LSHSS

Clinical Forum

Language and Communication Disorders in Adolescents

Oral Language Competence, Young Speakers, and the Law

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Purpose: This paper highlights the forensic implications of language impairment in 2 key (and overlapping) groups of young people: identified victims of maltreatment (abuse and/ or neglect) and young offenders.

Method: Two lines of research pertaining to oral language competence and young people's interface with the law are considered: 1 regarding investigative interviewing with children as victims or witnesses in the context of serious allegations of sexual abuse, and the other pertaining to adolescent offenders as suspects, witnesses, or victims. The linguistic demands that forensic interviewing places on these young people are also considered. Literature concerning the impact of early maltreatment on early language acquisition is briefly reviewed, as is the role of theory of mind in relation to

the requirements of investigative interviewing of children and adolescents.

Implications: High-risk young people (i.e., those who are subject to child protection orders because of suspected or confirmed maltreatment, and those who are engaged with the youth justice system) face an elevated risk for suboptimal language development but may need to draw on their language skills in high-stakes forensic interviews. Implications for early intervention policy and practice are identified, and the need for greater speech-language pathology advocacy and engagement in forensic interviewing research is emphasized.

Key Words: investigative interviewing, language competence, young offenders, child maltreatment

p school entry at around age 5, typically developing children have rapidly expanding expressive and receptive semantic, syntactic, and pragmatic skills; can share their experiences via narratives (albeit with a still emerging level of skill); and possess sufficient phonological awareness to begin to make the life-changing transition to literacy (Hoff, 2009). That these enormous milestones are achieved in such a short period of time is testimony to the everyday importance of communication competence and the fact that neural pathways that support it begin to be formed from the moment of birth (Fisher & Marcus, 2006).

However, children are not born with equal advantage, either biologically or psychosocially, with respect to their opportunities to become competent communicators. Particular threats in early life include neurological insult (congenital or acquired), hearing loss, and maltreatment. There is a sad irony in the fact that those children who have the most vulnerable start to life with respect to psychosocial functioning and emergence of oral language competence may face an elevated risk for encounters with the legal system, whether as a victim (e.g., making an allegation of sexual abuse), a suspect (e.g., as a youth offender), or a witness (Snow, 2009).

Child witnesses face immense challenges when they enter the criminal justice system. Compared to adults, children have less sophisticated language and memory abilities and lower social status as a communication partner (Wilson & Powell, 2001). Further, child witnesses predominantly testify in cases as victims of abuse (where there is little or no corroborating evidence) and about crimes committed on themselves by someone they know well (McGough, 1994). Collectively, these factors reduce children's capacity to provide accurate, detailed, and credible (coherent) accounts of their experiences. Young offenders (who may themselves

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¹"Maltreatment" is a term that refers to both *abuse* of various forms (e.g., physical, sexual, verbal, emotional) and *neglect* of various forms (e.g., physical, emotional, social, educational).

have been victims of maltreatment) also face particular challenges in their verbal navigation through the justice system.

This paper is concerned with the linguistic interface between young speakers (children and adolescents) and the justice system. The paper contains the following information:

- A brief review of the literature concerning early childhood adversity and implications for language development;
- An examination of the overarching relevance of narrative language skill for forensic interviews, both for young children making sexual abuse allegations and for adolescents in the youth justice system;
- An exploration of theory of mind (ToM) development in early life and its relevance for investigative interviewing;
- An exploration of the linguistic demands of investigative interviewing for children who are making allegations of maltreatment (most notably sexual abuse); and
- An examination of the international evidence on impoverished oral language skills in youth offenders, and what this means for forensic interviewing, and related therapeutic encounters in the justice system.

An important factor that unites young children who are undergoing investigative interviews and youth offenders is the collection of psychosocial risks they face in early life. Such risks typically exist at the community, family, and individual level (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002) and tend to compromise their early language development in ways that create particular disadvantage in interactions with the justice system. Notably, a significant subgroup (variously estimated at between 25% and 50%) of young people who are the subject of child protection orders in early life will progress to youth justice orders (e.g., Community Supervision) in adolescence (e.g., Stewart, Livingston & Dennison, 2008). Indeed, Snow and Powell (2011) recently reported on the oral language skills of a group of 100 incarcerated young offenders, 29 of whom had experienced a foster-care placement due to maltreatment issues. Of this subgroup, more than two thirds were classified as language impaired according to the Clinical Examination of Language Fundamentals-Fourth Edition (Semel, Wiig, & Secord, 2003) and the Test of Language Competence-Expanded Edition (Wiig & Secord, 1989).

