CHILD DEVELOPMENT TRAINER'S GUIDE FOR IN-PERSON CLASSES

Slides 1 - 7: Introduction/Overview (30 mins)

Explain that the goal of today is to build on the content from the online course by examining some of the contexts critical for development to proceed in a typical fashion. This will center primarily on the role of relationships and how they are critical for development. In the second part of the day we will turn our attention toward the context of trauma and how it impacts these developmental processes. Throughout the day we will have some time for discussion and reflection on these topics in relation to the child welfare system.

But first, we are going to take a little bit if time to review what you learned in the online course.

(Note to Trainer: Note to attendees that much of the content of this course will assume a basic knowledge of child development learned in the online course. If they have not taken the course, they should consider doing so as soon as possible so that today's information can be digested in connection with today's content)

Review of SPECS from online course:

I. Discuss the following key points about development:
- It is an ongoing, dynamic process
- It is directional
- It involves stages
- It is cumulative
- It occurs across many areas

II. Provide an introduction to developmental domains for understanding child development: SPECS

To facilitate the study of development, developmental tasks are typically divided into five primary domains**.** Refer to the acronym SPECS to name the 5 domains:

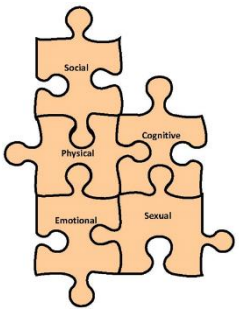
Social

Physical

Emotional

Cognitive

Sexual



Write the acronym vertically on chart paper, then write out each word. (Optional: draw a puzzle with 5 interlocking pieces, labeling each piece with one of the SPECS domains. This reinforces the concept that while development can differ in each domain, the domains fit together and are interconnected.)

Social

Ask the group to give you an example of the social domain. Friendships would be an example. Attachment is also in the social domain.

The trainer can ask the group, *"When do we usually assess children in the social domain?" Answer:* School age. When children go to school, their deficits or other difficulties in the social domain are easier to see. But waiting until school age to perform an assessment can be too late or decrease the effectiveness of a needed intervention. Researchers are now learning that the earlier children with autism and attachment disorders are assessed and treated, the higher the level of functioning the children can attain (Lake, 2005; Matson, 2007). Since abuse, neglect, and out-of-home placement can cause attachment deficits in children, it is also important for social workers to refer children for an assessment when an attachment disorder is suspected.

Physical

The physical domain is about physical growth and maturation, and sensory, motor, and nervous system development. Doctors refer to the "percentile" of the child's growth relative to a child population. Motor activity is divided into gross motor and fine motor skills.

Emotional

The emotional domain is about feelings and self-regulation. It also includes the development of empathy, personal traits, personal identity, and self-esteem.

Cognitive

The cognitive domain is about language development, thinking, and problem solving. Our brains develop in a use dependent way, i.e., "use it or lose it".

Sexual

Ask the group, at what age do humans develop sexuality? *Answer:* From birth. The infant's sexual development includes self-exploration through fingers and toes, and later expands to other body parts, including genitalia. Preschool age children often demonstrate a wide range of sexual behaviors that can include masturbation, sexual play with other children (usually of the ***same age***), sexual talk, and a wide variety of sexual questions (Friedreich, 1998).

The sexual domain includes the development of gender roles and identity. By 18 months of age, toddlers can self-identify as a boy or a girl.

III. Emphasize that the developmental domains interact across categories and are not discrete.

- How does a child learn to understand the concepts of "near" and "far"? Which of the five domains are utilized in understanding these concepts, and how? ***(Encourage responses linking the physical domain and the cognitive domain to this concept).***

IV. Emphasize that typical development progresses *forward*. Regressions or "stalling" of a skill or within a domain can signal a developmental problem.

ACTIVITY: Child Development Game

Explain to the trainees that to help them process the information they learned in the online course on child development, they will be playing a game throughout the day.

