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Wanda and Joseph: Language development in the context of family stress and trauma

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Wanda and Joseph:
Language development in the context of family stress and
trauma

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Abstract

Much has been written on child language development and recent years have seen a burst of research on the psychological and physiological impact of trauma and stress. This study seeks to review existing research on how family trauma influences language development, and consider existing interventions. A case study is presented of work with a mother and her language-delayed child through preventive services. Interventions focused on increasing the mother's capacity for mentalization and playful interaction with her child were found to be useful in ameliorating communication barriers and increasing the child's social engagement.

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Introduction

“The central role of language becomes clearer if we view it as a means of symbolizing experience and as a tool that allows for communication of one’s own – and understanding of others’ – thinking, experiences, emotions, ideas, and social and cultural rules.”

– p.26 Cohen, Nancy (2001) *Language Impairment and Psychopathology in Infants, Children, and Adolescents*. Thousand Oaks: Sage Publishing.

Delays in speech and language development deserve consideration from many angles. Disordered or delayed language development is not only a condition in itself but a primary symptom of many other conditions such as mental retardation, autism, neurological impairments, hearing loss, social deprivation and trauma. Developmental language disorders including specific language impairment, aphasia and dysphasia also exist as separate diagnostic categories, but so much overlap and co-occurrence exist that differentiating between symptom and cause can impractical.

This paper seeks to survey the existing research on the relationship between language and communication disorders and traumatic stress. A brief discussion of typical language development will be followed by a review of the research on echolalia, a common occurrence in atypical language development and communication problems. Additional research on the inhibiting impact of stress and trauma on language development will further illuminate the complicated interactions between neurological vulnerabilities and environmental stress, especially for children living in poverty and involved in child welfare.

The impact of disordered language and traumatic stress on the caregiver-child relationship will also be considered through an examination of attachment.

To illustrate how these issues play out in an individual child and within the child-caregiver dynamic, a case study of a family I worked with during my time at a foster care prevention agency will be presented. This particular family inspired my interest in the topic, but the question of language development was present with many of the families referred to the agency. Children would frequently come to the agency with a diagnosis of autism or PDD and limited language development, but without the social avoidance typically central in children with these diagnoses. Behavior tended towards tantrums and inattention rather than stereotyped patterns and restricted interests. Additionally, many of the children seen in this agency, as well as their siblings, had some kind of speech and language delay and received speech therapy in school. Regardless of the child's diagnosis, it seemed delays and disturbances in communication were a main presenting problem. Yet, language was generally treated as a separate issue from the larger picture of social and emotional functioning and addressed solely through school-based speech therapy.

Language development is one of the major tasks of early childhood development and coincides with the emergence of social awareness, reciprocity and self and other differentiation. Considering language's greater place in development inspired me to also to take a wider perspective on the role of language in the family system. Observations presented here of language within a family hopefully shed light on larger communication and relationship dynamics that may be important in understanding the maintenance or alleviation of a child's language symptoms.

In New York State, the number of children being treated for language disorders in public schools is rising. From 2002 to 2012, the percentage of special education students with a classification of speech and language impairment rose from 19% to 25.1% (New York State Education Department, 2013). During the same time period, special education students with a classification of learning disabilities fell from 47.1% in 2002 to 36.7% in 2012. Learning disabilities and speech language impairment are the two most common types of disability and both classifications cover different types of language impairments.

The IDEA act defines specific learning disability as a “disorder of one or more of the basic psychological processes involved in understanding or using spoken or written language.” (Scull, 2011) This is a broad definition that can include impaired executive function skills such as impulse control or social and emotional learning as well as problems with perception such as dyslexia. Speech or language impairment classifications on the other hand generally refer to disorders in communication that impact a child’s ability to learn in the classroom such as articulation problems, voice impairment or stuttering. Once a child is evaluated and enters the special education system, they are given an Individualized Education Plan that outlines specific services, supports and modifications necessary to help the child achieve their academic goals. These can range from working with a speech language pathologist outside of the classroom to modifications made to learning materials inside the classroom.

With so many options for individualized supports, there runs the risk that approaches to helping may become piecemeal and fractured. This is especially an issue when the child presents with multiple problem areas that are lumped under one

classification. A child with delayed language development may also present with severe behavioral concerns. While ideally providers would be able to coordinate their approaches, high caseloads, different training approaches and limited time prevent regular collaboration. Children may be placed in classrooms with a behavioral focus and receive speech services separately. Even in therapy or counseling settings, it is rare that language and learning problems that cause difficulty in processing academic information are thoroughly considered in how they apply to social emotional functioning and influence therapy. A comprehensive understanding of a an individual child's communication patterns across areas of academic, social and emotional functioning may lead to insight as to how these patterns are being maintained.

Literature Review

Typical Language Development

“Language starts as an affective experience – a cry in the dark.” (Caruth, 1987)

“The human capacity to understand and use language opens the doors to thinking, learning, and social relationships.” (Cohen, 2001)

Although language emerges during the second year of life, children are engaging in communicative behaviors long before that. Infants use behaviors such as smiling, crying and fussiness to show pleasure and displeasure. While the earliest forms of these behaviors may not be intentional on the infant’s part, parents begin to respond as if they have communicative intent; which sets the stage for intentional communication and the emergence of language later on (Cohen, 2001).

While communication establishes reciprocal relationships, it is also integral to the separation process. It is no coincidence that expressive language emerges during the second year of life at a time when most children are experimenting with separation from their primary caregiver. While this process can be clearly observed through toddler behaviors, an elaborate conceptual process is also taking place below the surface; major shifts are occurring in how the child experiences self and other through their physical experience as well as in their new language and thinking experience. Words are symbolic and introduce a difference between image and reality – a child’s world starts to become mediated by language. Judith Brett (1981) applies this to the individuation-separation process by explaining that language learning gives labels to others – most crucially the label ‘mother’ (in its infinitely varied forms). By naming mother, the word has “pushed itself

before the thing” giving mother and child words, and therefore symbols, for their separate identities (p.40 in Caruth, 1987). Caruth (1987) saw symbolic language as a way for the child to build internal psychic structures by experiencing and tolerating ‘me’ and ‘not me.’

Language is both a creator and facilitator of separation. It gradually moves the child and their caregiver from pre-linguistic oneness to a dyad. The sensations of the first years of life set the stage for learning, understanding, communication and separation (Brett, 1981). Piaget theorized that the sensorimotor experience helps the child understand what is self and what is not self, eventually preparing them for the cognitive task of verbal symbolization (Crocker, 1963). Initially, infants experience speech through its sensory rather than semantic qualities. They hear the prosodic melodies and variations in pitch, tone, and rhythm. Perhaps they see the speaker’s lips move or even feel bursts of breath. Later words will become symbols but these sensory qualities of speech will also take on meaning by providing emotional layers to communication.

Caruth (1987) explores the idea that these prosodic elements of language can be triggers later in life to early life experiences. Speech can be experienced as soothing, benign, or even hostile: “the phonic elements of the voice – the pitch, the intensity, the tone – can be as hostile an experience as intrusions or battering attacks” (p.44). Even the meaning given to silence in early relationships can be significant like a “merger experience” where separation is “obliterated” or can be threatening like a “repetition of earlier experiences of psychological or actual abandonment” (p. 42).

All elements of speech, language and communication begin gathering meaning during the earliest caregiver and child interactions. The emotional quality of language and

the role of language in a family, in addition to the specific meaning of words, likely have a strong influence on many levels of later social and emotional development.

Nonverbal communication

While language is the primary means of social exchange and communication, it is far from the only available tool. Rogoff (1990) observes: “young children are so skilled at obtaining information from adults’ glances, winces, and mood that one of the greatest challenges of testing preschoolers is to avoid nonverbal actions that may be construed as cues” (p.67). By gazing, watching and eventually imitating, children achieve joint attention and engage in early forms of nonverbal communication – often called social referencing (Rogoff, 1990).

Mothers may accompany their nonverbal exchanges with emotional cues (facial expressions) as well as words (despite the child being unlikely to understand these words). Children are actively attempting to put together the message or “interpret the tune,” using the adults’ “intonation contours and timing and emotional tone of an adult’s commentary to understand the gist” (Rogoff, 1990, p.69). To achieve communication and shared understanding, often called intersubjectivity, both partners in the exchange (adult and child) have to make adjustments to the other. The adult must be sensitive to the perspective of the child and change their effort to communicate accordingly (e.g., vary the pitch of their voice, exaggerate their facial expression of emotion, shift their body to take the viewpoint of the child). The child adjusts by taking an interest and joining the adult’s attention by looking where they look or point, watching their face or body, and eventually imitating a gesture or sound.