Language Development and Risk in Early Life

Obviously, the optimal environment for early language development to flourish is one that contains at least one caring, consistent adult who is emotionally attuned and available so that a secure attachment relationship is formed in early infancy (Cohen, 2001; Perry, 2005). This secure attachment not only provides a basis for learning the culturally appropriate conventions of reciprocity, eye contact,

turn-taking, and shared reference, but also underpins the development of social cognition and empathy (Cohen, 2001). The work of major 20th-century leaders in the field of attachment theory such as Bowlby, Ainsworth, Winnicott, Rutter, and others (see Cassidy, 2008) confirms the importance of early secure attachment for mental health across the life span. Communication competence, in turn, is central to mental health, as it is the means by which relationships with others are established and maintained. A substantial body of evidence links early secure attachment and parental responsiveness with children's expressive and receptive language skills (e.g., Beeghly, 2006; IJzendoorn, Dijkstra, & Bus, 1995; Murray & Yingling, 2000; Pungello, Iruka, Dotterer, Mills-Koonce, & Reznick, 2009; Rees, 2008), though this relationship has been studied most closely in high-risk rather than community samples, so its linearity is not clear. What is clear, however, is that the formation of early neural pathways in the immature cortex is highly dependent on experience (Perry, 2005), and there are critical periods during which the infant must have strong and repeated relational experiences both of secure and warm attachment and of language usage. Pungello et al. (2009) observed that "a responsive and emotionally supportive parent provides an interactive environment for young children to engage in reciprocal verbal and nonverbal exchanges that are stimulating and rewarding for the child" (p. 545). This is not to say, of course, that language impairment in a child is indicative of insecure attachment, as there are many intrinsic and extrinsic factors that can compromise the emergence of language in the early years. It is important to note, however, that supportive interactive environments are often absent from the histories of children and adolescents who come into contact with the child protection and justice systems (Snow, 2009).

Although it is helpful to conceptualize maltreatment as including both abuse (e.g., verbal, physical, sexual) and neglect (e.g., physical, socioemotional, educational), in reality, some 50% of maltreated children who are abused are also neglected in some way (e.g., Arata, Langhinrichsen-Rohling, Bowers, & O'Brien, 2007; Pears, Kim, & Fisher, 2008). Where maltreatment histories do suggest a predominance of abuse or neglect, however, the longitudinal evidence indicates that different patterns of psychopathology result. Mills et al. (2011), for example, reported on a followup at age 14 years of a birth cohort of >7,000 children in Queensland, Australia. They found that cognitive and academic abilities were equally adversely affected by neglect as they were by abuse, supporting the notion that neglect has itself been neglected in child welfare circles. These findings concurred with a review of neuropsychological outcomes for children who had experienced early maltreatment (Hildyard & Wolfe, 2002), which demonstrated that neglect is particularly detrimental to a child's cognitive, psychosocial, and academic development.

Early language problems may be associated with other developmental disorders (e.g., intellectual disability, cerebral palsy, and autism spectrum disorders [ASD]) that in themselves compromise early attachment and can create a "double jeopardy" elevated risk for maltreatment of various forms. Westby (2007) pointed out that these disabilities are likely to induce particular frustrations and distress in parents who may, as a consequence, react in ways that are abusive or neglectful toward the child. Shaken-baby syndrome represents an extreme form of the relationship between caregiver distress, lack of coping, and early maltreatment, with consequent compromised neurodevelopment or even death (Barr, Trent, & Cross, 2006). However, there is good evidence that less extreme forms of maltreatment result in long-term developmental sequelae-both for language specifically (see Snow, 2009, for review) and for psychological development more generally (e.g., Ander et al., 2006; Glasser, 2003). Cicchetti (2004) pointed out that when we think of individuals who have been maltreated, we tend to think of those with bruises, burns, and malnutrition rather than the impact that maltreatment can have on a child's socioemotional development. In an important cross-paradigm study, Beeghly and Cicchetti (1994) reported that maltreated toddlers had fewer emotion words in their lexicons and were poorer than nonmaltreated controls at verbally describing their own emotional state. This early association between verbal competence and emotional modulation underlines the role of language competence not simply as a tool of information transfer, but as a means of linking events with feelings. This nexus forms an important basis for establishing cause-effect relationships in coherent narrative accounts when experiences are shared with third parties.