Materials:

Supplemental Handout: Milestones booklet

Supplemental Materials: Cards for the words and phrases to be distributed to table groups. These are provided in the Trainer's Supplemental Materials in "cut-out" form

- Flip chart
- Markers
- Tape
- PowerPoint Slide: 96

For ease in scoring, have groups label their cards with a team name.

Create a "developmental wall." Hang strips of tape or Velcro with the developmental stages (Birth to 6 months, Infants older than 6 months, Toddlers, Pre-schoolers, School age, Adolescents) written on the top on the wall for the SPECS cards to be attached.

Activity:

Step #1. introduce the game activity. Identify groups/teams. Divide the cards equally between the groups with each group receiving words/phrases from each category. Tell trainees they are going to play a game throughout the day to engage with the material they learned online.

***Step #2*.** Explain that the object of the game is to put the cards under the matching developmental stage (e.g., rolls over belongs under infants). Make sure to tell trainees that they are not expected to get every card right and that mistakes are part of the game. Then tell the groups to decide where to place the cards and to attach them under the appropriate developmental stage listed on the wall or designated paper. Give participants 5 minutes to complete this step. Reconvene group after allocated game playing time.

***Step #3*.** Explain that they can review the board throughout the day and if they see a card in the wrong place, they can write their team name on the back and move it to the appropriate spot. The instructor will review the cards during breaks and remove any incorrect cards to be cards to a "up for grabs" pile. Teams can select from the pile during breaks to try and get more points. Correct cards will be counted at the end of the day to identify the winning team.

Development Game Words and Phrases:

Birth to 6 Months

Alert to people
Rolls over
Pulls to sit up
Birth weight doubles
Grasps rattle
Rapid brain development
Trust (also in infants older than 6 months)
Smiles reflexively

Infants Older than 6 Months

Trust (also in birth to 6 months)
Peek-a-boo
Stands alone
Shakes head "no"
Begins to show preferential responses
Crawling

Toddlers (1–3 years)

Symbolic thought
Can name body parts
Able to feed self
Reciprocal connectedness
Double syllable words
Follows 2-3 step directions
Developing sense of autonomy
Able to kick ball forward

Preschoolers (3–5 years)

Egocentric thought
Improved ability to share
Magical thinking
Learn letters & numbers
Memory (short & long term) improves
Initiative
Emergence of interactive & cooperative play

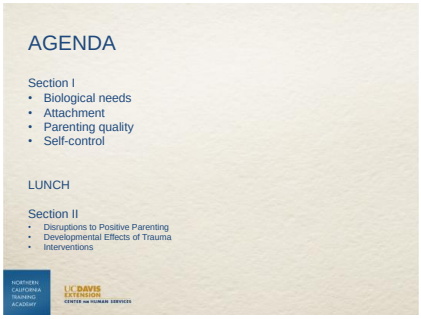
Ability to communicate needs verbally
Good control of bladder and bowel
1500-2000 words
Seeking to understand gender roles and identity

School-Age (6–12 years)
Concrete thinking
Rules & roles important
Able to take other's perspective
Understand cause & effect
Gender identity clear
Strength and coordination increase

School-Age (6–12 years) cont.
Slow and steady physical growth
Sensitive to criticism
Early puberty
Social interactions & relationships outside of the family are increasingly important
Body proportions similar to adults

Adolescents (12–18 years)
Growth spurt
Strong identification with peer group
Brain development increases
Puberty
Identity formation
Introspection & self-analysis
Need nine hours of sleep
Interest in sexual relationships increases

To build on the knowledge you gained from the online course, we will be using our time together today to discuss the experiences that are necessary for typical development to occur. Then we will transition to discussing development within abnormal contexts, such as trauma or maltreatment.



While humans are not born a complete "blank slate" with no personality or inherent characteristics of their own, a huge amount of their development depends on the environment and inputs they receive as babies. We will begin by talking about the biological and social needs of a baby. These are the inputs that human babies are expected to receive. Inputs are all the experiences that the baby has that shapes their development. Human babies have more development outside of the womb than other mammals, this is because there are certain things that they need to learn, these things are not innate abilities. Parents and caregivers teach these things to babies. One good example of an input is language. Babies are not born knowing how to talk, they must learn this skill. But there are tons of other physical, social, and emotional skills that babies must learn.