While these adjustments to achieve intersubjectivity happen fluidly and naturally in most parent-child dyads, they still involve a tremendous effort, energy and flexibility. Add stress, trauma and poor health into the equation and it is likely to have a negative impact on communication.

Atypical language development: Echolalia

One of the most confounding features of atypical language development is the phenomenon of echolalia – the immediate or delayed repetition of another’s speech. Often observed in autistic children with atypical language, some have argued that echolalia has no social communication function and is purely self-stimulating (Caruth, 1981; Piaget, 1959). Others emphasize that echolalic responses are communicative and even have a place in the early phase of normal speech development (Fay, 1980; Rapin, 1997). Currently, no consensus has yet been reached whether echolalia represents a speech pathology altogether separate from the typical speech development trajectory, or whether it is more characteristic of a delay in a phase of language learning.

Repetition undoubtedly plays a major role in any social learning process as a way of modeling and practicing what is experienced. It has frequently been reported that echoing increases as lexical complexity increases – in other words, children imitate new, unfamiliar words out loud until about the age of 3 (Bloom, 1974; Fay, 1981). This type of echoing and repeating during early language development can take different forms.

Fay (1981) delineated difference levels of echoing in response to unfamiliar words. Using the Peabody Picture Vocabulary Test, subjects under 8 years old were asked to point to a picture corresponding to a word spoken by the examiner. With more difficult words,

more children directly repeated the word back. Children aged 5 and 6 both more frequently and more directly than younger or older subjects. As the children got older and entered a new level of using repetition, overt echoing decreased and whispering took its place. Eventually, all out-loud vocalizations dropped off, with some children continuing to motion the word with their lips. This study upholds the theory that echoing is a strategy some children use to comprehend words just beyond their level of language development. Vocal or mimed repetition (lip movement) helps children tackle unfamiliar or challenging verbal information by providing a 'second hearing.' By repeating the word (the 'echo'), exposure to the word is prolonged. The information is temporarily held in "immediate auditory memory" or "echoic memory" storage for longer to allow more time for resolution, especially while the subjects were searching the visual picture display (Fay, 1981, p. 265).

The children in Fay's (1981) study were clearly involved in searching for meaning and engaged in a task of comprehension while making the echo responses. Children with a diagnosed pathology of echolalia may or may not be using echolalia to process the meaning of words. The answer to whether echolalia is a delayed phase of or a deviation from typical language learning may reside in whether these echoed utterances are used with or without the intention of communication or for the purpose of one's own comprehension.

Roberts (1989) presents a slightly different understanding of echolalia. He suggests that echolalia is an atypical attempt at language learning frequently used by autistic children. Rather than parsing a sentence and repeating single words, echolalic children take a larger portion of the sentence they hear. These "chunks" of sentences are only later broken down into small phrases or single words (p.279). The child then repeats these

phrases when they are in a context similar to the original hearing (delayed echolalia) even if the similarity is not immediately obvious to others. In this understanding, echolalia is a strategy of compensation when there is a deficit in processing the structure of language and meaning of individual words and therefore a deficit in generating spontaneous, unique utterances. To compensate, the child relies on “associative memory,” using chunks of language to label situations and contexts (p.280).

Other research has also given support to the theory that echolalic responses are more than automatic mirroring but are attempts at communication. Charlop (1986) showed that autistic children increased their frequency of echolalia in unfamiliar contexts and with unfamiliar people. Campbell and Grieve (1978) also higher rates of echolalia during face-to-face discourse positions compared to side-by-side positions. Examining how a child uses echolalia to function in their environment may give a more accurate assessment of their expressive language and attempts to communicate rather than traditional measures of length and complexity of utterance.

Some researchers have begun to make suggestions on how to work with and through echolalia, supporting its temporary functional role rather than intervening to directly reduce frequency. Prizant and Duchan (1981) warn that extinguishing echolalia in all forms through behavior modification could be harmful to language development. Instead, they suggest analyzing a child’s patterns of echolalia to discover their individual strategies of communication, such as maintaining social interaction when comprehension is limited. Rydell (1991) more specifically recommends that adults interact using “high constraint utterances” (utterances that require a specific response) when the intention is to

increase any verbal participation from the child. When the goal is to facilitate the child-led communication, whether unique or echolalic, using “low constraint utterances” (reflective or descriptive responses to the child’s actions) is recommended (p.151). Mirenda (1988) also suggests using echolalia and behavior modification to enhance nonverbal communication skills (attaching meaning to gestures and utterances) through game playing. Rather than imposing a typical communication style on echolalic children, each of these interventions uses and enhances the child’s available skills.

Language and Trauma

As psychologists and neurologists begin to expand the definitions of trauma and elucidate the impact of stress on the brain and body, it is important to also examine changes in major milestones of child development such as language disorders.

Research on trauma is extensive and has exploded in recent years as the long-term neurological and developmental impact of traumatic events as well as traumatic stress are becoming more fully understood. With regard to trauma’s effect on language development, deficits have been observed in vocabulary, fluency, listening, mutism, social discourse and symbolism (Yehuda, 2005).

Beeghly (1994) examined the language of toddlers and showed that those who had been abused or maltreated had less internal state language (words to describe their feelings such as happy, sad, tired). Additionally they showed deficits in social language use, making fewer attempts at interaction and fewer descriptions of themselves. The authors suggested these language observation represented a lag in the development of self and other differentiation.

Traumatic childhood events have also been shown to lead to brain abnormalities in the areas of memory and language such as diminished hippocampal volumes, reduced corpus callosum size and less activity in the cerebellum (Bremner, Randall, & Vermetten, 1997; Ito, Teicher, Glod & Ackerman, 1998). Giedd (2003) has shown that increased pauses during speech may be related to disruptions from early psychological trauma affecting the corpus callosum, resulting in decreased communication between the left and right hemispheres and less fluid translation of thoughts to speech. The ability to process increasingly difficult cognitive tasks, such as mentalization, Giedd suggests relies on the transfer of information between brain hemispheres through the corpus callosum. During childhood, the corpus callosum undergoes dramatic growth and change and is therefore highly vulnerable during this period. Children with a history of abuse show less hemispheric integration leading researchers to believe that traumatic events may be compartmentalized in the right hemisphere where they are less accessible to the verbal right hemisphere (Giedd, 2003).

Expressive language impairments have been documented not just with children, but with adults with a history of trauma as well as those with a diagnosis of borderline personality disorder. In subjects with a diagnosis of PTSD, exposure to trauma-salient stimuli has been shown to have a negative effect on both language and delayed memory retrieval as shown through decreased activity in Broca's area – the area responsible for verbal production (Rauch, 1996). Zlotnick (2001) sought to examine the associations between PTSD and the inability to verbally describe or identify emotions, a pathology

referred to as alexithymia. The researchers found that PTSD and BPD were the disorders most strongly related to later alexithymia.

To examine more closely the mechanism by which language is interrupted by the trauma response, recent research by Carter and Grenyer (2012) examined how adult language becomes impaired during moments of emotional dysregulation when traumatic memories are activated. The Adult Attachment Interview was used to elicit samples of subjects verbally describing emotional material, intended to trigger emotional dysregulation. These samples cued relevant traumatic memories in early childhood such as separation, rejection and physical harm. Deficits were evident in increased number and length of pauses and reduced complexity of sentence structure. Subjects with borderline personality disorder had greater overall expressive language deficits during emotional vignettes but were relatively similar to controls during neutral conditions. The authors used this finding to support the idea that emotional arousal interferes with expressive language on a neurological level. Brain imaging studies have shown activation of the pre-frontal cortex and increased activation in the amygdala during exposure to trauma-salient stimuli (Donegan, 2003; Minzenberg, 2008).

Stress

Another, related, pathway between environment and language deficits is the hormonal stress response, specifically the HPA axis. High levels of stress, measured hormonally rather than by identifying specific traumatic events, have been shown to permanently change the hormonal response to stress and affect development (Sturge-Apple, 2012). Children enduring long-term stress early in life develop persistent activation

of the central nervous system's stress response. In this state of hyperarousal, it is likely that the child will have difficulty incorporating complex cognitive information as is required for developmental tasks such as learning language. Perry (1997) describes these children as hypervigilant to threat and likely to focus more on non-verbal cues that they recognize as threatening rather than the words that accompany the actions. Perry maintains that only when the child is "significantly calmed" will they be able to incorporate and benefit from words (p.134). Effects of hypervigilance in the face of chronic stress may also be more permanent: higher levels of cortisol have been shown in children exposed to ongoing trauma and anxiety which may have deleterious effects on the hippocampus and may be responsible for the relationship between abuse and expressive language deficits (McAuley, 2009; Music, 2011).