Narrative Competence and Forensic Interviewing

Narrative discourse is the means by which speakers locate events in time and place (Nelson, 1996). In a forensic context, much emphasis is placed on the speaker's free-narrative account of an alleged incident (Wilson & Powell, 2001), particularly in the case of minors, whose testimony is more vulnerable to the contaminating effects of suggestion and leading questions (see further below). However, the ability to provide a free-narrative account of an event is developmentally complex. It requires the young person as speaker to engage in perspective taking (i.e., assuming the standpoint of the listener, who is often naïve about the events in question) and to adjust the message according to the listener's perceived level of background knowledge. The gradual strengthening of narrative competence throughout childhood and adolescence draws on a sophisticated set of expressive and receptive linguistic skills, ranging across semantics (e.g., representing increasingly subtle shades of meaning through a growing vocabulary), syntax (e.g., embedding

complex ideas via relative clauses), and pragmatics (e.g., responding appropriately to a complex range of contextual variables) (Joffe, 2006; Nippold, 2007; Stringer, 2006). In addition, in adolescence, narrative production and comprehension requires mastery of commonly used linguistic devices such as idiom, metaphor, and sarcasm (Nippold, 2007). In stressing the cognitive demands inherent in competent narrative generation, Nelson (1996, p. 201) observed that "reporting an event in sequence is a very complicated manoeuvre, requiring the child to hold in mind the present time, then to move back (or forward) to the beginning of a prior event, move forward again through the event and reach the end, then move forward to the present." Westby (1982) related narrative skill development to the Piagetian stages of cognitive development. Given that it is difficult for preoperational children to infer other people's plans and internal responses, these elements are typically missing from the narratives of young children. Narrative competence also draws heavily on the speaker's attentional skills, turntaking, ability to attend to topic coherence, and repair of breakdown (e.g., when a listener misunderstands) (Ripich & Spinelli, 1985). Finally, the cognitive-linguistic demands of using narrative as a tool to both describe characters and events and explain reasons for protagonists' actions has also been stressed (e.g., Vallance, Im, & Cohen, 1999).

There are a number of ways of considering the structure of a narrative. Labov's (1972) highly influential description of narratives directly linked experience, cognition, and representation. Labov identified that narratives include an abstract (a description of what the story is about), an orientation (setting the scene, temporally and spatially), a complicating action (the "what happened next" part of the story, that in Labovian terms is a defining feature of the narrative), an evaluation (the human consequences of the story from the subjective perspective of the narrator), a resolution (how the story ends), and a coda (a linking statement that connects the end of the story with the present). More recently, Labov (2001) elaborated on this process, incorporating the assignment of praise or blame for the reportable events and the transformation of the narrative in the interests of the narrator through the deletion of objective events and the insertion of subjective

Workers such as Stein and Glenn (1979) have built on Labov's (1972) early work, specifically through the notion of *story grammar*, which is a structural template consisting of up to seven logically sequenced story grammar elements: setting, initiating event, internal response, plan of action, attempt at action, direct consequences of this action, and protagonists' reactions. These elements are each of direct relevance to the type of information that is sought in an investigative interview. The *setting* refers to the physical location where the event took place. The *initiating event* refers to the event that commenced the sequence of events in question. The *internal response* refers to the way the speaker

felt (in the case of a first-person account) or to the inferred emotions of the person affected by the initiating event (in the case of a second-person account). The *plan* refers to the set of intentions that was formed in the mind of the person affected by the initiating event. The *attempt* is what that person then did in an effort to execute the plan. *Direct consequences* are the outcomes of this attempt, and the *resolution* refers to the outcome of the story.

It is in the context of conversations with parents and other caregivers that preschool children embark on the journey of becoming competent narrators of events that they observed or directly experienced. Initially, when children have limited verbal ability, their conversations are "scaffolded" by their parents, usually by mothers as the primary caregivers. Scaffolding is a term introduced to developmental psychology by Vygotsky in the 1930s (Robbins, 2001); it refers to unobtrusive assistance via prompts and elaborations that are provided by key adults to assist the child with the task of information transfer. In many cases, scaffolding is facilitated by the fact that the caregiver knows the story that the child is attempting to narrate and can shift between the perspective of child as narrator, and listener, as the one who is being informed. As the child becomes more competent, this scaffold is gradually withdrawn.