We will first start by talking about the biological needs. Here I am using the term "biological" very broadly. We will use the term biological interchangeably with the term physiological. Physiological refers to the normal functioning of living being. Brain physiology is the normal day to day changes and functions that your brain goes through, to keep you alive and working. In this section we will be focusing on normal and "expect" inputs for a baby. When I say "expected" I mean that humans have evolved to need certain inputs in order to develop correctly, you can think of these inputs as what the baby expects.

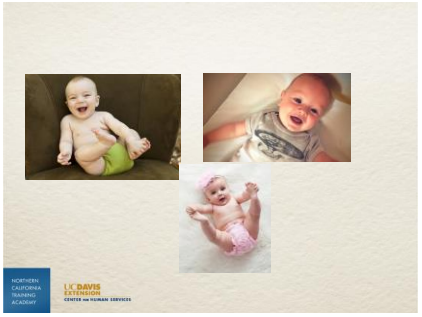
What is interesting is that most of babies' biological needs, are actually met through social needs. In other words, because babies are so helpless, they rely on others (or their social relationships) to help them with their physical needs. We will next talk about these social needs of babies. Humans are social animals, and depend on social inputs to behave in socially appropriate ways. This will include a discussion of attachment and parenting quality. We will resume

the first part of the day discussing one of the most critical outcomes of these inputs, self-control, and its role in development.

In the next section, after lunch, we will shift to talking about inputs that are not expected, or are not typical human experiences, such as experiencing maltreatment and trauma. We will focus our discussion the developmental effects of these environments with reflection on what we learned about expected inputs from the first part of the day.

Let's start by reflecting on the beginning stages of development. Many adults are unaware of the intensity of newborns. When they think of new born babies, they think of the fat, cuddly, smiley babies like those pictured here.

What is your guess, how old are the babies pictured here?



These babies are roughly 6 months old. They have purposeful motions, they are controlling their bodies, they are smiling and social and can signal their caregivers with positive coos and gurgles, they can make eye contact for extended periods of time, they can sleep for more than 2-3 hours at a time, they can reach for things they want. They have a huge number of capabilities that newborns do not have.

How do you think the difference between what parents EXPECT from their newborn babies, and the REALITY of what their babies can do, affects the way they parent? In other words, why might unrealistic expectations be a problem?

These are pictures of newborns. Newborns are incredibly helpless, they cannot hold their weight, sit up, hold up their heads, or purposefully reach for something they want. These are all physical limitations, but they also have emotional and social and biological limitations as well. Newborn babies are not social, like a 6 month old. They do not social smile, they seem to not derive pleasure from social interactions because they do not laugh or coo or act playfully.

But this doesn't mean that they are not social, or that they do not need social interactions.

They also have a much harder time controlling basic physiological functions. They are born so under developed that they cannot control their own heart rates, breathing rates, their temperature, and certain brain waves. This is most obvious with their inability to control their temperature, and most people know they need to "bundle" babies.

Another example is that newborns and infants rely on adults for soothing and calming stress responses. This can be stressful for parents who are expecting a baby like the first set of photos. Studies show that parents who have unrealistic expectations of their child, or developmentally inappropriate expectations, are more likely to abuse their children. This is part of why infants are so susceptible to maltreatment. In the next slides we will discuss the biological needs of infants and how adults attend to these needs.

Slides 8 - 16: Attachment (50 mins)

The pattern of caregiver soothing infants' biologically-driven distress behaviors (like crying) is what creates the basic foundations of the attachment relationship that is so important in development.