The body's cortisol levels (its hormonal response to environmental threat and stress) are mediated by the hypothalamic-pituitary-adrenal (HPA) axis. Cortisol is known to function adaptively to perceived threats by mobilizing energy and increasing cognitive processing of emotionally significant events (Sturge-Apple, 2012). Sturge-Apple (2012) found that children exposed to interparental violence in the home had lower cortisol reactivity to interparental aggression in the laboratory context (a situation where reactivity should be high). They concluded that these children's physiological stress systems had adapted to insecurity and were consistently primed to respond to possible threat. In other words, their baseline was higher. Researchers suggested that this lower cortisol reactivity might represent a form of dissociation or attempt to inhibit the psychological impact of fear. In the same study, maternal emotional unavailability was also correlated with higher

base line cortisol levels before a stressful task (the strange situation) but lower reactivity to the stressor.

Domestic Violence

An often-cited source of trauma or stress in the research on child language development and maternal mental health is domestic violence. Domestic violence is a particularly relevant category of trauma because of its dual effect on mothers and children. Young children may directly or indirectly witness explosive arguments and physical abuse between parents. Researchers have put forward that domestic violence situations present intense stimulation, arousal, threat and terror for child witnesses, exacerbated by the fact that the situation is uncontrollable for them, creating a pervasive feeling of helplessness (Yates, 2003). Re-experiencing symptoms specifically may be distracting, intrusive and “divert attentional resources” from other areas of learning and development (Saltzman, 2006, p.270). The impact is particularly great for children before preschool age because these early experiences form the foundation for development and later coping strategies.

Domestic violence additionally impacts children through maternal mental health. Cashman (2010) suggests that one especially impactful symptom of a mother’s DV trauma is alexithymia, as discussed earlier in relation to PTSD and BPD. Alexithymia is thought to stem from avoidance of trauma-linked emotions, which develops into an inability to identify these emotions. In these environments, the use and modeling of internal-state language is stifled.

Exposure to domestic violence and its emotional effect on caretakers additionally takes a toll on children’s acquisition of affect regulation skills. Chemtob (2004) has shown

that mothers who had experienced domestic violence and had PTSD were more likely to be quick and impulsive towards children. While most of these mothers sought mental health services for themselves, most did not seek services for their children. Women with a history of domestic violence and PTSD may underestimate their children's exposure and distress. If this distress is unrecognized and repeatedly ignored, children may also be experiencing a degree of emotional neglect (Kernic, 2002). In a study of children's articulation, Culp (1991) found that neglected children, when compared with abused children, were more delayed in language skills and performed worse on auditory and verbal scales.

De Bellis (2009) researched children with a history of neglect and a history of witnessing domestic violence. These children showed significantly lower scores on verbal fluency and overall receptive language capabilities than controls. Lower IQ and impaired visual-spatial, learning/memory, and attention/executive function capacities were also found. While some have argued that linguistic functions are negatively impacted in parallel with cognitive and physical development, other have emphasized the specific vulnerability of speech and language problems (Law, 1992). Deficits in expressive language are highlighted by Gersten (1986) in a study of maltreated and insecurely attached toddlers. This group used less syntactically complex language, had shorter mean length of utterance, fewer total number of unique words, and used more content-less filler utterances than cognitively matched, securely attached controls. Coster (1989) found that in an assessment of maltreated and non-maltreated children, the two groups differed on all measures of language expression but not on vocabulary. More specifically, the maltreated group had

less descriptive speech including content referring to their own activities and feelings, a finding replicated by McFayden (1996).

These effects bear out in correlations between exposure to domestic violence and speech and language disorders in school-age children. Communication delays can be seen in areas such as grammar, vocabulary, comprehension and production, conversational skills and receptive or expressive syntactic skills (Beeghly, 1994; Law, 1992). Kernic (2002) examined the behavioral, academic and health problems related to domestic violence by comparing public school children ages 5-16 who had been exposed to domestic violence, those who had been exposed to domestic violence and abused, and their non-abused, non-exposed peers. On the measure of referrals to the speech pathologist, non-abused, domestic violence-exposed children were 7 times as likely to have speech and language concerns. Interestingly, the authors found there were no speech pathology referrals for the abused, domestic violence exposed group although this was a relatively small cohort. Caregiver stress and subsequent neglect of caretaking activities was suggested as a mediating factor for speech disorders. Decreased immune function due to the direct impact of stress on children was also seen to play a role in the increased health problems in the domestic violence exposed group.

While much of the research on the influence of DV has been done using school-aged children as subjects, recent work has illuminated the dynamics of parenting very young children in the context of domestic violence. Schore (2002) has shown that a mother's lack of emotional availability interferes with the child's capacity to regulate affective experience and learn emotional descriptive language. More specifically, exposure to DV may inhibit a

mother's ability to regulate her own affects and behaviors which then compromises to model regulation for her child (Fonagy, 2002). Schore (2002) has contended that due to the central importance of the mother-child relationship in early development, a parent's ability to expand positive affect and moderate negative affect is necessary to teach emotional organization to the child.

In a review of research from 1975 to 1992, Katz (1992) discusses the idea that communication and language problems stem from early interactional patterns mutually established by infant's temperament and mother's style of relating. Rather than language deficits creating poor communication, they are the result of patterns of interaction with diminished reciprocal language stimulation. This model acknowledges the mother-infant style as mutually reinforced. While mothers' may bring their own mental health issues and experiences of trauma into the language relationship, young children's developmental disabilities may also compound the challenge. The caretaker's difficulty in adapting to their child's special communication needs diminishes any further opportunities for language stimulation and reinforces problematic interactions.

Skuse (1992) underscores that language development, similarly to how we conceive of physical development, is dependent on sufficient and appropriate stimulation and attention by the caregiver. Turmoil in the home may reduce normal, non-argumentative talking behaviors, which could be crucial for language development during the preschool years (Katz, 1992). Parents may additionally find little value in talking to their children or children may reduce talking due to fear of failure or of making a mistake (p.156). Whatever the specific reason, neglectful or violent home environments may lack the rich language

stimulation crucial to language development. Yet, it is also possible that the harmful effect of trauma or domestic violence in the home can be mediated through home environment, external supports and parenting behaviors.

Interventions

Standard interventions for speech and language delays differ significantly from those targeting individual trauma or family stress. Language impairments are generally considered the domain of speech therapists and addressed through school supports (Katz, 1992). Some researchers have begun to make recommendations for considering environmental and relational factors when treating the individual child. Katz (1992) emphasizes the importance of having school speech-language pathologists who are trained in recognizing neglect and abuse since comorbidity is high. Yehuda (2005) outlines specific trauma-informed techniques speech-language pathologists can use such as “grounding, narrative, the vocabulary of sequence, the words for emotions and body-states, and the listening skills for following and engaging in conversation” (p.28).

Individual speech therapy has a role for any child struggling significantly with language expression and comprehension, especially since it can be difficult to determine environmental or biological cause. Understanding of how the environment changes neurological functioning during early childhood development is still taking shape. While certain risk factors may not produce language impairment on their own, the combination of biological predisposition and disruptive environment may have a profound impact. Interventions targeting caregiver and child interactions are not meant to take the place of

work with a speech pathologist but to enhance the likelihood that a child's speech can be supported and encouraged in their home environment.

Addressing the home environment is widely considered a key to facilitating change (Bishop, 1992; Skuse, 1992; Yehuda, 2005). Psychobiological evidence for the stabilizing influence of an external support system in stressed families has been shown through decreased salivary cortisol levels of children in early childcare (Chryssanthopoulou, 2005). Supports such as quality preschools and positive relationships between staff and students have been shown to be protective of cognitive development for children at risk due to poverty and other familial factors (Hall, 2009).

Katz (1992) also suggests that providers work closely with parents to provide different and more focused language stimulation with the intent of adjusting communication patterns. Due to the fact that many abuse and neglect cases are referred before the child is four years old, a time when language development is considerably active and sensitive to disruption, preventive environmental interventions should begin as early as possible (Law, 1992). Attachment interventions targeting caregiver/child interaction are specifically recommended to prevent a "reinforcing negative spiral in the relationship between parent and child" which would contribute to disruptions in language and communication skills not evident until later on (p. 946).

Many psychodynamic-oriented attachment interventions hone in on a parenting skill referred to as reflective functioning. Reflective functioning interventions directly stem from Bion and later Fonagy's (2002) theories of mentalization. Mentalization very generally refers to the capacity to envision mental states in self or the other (Lagos, 2007).

