperated.

[38] Children in the supportive condition were given juice and cookies "to build rapport before the interview" while children in the non-supportive condition "were given their choice of juice of cookies after the interview" (p. 413).

Tabell 3. Summary of effects of Support and Rapport

Authors, Year	Positive Effects	Mixed Results	No Effects	Negative Effects	Unable to Determine
EFFECTS OF SUPPORT					
Almerigogna, Ost, Akehurst, & Fluck (Study 2), 2008	X				
Almerigogna, Ost, Bull, & Akehurst, 2007	X				
Carter & Bottoms, 1996	X				
Davis & Bottoms, 2002	X				
Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991	X				
Goodman, Sharma, Thomas, & Considine, 1995		X[39]			
Hershkowitz, Lamb, Katz, & Malloy, 2013	X				
Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2006	X				
Imhoff & Baker-Ward, 1999			X[40]		
Klemfuss, Milojevich, Yim, Rush, & Quas, 2013	X				
Peter-Hagene, Bottoms, Davis, & Nysse-Carris, 2014	X				
Quas, Bauer, & Boyce, 2004	X				
Quas & Lench, 2007	X				
Quas, Rush, Yim, & Nikolayev, 2014		X[41]			
Quas, Wallin, Papini, Lench, & Scullin, 2005	X				
EFFECTS OF RAPPORT					
Brown, Lamb, Lewis, Pipe, Orbach, & Wolfman, 2013		X[42]			
Hardy & Van Leeuwen, 2004	X[43]				
Roberts, Lamb, & Sternberg, 2004					X[44]

---

[39]While children who received more supportive comments were no more or less suggestible on misleading questions than children who received fewer supportive comments, they were less accurate on direct questions when interviewed by unfamiliar interviewers (but not when interviewed by mothers). It is important to note that data from this study are correlational in nature and do not suggest that support caused inaccuracy. A review of videotapes suggested the reverse might be true. Interviewers may have become more verbally supportive in an effort to engage an uncooperative, and possibly more inaccurate, child.

[40]Failure to find effects of support could be due to the fact that the non-supportive condition was still fairly supportive (e.g., smiling and occasional praise).

[41] Children in supportive condition were less suggestible than children in non-supportive condition, but also reported fewer pieces of factual information. Authors note that the length of narratives did not differ across support condition so that perhaps it was the content and not the amount of information that was affected by support.

[42]There was a significant effect of rapport condition on the number of details reported per prompt (accurate plus inaccurate) but not on accuracy or overall amount of information reported. In short, children were most responsive when prepared during rapport building with practice narration using open-ended prompts; however, the hypothesized benefit of practice narrating an event during rapport building did not lead children to provide more detailed accounts during substantive questioning, as predicted. Also, an interaction with order of true or false event interview suggested that children prepared during rapport building with practice narration using open-ended questions (rather than closed questions) may mitigate the negative influence of being asked about something that did not occur.

[43] Researchers found benefit for younger children, 3 to 5 years of age, of focusing rapport talk on a generic event in comparison to talking about specific personal past event, although type of rapport talk did not influence reports of older children, 5 to 8 years of age.

[44] Type of rapport method potentially confounded with amount of time spent developing rapport.

Tabell 4. Descriptive Characteristics of Bias Studies

Authors, Year	Country Ethnicity SES	N	Age Range (years)	Event Type	Delay	Study Design	Interview
Bruck, Ceci, Melnyk, & Finkelberg, 1999[45]	USA NR[46] NR	90	Pre-school-aged	Staged birthday party or coloring event	none	Variables examined: ° Interviewer bias[47] ° Child age ° Repeated interviewing Outcomes examined: ° Child memory accuracy ° Interviewer beliefs	Free interview: ° Interviewers told to elicit as much factual information as possible
Ceci & Huffman, (Study 2), 1997	USA NR NR	NR	3 to 6	Game-like event[48]	1 and 3 months	Variable examined: ° Interviewer bias Outcomes examined: ° Child memory accuracy ° Child suggestibility ° Children's confidence judgments	Free interview
Goodman, Sharma, Thomas, & Considine, 1995	USA NR NR	40	3 to 5	Scripted play activities with research assistant: ° Played with toys, hygiene activities	none	Variables examined: ° Interviewer bias ° Interviewer familiarity Outcomes examined: ° Interviewer question types ° Child memory accuracy ° Child suggestibility ° Adult description of child report	Free interview Detailed questions ° Specific, misleading, person, room, actions

---

[45] As cited in Bruck, Ceci, and Principe (2006). This study has not been independently published.

[46] Not reported in published manuscript.

[47] Each study had its own definition of interviewer bias (see Table 5). These definitions were collapsed into one category representing interviewer bias.

[48] No other details about the event type were reported.

Authors, Year	Country Ethnicity SES	N	Age Range (years)	Event Type	Delay	Study Design	Interview
Powell, Hughes-Scholes, & Sharman, 2012	Australia NR NR	110 110	5 to 8 Adult Inter-viewers	Scripted play activi-ties: 　° Heard a story, played 　　with toys, found a surprise sticker	1 week	Variables examined: 　° Interviewer bias 　° Interviewer quality (good vs. 　　poor) Outcome examined: 　° Interviewer question types	Free interview
Principe, DiPuppo, & Gammel, 2013	USA 6% eth-nic mi-nority Middle class[49]	117	3 to 5	Scripted magic show	1 week	Variables examined: 　° Interviewer bias 　° Mother-child conversation style 　° Mother ratings of what oc-curred Outcomes examined: 　° Child memory accuracy 　° Child suggestibility	Rapport Free recall Suggestive, leading question
Quas, Mal-loy, Melinder, Goodman, D'Mello, & Schaaf, 2007	USA 22% ethnic minority Middle class	75	3 to 5	Played with toys alone	3 weeks	Variables examined: 　° Interviewer bias 　° Child age 　° Delay 　° Repeated interviewing Outcomes examined: 　° Child memory accuracy 　° Child suggestibility	Free recall Detailed questions 　° Open-ended, yes-no, 　　suggestive ques-tions

---

[49] Designations within classes, such as upper-middle versus lower-middle class, were collapsed into one category (e.g., middle class).