Explain the physiological system that controls stress response:

The parasympathetic nervous system is the "rest and digest" system. This is the biological system that is active for all you right now. You do not need to have a high heart rate, so the parasympathetic nervous system is actively slowing your heart rate. Likewise, you do not need to be "on high alert" so your parasympathetic nervous system is also calming your brain (if the parasympathetic nervous system actives too much, you will actually fall asleep! Which is actually why some of you might feel sleepy just sitting here).

The sympathetic nervous system is the opposite. This system gives you the energy to respond to the challenge. This is the "fight or flight" system. That is your stress response system. When something is distressing, or challenging (physically or emotionally) your sympathetic nervous system increases activation. Your heart rate increases, your blood flow increases, your breathing increases. You may feel agitated, anxious, or angry and frustrated.

These systems work together to create a balance. You don't want to fall asleep mid conversation, or while you are eating, but you also don't want your heart racing and feel the need to run when you are simply grocery shopping. So you need both of these systems to create a balance for you to function in everyday situations.

- Balance is essential for optimal development and learning.
- Brain does not focus on learning new information if system is focused on survival.

This balance is something that develops across development. So babies' system do not keep this balance as easily as adults' systems. This is why a little discomfort may cause uncontrollable crying, or they fall asleep while eating. Instead of their systems doing it for them, babies need caregivers to help them control these systems.

Use the following example to illustrate the biological needs of infants:

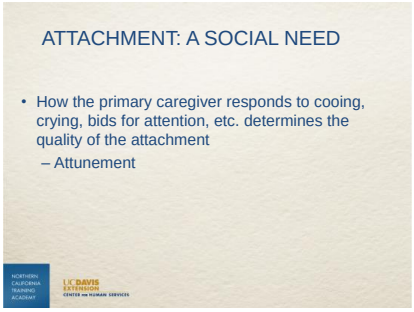
- When a baby cries, their heart rate can speed up very quickly, they have few ways to calm themselves down.
  - Think about how do you feel when your heart races, and you can't catch your breath? It feels uncomfortable! And it feels uncomfortable for a baby as well.
  - What are strategies you use to calm yourself down when you are scared, angry, frustrated, anxious? (Look for strategies like: walk, talk, deep breaths, praying)

But babies cannot use these calming down strategies on their own, and require adults to help them soothe. In fact, humans are born with systems that expect a kind and soothing environment. When that environment is present, the physiological system can be balanced and development can proceed in a typical fashion.

Touch is one of the basic needs that babies' systems expect. Holding is an essential way in which caregivers can calm their baby. When caregivers hold babies they naturally rock and sway them. This movement activates the parasympathetic nervous system so you get that calming effect. We know that babies who are held cry less than babies who are not held.

Sucking is another biological need of babies. Like holding and rocking, their systems are naturally calmed when they engage in sucking. This is why feeding interactions are such an important part of the early parent-child interactions. The baby is held close and sucking at the same time.

Environments that meet these biological needs set the stage for the essential bonding that needs to happen for development to occur in an optimal way. The bond is commonly called the attachment bond. Attachment refers to the social and emotional relationships children develop with the significant people in their lives. An infant's first attachment is usually to its mother. In some circumstances, someone other than the infant's mother can become the primary attachment figure. This may be a father, grandparent, or an unrelated adult.



How a caregiver responds to the biological needs we discussed and bids for attention will determine the attachment bond. This is called "attunement" = the act or "dance" of creating attachment through a series of actions and responses between the infant and the attachment figure.

Use the following points to emphasize why attachment is important:

- Attachment:
- Promotes the development of trust and a positive world view
- Promotes the development of self-esteem
- Reduces anxiety and promotes a sense of security
- Serves as a foundation for other forms of learning through social interactions, and serves as the basis for forming intimate relationships later in life
- Promotes self-reliance
- Social and linguistic interactions between infants and their caregivers foster the development of language and nonverbal communication

VIDEO: Attachment Through Everyday Moments:

Video Introduction

The primary way the attachment bond is established is through responsive interactions with caregivers. When caregivers respond to their needs infants can come to rely on the fact that their needs are going to be met. This is the core of the attachment bond.

Video Discussion: Display slide 16 for group discussion.