Sociolinguistic research on narrative production in the forensic context provides some important caveats and cautions about potential distortions in a witness's story that can eventuate as a result of legal processes. Eades (2007), for example, reminds us that "courtroom hearings are all about competing stories: to a considerable extent the aim of legal representation is to present the winning story" (p. 2). As Eades pointed out, however, the way in which witnesses are allowed to tell their stories in court are "very strange, and are subject to a number of restrictions which do not exist in other storytelling contexts to anything like the same degree, if at all" (p. 3). Such restrictions include the artificial segmentation and "filtering" of the story into isolated units in response to specific questions, the need to recontextualize the events to accommodate listener perspective, and the retelling of a witness story by a third party (e.g., legal counsel) who was not present when the events in question occurred. Such distortions in story retelling are particularly disadvantageous to vulnerable witnesses such as young people and ethnic minorities (e.g., Aboriginal speakers) whose language and culture may be poorly understood by those responsible for justice administration. Children from vulnerable ethnic minorities, particularly indigenous people in countries such as Australia and New Zealand, and Black and Hispanic Americans (Hawkins, Laub, Lauristen, & Cothern, 2000), are overrepresented in both abuse and youth justice statistics (Snow, 2009). Such young people (a) are disadvantaged with respect to their access and exposure to mainstream English; (b) may be growing up in multilingual environments; and (c) may be exposed to a range of psychosocial disadvantages that further compromise their

language development, expressively and receptively. There are also cultural constraints pertaining to communication behavior that can further disadvantage minority groups in their interactions with the law (e.g., avoiding eye contact with authority figures; this is seen as an appropriate mark of respect in Australian Aborigines, but as a sign of evasiveness or disrespect in many western mainstream cultures).

It should also be noted that narrative skill development is sensitive to a range of high-prevalence developmental disorders that are overrepresented in vulnerable witnesses, for example, learning disability (Roth & Speckman, 1986), ASD (Diehl, Bennetto, & Young, 2006), intellectual disability (Finestack & Abbedutto, 2010), traumatic brain injury (Chapman, Levin, Wanek, Weyrauch, & Kufera, 1998), hearing impairment (Geers, Nicholas, & Sedey, 2003), and developmental language impairment (Liles, Duffy, Merritt, & Purcell, 1995). The sensitivity of narrative competence to developmental competencies in a range of domains (e.g., cognitive, linguistic, socioemotional) led Snow and Powell (2005, 2008) to describe narrative competence as "the canary down the coalmine" of language development. This analogy is an important reminder that narrative difficulties in a child or adolescent are not diagnostic of a particular underlving disorder.

ToM and Narrative Language Development

ToM was defined by Astington and Barriault (2001) as "an integrated set of concepts underlying the understanding of how things work in a particular domain. Children's theory of mind underlines their ability to understand human behavior" (p. 2). These workers went on to stress that ToM is the basis for human interaction as it underpins our ability to understand, predict, and interpret the thoughts and feelings of others in our world. Milligan, Astington, and Dack (2007) observed that ToM reflects children's "understanding of themselves and other people as mental beings, that is, as people who have beliefs, desires, emotions, and intentions, and whose actions and interactions can be interpreted and explained by taking account of these mental states" (p. 622).

ToM has particular relevance to the investigative interview because it has bearing on *both* the child's understanding of the beliefs, motivations, and perspectives of characters in the story they need to narrate for the purpose of the interview *and* their capacity to understand that interviewers themselves have a set of beliefs and understandings separate from their own. In this sense, the investigative interview demands a particularly complex repertoire of cognitive and linguistic competencies. Scaffolding, although developmentally helpful in nonforensic contexts, is not a part of best-practice interviewing because it could be seen by defense counsel as a form of prompting or leading questioning that could then compromise the child's testimony in court (Ceci, Crossman, Scullin, Gilstrap, & Huffman, 2002).