Author (Year)	Country Ethnicity SES	N	Children's Age Range (years)	Event Type	Delay	Study Design	Interview
Schwarz & Roebers (Study 1), 2006	Germany NR Middle class	60	8 to 10	Film about a group of children who go treasure hunting in an old castle	1 week	Variables examined: ° Interviewer bias ° Child age Outcomes examined: ° Child memory accuracy ° Child suggestibility ° Children's confidence judgments	Detailed questions: ° Included either high or low social pressure
Tobey & Goodman, 1992	US NR Middle class	39	4 yr olds	Scripted play activities with babysitter: ° Played with toys, Simon Says, dressed in costume, photograph taken	11 days	Variables examined: ° Interviewer bias ° Child gender ° Participated in vs. observed event Outcomes examined: ° Child memory accuracy ° Child suggestibility	Free Recall Detailed questions ° Specific, misleading, person, room, actions Age ID lineup
White, Leichtman, & Ceci, 1997	US 25% ethnic minority Middle class	20	3 to 5	Simon Says with innocuous body touch	1 and 2 months	Variables examined: ° Interviewer bias ° Child age ° Repeated interviewing Outcomes examined: ° Child memory accuracy ° Interviewer question types	Free Interview Interviewers asked primarily direct (yes/no) questions about events on the checklist they were given in advance

Tabell 5. Characteristics of Bias Manipulation

Authors, Year	Bias Manipulation
Bruck, Ceci, Melynk, & Finkelberg, 1999[50]	Interviewers questioned sets of four children about what occurred when a special visitor came to their school. The first three children had attended a birthday party while the fourth attended a coloring session. Interviewers were not told about the events but were instructed to find out from each child what occurred with the special visitor. Investigators examined how preconception developed over the course of interviewing four children and effects of child verbal reports.
Ceci & Huffman (Study 2), 1997	One month after a play event, a first interviewer was given information about what might have happened during the event. Some of the information was accurate, and some was inaccurate. Two months later, a second interviewer used the notes from the first interviewer to conduct a second interview of the children.
Goodman, Sharma, Thomas, & Considine, 1995	Each biased interviewer watched a 15 minute videotape of a child playing with a research assistant. Some of the activities matched what children did in the study, while others did not. Biased interviewers were then told that all children participated in the same activities as the videotape and that the children were asked to not discuss some of the event elements. Unbiased interviewers did not watch film.
Powell, Hughes-Scholes, & Sharman, 2012	Children participated in two of three possible events. Before the interviews, biased interviewers were provided false details about all three events that "may or may not have happened." Unbiased interviewers were told that a lady came to the school and did some activities with the children.
Principe, DiPuppo, & Gammel, 2013	In the neutral and biased conditions, mothers were sent letters that said a magician tried to pull a rabbit out of his hat and failed. In the biased condition, mothers were told that the rabbit got loose during a magic show. Mothers were told to ask the children about the event. In the control condition, mothers were not sent letters. All mothers were asked to interview their children about the magic show.
Quas, Malloy, Goodman, Melinder, D'Mello, & Schaaf, 2007	Biased interviewer made series of statements and nonverbal behaviors indicating she had a preconceived notion that child played with an adult male, saying the parent told the interviewer that the child played with the man. Interviewer encouraged child with explicit details, selective reinforcement, and focused pressure with nonverbal behaviors (smiling at his picture), including mild accusation that something bad might have happened. Control interviewer never mentioned that the parent said the child played with a man, instructed the child to say "I don't know" if child forgot an answer, and provided encouragement without reference to the man, showing his picture, but asking rather than assuming the child played with him.
Schwarz & Roebers (Study 1), 2006	Interviewer stated that she had seen the same film the children watched and could remember some things clearly and others not well. She then questioned the children providing either high or low social pressure on misleading questions by expressing her own confidence in each of the suggestions.
Tobey & Goodman, 1992	Before interview with neutral interviewer, police officer built rapport saying he was there to help children when there is trouble and suggested he was concerned something bad had happened and that the babysitter the child had played with had done bad things. Officer told children he needed their help.
White, Leichtman, & Ceci, 1997	Prior to the interview, interviewers were given a one-page report that contained either correct or incorrect information about "things that might have occurred." Then they were instructed to elicit the most factually accurate account possible.

---

[50] As cited in Bruck, Ceci, and Principe (2006).

Tabell 6. Summary of Effects of Bias

Authors, Year	Positive Effects	Mixed Results	No Effects	Negative Effects	Unable to Determine
EFFECTS OF BIAS[51]					
Bruck, Ceci, Melynk, & Finkelberg, 1999				X[a]	
Ceci & Huffman (Study 2), 1997				X[a]	
Goodman, Sharma, Thomas, & Considine, 1995				X[52]	
Powell, Hughes-Scholes, Sharma, 2012				X[53]	
Principe, DiPuppo, & Gammel, 2013				X	
Quas, Malloy, Goodman, Melinder, D'Mello, & Schaaf, 2007				X	
Schwarz & Roebers (Study 1), 2006				X[54]	
Tobey & Goodman, 1992		X[55]			
White, Leichtman, & Ceci, 1997					X[56]

---

[51] Negative effects of bias defined as decreased accuracy in free recall and/or detailed questions and/or misleading questions, or false report of suggested false activity, unless otherwise indicated.

[a] Investigators describe only negative effects; however, these should be interpreted with caution because there is insufficient detail in the article to independently evaluate the results.

[52] Children were more suggestible, and accuracy declined, when children interviewed in biased as compared to unbiased condition; however, this was only true when interviewers were strangers, not mothers.

[53] There was a negative effect of bias on interviewer question type when interviewers were "poor" interviewers in pretest; however, this was not true for interviewers who were "good" interviewers in pretest. Hence, bias exacerbated the "poor" interviewers response style of asking many yes-no and closed questions, and few open-ended questions.

[54] Bias had negative effect on suggestibility of 8 year olds but not 10 year olds.

[55] Bias had no significant effects on free recall and suggestibility overall, however, children in the biased interviewer condition made more errors on free recall action question ("What games did you play?") and there were more nuanced negative effects of bias depending on content (person, location).

[56] Small sample size (some cell sizes less than 10) and four-way interaction suggest results need to be interpreted with caution.

APPENDIX A. **Search Strategy for Efficacy of Interview Methods with Children in Foster Care**

PubMed Completed Search

("Interview, Psychological"[Mesh] OR "Interviews as Topic"[Mesh] OR interview* OR question*) AND ("Foster Home Care"[Mesh] OR "foster child*" OR "foster care" OR "out of home") AND ("Child"[Mesh] OR "Child, Preschool"[Mesh] child* OR youth*)
> Limited for:
>> Date- After 1990
>> Language- English
>> Age: Child **(**6-12 years), Preschool Child (2-5 years)

Initial Findings: 401 journal articles

Cochrane CENTRAL Completed Search

("Interview, Psychological"[Mesh] OR "Interviews as Topic"[Mesh] OR interview* OR question*) AND ("Foster Home Care"[Mesh] OR "foster child*" OR "foster care" OR "out of home") AND ("Child"[Mesh] OR "Child, Preschool"[Mesh] child* OR youth*)
> Limited for:
>> Date- After 1990
>> Allowed database to search for variations of words

Initial Findings: 23 journal articles

PsycInfo Completed Search

(SU.EXACT("Foster Care") OR "foster child*" OR "foster care" OR "out of home") AND (SU.EXACT("Interviewing") OR SU.EXACT("Questioning") OR interview* OR question*) AND (child* OR youth*) AND (stype.exact("Scholarly Journals") AND su.exact("School Age (6-12 yrs)" OR "Preschool Age (2-5 yrs)") AND la.exact("ENG") AND yr(1990-2019))
> Limited for:
>> Date- After 1990
>> Language- English
>> Publication- Scholarly Peer Reviewed
>> Age: School Age (6-12 yrs) and Preschool Age (2-5 yrs)

Subject headings for foster care, interview, and questioning changed for the ProQuest's thesaurus. No good substitute term for MESH headings: "child," or "child, preschool." Used age limiters in PsycInfo, which includes School Age, and Preschool Age.