Mentalization, through the activity of reflective functioning, allows a parent to make sense of her own and her child's mental states. This process plays a crucial role in helping the child develop means of regulating his or her emotions that are flexible and adaptive as well as allow them to engage in productive and ongoing relationships.

Recently, Slade (2006) identified reflective functioning as the process responsible for the success of many attachment-focused interventions with parents and children and outlined more specific intervention efforts. By focusing on building reflective functioning capacities and skills, interventions can help change parental representations of the child and as a result, alter caregiving behavior. Slade delineates the following stages of parent's reflective functioning:

- a.* Awareness that young children have thoughts, feelings and intentions.
- b.* Desires, emotions, and thoughts can drive behavior and paying attention to them can help a parent understand behavior.
- c.* What a parent is thinking and feeling intersects with what the child is thinking and feeling – parents become aware of their own role in determining how the child sees himself and how the feelings of parent and child mutually influence each other.
- d.* While interconnected, parent and child have two minds, which can disagree, and conflict.
- e.* Misunderstanding and misinterpretation of another's intentions is a common experience (Slade, 2006).

Reflective functioning is particularly challenging for parents of children with developmental disabilities. Slade (2009) refers to this as “mentalizing the unmentalizable” and points out the unique challenge parents face when trying to build a relationship with the children on the autism spectrum with neurobiological-based deficits in social interaction and reciprocity (p.7). While children differ in their inborn capacities to mentalize, all children need mentalizing from their parents: “Early relationships create the opportunity for the child to learn about mental states and determine the depth to which the social environment can ultimately be processed” (p.2). Social competency begins with self-other differentiation and the extent to which ‘others’ can be known and understood is determined by the first caregiving relationships. If a parent is ‘unknowable’ in the sense that they have difficulty recognizing and communicating mental states (due to trauma, alexithymia, or depression), this skill may also go undeveloped in their child.

There is a general consensus that neglect, abuse and trauma (parental or child) influence development and evidence is mounting of higher speech and language delays in this population. Still, the patterns of impact and vulnerabilities may be individually determined by each child’s experience and environment (Katz, 1992). The previously discussed interventions involve working within the specific family dynamics and life circumstances of an affected child rather than applying a standardized practice. For this reason, case studies examining the child’s specific language and emotional environment are useful.

Case Study

Methods

During my second year as a social work intern, I was placed at a foster care and prevention agency serving children and families with developmental disabilities or special medical needs. The New York City Administration for Children's Services describes Prevention services as services "designed to ensure that children remain safe in the home and to prevent children from entering foster care" (ACS, 2013). Specific services are contracted through social services agencies and include anything from family counseling to substance abuse treatment. Families tend to be referred to preventive services when there is evidence of abuse or neglect but no imminent risks are identified by the ACS caseworker and removing the child to foster is deemed unnecessary.

In my capacity as preventive caseworker, I was assigned a caseload of families (referred through ACS) with children identified as having a developmental disability. For the most part, parents presented as overwhelmed by their child's needs, as well as besieged by their own histories of trauma, neglect, chronic stress, poverty and poor mental health. When assessing the children it was a challenge to parse the symptoms of their developmental disability from the effects of a stressful and chaotic environment.

Contacts and Data Collection

I was responsible for making at a minimum two contacts with the family per month with at least one of these being a home-visit. Other contacts could be made in the agency office or at relevant community locations such as schools or doctors' offices. Goals were identified with the caregiver and included concerns outlined in the initial ACS referral.

Caseworkers attend to multiple areas of functioning and need in the family: Education, medical, mental health, safety, and government benefits. While individuals could be referred for separate intensive mental health counseling, each visit with the family included a clinical piece of assessment (parenting skills, trauma, domestic violence, etc.) and intervention.

The following case of Wanda and Joseph is compiled from 9 months of observations documented through case notes written during and after visits. Frequency of contact ranged from at least 2 to at the most 5 visits a month. The observations and case material presented here are mostly from interactions in the family's apartment but also include some descriptions of the family in the community and Joseph in his school. Additional data was collected through conversations with school staff as well as from evaluations completed by other providers (psychological, speech, OT, PT).

Although much of my discussion of this case is through a clinical lens, it is important to note that my role with Joseph and his mother was not as a psychotherapist. Although ideally interactions with the caseworker have a therapeutic effect (as discussed later), my primary role was to assess safety and help the family meet concrete goals. The broader goals I worked on with Wanda and Joseph are mentioned briefly in the case, but more in-depth discussion is reserved for my observations of language use and experience of communication in the family.

Family Background

Wanda is a 42-year old woman and originally from Panama. She lives with her 17-year old daughter Cassie and 4-year old son Joseph. Joseph has a diagnosis of Pervasive

Developmental Disorder as well as a history of febrile seizures. Wanda also has five other children living out of state. Three elementary school age children live with their father and she has two older sons who live independently. These children were not included in the prevention services and I did not have contact with them. Wanda frequently expressed missing them and a desire to visit them but did not discuss the specifics of her history with them.

Wanda was referred to my agency by child protective services after Joseph's special education pre-school raised concerns about his frequent absences (he had not attended a full week all year). During the initial intake, Wanda explained Joseph's absences at school were due to issues with the bus company. When asked what her own concerns were, she focused on her poor relationship with her daughter Cassie. According to Wanda, Cassie refuses to accept supervision and is disrespectful towards her mother. Their fights occasionally turn physical with Cassie throwing objects and yelling and more than once the police have been called.

At the time of intake, Wanda was open to receiving preventive services and willing to engage with me. We attempted to set mutually agreed upon goals in the areas of medical, education, entitlements and mental health and identify specific steps to achieve these.

Domestic violence

As I built rapport with the family and learned more about their past, it was revealed that Wanda has a long history of domestic violence with four different partners.

Her first husband died suddenly when she was in her early twenties and she reports this as a traumatic loss. Throughout her next three marriages, she was in and out of domestic violence shelters. She had a number of specific traumas in her history (sexual abuse and physical abuse as a child) as well as high stress due to inconsistent housing and poverty. Wanda explained to me that she suffered from depression and anxiety and also had a diagnosis of PTSD. She had engaged with mental health treatment for short episodes in the past but did not want me to contact previous providers. She expressed enthusiasm about receiving individual therapy at the agency with a separate worker but inconsistently attended appointments and this service did not continue.

When I first met the family, Joseph's father, Leo, was still occasionally staying in the house although I never met him. Within the first month of my involvement, Leo left the house after fights with Wanda escalated and she threatened police involvement. He returned once while only Cassie was home and "trashed" the apartment, breaking the television and taking their computer. At this point, Wanda called the police and obtained a restraining order against him.

When asked directly whether Joseph witnessed any domestic violence in the home, Wanda at first denies he was exposed to these scenes. Yet, with a little more probing, she discusses that he was at home during these incidents. She imagines that he was sound asleep or playing in another room, completely protected from the sights and sounds of arguments.

W: Sometimes it was every night. He got jealous and it would really set me off. Screaming, throwing, he hit me in the face with the phone.

IJ: That sounds very frightening. How did the fights end?

W: We got so loud sometimes the neighbors would come in or call the cops.

Sometimes I called...or Cassie would call. Then he'd leave.

IJ: So Cassie saw a lot of this. Where was Joseph usually?

W: He was never a part of it, but he'd miss his Daddy when he was gone. That late, he was asleep or in the other room. I remember I closed the door.

IJ: You were trying to protect him.

W: Yes, I did. I didn't want him to see his father like that. Or me like that.

Wanda holds on to idea that she completely shielded Joseph from the fighting.

During those episodes, his experience was completely separate from her own; she is able to see herself as Joseph's protector and also preserves (in her version of Joseph's experience) an untainted image of Leo as a 'good father.'

While Joseph may not have witnessed abuse visually, he was likely exposed to the frightening sounds and atmosphere of domestic violence. The noise was loud enough to signal alarms for the neighbors and Cassie describes a tense and fearful atmosphere in the house - as if things could erupt into screaming and fighting at any moment. Dayton (2009) suggests that reporter bias, like Wanda's, is fairly common in the form of mothers minimizing their child's direct exposure to domestic violence either as a form of denial or due to poor attunement to their child's experience.

A home environment of fear, arousal and alarm has detrimental effects on development from two directions. Joseph directly experiences fear arousal through the

sound of arguments. Screaming, breaking, crying are repeated alarms that signal the brain to be careful, that something is wrong. A traumatic stressor has been defined by the Diagnostic Classification of Mental Health and Developmental Disorder of Infancy and Early Childhood (National-Center-for Clinical-Infant-Programs, 1994) as a child's "direct experience, witnessing, or confrontation with an event or events that involve actual or threatened death or serious injury to the child or others, or a threat to the psychological or physical integrity of the child or others" (p.19). Domestic violence between parents can certainly fall into this category as marital violence threatens both the direct wellbeing of the child and the wellbeing of their primary caretaker.