Critical to the development of ToM is the understanding of false belief (i.e., the realization not only that other people may hold views different from one's own, but that this other person's beliefs may be based on a false premise). Astington and Barriault (2001) observed that with the understanding of false belief comes the knowledge that the child is able to misrepresent events (e.g., by lying or keeping a secret). This development is relevant to forensic interviewing because (a) the young person's task is to convey information to an adult who may hold mistaken or incomplete beliefs about the events in question, and (b) it is usual for such interviews with children to begin with an affirmation about the importance of "telling the truth" and asking the child if he or she knows the difference between the truth and a lie and can give an example utterance of each (Wilson & Powell, 2001). In their meta-analysis of 104 studies examining the relationship between ToM development and language acquisition, Milligan et al. (2007) confirmed a strong relationship between the two concepts, particularly in younger children. ToM is, therefore, a powerful facilitator of the child's relationships with others, given its role in fostering sensitivity to the thoughts and feeling states of others. There is a positive correlation between tasks measuring ToM ability and language ability in young children (Harris, de Rosnay, & Pons, 2005). Garfield, Peterson, and Perry (2001, p. 996) argued that "ToM is acquired through the acquisition of social and linguistic competencies and does not precede them as an autonomous body of knowledge."

Hedberg and Stoel-Gammon (1986) observed that individuals who lack adequate story grammar skills "will have difficulty reconstructing their own experiences and sharing them with others" (p. 68). This is relevant to investigative interviewing as this is the very focus of such an interview (i.e., to encourage the child witness to recall and reconstruct his or her experiences in a way that facilitates the generation of a coherent and logically sequenced narrative to someone who was not present when the alleged events occurred). Without a well-developed ToM, however, the child will have difficulty using knowledge of different perspectives and levels of background information to generate narratives that are both structurally adequate (i.e., showing evidence of Stein and Glenn's (1979) story grammar elements) and qualitatively adequate (i.e., providing sufficient [and ideally accurate] content in order for genuine information transfer to take place between the speaker [the child witness] and the listener [the police interviewer]).

Investigative Interviewing of Children Who Have Experienced Maltreatment

In forensic terms, an investigative interview is one that occurs in the process of investigating an alleged offense. Forensic interviews can be performed at various stages of the investigative process and range from the initial police interview (conducted by a trained investigative interviewer)

to in-court interviews in front of a judge or other decision maker. The interview has particular salience in the context of children who experience maltreatment because children make up a substantial portion of "crime-against-the-person" victims. In the United States, youths ages 12–17 were more than twice as likely as adults to be victims of serious violent crimes in 2007 (Snyder & Sickmund, 2006), and in statistics on child victimization from 2005–2009, those <1 year of age had the highest rate: 20.6 per 1,000 children of the same age (Child Welfare Information Gateway, 2011). In Australia, recent studies have found the prevalence of child physical abuse to be between 5% and 10% (Price-Robertson, Bromfield, & Vassallo, 2010).

Law enforcement remains the major tool for the prevention of child abuse. Despite this, prosecution rates for child abuse cases are low. In Victoria, Australia, only 14% of penetrative offenses² involving children that are reported to, and recorded by, police ultimately proceed to prosecution (Victorian Law Reform Commission, 2003). In the United States, <20% of substantiated abuse cases are prosecuted (Snell, 2003). One reason for low prosecution rates is that evidence is difficult to come by in child abuse matters, which makes investigative interviews with child victims vitally important. Interviews conducted during the initial phase of the police investigation are usually the most critical in determining whether a case is solved (Fisher, Geiselman, & Raymond, 1987). At this point, there is considerable potential to extract accurate and extensive information as the event is still fresh in the witness's memory and relatively accessible (Powell, Fisher, & Wright, 2005). Additionally, a well-conducted forensic interview that has been recorded (the practice for vulnerable witnesses in some jurisdictions) can reduce a child's court appearance time if it is used as the child's evidence-in-chief (Cherryman, King, & Bull, 1999). A poorly conducted interview, however, has the potential to distort the witness's memory and contaminate the entire investigative process (Powell et al., 2005).

The act of eliciting reliable and detailed information from a child is a unique and complex process and is not limited to a strictly legal context. For example, many investigative interviews are conducted by teachers and other school personnel in response to allegations of bullying and physical assaults in the school yard, and schools must take appropriate action when incidents occur to satisfy their duty of care to students. Regardless of the context, in an investigative interview, the onus is on the *interviewer* to maximize the quantity and quality of information that the interviewee can provide. In a police investigation, this increases the likelihood of

²In general, this term refers to the act of rape, although there are inconsistencies between jurisdictions with respect to the penetration of the vagina or anus by a body part or object, as well as penetration of the mouth by a penis (Australian Law Reform Commission, 2010).

obtaining corroborative evidence to support the interviewee's account, thereby improving the chances that a successful prosecution will result (Powell et al., 2005). Additionally, the more complete and accurate the initial investigative interview with police is, the less susceptible that account is to distortion during cross-examination (McGough, 1994; Powell, 2005).