Initial Findings: 429 journal articles

Social Services Abstracts Completed Search

(SU.EXACT("Foster Care") OR "foster child*" OR "foster care" OR "out of home") AND (SU.EXACT("Interviewing") OR SU.EXACT("Questioning") OR interview* OR question*) AND (child* OR youth*) AND (stype.exact("Scholarly Journals") AND la.exact("ENG") AND yr(1990-2019))
> Limited for:
>> Date- After 1990
>> Language- English
>> Publication- Scholarly Peer Reviewed

(No age limiters in this database)

Initial Findings: 652 journal articles (583 articles when database removed internal duplicates)

Sociological Abstracts Completed Search

(SU.EXACT("Foster Care") OR "foster child*" OR "foster care" OR "out of home") AND (SU.EXACT("Interviewing") OR SU.EXACT("Questioning") OR interview* OR question*) AND (child* OR youth* OR adolescent*) AND (stype.exact("Scholarly Journals") AND la.exact("ENG") AND yr(1990-2019))
>   Limited for:
>>   Date- After 1990
>>   Language- English
>>   Publication- Scholarly Peer Reviewed
>>   (No age limiters in this database)

Initial Findings: 115 journal articles
           (103 when database removed internal duplicates)

Web of Knowledge Completed Search

TOPIC: (("foster child*" OR "foster care" OR "out of home")) AND **TOPIC**:((interview* OR question*)) AND **TOPIC**: ((child* OR youth*))
>   Limited for:
>>   Date- After 1990
>>   Language- English
>>   Publication- Journal Article
>>   (No age limiters in this database)
>>   Removed all subject headings due to database's search restrictions.
>>   Keyword only search

Initial Findings: 50 journal articles

Search Strategy for Efficacy of Child Interview Methods
in General Population

PubMed Completed Search

("Mental Recall"[Mesh] OR "Memory"[Mesh] OR memor* OR recall*) AND ("Interview, Psycholog-ical"[Mesh] OR "Interviews as Topic"[Mesh] OR interview* OR question*) AND ("Reproducibility of Results"[Mesh] OR reliab* OR suggest* OR bias* OR valid* OR accuracy) AND ("Child"[Mesh] OR "Child, Preschool"[Mesh] OR child* OR youth*)
>> Limited for:
>>> Date- After 1990
>>> Language- English
>>> Age: Childhood **(**6-12 years) and Preschool Child (2-5 years)

Initial Findings: 1383 journal articles

Cochrane CENTRAL Completed Search

("Mental Recall"[Mesh] OR "Memory"[Mesh] OR memor* OR recall*) AND ("Interview, Psycholog-ical"[Mesh] OR "Interviews as Topic"[Mesh] OR interview* OR question*) AND ("Reproducibility of Results"[Mesh] OR reliab* OR suggest* OR bias* OR valid* OR accuracy) AND ("Child"[Mesh] OR "Child, Preschool"[Mesh] OR child* OR youth*)
>> Limited for:
>>> Date- After 1990
>>> Allowed database to search for variations of words

Initial Findings: 106 journal articles

PsycInfo Completed Search

((SU.EXACT("Memory") OR recall* OR memor*) AND (SU.EXACT("Interviewing") OR SU.EXACT("Questioning") OR interview* OR question*) AND (SU.EXACT("Suggestibility") OR reliab* OR suggest* OR bias* OR valid* OR accuracy) AND (child* OR youth*)) AND (stype.exact("Scholarly Journals") AND su.exact("School Age (6-12 yrs)" OR "Preschool Age (2-5 yrs)") AND la.exact("ENG") AND yr(1990-2019))
>> Limited for:
>>> Date- After 1990
>>> Language- English
>>> Publication- Scholarly Peer Reviewed
>>> Age- School Age (6-12 yrs)(yrs 5-and Preschool Age (2

Initial Findings: 1185 journal articles (1184 duplicate removed)

Social Services Abstracts Completed Search

(SU.EXACT("Memory") OR recall* OR memor*) AND (SU.EXACT("Interviewing") OR SU.EXACT("Questioning") OR interview* OR question*) AND (SU.EXACT("Suggestibility") OR reliab* OR suggest* OR bias* OR valid* OR accuracy) AND (child* OR youth*) AND (stype.exact("Scholarly Journals") AND la.exact("ENG") AND yr(1990-2019))
>> Limited for:
>>> Date- After 1990
>>> Language- English
>>> Publication- Scholarly Peer Reviewed
>>> (No age limiters in this database)

Initial Findings: 58 journal articles but 57 on import

Sociological Abstracts Completed Search

(SU.EXACT("Memory") OR recall* OR memor*) AND (SU.EXACT("Interviewing") OR SU.EXACT("Questioning") OR interview* OR question*) AND (SU.EXACT("Suggestibility") OR reliab* OR suggest* OR bias* OR valid* OR accuracy) AND (child* OR youth*) AND (stype.exact("Scholarly Journals") AND la.exact("ENG") AND yr(1990-2019))

        Limited for:
                Date- After 1990
Language- English
                Publication- Scholarly Peer Reviewed
                (No age limiters in this database)

Initial Findings: 96 journal articles

Web of Knowledge Completed Search

TOPIC: ((recall* OR memor*)) AND **TOPIC**: ((interview* OR question*))AND **TOPIC**: ((reliab* OR suggest* OR bias* OR valid* OR accuracy))AND **TOPIC**: ((child* OR youth*))
Removed all subject headings due to database's search restrictions. Keyword only search.
        Limited for:
                Date- After 1990
                Language- English
                Publication- Journal Article

Initial Findings: 366 journal articles

APPENDIX B. **Understanding Reports from Older Children and Adolescents**

This appendix briefly addresses some of the issues relevant to eliciting reliable reports from older children and teens, 12 to 16 years of age. Children in this age range are no longer neglected as respondents in large scale studies. Longitudinal studies of child welfare populations begin to use the children themselves as the key respondents by the time they reach about 11-12 years of age (e.g., Dolan, et al., 2011; Egelund & Hestbæk, 2006; Lundström & Sallnäs, 2012; NSCAW Research Group, 2002; Sallnäs, Wiklund & Lagerlöf, 2012; Dubowitz, et al., 2006).