- Why is responsive care important?

- Strong emotional, cognitive, social development (self-esteem, problem solving, accurately responding to emotions of others, empathy)

- What are the key pieces to responsive care?
  - Taking turns
  - Following lead (be a good observer)
  - Positive feelings (communicate feelings, manage feelings)
  - Age appropriate toys

- How can the child welfare system promote these parenting behaviors?

Additional points for discussion:

- *The Importance of Rhythm, Repetition, and Consistency*

Responsive caregiving sets up a rhythm to the relationship. Infants are wired to look for these responses to happen repeatedly and consistently. When the expected response is not there, the system will react. The pattern of these responsive behaviors is critical for the fundamental organization of the brain and physiological systems that serves as the foundation for current and later learning. Examples include singing and talking to baby, and providing consistent parenting behaviors.

- *Reciprocal Communication with Baby*

The video talked about how the baby's behavior serves as a means of communication. When parents understand this, they can have more empathy for their child. Instead of becoming aggravated, for example, they can understand that their child is trying to communicate with them. This allows the parent to become more engaged with his/her child and to meet the child's needs more effectively.

- *Enjoyment of Parenting*

Many of the families served by the child welfare system experience daily challenges to basic survival. These challenges may pose obstacles to having the awareness, time or energy to fall in love with their child. We can help parents learn to enjoy their child and have fun, while employing nurturing parenting methods. Parents who enjoy their children are much less inclined to harm them.

Explain that these concepts all set the foundations for building a strong attachment relationship, which will be discussed further a little later.

TALK ABOUT SERVE AND RETURN
NURTURANCE

SERVE AND RETURN is the bidirectional back and forth interactions between infant behaviors and parental responses and vice-versa. This is dyadic back and forth (involving 2 partners) and is sometimes called the "dance of attunement" and involves the back and forth sharing of emotions. During serve and return, babies and caregivers share:

Attention (focused on the same thing or each other)

Affect (delight in the same thing)

Arousal (caregiver and baby match intensity)

As we discussed, babies' behaviors are the only means they have for communication. This means that parents must be attuned to what these behaviors mean for their baby. NURTURANCE is when parents are able to accurately read and respond to babies cues/behaviors. Being able to understand the baby, and respond appropriately to the baby's needs allows children to develop empathy. Nurturant parents are aware of the baby and the baby's needs, and they respond (accurately and promptly) to their needs and bids for attention. This allows the parent to become more engaged with his/her child and to meet the child's needs more effectively.

Parents who have difficulty accurately reading their babies' cues can become aggravated by these naturally occurring, biologically driven communicative behaviors. For example, they may interpret cries as an annoying behavior rather than understanding that their child is trying to communicate with them.

STABILITY of care is necessary to create the expectation on the part of the child that his/her needs will be met, that bids for attention will produce a response. In order for a child to securely attach to their caregiver, the caregiver must be a constant and stable presence in their life. Attachment is the product of repeated interactions. To develop trust, to understand the caregiver, and to have clear expectations of the caregiver's behaviors and to depend on the caregiver as a source of comfort, the child must have stable care. Instability in care jeopardizes attachment formation, and the security of the attachment.

Infants require (and expect) a COMMITTED caregiver who finds enjoyment in parenting. Many of the families served by the child welfare system experience daily challenges to basic survival. These challenges may pose obstacles to having the awareness, time or energy to fall in love with their child. We can help parents learn to enjoy their child and have fun, while employing nurturing parenting methods. Parents who enjoy their children are much more likely to be committed to the job of parenting and less inclined to harm them.

The Importance of Rhythm, Repetition, and Consistency

These ingredients establish a rhythm and consistency necessary to assist with the fundamental organization of the brain that serves as the foundation for current and later learning. The quantity and consistency of these types of interactions are critical in the early years. They must be reliable in order for the child's system to come to expect it. This expectation happens early so it is important for these behaviors to be present as early in life as possible.