Investigative interviews, particularly those conducted in a forensic setting, are usually informed by one of several interviewing protocols that have been developed for different interview populations and situations (e.g., suspects, witnesses). These protocols exemplify best-practice interviewing and are based on years of experimental laboratory research and experiential knowledge. Although the outcome of any investigative interview is determined by a wide range of factors (Ceci, Powell, & Principe, 2002), including the child's developmental level, the timing and nature of the to-berecalled event, and contextual factors related to the interview setting, the most important factor is whether the interviewer has adhered to the best-practice guidelines stipulated in interview protocols (Agnew & Powell, 2004).

The central aim of all prominent interview protocols is to obtain an account of the event or situation in the child's own words, with as little specific prompting as possible from the interviewer; in other words, a free-narrative account (Poole & Lamb, 1998). A free-narrative account is a story that organizes a person's experiences of a situation into a comprehensible, linked series of activities. It is best understood when it is relayed in the right order, when causality between events is understood, and when the elements of story grammar are present (Powell & Snow, 2007a, 2007b). Presenting the information in a meaningful and informative way is particularly important for use as evidence (Davis, Hoyano, Keenan, Maitland, & Morgan, 1999). As discussed earlier, narrative language commences in the early years and develops throughout childhood but is a skill that is sensitive to a range of factors, such as emotional well-being, presence or absence of learning disabilities, and whether there has been socioemotional neglect (Snow, Powell, & Murphett, 2008). However, reliable and accurate free-narrative accounts can still be elicited from children as young as 3 years of age, provided the account is obtained with the use of nonleading, open-ended questions and other prompts that encourage elaborate responses (Powell & Snow, 2007a). Notwithstanding this, there is very limited knowledge about how children with language impairments fare when they are asked to provide free narratives, particularly in a forensic context; this is an important issue that demands further research.

Child abuse and neglect are both associated with impoverished language development (Culp et al., 1991; Eigsti & Cichetti, 2004), thus reinforcing the likely fragility of a maltreated child's language competence in the face of forensic interviewing demands. This needs to be considered alongside the literature regarding appropriate interview techniques for children, which focuses on the use of open-ended questions.

Importantly, however, not all open-ended questions are alike. Because the language and memory ability of child witnesses is more limited than that of adults, some open questions are not effective at eliciting an elaborate response from a child (e.g., "Tell me everything about his eyes," while open, would elicit a short answer from a child, such as "They were blue"). In fact, questions that focus on highly specific details are problematic with young children. It is well established that when vulnerable interviewees such as children are pressured to recall highly specific details, they are more prone to make up or accept false details, perhaps to appear more competent or to bring the interview to an end (Ceci & Bruck, 1993; Eades, 1995).

The literature does, however, establish some principles that offer a framework for phrasing questions when interviewing children. These principles have been summarized by Powell and Snow (2007a) as the "SAFE" approach (i.e., simple language, absence of specific detail [not previously raised], flexibility on the part of the interviewee to choose what details will be reported, and encouragement of an elaborate response).

Applying these four principles is obviously challenging for interviewers. Despite the existence of commonly accepted and adopted protocols for best-practice interviewing, evaluation research has concluded that professionals do not elicit free-narrative accounts from children. Evaluated interviews contain predominantly short-answer questions with few pauses and an excessive number of closed and leading questions (see Powell et al., 2005; Powell & Snow, 2007a, 2007b). In an analysis of verbatim transcripts of police interviews with child victims of sexual abuse, Snow, Powell, and Murphett (2009), for example, found that police interviewing techniques consistently served to disrupt, rather than facilitate, the child's free-narrative account of the alleged abuse incident, and were significantly more likely to elicit context and background information (i.e., details that may have questionable testamentary significance in court) than actual story grammar (narrative) content regarding the alleged incident. Although these difficulties implementing best-practice guidelines stand to significantly compromise the integrity of the child's testimony, they occur internationally (e.g., United Kingdom, United States, Australia, Sweden, and Israel), across different interviewee groups (e.g., children, adults), and with different kinds of interviewers (e.g., police and social workers). There is clearly a need for increased involvement of speech-language pathology as a profession in the training of personnel who are charged with the important responsibility of eliciting the best possible free-narrative account of an alleged incident from a child witness. Prosecution cases rely heavily on this free narrative, so its contamination by poor interviewing technique should be a matter of serious concern for speechlanguage pathology as a profession.