For example, in the United States, the Longitudinal Studies Consortium on Child Abuse and Neglect (LONGSCAN) relied on primary caregivers as principal respondents when children were 2, 6, and 8 years of age, but children gradually assumed the role of principal respondent beginning at age 12, with yearly telephone calls to increase retention as children got older (e.g., Dubowitz et al., 2006). Also in the U.S., the NSCAW study of 727 children placed in out-of-home care began to use children as key respondents at 11 years of age. The Danish Children in Care (CIC) study of 576 children born in 1994-1995 began collecting baseline data in 2003, when children were 7 or 8 years old, however, the children themselves were first interviewed at age 11 in 2006 (Egelund & Hestbæk, 2006). In Sweden, Lundström, Sallnäs, Wiklund and colleagues began soliciting information from children at 13 years of age using structured interviews derived from a larger level of living study among Swedish children (e.g., Lundström & Sallnäs, 2012; Sallnäs, et al., 2012). Authors in several of these studies noted that in pilot testing, younger children in foster care had difficulty understanding and responding to questions reliably.

Capabilities of 11 to 12 Year Olds

From a developmental perspective, there are some good reasons for expecting relatively reliable data from children 11 to 12 years of age.[57] By this time, children are nearing the end of elementary school and have achieved important milestones in a number of relevant domains. The average child has mastered the vocabulary, grammar, and conversational rules to communicate their ideas and memories adequately in a verbal interview (Owens, 2012). They have developed concrete, logical, realistic thinking processes (Damon & Lerner, 2008). Children at this age have made major advances in memory and resistance to suggestion (Lamb, LaRooy, Malloy & Katz, 2011). They have developed a sophisticated use of retrieval strategies to systematically search their memories and access greater amounts of accurate information, with less prompting by adults. Their narratives are detailed, coherent, and organized descriptions of multi-episodic experiences. Older children are less likely to acquiesce to leading questions, more likely to request clarification, to say they "don't know," and to correct adult's misperceptions, but they are not immune from suggestion and intimidation. Adults are also suggestible to a surprising degree, depending on how questions are worded and other factors.

With regard to academic skills, most children (with typical educational experiences) have mastered the fundamentals of reading, writing, mathematics, time, and space by 11 to 12 years of age (Kuhn & Franklin, 2008). Advances in information processing allow these children to process greater amounts of information with greater speed and more focused attention. Hence, they can hold more than one idea in mind at a time, comparing and contrasting them, as might be required for more thoughtful opinions. In comparison to younger children, this age group can inhibit and contradict immediate tendencies and take time to reflect on their answers. Whereas younger children often respond reflexively and quickly based on a small amount of information, focusing on only a few observable elements (e.g., stereotyping), these older children can process more slowly, reflecting more conceptually with

---

[57] Reviews of relevant developmental research can be found in Damon and Lerner (2008), Lamb, LaRooy, Malloy, & Katz (2011), Melton et al. (2014), and Owens, 2012.

analytical (primarily cortical) problem solving skills. Again, these processes contribute to more thoughtful decision making (Sylwester, 2007; Walsh, 2004).

Children at this age have the basics of metacognition, that is, the ability to think about our own thoughts, feelings, and behaviors as objects of analysis—a skill that develops rapidly between 7 to 10 years of age (Damon & Lerner, 2008). In combination with their expanding sense of self-awareness, older children can use these metacognitive abilities to more reliably rate their own thoughts, feelings, and behaviors or to project themselves into vignettes. Eleven to twelve year olds can look beyond immediate appearances and apply general principles beyond their own experience. They can draw inferences from a wider range of experiences and a greater fund of knowledge in order to take the perspectives of other individuals and groups. Hence, these children are beginning to understand how society and social institutions operate and to anticipate systemic consequences down the road.

Variability across Children of the Same Age

Any individual child may be advanced or delayed for his or her age in any single domain of functioning. While the onset of puberty, on average, is considered to be 12 years of age, onset varies dramatically, with some girls beginning puberty closer to 8 years of age. Similarly, some children enter the phase of more abstract reasoning at 11 years of age while others do not enter until closer to 14-15 years of age. There are powerful individual differences at play driven by culture, temperament, genetics, education, socio-economic status, mental health status, and trauma history that can influence the developmental timeline and the responses of 12 to 16 year olds on interviews and surveys.

Methodologies used with 11 to 16 Year Olds

Studies eliciting 11 to 16 year olds' experiences in, and satisfaction with foster care have utilized a variety of methods. These include face-to-face semi-structured individual interviews (Cashmore & Paxman, 2006; Woolfson, Hefferman, Paul, & Brown, 2010), focus groups (Ellerman, 2007; Strolin-Goltzman, Kollar & Trinkle, 2010), telephone interviews (Perry, 2006; Dubowitz, et al., 2006), postal surveys (Sinclair, Wilson, & Gibbs, 2001), prerecorded CDs (Lundström & Sallnäs, 2012), computer-assisted interviews with headphones and tablets (Chapman, Wall & Barth, 2004), online web-based surveys (McDowall, 2013), and ethnographic approaches (Torronen, 2006), as well as more traditional paper and pencil instruments, including Likert scales and other forced choice options.

In particular, our review team located four studies excluded from our search[58] that raters believed to be worthy of further consideration in planning future research with older children based on the creativity and methodological rigor of the study. These are listed below in this appendix to supplement the report:

(a) Cashmore and Paxman (2006, 2007) developed a face-to-face interview for teens and young adults that was repeatedly administered over four to five years after leaving care in an Australian four-wave longitudinal study. The interview includes quantitative and qualitative questions about current and past living arrangements, education, employment, contact with families, and child well-being. The entire interview is available in the report.

(b) McDowall (2013) created a self-administered, 40 minute, online web-based anonymous survey with lively graphics administered to 1,069 Australian youth in care (although subjects had the choice of calling an office for a hard copy or telephone version if they preferred). The survey includes rating scales, open-ended questions with text input, and check-the-box categorical items. Questions cover seven domains based on the Looking After Children (LAC) framework in Great Britain, including identity, education, health, family, social relationships, and self-care. The entire interview is available in the report.

---

[58] These studies were excluded either because interviews were not conducted in person (e.g., telephone), interviewers did not administer questions (e.g., web-based), or the study surveyed only subjects no longer in care.