Attachment theory suggests that young children depend on their primary caretakers not just for physical health, but for psychological health and growth – for assistance in emotion regulation. Threats to the attachment figure are therefore threats to the child's mechanism for regulating physiological and affective states.

Wanda's difficulty with emotion regulation was clear in her interactions with others. She was able to maintain calm composure throughout most of our visits but when triggered to anger (usually by a phone call from a family member) she was unable to modulate her response. Anger quickly escalated to continuous screaming of threats and allegations without pause for multiple minutes. Surprisingly, I observed her able to return to our previous conversations with little explanation of acknowledgement of the outburst on the phone. All emotions, whether anger, shame or other mixed feelings around these outbursts go unverbilized. When asked to reflect on what happened, Wanda may casually comment

that maybe she overreacted but is unable or unwilling to elaborate and turns the conversation away from her emotional experience.

Other times, she admitted she struggled with crippling feelings of depression:

W: Sometimes I can't get out of bed in the morning. Usually when I have my monthly but other times too when I'm thinking about everything. I know those days I miss Joseph's bus but it probably didn't show up anyway.

IJ: What does Joseph do on those days?

W: He'll play. Make himself breakfast. Cereal and stuff. Sometimes he'll come in bed with me and want to know why I'm sad. I think he gets sad too.

Throughout these conversations, Wanda's explanation for what Joseph does on these days seem unrealistic given his age and limitations. She does not seem to be connected to his experience. When describing emotionally triggering material, Wanda would occasionally display a dissociative response. Eye contact was avoided. Sometimes she even appeared to be falling asleep, eyes closing or tuning out of the conversation mid-sentence to watch TV.

Her communication style also had a dissociated quality. Her use of language was connected to her experience but was unable to describe it in a way that let her use language as a means of expression. As described with alexithymia, her past traumas made emotional expression too vulnerable so she divorced language from meaning and avoided using internal-state language. When she was triggered by some interaction, she would become rageful – losing control and spilling verbal abuses that represented her anger but did not communicate the feeling as an inner experience: "I am going to break your face" instead of "I am so angry!"

If a parent is unable to regulate his or her own affect or internal experiences, it will be difficult to provide that experience for her child. Wanda was able to describe her experience to me, but not in a way where it felt she was communicating some kind of affect, or trying to be understood. I often felt like I did not exist in the room – that I was being talked at but nothing was being communicated – this could also have been a slightly more purposeful tactic to prevent me from talking or addressing any agenda, but I think that tactic was protective and extended to many other people in her life, including her children.

For Joseph, the model of emotion regulation his mother employs is one of sadness and anger being completely overwhelming rather than tolerated, expressed and explained. There is little differentiation between levels of triggers, similarly to the hypervigilance described in the stress-response to repeated trauma. Everything is experienced as a high-level threat. Trauma reactions such as these are prevalent in Joseph's environment and leave little energy or space conducive to developmental tasks.

Early Attachment

At the time of Joseph's birth, the family was living in a domestic violence shelter and Wanda reports that this was a very stressful time as she was struggling with whether to have a relationship with Joseph's father. Cassie, the teenage daughter, has described Joseph as being primarily attached to her during his first few months:

C: " Joseph thought I was his mom...he was so cute, I would hold him on my chest, he would sleep with me and follow me around... My mom joked that he loved me more

because I had big breasts. I loved that he had this long hair that I would brush down over his forehead.”

When I asked Wanda about Joseph’s early attachment, this was her response:

W: “Yes, he and his sister were really close, but I don’t remember much about that time. There was so much going on for me.”

Cassie also described a turning point in her relationship with Joseph:

C: “It was too much for me, I was in 8th grade and couldn’t be a mom. I would have to kick him out of my room and shut the door on him when my friends came over. I had to be mean to him just to get him to leave me alone.”

All of Joseph’s primary caregivers during the first years of his life (Mother, Sister and Father), seem to report deep affection for Joseph but a lack of consistent caregiving due to interference from other stressors. His caregivers were frequently preoccupied and attachments repeatedly disrupted.

Early Development

It was around age two that Wanda started noticing Joseph’s atypical development. She says he crawled and walked and babbled when expected but she noticed that he did not make eye contact or respond to his name. Medical issues were also noted: He had many allergies that would result in rashes. He would also have small seizures if he had a very high fever resulting in parental panic and a rush to the hospital. One of the few fond memories Wanda recalls of Joseph’s father at this time is his tender fear and worry over Joseph’s health. When he would have a febrile seizure, they would rush to the hospital together.

As Joseph grew he also began head banging, rocking, spinning, hand flapping and lining up objects. He was extremely sensitive to light, loud noises, water and certain fabrics – when overwhelmed by sensory input he would have inconsolable tantrums. Wanda noticed these behaviors and brought her concerns to the pediatrician who brushed them off. Persisting, Wanda was able to have Joseph evaluated by Early Intervention at 15 months. He was given a diagnosis of Pervasive Developmental Disorder NOS. He began receiving ABA therapy, speech therapy and physical therapy in the home five days per week. With pride, Wanda says she fought to ensure good therapists and that because of this he made a lot of improvements. Additionally, she explains these providers were helpful in teaching her about his diagnosis of PDD.

Given their otherwise chaotic environment, it is likely that these early intervention services brought a lot of routine, consistency and support into the home. Wanda felt like this was a time when she was learning to help her child and figuring out how to engage with him. Although she went through a number of providers, she eventually found the therapists helpful, supportive and developed good relationships with them.

When Joseph entered preschool at age 3, many of the repetitive and self-injurious behaviors had decreased. During my work with him, he occasionally rocked but no longer flapped hands or fingers and was less reactive to his sensory environment. Inconsolable tantrums at home and at school were reported as an ongoing issue, but I was never present at the time to witness these. Joseph's preschool teachers were primarily concerned with occasional tantrums with aggressive behaviors, mostly occurring when he returned to school following a prolonged absence. When he was there everyday and became used to

the routine, they reported he was able to engage in activities with concentration and pleasure.

Speech, communication and social interaction

Most significant at the point that I met the family, were Joseph's speech delays. Joseph's verbal communication was almost exclusively echolalic; he would repeat back to me questions I asked or statements I made to him. In his echolalic statements he would emphasize the melody and tone of speech, as if playing with it. He did not seem to recognize his name – he did not respond to it and produced it back to me as if it was any other word. Speech interactions were limited to one or two back and forth with question and answer or echolalic response.

IJ: Hi Joseph!

J: Hi Joseph!

IJ: How are you?

J: How are you?

He was sometimes able to mitigate the echolalia, offering a slightly different version of what he heard. This was more likely to happen when an action of labeling of 'finding' was involved.

W: Do you see Elmo?

J: Sees Elmo? [points to Elmo on the TV]

Joseph's psychological evaluation described his spontaneous speech as a "mix of jargon and word approximations." It was observed that he could spontaneously some

pictures such as “i-cee” for ice cream, “bah-yoon” for ballon, “plane” and “tree.” On the Vineland Adaptive Behavior Scales, the psychologist noted that Joseph’s functioning in the communication domain was low for his age group in both receptive and expressive language. Wanda was adamant that his verbal and communication skills were stronger than observed by myself or other providers. She would demonstrate that he would follow some directions such as pointing to or fetching objects. In particular he showed recognition of the letters of the alphabet and could label his sister’s face when given a picture as well as give the names of favorite cartoon characters.

In the home, I also observed Joseph would try to get his mother’s attention or my attention by bringing over books and toys. He had limited engagement with the objects themselves but was enjoying the acts of bringing, finding and gathering. It seemed like he was trying to engage with others and begin a social interaction using the objects as a tool.

Over time, I observed these invitational gestures more frequently. Wanda would sometimes ignore the gestures and other times respond by labeling the object or asking, “Do you want to play with this?” The interactions remained short without evolving into a more elaborate reciprocal experience. During one visit in particular, Wanda was describing her frustration with the school while Joseph was eating cookies on the floor. Joseph begins to play with cookies and spit the crumbs out on the floor. Wanda notices, yells at him to stop, and takes the cookies away. Joseph begins sobbing and leaves the room for 10-15 minutes. When he returns, he has another cookie. He places it on the floor but does not eat it, almost daring Wanda to comment. He sits for a few minutes before inching himself over to Wanda. Once in close proximity, he lifts her foot and places its sole on his cheek

and face. Wanda continues to talk with me without addressing Joseph or commenting on the behavior. As the gesture continues to be ignored, Joseph eventually turns his attention away and back to the cookie.