Ultimately, not every aspect of an interview is within the interviewer's control. For example, if the styles of interaction

that the child engages in on a daily basis are usually leading, closed, or interviewer centered, then the child may have limited cognitive structures to support the recall of information in response to open-ended questions. This is a common problem when interviewing children with intellectual disabilities (Abbeduto, Weissman, & Short-Meyerson, 1999; Marchant & Page, 1992). Further, the likelihood of eliciting an accurate and detailed account from a child is affected by the physical, mental, and emotional state of the child at the time of the event and the interview, as well as by the nature of any previous questioning about the event (Powell & Snow, 2007a, 2007b). Despite this, the investigative interviewer must adhere to the principles of best-practice interviewing in order to elicit the fullest, most accurate account possible. This can be improved across the professions through the delivery of training packages that optimize interviewers' ability to acquire and maintain an open-ended questioning style.

Despite the important role of the skilled interviewer in allowing children to be reliable informants of events, narrative competence is sensitive to a range of social, psychological, linguistic, and cultural variables. For example, Vallance et al. (1999) studied the narrative skills of children with language impairment and other highprevalence psychiatric disorders (e.g., behavior problems, social withdrawal, attention deficit hyperactivity disorder, anxiety, and depression) and reported that narrative disruptions are higher in these populations. This finding has important implications for interviewers, who must accept professional responsibility for the quality of evidence elicited via narrative accounts from children, some of whom will have developmental disabilities, and many of whom will have experienced complex psychological trauma.

Young Offenders, Communication Competence, and the Law

Young people who become involved with youth justice are not a random sample of the community. Indeed, they can broadly be characterized as male (though of course some young woman do offend), and they are likely to come from home environments that are chaotic and unstable and/or from single-parent households (with the notable absence of a father figure). They are also likely to have underachieved academically, to have experienced suspension (and in many cases expulsion) on conduct grounds, and to have exited early from school without marketable employment skills (Snow & Powell, 2011). Young offenders also face an elevated risk for contact with child protection services, in extreme cases requiring placement in foster care because their home environment was not sufficiently safe or stable to support their development (Stewart et al., 2008). Research in Australia (Coffey, Veit, Wolfe, Cini, & Patton, 2003) has also

shown high rates of mortality in young offenders, meaning that contact with the justice system in early life is a serious health issue.

Early comorbidity between language deficits, behavioral disorders, and academic underachievement has been documented in the early life histories of young people who enter the youth justice system (see Snow & Powell, 2011, for review). The risk for offending behavior is borne from risks in childhood; in many cases, such risks could be at least partly ameliorated if interventions were provided in the appropriate developmental window (Heckman & Carneiro, 2003). Sadly, however, there is strong international evidence (Blanton & Dagenais, 2007; Bryan, 2004; Sanger, Creswell, Dworak, & Schultz, 2000; Sanger, Moore-Brown, Magnuson, & Svoboda, 2001; Snow & Powell, 2008, 2011) attesting to the presence of clinical levels of language impairment in significant proportions of young offenders, ranging between 19% and 60% on current estimates. The wide range of these estimates no doubt reflects differences in sampling and assessment techniques, both issues that need to be systematically addressed in future studies.

Our current level of knowledge is sufficient, however, to highlight some important points with respect to linguistic aspects of young offenders' interface with the law. For example, Sanger et al. (2001) found that many young offenders who demonstrated language problems could not define or describe words such as penalty, verify, priority, caution, or crucial. Snow and Powell (2005) found that there were qualitative and quantitative features of young offenders' narrative language skills that called into question their ability to "tell their story" in the forensic context, which is a central pillar of western justice systems. Young offenders also have difficulties dealing with everyday metaphors and idioms as well as other nonliteral linguistic devices, being more likely to decode the literal, rather than the intended, abstract meaning behind a speaker's intent, if indeed they had any familiarity with the expression in the first place (Snow & Powell, 2008, 2011).