(c) Lundström, Sallnäs, Wiklund, and colleagues distributed structured interviews to 240 Swedish 13-to-18 year olds on a pre-recorded CD to be answered using headphones; the questions were adapted from an instrument used in the national level of living studies by adding extra questions about out-of-home care and families of origin (Lundström & Sallnäs, 2012; Sallnäs, et al., 2012).

(d) Perry (2006) developed the These Are My Experiences: A Survey of Foster Children Study (TAME-S) interview administered over the telephone to 167 adolescents. The interview identifies subjects' aspirations about the future, available resources, health, family, and social networks; data were compared to responses of over 6,000 7th through 12th graders in the Add Health: National Longitudinal Study of Adolescent Health in the United States.

What to Expect from 12 to 16 Year Olds

While 12 to 16 year olds are no longer children, they are not yet adults.[59] While most have achieved certain universal milestones in thinking, their behaviors can be immature and contradictory. Between 11 and 15 years of age, youth are developing abstract, hypothetical-deductive reasoning. Many are capable of mature, close to adult level reasoning, using a hypothesis-testing model in which they anticipate and evaluate the outcomes of various scenarios (Kuhn & Franklin, 2008). Yet, the adolescent brain is still undergoing growth spurts in a number of regions and continuing myelination of neurons. Commitments of neural pathways continue well into the twenties. Early adolescence is sometimes referred to as a second critical period of brain development (Sylwester, 2007; Walsh, 2004). It can be a confusing time of increasing freedom, independence, choices, and personal control juxtaposed with errors as teens often over-reach when using their fragile new abilities. This often requires adults to respond with guidance and limits that promote safety and security.

For example, during adolescence, the limbic system, which is the seat of emotion and impulsivity, is still under construction (Sywester, 2007; Walsh, 2004). This includes the amygdala, responsible for fear and anger, the hippocampus, key for encoding new memories, the hypothalamus, responsible for 'raging hormones,' and the ventral striatal, key for motivation and responsible for teen 'laziness' and an apparent lack of drive. With maturity in these areas, there is increasing improvement in regulating emotions and reactions, self-discipline, and impulse control. These issues need to be considered in relying on adolescents' input.

In addition, the adolescent brain is especially focused on the development of the prefrontal cortex to process conscious executive decisions (monitoring, planning, strategizing, and organizing) about what to do and how to do it (like the conductor of a symphony). Early adolescents with immature frontal lobes can be sufficiently mature to plan and carry out complex actions, but not yet realize that their behaviors are immature or inappropriate. Confusion rather than consistency often characterizes their cognition and behavior. Teens are practicing the reflective problem solving and advanced social skills that frontal lobes oversee, but initially they are not very successful and do not always make choices that are in their best interests (Walsh, 2004). This kind of developmental information needs to be taken into account when eliciting information from 12 to 16 year olds and relying on their answers to make important decisions about their welfare.

On the socio-emotional front, a number of trends that are typical of youth in this age range may be more complicated for teens in foster care with histories of unstable, insecure, or disorganized relationships with caregiving adults. The adolescent's search for identity often involves experimenting with new roles, often ones that involve taking risks. As children move through adolescence, they begin to seek sustained separation from social, residential, economic, and ideological dependence on adults. Peers take on a heightened level of importance in defining the self, as they shift loyalties from adults to peers. Non-parental mentors also gain influence during this time. While younger children are willing to follow adult direction, and are less cognizant of the all of the possible consequences of their responses, adolescents are ready to explore their own individuality and to define themselves apart from

---

[59] See Kuhn and Franklin (2008), Sylwester (2007), and Walsh (2004) for discussion of relevant research on adolescent development.

adult expectations (Sylwester, 2007). These trends can influence responses to questions about family and caretakers as well as the methods used to develop rapport and encourage open, honest, information exchange.

As adolescents begin to develop adult-like levels of reasoning, they can think about possibilities and make decisions with far-reaching consequences. Yet, they are also overly self-focused, if not pre-occupied with the self, highly sensitive to actual or anticipated criticism, and vulnerable to self-doubt and risky behaviors, despite their eagerness for intellectual interaction, freedom, and control over their own destinies. While they are often eager to provide their perceptions and experiences to contribute to and participate in adult decision-making processes, their responses will be determined by the developmental challenges of separation and individuation, continuing brain developments, as well as powerful individual differences in experience and genetics.

APPENDIX C. Studies of interviewing Children in Foster Care

Authors, Year	Country	N	Age Range (years)	Interview Method
Altshuller, 2003	USA	7	11 to 14[60]	Focus group with open-ended questions about perceived educational needs.
Andersson, 1999	Sweden	22	10 to 11	Mixed methods approach to interviews using open-ended questions about perceived relationships with foster family and family of origin, everyday life at home, neighborhood, school, peers, social workers, and the future via lists of people and experiences that were elaborated upon and via discussion of favorite items and photographs; qualitative approach.
Aubrey & Dahl, 2006	UK	21	6-to-11	Mixed method interviews using a range of techniques to elicit views on key decisions using decision charts; open-ended questions about vignette to elicit positive and negatives about workers; closed-ended questions about perceived roles in decision making with answers indicated by dropping 1 to 3 beans into jar to indicate 3 point scale; dictating messages on postcard to workers regarding desired change; qualitative approach.
*Barber & Delfabbro, 2005	Australia	48	M = 13	Semi-structured interviews to obtain consumer feedback about satisfaction with foster care system, placement, caregiving, daily activities, relationships, support and enjoyment; quantitative and qualitative approach to findings.
Bell, 2002	UK	27	8 to 16	Semi-structured interviews to elicit children's narratives of experiences with child protection system, relationships with workers, and intervention outcomes; qualitative approach.

---

[60] Children were in grades 6th – 8th.

* Asterick indicates quantitative approach with more rigorous methodology.

Authors, Year	Country	N	Age Range (years)	Interview Method
Biehal, & Wade, 2000	England	36	11 to 16	Individual interviews regarding incidents of unauthorized absence from placement and the risks involved, including sexual exploitation, lack of sleep, substance misuse; qualitative approach to interview data.
Block, Oran, Baumrind, & Goodman, 2010	USA	85	7 to 10	Structured interview about dependency court experiences and participation using Children's Court Questionnaire with closed-ended questions and open-ended questions; quantitative and quantitative findings.
Blower, Addo, Hodgson, Lamington, & Towlson, 2004	Scotland	47	7 to 17	Semi-structured individual interviews about children's perceptions of their mental health needs, current and ideal sources of emotional support, stigma, self-agency, and advice to other children; qualitative approach.
Burgess, Rossvoll, Wallace, & Daniel, 2010	Scotland	12	11 to 17	Interviews about kinship care, but method not well described; qualitative approach.