Joseph would also play little games. When his mother turned the lights up in the living room to show me a particular document, he would crawl up on the couch, turn the lights down, and then stand poised in front of his mother, his body turned to run away, but his face staring back at mom – as if to say chase me! Or seek some kind of response from her. In my observations, his requests for games such as these were often ignored – he would be yelled at if told to stop too many times and instructed to watch TV. Wanda saw the behavior as something to be disciplined and stopped rather than something to engage in.

Intervention

Intervention through preventive services is primarily focused on the parent. By working with Wanda, I was attempting to make changes in Joseph's environment that would allow him to access and receive appropriate direct services. Additionally, a secondary benefit was possible if Wanda was able to adjust her interactions with Joseph to support his development particularly in the area of communication.

The purpose of my involvement was to increase Joseph's school attendance and more generally increase his mother's ability to create a consistent predictable environment for Joseph and herself. As I got to know the family, I realized just how big a task this was. There seemed to be crisis after crisis that made creating routines impossible: first Joseph was apparently injured on the bus and Wanda was too angry and uncomfortable to send

him to school. Later, Wanda kept Joseph home for weeks because she wanted to ensure the school had an order of protection preventing Joseph's father from picking him up from school.

If not a crisis, Joseph was often absent due to frequent illness. Wanda would say he had missed school because he was sick with fever or a runny nose. I was not in a position to question this, but she agreed that if he were sick, she would get a note from doctor to excuse the absence. This usually meant taking him to the emergency room where she would get a note saying he could return to school in 2-3 days. My suggestion to get Joseph a pediatrician in the neighborhood was adamantly refused – up until around termination, when Wanda brought this up as her own idea.

Crisis was a frequent theme of my visits. It is possible that my visits, especially initially, were stressful for her and incited defensiveness in the form of a crisis which would take attention away from addressing baseline family functioning. When triggered to stress and anxiety, Wanda would often use a splitting defense and start thinking in extremes. She would quote her father saying: "If someone's not for you, they're against you." The school was seen as out to get her and take her children away – an understandable reaction for parents involved in child protective services, but in this case not reality-based. There was no discussion of removing the child from her care; although I suspected custody of her other children had been to other family members (she would not confirm this). A major challenge in my work with Wanda was to help her experience the school as a positive support with mutual goals and diminish her perception that they were 'out to get' her.

During my home visits I worked on specific goal setting and problem solving but also tried to take every opportunity to help Wanda see the side of Joseph that was making efforts to communicate and interact. Once she could recognize these invitations, I hoped to assist them in building on these moments in a playful way. Once immersed in play with Wanda I hoped he would produce more spontaneous verbalizations and utterances as new, exciting ways to communicate and share meaning were developed.

One of the goals for adjusting Wanda and Joseph's communication patterns would be to increase even short reciprocal interactions. Child-directed speech that builds on Joseph's existing language skills and creates space for and the expectation of a response would return the communication function of language. Joseph would be seen less as a recipient and more of a participant – even if his initial participation was extremely limited. This approach not only intended to increase spontaneous speech, but encouraged mutuality and trust in the relationship – ameliorating some of the disruptive fear and stress currently characterizing their interactions.

Over the course of seven months, I saw Joseph make improvements despite continued issues with consistent attendance at school. His eye contact was more sustained and he remained interested in conversational interaction for longer. He could continue to respond for more than one or two rounds of questioning. Echolalia was still present but a tolerance for (and interest in) staying in a conversation was developing.

More relatedness was also evident in his nonverbal communication of facial expressions and in play behavior. He was quick to smile and sometimes exaggerated different emotion faces of sad, angry, and happy. This could be used as a form of

interaction with him. Using his tendency towards repetition, I developed a game with Joseph and Wanda where he would copy the emotion on the adult's face. Sometimes the adult would change their expression from exaggerated sad to exaggerated happy, other times Joseph would take the lead and the adult would follow. After each mirroring, he would laugh and begin another round.

Joseph was also more interested in me. During one visit I arrived while his mother was doing a Tai-Bo boxing exercise video. She got on the phone soon after I arrived and Joseph stayed in the room with me. He stood on the exercise mat and attempted some of Billy Blank's moves. I joined him in the activity, simplifying and exaggerating the exercises. Joseph turned to me, smiled and began imitating my moves. We started a back and forth mirroring game. I introduced verbal component by trying to label the body part instead of gesturing and he would respond by moving that body part similarly to the video. Soon, he was the one saying the body part, and I was the one moving. His eye contact was consistent - switching from me to the television at appropriate times. The game showed a capacity for much more sustained interactive play than I had experienced with Joseph before.

At another point, I rode the public bus to school with Wanda and Joseph and witnessed him interacting with another child. Wanda had previously told me Joseph was overwhelmed on public transportation and would likely have a tantrum. She was preoccupied that day by a morning fight with her daughter and I was working with her on calming down before a school meeting. In my peripheral vision on the bus, I watched Joseph sit next to a boy his same age. Joseph turned to smile at him and when the bus lurched, the boy laughed. Joseph laughed back with a similar pattern and a game was

instantly started. They would alternate between mimicking each other's laughing pattern and spontaneous giggling. No words were exchanged but Joseph was clearly relishing this social experience.

I interrupted Wanda to subtly point out what was happening. First, she smiled it off and continued her story. But I persisted and began to narrate a little of what was going on in order to clue her into how special the moment was for Joseph and help her be in a moment of observing her son. I commented to her what he might be thinking and feeling at that moment and reflected on how nice it must be for her to see her son enjoy himself. This moment of reflective watching seemed to calm her - distracting her from the troubles of the morning, the anxiety of the afternoon and allowing her to tune into her child as he played.

Consistency and Routines

The main preventive services goal with the family was to establish regular school attendance. Along with this would hopefully be other routines such as consistent bedtime, meals, social activity, etc. It became clear that Wanda had little experience with consistency- it was absent from her own childhood and lacking in her subsequent tumultuous adult relationships. Taking small steps, I tried to establish regular, predictable home visits with rituals and patterns, hoping that the family would find this steadiness therapeutic in itself. Knowing when and what to expect would decrease Wanda's anxiety and make determining real or imagined danger a little easier, a little clearer. Wanda would push back on these efforts: appointments were cancelled, missed entirely or she would not be home when I arrived. Sometimes she would make plans by agreeing to a date and time,

but refuse to write it down. Other times she would simply be out of contact, letting her phone ring and voicemails pile up.

It was becoming the work itself to try to keep these routines and I felt that maybe the family was not ready for this consistency. I shifted my focus to establishing routines not in the timing of visits, but in the content. Closing a visit became important. Early on, Wanda had asked about an impending hurricane (Sandy). As we discussed, it became clear she had more news about what was being predicted than I had and she was able to offer valuable information. In the months that followed, visits would end with Wanda telling me about the upcoming weather. It seemed to be her way of empowering herself by imparting valuable knowledge and reducing anxiety about my visits. No matter how difficult our meeting had been, we would finish and repair with this routine. I was especially careful to maintain a posture of positive regard, interest and appreciation during these moments.

As I gathered observations of the family, I suspected that some of the unpredictability Wanda maintained in her life was both a symptom of her depression and a tactic to ward off depression. Wanda had made it clear she was not ready to access her own mental health treatment, so I responded by shifting the focus of my interventions away from changing behavior through routines and towards trying to model a 'way of being' with Joseph.

The 'way of being' was specifically intended to develop her parental capacity for reflective functioning. The first step was to help Wanda simply observe her son and let herself be absorbed in watching. I used the example of witnessing Joseph making a friend on the bus to illustrate what observation could feel like and reveal. "Let's watch" became a

cue to turn attention to Joseph. Eventually, I would start to narrate Joseph's actions and make guesses about what he might be experiencing and feeling as he played. The purpose of this was for Wanda to be able to see her son as a separate entity and imagine his feelings as distinct from her own. Once she was able to represent him more accurately, she could then reflect his experience back to him in a more meaningful way (the building blocks of communication).

Parental Representations

Parental representations are not just informed by the child, but by all of the parent's history. For Wanda, her representations of Joseph were a mosaic of her childhood experiences, combined with associations of domestic violence with his father and her image of him as a sick child, vulnerable to seizures and diagnosed with autism.