Note the following points:

- It is ok if mothers and infants are not synchronous all the time. Early social interactions are often asynchronous. The repetition and consistency of it over time is what matters.
- Small breaks in synchrony can help the child practice self-soothing skills in a safe environment.
- Infants rely on crying to cue caregivers to their needs. They are completely reliant on caregivers 24 hours a day. Prompt responses to cries are a necessary part of building synchrony and being nurturing.
- If needs are not met: they cry. Prolonged crying leads to heightened hormone levels and teaches babies that parents are not consistent caregivers.
- Letting babies cry for prolonged periods of time does not teach independence or self-soothing skills.
- Parents now days are led to believe their babies "should be" sleeping though the night by 6 months (on average: 2-3 years) – this can cause distress among parents with babies who need more comforting throughout the night.

This consistency and repetition of a nurturing caregiver creates the foundation for the attachment relationship. But attachment itself begins at birth.

Stage 1: Pre-attachment Phase Birth- to 8-Weeks.

- Provide comfort, security, and calm the infant. Protective caregiving. Infant communicates through crying. Important feature: the infant can be calmed by any adult.
- At this early stage, the Infant has little control over their own arousal/state, and relies on the adults to be an external regulators. Infant begins to learn to "perceive" the reciprocity between caregiver appearance/care and being cared for. Reciprocal social smiling emerges toward the end of this phase and when the infant can reliably discriminate various familiar faces and is calmed by the mother – end of Phase 1.

Stage 2: 2- 7 Months.

- Infants begins to prefer the care of familiar adults compared to unfamiliar adults – presumably the infant has learned the association between these adults and reliable care.
- Strangers cannot soothe the infant.
- Begin to show preferences for socially contingent interactions involving face games such as peek-a-boo.
- More social reciprocity – turn taking behaviors and the knowledge their behaviors can have an effect on others. This back and forth lays the ground work for the child's development of trust.

Stage 3: 7- 24 Months.

- Attachment formation. Initiate interactions, attempt to maintain proximity to caregiver. Become upset at disappearance.
- Separation Anxiety After 12-months may begin to form secondary attachments.
- Increasing displays of intentional behaviors including language.

Stage 4: 2.5 years on.

- Realization that the parent may not immediately respond to requests. Helps child learn self-regulation.
- Reciprocal relationship
- Increased perspective taking – though often difficult for the child.
- Do not show as much separation anxiety

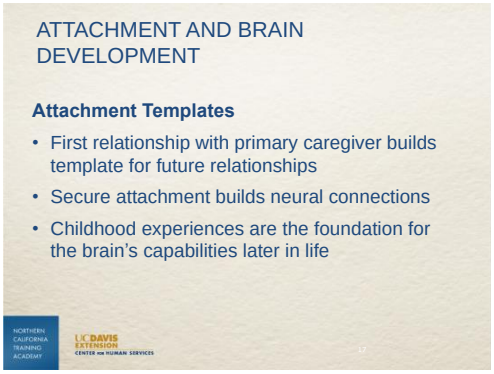
Use the following points to emphasize why attachment is important.

- Promotes the development of trust and a positive world view
- Promotes the development of self-esteem
- Reduces anxiety and promotes a sense of security
- Serves as a foundation for other forms of learning through social interactions, and serves as the basis for forming intimate relationships later in life
- Promotes self-reliance

Discussion: Looking through these stages, where are the critical points of the developmental process? How might this knowledge impact child welfare decisions and why? What implications would disruption at one or more of these stages have on the later stages of attachment development?

Slides 17 - 21: Attachment and Brain Development (30 mins)

Discuss the importance of attachment templates.

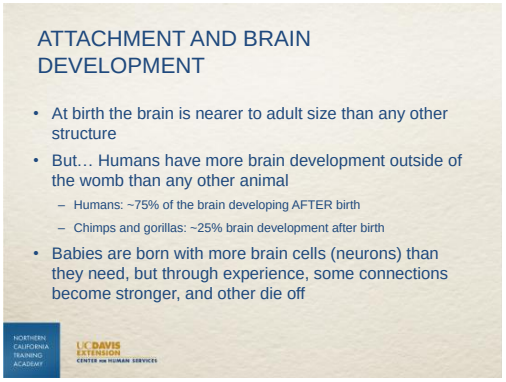


Internal working model – an internalized view or set of expectations regarding the attachment figure.