Authors, Year	Country	N	Age Range (years)	Interview Method
Daly, 2009	Austral-ia	14	8 to 21	Four individual and group semi-structured interviews with focus on children devising the questions regarding how to improve foster care system; used "evolving explora-tory conversations" during engagement stage to mapping key concepts for later interviews; special attention to developing rapport with strength-based approach using picture/language cards highlighting different strengths; emphasized apprecia-tion of child's effort, role of community stakeholders in development, reducing power differential, peer facilitators; children were recognized for their potential to influence system and appreciation for their efforts and competence were expressed; qualitative approach.
*Delfabbro, Barber & Bentham, 2002 (Study 1)	Austral-ia	51	M = 12	Structured interviews consisting of statements children rated on 3-4 point scales re-garding social adjustment, quality of parenting (as indicated by ratings on Parenting Checklist of 56 daily activities), and child satisfaction; Quantitative approach.
Delfabbro, Barber & Ben-tham, 2002 (Study 2)	Austral-ia	48	M=13	Structured interviews in which children rated satisfaction with long term care and placements responding to statements answers on a 3 point scale; quantitative ap-proach.
*Dunn, Culhane, & Taussig, 2010	USA	180	9 to 11	Structured interviews of children's appraisals of lives before and after placement assessed with Foster Care Questionnaire using open-ended questions and closed-ended questions with responses fixed on 3 point scale, and People in My Life self-report scale ratings of attachment to caretaker; quantitative approach.
Emond, 2010	Cam-bodia	19	4 to 14	Unstructured interviews using flash cards to guide topics: self-history, self-help, helping others, rules, worries and other activities to encourage narratives; qualitative ap-proach.

Authors, Year	Country	N	Age Range (years)	Interview Method
*Fernandez, 2007	Austral-ia	59	7 to 15	Structured interviews using items from Assessment and Actions Records of Looking After Children protocols and Hare Self-Esteem Scale, Interpersonal Parent and Peer Attachment Inventory ; quantitative approach.
Fleming, Bamford, & McCaughley, 2005	North-ern Ireland	8	11 to 18	Semi-structured interviews of children and parents about health, social well-being, and causes of stress; included strategies to reduce power differential, develop rapport, and promote collaborative approach; children played important role in designing the questions; qualitative approach.
*Fox, Berrick, & Frasch 2008	USA, CA	100	7 to 13	Multiple methods using semi-structured interviews and standardized instruments like Things I Have Seen and Heard scale of exposure to violence, Relatedness Scale regarding caretakers support, and Social Climate Scale of perceived home permanency and well-being; quantitative approach.
*Gardner, Part I, 2004		43	8 to 16	Semi-structured interviews with modified version of Kvebaek Family Sculpture Technique to gain representation of current and ideal family; quantitative and qualitative approach.
Heptinstall, Bhopal, & Brannen, 2001	UK	15	11 to 13	Multi-method approach to interviews on family changes and daily life experiences, including school, leisure, & household, using techniques to engage children's interests and accommodate competencies, such as vignettes, visual mapping social networks and family relationships; qualitative approach.

Authors, Year	Country	N	Age Range (years)	Interview Method
Johnson, Yoken, & Voss, 1995	USA	59	11 to 14	Semi-structured interviews with open-ended and forced-choice questions about child's perceptions of placements, reasons for placement and life changes in school, neighborhood, contact with biological families, caseworker roles, state intervention; qualitative approach.
Lee & Whiting, 2007	USA	205	2 to 12	Semi-structured interviews with children telling stories in response to Blacky Pictures of animal families to assess ambiguous loss; qualitative approach.
Mason, 2008	Australia	47	8 to 18	Semi-structured interviews with open-ended questions derived from focus groups with children who helped create the questions as co-constructor of knowledge base, reducing power differential, and children's rights research model; qualitative approach.
McLeod, 2006	England	11	9 to 17	Semi-structured interviews to assess child's feelings regarding SW listening to them, explaining decisions to them, child's perceived role in decision making, grievances, advice to SWs and other children; qualitative approach.
McLeod, 2007	England	11	9 to 17	Semi-structured interviews to assess child's feelings regarding being listened to by workers, explaining decisions to them, child's perceived role in decision making, grievances, advice to workers and other children; deconstruction of child's strategies for coping with interview (avoidance, resistance); qualitative approach.
Messing, 2006	USA	40	10 to 14	Focus groups of 4-6 children using open-ended questions about kinship care, family relationships, stigma, stability; qualitative approach.
Mitchell & Kuczynski, 2010	Canada	20	8 to 15	Semi-structured interviews of children's lived experience in placement using We Care workshop to establish rapport followed by Sharing Ideas interview of open-ended questions; qualitative approach.

Authors, Year	Country	*N*	Age Range (years)	Interview Method
Morrison, Mishna, Cook, & Aitken, 2011	Canada	24	8 to 12	Semi-structured interviews about children's visitation with biological families and communications with workers around supervision; qualitative approach.
*NSCAW II Baseline Report, 2011 & NSCAW, 2002 (Dolan, Casanueva, & Ringeisen, 2011 and NSCAW Research Group, 2002)	USA	677	11 to 17	Structured interviews with multiple methods approach using closed-ended questions with fixed alternative answers on Likert scales about contact and satisfaction with caseworkers and welfare system lining to children, understanding, and explaining services; descriptive approach.
Pölkki, Vornanen, Pursiainen, & Riikonen, 2012	Finland	8	7 to 17	Semi-structured interviews about perceived participation in child protection processes and perceptions of being heard, using a climbing wall model to allow children to express power and voice and Life Path method; qualitative approach.
Rostill-Brookes, Larkin, Toms, & Churchman, 2011	England	5	9 to 15	Unstructured interviews about placement breakdowns to elicit narratives with follow-up prompting for elaboration; qualitative approach.

Authors, Year	Country	N	Age Range (years)	Interview Method
*Weisz, Wingrove, Beal & Faith-Slaker, 2011	USA	93	8 to 18	Structured interviews about perceptions of attending and participating in dependency court hearings with statements using response on Likert scale regarding feelings, preferences, knowledge, opportunities, legal professionals and processes; quantitative approach.
Whiting & Lee, 2003	USA	23	7 to 12	Semi-structured interviews with open-ended questions to solicit narrative stories about children's lives, including early memories and current placement and thoughts about future using a storyboard with prompts to fill in graphics and text; ethnographic approach.
**Wilson & Conroy, 1999	USA	1100	5 to 18	Semi-structured interviews about children's satisfaction with various aspects of their lives and services in care and in biological families, using mixed methods approach with close-ended questions with fixed alternatives or Likert scale choices (using faces expressing various emotional states for younger children) and open-ended questions; quantitative approach.