Within these muddled representations, a few themes become clear. For one, experiences are compartmentalized into 'good' and 'bad' categories. Wanda reported a generally positive childhood but also had a history of sexual abuse. She separates these traumatic experiences from her general experience of being a child, allowing her to maintain positive identifications with childhood. Similarly, although she no longer speaks to her mother, she maintains a good relationship with her father. In lieu of full integration, she was able to use the 'good' experiences to her benefit. Despite adversity, aspects of Wanda's own early life provided a sufficient foundation and model for developing positive attachments with her children.

Secondly, for Wanda, Joseph is inextricably linked with memories of his father, Leo. Joseph possibly represents both a reminder of the intense love experiences as well as the

rejection, jealousy and violence. The memories of Leo are either all good or all bad. Given how difficult it was for Wanda to integrate the 'good and bad,' these representations may have introduced a degree of ambivalence in her relationship with Joseph.

Lastly, Joseph's special needs represented an area where Wanda could see herself as a successful caretaker: she had noticed Joseph's atypical development, worked hard and succeeded in getting him many services. She strongly associated with the image of herself as an advocate 'fighting for her son.' Any suggestion that he wasn't getting what he needed felt like a direct attack on her and weakened her already fragile sense of herself as a competent parent. Especially in a stressed or activated state, Wanda was unable to separate these representations and recognize Joseph as a separate individual or a separate mind. His limited communication abilities complicate this issue by limiting Joseph's capacity to represent his own experiences, thoughts and needs.

For Wanda and Joseph, a dual challenge exists: Joseph has diminished capacities for mentalization and communication while Wanda has trauma-based deficits in affect regulation, integration and mentalization. Joseph is a confusing, sensitive and inconsistent social partner and Wanda has the exceptional challenge of persisting in picking up, interpreting and reflecting his emotional cues. Additionally, if Wanda makes guesses about Joseph's affect, he is likely unable to provide her with a reliable verbal or nonverbal response about the accuracy of her guesses. The gratification of 'getting it right' is unavailable to Wanda and may decrease her motivation to keep trying. Overtime, Joseph's slow-developing efforts at expression may go unnoticed, missed or ignored and an ineffective interactional style perpetuates.

Using the reflective functioning model, I would try to describe Joseph's potential internal states and emotional cues as much as possible. Wanda was starting at a place of understanding that behavior and mental states were linked but had difficulty containing her own feelings enough to make room to recognize his as possibly separate from her own. She would understand Joseph's tantrums at school not as 'it might be frustrating for him to be in a new environment and challenging to learn the routines of school' but as "he doesn't want to be there because they're out to get us, they're trying to take him away from me."

Wanda would often project her own conflicted feelings of missing Joseph's father onto Joseph:

W: "Joseph really misses his daddy, he stands by the window and says 'Where's daddy?' I think he's upset that his dad's not around anymore. I have to tell him 'daddy smashed the TV, he's not coming back.' And then he kind of laughs and gets it, he feels better."

These statements seem likely to be a projection of Wanda's own experience of grappling with missing Leo and being relieved he was gone. On the other hand, in these conversations she was thinking about how Joseph was having feelings and internal experiences that were related to the events in the home. This could be used as a foundation for mentalization.

To further develop Wanda's reflective functioning with Joseph, it seemed necessary to first acknowledge and label Wanda's feelings as her own. Before she could build these skills to use with Joseph, she had to recognize her own emotions and behaviors. I wanted to encourage this reflection, not expose it as a misinterpretation, while also addressing what

Wanda was revealing about herself. I would respond within the projection without contradicting her allocation of the emotions, as she might not be ready to take ownership of these feelings:

W: "Joseph really misses his daddy, he stands by the window and says 'Where's daddy?' I think he's upset that his dad's not around anymore. I have to tell him 'daddy smashed the TV, he's not coming back.' And then he kind of laughs and gets it, he feels better."

IJ: "It must be really confusing to miss someone and be glad they're gone at the same time."

W: "Yes, it's a good thing, but it's sad when I think about the past."

Reflective functioning with Wanda looks like very basic reflective listening practice. When she was in a heightened state, rather than focusing on her behavior, it was helpful to focus on her internal experience. She had limited tolerance for observing internal experience directly and when the conversation ceased to feel like communication and became a somewhat disconnected rant, I would try to redirect her to her present experience. This sometimes meant encouraging her to notice the physical manifestation of these feelings and sometimes meant turning her attention to reflective observations of Joseph. When she was able to switch her attention, it often appeared to have a calming effect. Eventually, I hoped she would pair the experience of feeling calm with the practice of noticing and observing Joseph's experience, just as she paired his positive development with her feelings of success.

Outcomes

During the months that I knew him, Joseph appeared to make gains in language development and social development. Tantrums were more manageable. In March at his IEP meeting, he was given a classification of speech and language disorder since that seemed to be where his primary deficits were and where the focus of intervention should be rather than behavioral modification. Joseph's language had noticeably improved as well. In the fall, his average length of utterance was short and echolalic – he could repeat about 3 words back to you but I almost never heard spontaneous language. In the spring I was observing spontaneous utterances of up to 3 and sometimes 4 words: “Where did Cassie go?” “What’s that? That’s his hat.” “My name is Joseph.”

He was even beginning to occasionally use pronouns referring to himself as “me” instead of “you” or “Joseph.” He could readily identify the alphabet, colors and was writing the names of his friends in class – he often would write “EMANUELLE” on pieces of paper – the name of a boy in his class. He would regularly verbally communicate requests for basic needs like food or a toy instead of simply melting down into a tantrum when the sensation of hunger or need for play struck. He also started playing with intonation: he might repeat a phrase back to me “are you hiding?” with the same tone and rhythm but then repeat it a few more times, trying out other melodies. He was differentiating the sounds of language. To the listener, intonation provided more meaning to the interaction. Whether meaning was intended by Joseph or not, his experimentation with sounds opened the door for the listener to respond with other levels of meaningful communication.

W: “Where’s Cassie?”

J: "Where's Cassie?"

W: "Where did Cassie go?"

J: "Cassie go? To the store? To the store."

W: "Cassie told you she went to the store?"

J: "She went to the store."

Repetition and echolalia are present in the exchange, but more information is passed between them. Crucially, in this instance it was true that Cassie had gone to the store. Joseph was intentionally communicating information he had received previously.

There is also potentially a parallel process under way: Wanda projects her feelings and experience onto Joseph and at the same time projects her experience of ineffectiveness onto me. During interactions with her I often felt without the tools for productive communication. In turn, I project my own experience of lack of communication onto Joseph. Using this countertransference could be a useful tool for understanding Joseph's experience with Wanda. Joseph's struggles with communication were also observed more objectively. I discussed the case frequently with the agency psychologist who evaluated Joseph. She eventually revised his diagnosis from PDD to speech and language delays, and consulted with Wanda on the conditions conducive to further language development.

Increasing Wanda's emotional competency was not going to single-handedly resolve Joseph's developmental issues – but the cumulative effect of all his services – OT, PT, ABA, speech, counseling, the consistency of even sporadic attendance at school (but more than he had gotten previously), the pause from witnessing domestic violence and a support

system for his mother, was profound for giving Joseph the space to develop cognitively, emotionally, and even physiologically.

Conclusions

In the child welfare system, families often present with poor functioning in many areas and extremely complicated backgrounds and trauma histories. The children may have multiple diagnoses with overlapping etiologies. Organizing and working therapeutically within these chaotic situations presents a unique challenge to the social worker and rarely do efficacy studies target such comorbid problems. As more literature emerges on the destructive nature of early neglect and trauma on brain development, it becomes even more imperative for social workers to parse the chaos and ameliorate this disorganization.

Joseph and Wanda's case illustrates the multiple interactions between development, trauma, language and attachment. The intention is not to delineate clear cause and effect, but to observe how these issues can play out within child and caregiver dynamics and hopefully inform the nuances of intervention. The research reviewed on the neurological, hormonal and interpersonal pathways between traumatic stress and language development emphasize the need for intervention to take various forms and also consider the child within their past and present caretaking environment. New therapeutic practices incorporating early parenting dynamics and using video-feedback (i.e., Parent-Child Interaction Therapy, Building Blocks) are gaining empirical support. Speech-language pathologists, teachers and other helpers should also be involved in using trauma-informed practices to address the needs of children in their care.