According to Schore (1997b, p. 30 [italics in original] in Applegate & Shapiro, 2005), the child's first relationship with the primary caregiver "acts as a template for the imprinting of circuits in the child's emotion-processing right brain, thereby permanently shaping the individual's adaptive or maladaptive capacities to enter into all later emotional relationships."

Reflect back to the SPECS of development. Remind trainees that development occurs across domains simultaneously. Stress the following points:
The first 5 years of life represent the critical period for the development of the attachment system.
Babies are biologically ready to seek out a consistent and responsive caregiver from birth. They are, in essence, primed from birth to attach to a caregiver. This is a survival mechanism – cannot survive without needs being met. Need to know that base needs for survival will be met so system can devote attention to other developmental domains.
At the same time we know the first five years of life represent a critical period for brain development.

Explain discussion will now turn toward the intersection of attachment and brain development in these first five years of life.



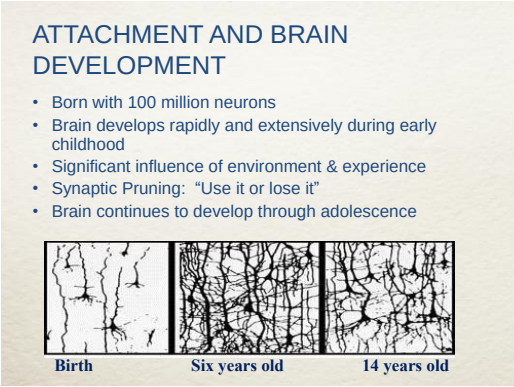
The brain's prime mandate is survival of the species. Consequently, the brain has crucial neural systems dedicated to:

- the stress response and responding to threats—from internal and external sources;
- the process of mate selection and reproduction
- protecting and nurturing dependents, primarily the young
- The creation of social relationships has been our primary survival strategy and the key to our success on the planet. That is why powerful and complex neural systems are dedicated to social affiliation and communication (Perry, 2002).

Explain the following points about brain development:

- Brain development begins in utero. By the 18th week in utero, the fetus has developed most of its neurons (brain cells).
- This creates a fully functional organ at birth – ready to learn.
- The brain also continues to develop – at a rapid pace – outside of the womb. In fact, about 75% of the development of the brain occurs after birth.
- Post-birth experiences are critical to how the brain develops.

Explain the following points about brain development:
At birth, the fetus has developed more neurons the necessary. These provide the foundation on which neural connections are built and organized.
Once the child is born, stimulated neurons make connections, non-stimulated undergo pruning (cell death ~40% of the connections between neurons die)
This pruning occurs at different times in different areas of the brain and is not fully completed until adolescence.
The mature brain has 100 billion neurons connected by trillions of synapses, the product of billions upon billions of complex chemical transactions in the process of neurodevelopment.
The normal wiring of the brain occurs in part as a result of general experiences that every human who inhabits any reasonably normal environment will have.
The expected experiences allow the human brain to grow in a normal and healthy way.
There are Sensitive periods for brain development, pruning, and expected experiences.
If these expected experiences are not available, impairment can result.



Point out the following:
The lack of experience, or an atypical experience, can cause the brain to "re-wire" and reorganize as a function of an individual's experience. For example, children who are abused or grow up in high conflict homes become sensitized to anger. Their brains become more sensitive to slight amounts of anger, and they are more likely to detect anger, even when anger is not present. Conversely, children that grow up in high resource homes perform better on a variety of learning tasks.