APPENDIX D. Effect Sizes and Downs and Black Quality Index Scores for Support and Rapport Studies

Authors Year	N Age Range	Effects of Support[61]	Effect Size[62] η^2	Downs & Black[63]
Almerigogna, Ost, Ake-hurst, & Fluck (Study 2), 2008	N = 86 8 to 10 yrs	Children in support condition were less suggestible[64] than children in non-support condition.	0.23	14
Almerigogna, Ost, Bull, & Akehurst, 2007	N = 74 8 to 11 yrs	Children in support condition were less suggestible than children in non-support condition.	0.29	17
Carter, Bottoms, & Levine, 1996	N = 60 5 to 7 yrs	Children in support condition were less suggestible than children in non-support condition.	0.11 – 0.12	18
		There was no significant effect of support on accuracy. [65]	0.002 – 0.02	
		Children in support condition were more accurate than children in non-support condition on non-abuse questions. Note: All children highly accurate on abuse questions.	0.10 – 0.13	
Davis & Bottoms, 2002	N = 81 6 to 7 yrs	Children in support condition were less suggestible than children in non-support condition.	0.07 – 0.10	21
		There was no significant effect of support on accuracy.	0.006 – 0.04	
		Interviewer support reduced children's anxiety.	0.06	
		Anxiety associated with decreased accuracy for younger children.	0.18	
Goodman, Bottoms,	N = 70	Children in support condition were less suggestible than children in non-support	0.05	17

---

[61] Unless otherwise indicated when effects (or no effects) of support are reported in this table, they have been deemed statistically significant ($p < .05$) or non-significant ($p > .05$) by investigator of study.

[62] We have reported effect sizes in the metric of η^2 because several of the papers in this review report η^2 values, and most of the studies used analysis of variance (ANOVA) as the statistical model for analyzing the data. Specifically, η^2 gives the proportion of variance explained by a predictor variable, while holding all other variables in the model constant. Wherever a range of effect sizes is reported, there was more than one dependent variable measuring suggestibility or accuracy.

[63] Downs and Black (1998) Quality Assessment Index scores range from 0 to 28. Higher scores indicate better quality.

[64] Unless otherwise indicated, "suggestible" is defined as more errors on misleading questions; and/or fewer correct responses on misleading questions; and/or false assents to fictitious events or details.

[65] Unless otherwise indicated, "accuracy" is defined as less error or more correct on free recall and/or direct (specific) questions.

Authors Year	N Age Range	Effects of Support[61]	Effect Size[62] η^2	Downs & Black[63]
Schwartz-Kenny, & Rudy, 1991	3 to 7 yrs	condition.		
		Children in support condition were more accurate than children in non-support condition.	0.07	
		Younger children in non-support condition were more suggestible[66] on abuse questions than older children in non-support condition. However, support decreased age differences in error on abuse-related questions.	0.01[67] 0.01[68]	
		Younger children in support condition omitted more information about the location.	0.29	
Goodman, Sharma, Thomas, & Golden-Considine, 1995	N = 40 4 year	When unfamiliar adult interviewers made more supportive comments accuracy was negatively affected.[69] While mother supportiveness was unrelated to accuracy.	0.28	19
Authors Year	*N Age Range*	*Effects of Support*	*Effect Size η^2*	*Downs & Black*
Heshkowitz, Lamb, Katz, & Malloy, 2013[70]	N = 200 Ages not reported	Children in the support condition showed less reluctance than children in the non-support condition.	0.04	19
Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2006[71]	N = 100 4 to 13 yrs	Children in support condition provided more details than children in non-support condition.	0.06	21
		Children in support condition provided fewer uninformative responses than children in non-support condition. [72]	0.07	

---

[66] In this instance, "suggestible" indicates increased commission errors on abuse-related questions.

[67] $F(1, 32) = 14.03, p < .01$

[68] $F(1, 34) = 0.49$.

[69] Authors suggest that uncooperative or intimidated children make more errors and strangers used more supportive comments to address this problem. The fact that mothers' supportive comments were unrelated to accuracy argues against the hypothesis that support increases inaccuracy.

[70] Alleged victims of abuse in cases determined to be highly credible with modified "Ground Truth" scheme (Lamb et al., 1997).

[71] Alleged victims of abuse in cases determined to be highly credible by "Ground Truth" scheme (Lamb et al., 1997).

[72] Details are defined as informative information, as opposed to uninformative ("Don't know." "Don't want to talk." "Don't remember.").

Authors Year	N Age Range	Effects of Support[61]	Effect Size[62] η²	Downs & Black[63]
Imhoff & Baker-Ward, 1999	N = 64 3 to 4 yrs	There was no significant effect of support on suggestibility.	0.05	18
		There was no significant effect of support on accuracy.[73]	0.05	
Klemfuss, Milojevich, Yim, Rush, & Quas, 2013	N = 168 7 to 14 yrs	Children who were most stressed at the time of the event showed the largest benefit of support in terms of disclosing internal states (i.e., thoughts).	0.14	23
Peter-Hagene, Bottoms, Davis, & Nysse-Cariss, 2014	N = 72 7 to 8 yrs	Children in support condition were less suggestible than children in non-support condition after a one-year delay.	0.15	10
Quas, Bauer, & Boyce, 2004	N = 63 4 to 6 year	There was no significant effect of support on accuracy or suggestibility.[74]	0.00 – 0.001	22
		Autonomic reactivity associated with increased accuracy when interviewed in supportive condition but associated with decreased accuracy when child interviewed in non-supportive condition.	Unable to determine[75]	
Quas & Lench, 2007	N = 109 5 to 6 year	Children in non-support condition with increased heart rate during interview were less accurate than children in all other conditions.	0.26	20
Quas, Rush, Yim, & Niko-layev, 2014	N = 168 7 to 14 year	Children in support condition were less suggestible than children in non-support condition.	0.04	21
		Children in support condition recalled a lower volume of information than children in the non-support condition. Note: Overall length of narratives was comparable across support conditions, suggesting that it was the content that varied rather than the volume recount-ed.[76]	≥0.042[77]	

---

[73] Investigators state that their neutral condition was still supportive (e.g., smiling and occasional praise).

[74] Suggestibility and accuracy were not analyzed separately.

[75] Data provided in terms of beta weights. Exact cell sizes and standard deviations not reported.

[76] Authors suggest that children were trying to impress and gain attention from non-supportive interviewer by recounting more details or trying to get her to change her behavior, such that non-supportiveness reduces children's motivation and willingness rather than memory ability.

[77] As reported by study author.

Authors Year	N Age Range	Effects of Support[61]	Effect Size[62] η^2	Downs & Black[63]
Quas, Wallin, Papini, Lench, & Scullin, 2005	N = 106 5 to 6 year	Children in support condition were less suggestible than children in non-support condition.	.031 - .040	21
		Children with lower scores on "trait" of acquiescence were more accurate in the support condition than in the non-supportive condition.[78]	0.33 – 0.40	

[78] "Trait" of acquiescence determined by Video Suggestibility Scale for Children (VSSC), Yield Subscale.