References

- ACS. (2013). *Preventive Services*. Retrieved 6 19, 2013, from NYC Administration for Children's Services:
http://www.nyc.gov/html/acs/html/support_families/preventive_services.shtml
- Beeghly, M. C. (1994). Child maltreatment, attachment and the self system: Emergency of an internal state lexicon in toddlers at high social risk. *Development and Psychopathology* , 6 (1), 5-30.
- Bishop, D. (1992). The biological basis of specific language impairment. In D. Hall, *Specific Speech and Language Disorders in Children*. London: Whurr.
- Bremner, J., Randall, P., & Vermetten, E. (1997). Magnetic resonance imaging-based measurement of hippocampal volume in posttraumatic stress disorder related to childhood physical and sexual abuse – a preliminary report. *Biological Psychiatry*, 41/1, 23-32.
- Bloom, L. H. (1974). Imitation in language development. *Cognitive Psychology* , 6, 380-420.
- Campbell, B. G. (1978). Social and attentional aspects of echolalia in highly echolalic mentally retarded persons. *American Journal of Mental Deficiency* , 82, 414-416.
- Carter, P. G. (2012). The effect of trauma on expressive language impairment in borderline personality disorder. *Personality and Mental Health* , 6, 183-195.
- Caruth, E. (1987). Language in intimacy and isolation: Transitional dilemma, transformational resolution. *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry* , 15, 39-49.
- Cashman, C. (2010). Maternal alexithymia and adult children's emotion regulation: A retrospective study with survivors of childhood exposure to intimate partner violence. *ProQuest Dissertations and Theses* .
- Charlop, M. (1986). Setting effects on the occurrence of children's immediate echolalia. *Journal of Autism and Developmental Disorders* , 16 (4), 473-483.
- Chemtob, C. C. (2004). Psychological effects of domestic violence on children and their mothers. *International Journal of Stress Management* , 11, 209-226.

- Chryssanthopoulou, C. T.-C. (2005). Childcare as a stabilizing influence on HPA axis functioning: a reevaluation of maternal occupational patterns and familial relations. *Developmental Psychobiology*, 47 (4), 354-68.
- Cohen, N. (2001). *Language Impairment and Psychopathology in Infants, Children and Adolescents*. Thousand Oaks: Sage Publications.
- Crocker, D. (1963). Psychoanalytic consideration concerning the development of language in early childhood. *Journal of the American Psychoanalytic Association*, 11, 143-150.
- Culp, R. W. (1991). Maltreated children's language and speech development: abused, neglected and abused and neglected. *First Language*, 11, 377-389.
- Dayton, C. (2009). A longitudinal examination of emotion regulation across early development: infant attachment and maternal parenting in the context of domestic violence. Michigan: ProQuest Dissertations and Theses.
- De Bellis, M. H. (2009). Neuropsychological findings in childhood neglect and their relationships to pediatric PTSD. *Journal of the International Neuropsychological Society*, 15, 868-878.
- Donegan, N. S. (2003). Amygdala hyperactivity in borderline personality disorder: Implications for emotional dysregulation. *Biological Psychiatry*, 54 (11), 1284-1293.
- Fay, W. A. (1981). Children's echo-reactions as a function of increasing lexical difficulty: A developmental study. *The Journal of Genetic Psychology*, 138, 259-267.
- Fay, W. S. (1980). *Emerging Language in Autistic Children*. Baltimore: University Park Press.
- Fonagy, P. G. (2002). *Affect Regulation, Mentalization, and the Development of the Self*. New York: Other Press.
- Gersten, M. C.-R. (1986). The socioeconomic bases of communicative functioning: quality of attachment, language development, and early maltreatment. In M. B. Lamb, *Advances in Developmental Psychology* (Vol. 4, pp. 105-151). Hillsdale, NJ: Erlbaum.
- Giedd, J. (2003). The anatomy of mentalization: A view from developmental neuroimaging. *Bulletin of the Menninger Clinic*, 67 (2), 132-142.
- Hall, J. S.-B. (2009). The role of pre-school quality in promoting resilience in the cognitive development of young children. *Oxford Review of Education*, 35 (3), 331-352.

- Ito, Y., Teicher, M., Glod, C., & Ackerman, E. (1998). Preliminary evidence for aberrant cortical development in abused children: A quantitative EEG study. *The Journal of Neuropsychiatry and Clinical Neurosciences*, *10/3*, 298-307.
- Katz, K. (1992). Communication problems in maltreated children: A tutorial. *Journal of Childhood Communication Disorders*, *147-163*.
- Kernic, M. H. (2002). Academic and school health issues among children exposed to maternal intimate partner abuse. *Archives of Pediatric and Adolescent Medicine*, *156* (6), 549-555.
- Lagos, C. (2007). The theory of thinking and the capacity to mentalize: A comparison of Fonagy's and Bion's models. *The Spanish Journal of Psychology*, *10* (1), 189-198.
- Law, J. C. (1992). Effects of abuse and neglect on the development of children's speech and language. *Developmental Medicine and Child Neurology*, *34*, 943-948.
- McAuley, M. K. (2009). A mathematical model of ageing-related and cortisol induced hippocampal dysfunction. *BMC Neuroscience*, *10* (1), 10-26.
- McFayden, R. K. (1996). Language comprehension and expression among adolescent who have experience childhood physical abuse. *Journal of Child Psychology and Psychiatry*, *37*, 551-562.
- Minzenberg, M. F. (2008). Frontolimbic structural changes in borderline personality disorder. *Journal of Psychiatric Research*, *42* (9), 727-733.
- Mirenda, P. S. (1988). Augmenting communication for persons with autism: Issues and strategies. *Topics in Language Disorders*, *9* (1), 24-43.
- Music, G. (2011). Biology and the brain. In *Nurturing Natures*. New York: Psychology Press.
- National-Center-for-Clinical-Infant-Programs. (1994). *Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood*. Arlington, VA: Zero to Three: National Center for Clinical Infant Programs.
- New York State Education Department. (2013, 12 6). *Number of New York State Children and Youth with Disabilities Receiving Special Education Programs and Services*. Retrieved 06 20, 2014, from <http://www.p12.nysed.gov/sedcar/goal2data.htm#2012>

- Perry, B. (1997). Incubated in terror: Neurodevelopmental factors in the 'cycle of violence'. In J. Osofsky (Ed.), *Children, Youth and Violence: The Search for Solutions* (pp. 124-148). New York: Guildford Press.
- Piaget, J. (1959). *The language and thought of the child* (2nd ed.). New York: Routledge & Kegan Paul.
- Rapin, I. D. (1997). Language disorders in children with autism. *Seminars in Pediatric Neurology*, 4 (2), 86-92.
- Rauch, S. V. (1996). A symptom provocation study of posttraumatic stress disorder using positron emission tomography and script-driven imagery. *Archives of General Psychiatry*, 53 (5), 380-387.
- Roberts, J. (1989). Echolalia and comprehension in autistic children. *Journal of Autism and Developmental Disorders*, 19 (2), 271-281.
- Rogoff, B. (1990). *Apprenticeship in Thinking*. New York: Oxford University Press.
- Rydell, P. M. (1991). The effects of two levels of linguistic restraint on echolalia and generative language production in children with autism. *Journal of Autism and Developmental Disorders*, 21 (2), 131-157.
- Saltzman, K. H. (2005). The psychobiology of children exposed to marital violence. *Journal of Clinical Child and Adolescent Psychology*, 34 (1), 129-39.
- Saltzman, K. W. (2006). IQ and posttraumatic stress symptoms in children exposed to interpersonal violence. *Child Psychiatry and Human Development*, 36 (3), 261-272.
- Schore, A. (2002). Dysregulation of the right brain: A fundamental mechanism of traumatic attachment and the psychopathogenesis of posttraumatic stress disorder. *The Australian and New Zealand Journal of Psychiatry*, 36 (1), 9-30.
- Scull, J. W. (2011). *Shifting Trends in Special Education*. Thomas B. Fordham Institute. Washington, D.C.: Thomas B. Fordham Institute.
- Skuse, D. (1992). The relationship between deprivation, physical growth and the impaired development of language. In P. H. Fletcher, *Specific Speech and Language Disorders in Children* (p. 29). San Diego: Singular.

- Slade, A. (2009). Mentalizing the unmentalizable: Parenting children on the spectrum. *Journal of Infant, Child and Adolescent Psychotherapy*, 8, 7-21.
- Slade, A. (2006). Reflective parenting programs: Theory and development. *Psychoanalytic Inquiry*, 26 (4), 640-657.
- Sturge-Apple, M. D. (2012). Interparental violence, maternal emotional unavailability, and cortisol functioning in family contexts. *Developmental Psychology*, 48 (1), 237-249.
- Yates, T. D. (2003). Exposure to partner violence and child behavior problems: A prospective study controlling for physical abuse and neglect, child cognitive ability, socioeconomic status and life stress. *Development and Psychopathology*, 15, 199-218.
- Yehuda, N. (2005). The Language of Dissociation. *Journal of Trauma & Dissociation*, 6 (1), 10-29.