Language difficulties in the context of the forensic interview are unlikely to be recognized as such, instead masquerading as rudeness and poor cooperation, potentially creating additional disadvantage for the young person's passage through the justice system (Snow & Powell, 2011). Further, in an incarcerated sample of young offenders, an association has recently been demonstrated between histories of violent offending and risk for language impairment (Snow & Powell, 2011). Given that violence is an extreme form of interpersonal dysfunction, its prevention in early life is a challenge that could benefit from more intensive speechlanguage pathology involvement (Sanger, Moore-Brown, & Alt, 2000; Sanger, Moore-Brown, Montgomery, & Hellerich, 2004). The interplay between early maltreatment and later offending was also borne out in a qualitative study of 46 female offenders who were victims of maltreatment and were residing in a correctional facility, with self-reflections

such as "It [abuse] affects your self-confidence and confidence affects your communication" (Sanger et al., 2000, p. 182).

In addition to their difficulties dealing with the challenges of police and courtroom interviews, young offenders' language difficulties may compromise their capacity to engage in highly verbal therapeutic interactions, such as counseling and restorative justice conferences, as has been discussed elsewhere (Snow & Powell, 2011; Snow & Sanger, 2011).

Summary and Future Directions

Many children and adolescents are disadvantaged linguistically in their interface with the law, whether as victims, suspects, or witnesses. Children and adolescents are, by virtue of their developmental stage, vulnerable witnesses. When maltreatment, psychosocial adversity, and disability are also present, their disadvantage is significantly compounded. There is a need for speech-language pathology as a profession to engage more actively with practitioners in education, forensic, and human services fields who do not possess a specialized knowledge base with respect to children's communication competence. Speech-language pathologists (SLPs) need to advocate for vulnerable children with respect to the linguistic demands of engaging with the law. SLPs also need to engage closely with educators about language impairments as hidden disabilities; typically, the difficulties of such children (especially boys) become apparent when they struggle to make the transition to literacy, but comorbidities with emotional-behavioral difficulties may "cloud" the judgment of key adults, and language competence may not be specifically considered.

SLPs should advocate for improvements in the type and quality of interactions that vulnerable children experience with adults on a daily basis. As discussed in this paper, when children have limited experience in open-ended or childcentered forms of communication (which is often the case with children who have disabilities), this creates a "Catch-22" situation such that without experiences of being a valued informant, children are unlikely to develop appropriate skills for participating in investigative interviews. In order for this to occur, there will need to be greater coverage in preservice speech-language pathology curricula of the public health contexts in which language competence can be compromised in early life, with due emphasis on the role of parental and family well-being in a social determinants of health framework. Social determinants are "factors characterizing the environments that individuals are 'exposed' to and that can influence lifelong developmental and health outcomes" (Maggi, Irwin, Siddiqi, & Hertzman, 2010, p. 627).

SLPs cannot be effective advocates for vulnerable children at a policy level unless they themselves understand and can use the language of public health policy. Inclusion of

curriculum content on forensic aspects of language competence would also strengthen SLPs' positioning as experts who can both advocate for, and intervene on behalf of, children as witnesses, suspects, or victims in their engagement with law enforcement agencies. SLPs should also engage with the training of police and other human services personnel who come into contact with children and adolescents in forensic contexts so that interviewing practices are linguistically and developmentally appropriate and nonspecialists are better able to identify children whose language skills may be suboptimal for the forensic demands they face. The Witness Intermediary Scheme introduced in the United Kingdom to assist children and other vulnerable speakers in their interface with the law is an important step toward ensuring equity in forensic interviews. Intermediaries must be registered with the U.K. Department of Justice and have demonstrable skills in facilitating communication success, which is an obvious role for SLPs. The Royal College of Speech-Language Therapists (RCSLT) has campaigned strategically in recent years to improve the passage of vulnerable witnesses through the justice system, and it is pleasing that a significant proportion of witness intermediaries are in fact speech-language therapists (RCSLT, 2011). Over time, then, increased awareness on the part of police and judicial professionals of the special expertise that sits within the speech-language pathology profession should see improved consultation with SLPs about the forensic vulnerability of children and adolescents with language difficulties.

Lack of opportunity to "speak out" compounds the disadvantage of children with communication disabilities. Children who are most likely to be competent informants about events are the ones whose narrative skills have developed sufficiently well to support the transfer of information from child to adult. Thus, promoting opportunities for *all* children, including those with communication disabilities (hidden or identified), to speak with adults in a variety of exchange types plays an important role in facilitating early detection of maltreatment and access to justice in the legal system. SLPs have a vital role to play in this important endeavor.

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