Authors Year	N Age Range	Effects of Rapport	Effect Size (η^2)	Downs & Black
Brown, Lamb, Lewis, Pipe, Orbach & Wolfman, 2013	N = 128 5 to 7 yrs	There was no significant effect of rapport style on accuracy or suggestibility.[79]	0.002 – 0.02	20
		There was no significant effect of rapport style on volume of information.	.007	
		When rapport-building consisted of closed-ended questions, made more errors when asked about the false event first.	0.27	
Hardy & Van Leeuwen, 2004	N = 182 3 to 8 yrs	There was no significant effect of rapport style on suggestibility.	0.06	17
		Younger children were less accurate than older children when prepared with specific-event rapport style; however, there were no age differences when children were prepared with generic-event rapport style.	0.11 0.002	
Roberts, Lamb & Sternberg, 2004[80]	N = 144 3 to 9 yrs	Children prepared with open-ended rapport style more accurate than children prepared with direct rapport style.	0.03	17
		Children prepared with open-ended rapport style were less suggestible than children prepared with direct rapport style.	0.03	
		Open-ended rapport style led 3 to 4 year olds to report more errors in free recall. Children in open-ended rapport style spent significantly longer in rapport building phase than children in direct rapport style.	0.03 0.28	

---

[79] Suggestibility and accuracy were not analyzed separately.

[80] Children in open-ended rapport style ($M = 16.07$ min, $SD = 11.77$) spent significantly longer in rapport-building phase than children in direct rapport style ($M = 5.78$ min, $SD = 3.45$; F [1, 131] = 30.61, $p < .001$, $\eta^2 = 0.28$). Therefore effects of open-ended rapport style need to be interpreted with caution.

Authors, Year[81]	Participants	Effects of Interviewer Bias[82]	Effect size (η^2)	Downs & Black
Goodman, Sharma, Thomas, & Considine, 1995[83]	N = 40 3 to 5 yrs	Children in biased condition were less accurate than children in unbiased condition (but only when the interviewer was an unfamiliar adult).	0.13 – 0.20	19
		There was no significant effect of bias on accuracy when the interviewer was child's mother.	0.01 – 0.06	
		Children in biased condition were more suggestible[84] than children in unbiased condition (but only when interviewer was an unfamiliar adult).	0.02 - 0.06	
		There was no significant effect of bias on suggestibility when the interviewer was the child's mother.	0.0003 - 0.002	
		Children in biased condition made greater omissions, that is, less complete reports than children in unbiased condition (but only when the interviewer was an unfamiliar adult).	0.27	
Powell, Hughes-Scholes, & Sharma, 2012	N = 110 5 to 8 yrs	"Poor"[85] interviewers asked fewer open-ended questions in biased than unbiased condition.	0.54	21
		"Poor"[7] interviewers asked more leading yes/no questions in biased than unbiased condition.	0.27	
		For "good"[7] interviewers, bias did not significantly affect the number of open-ended or leading yes/no questions asked.	0.01 0.02	

---

[81] Two articles did not report enough information to calculate effect sizes and therefore are not included in this table (Bruck, Ceci, Melynk, & Finkelberg, 1991; Ceci & Huffman, Study 2, 1997).

[82] Unless otherwise indicated when effects (or no effects) of bias are reported in this table, they have been deemed statistically significant ($p < .05$) or non-significant ($p > .05$) by investigator of study. Operationalization of bias varied across studies (see Table 5). For the present table, manipulations were collapsed into biased or unbiased conditions.

[83] In a manipulation check, researchers determined that biased interviewers asked more questions consistent with misinformation than unbiased interviewers.

[84] Unless otherwise indicated, "suggestible" is defined as more errors on misleading questions, and/or fewer correct responses on misleading questions, and/or false assents to fictitious events or details.

[85] Researchers pre-tested police officer interview style and divided police officers into "good" and "poor" interviewers before target interviews with children.

Principe, DiPuppo, & Gammel, 2013	N = 117 3 to 5 yrs	Children in biased condition were more suggestible than children in unbiased condition.	0.15	20
		Children in biased condition with high elaborative interviewers were more suggestible in a later interview than children with low-elaborative interviewers.	0.15 - 0.29[86]	
Quas, Malloy, Goodman, Melinder, D'Mello, & Schaaf, 2007	N = 75 3 to 5 yrs	Children in biased condition after a long delay, presumably when memory is weaker, were less accurate.	0.09	21
		In biased condition, among children questioned once after a long delay, 5-year-olds were more likely than 3-year-olds to falsely claim that they had played with a fictitious man.	0.17	
		Children in biased condition were more suggestible than children in the unbiased condition.	0.14	
Schwarz & Roebers (Study 1), 2006	N = 60 8 and 10 yrs	Eight-year-old children were more suggestible in biased condition than in unbiased condition. There was no significant effect of bias on the suggestibility of 10-year olds.	0.24 <0.03	15
		There was no significant effect of bias on children's confidence judgments.	0.00 – 0.03	

---

[86] The authors reported the means and standard deviations as well as the t-statistic and degrees of freedom (p. 268). The value of η2 based on the means and standard deviation was 0.44, whereas the value of η2 based on the t-statistic and degrees of freedom was 0.29. To be conservative, we reported the lower of these two values.

Authors, Year[87]	Participants	Effects of Interviewer Bias[88]	Effect size (η^2)	Downs & Black
Tobey & Goodman, 1992	**N = 39**	**Children in biased condition were less accurate in response to action questions compared to children in unbiased condition.**	**0.19 – 0.24**	**21**
	4 years	Children in biased condition were more suggestible on person questions than children in unbiased condition.	0.47	
		Children in biased condition were more suggestible on location questions than children in unbiased condition.	0.24	
		There was no significant difference between biased and unbiased condition in children's suggestibility for abuse questions.	0.00	
White, Leichtman, & Ceci, 1997	N = 20 3.3 to 5.5 yrs	Children's errors increased between the two interviews, which the authors specu-lated may be due to development of interviewer preconception between the two interviews, which thus may have increased interviewer bias over time.	0.20	18

---

[87] Two articles did not report enough information to calculate effect sizes and therefore are not included in this table (Bruck, Ceci, Melynk, & Finkelberg, 1991; Ceci & Huffman, Study 2, 1997).

[88] Unless otherwise indicated when effects (or no effects) of bias are reported in this table, they have been deemed statistically significant ($p < .05$) or non-significant ($p > .05$) by investigator of study. Operationaliza-tion of bias varied across studies (see Table 5). For the present table, manipulations were collapsed into biased or unbiased conditions.