The influence of early environment on the brain is long lasting (Carnegie Foundation). The time in life when the brain is most sensitive to experience—and therefore most easy to influence in positive and negative ways is in infancy and childhood. It is during these times in life when social, emotional, cognitive and physical experiences will shape neural systems in ways that influence functioning for a lifetime. This is a time of great opportunity—and great vulnerability—for expressing the genetic potential in a child (Perry, 2002).
Development is use-dependent. Particularly in infancy, healthy development requires repeated exposure to positive experiences that stimulate the brain.

Refer to the slide to illustrate the "use it or lose it" process.

Note that many cell connections are not formed at birth, but proliferate after birth to their highest density at 6 years of age. Nerve cells constantly interact with the environment. If they are used, they remain. If not, they are "pruned" or cut back and the connection is lost.

Review the principles of neurodevelopment:
Neurodevelopment proceeds from genetic and environmental influences.
Neurodevelopment is sequential.
Neurodevelopment is activity-dependent.
Neurodevelopment involves windows of opportunity and windows of vulnerability.

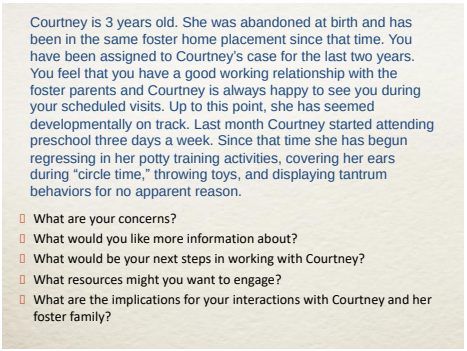
Ask trainees what implications this information has for parenting practices in light of the child-rearing environments of many children in the child welfare system. Ask trainees to consider how they would convey this information to parents and other caregivers. Be sure to include:
the "use it or lose it" principle regarding the development of synaptic interconnections could be conveyed in terms of providing experiences such as speaking to infants and providing visual stimulation to infants to help them build brain power
the idea that rapid brain development during infancy provides great opportunity and vulnerability to lay the foundation for future brain development could be conveyed in terms of protecting the infant from stressful stimuli such as domestic violence, neglect and abuse so that brain development can occur in a calm atmosphere without distractions of stress from the limbic system

VIDEO: Experiences Build Brain Architecture:

Video Introduction
Explain that this brief video will demonstrate these concepts and highlight the importance of inputs on how the brain develops.

Conclude this topic with the following points:
The human brain continues to grow through all of life's stages; however, the early years are a critical period of rapid brain growth with ramifications throughout the lifetime. Adolescence is another critical period for brain development and this will be covered during the section on adolescent development.
The brain develops within the constraints of its genetic potential.
The environment can either stimulate brain development to reach the brain's maximum capacity or hinder brain development by inhibiting growth.
The child welfare worker can assist families by making timely referrals and educating parents about the basic principles of neurodevelopment.
Social workers can assist parents to actively promote their babies' well-being by explaining how and why their babies' brains should be stimulated to promote optimal brain development.
Emphasize that it is important that health professionals identify any deficits and provide treatment as early as possible.

GROUP ACTIVITY: Courtney Scenario



Display Slide 24 and have participants read about Courtney and discuss the questions in their groups. Come back together and have groups share their responses.

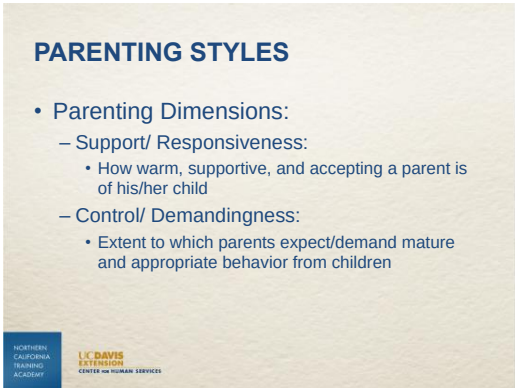
Possible points to note:

- Courtney is experiencing some stranger anxiety in her new school setting.
- She is unfamiliar with the new school schedule and facility, which has made using the bathroom regularly difficult for her.
- She has yet to feel safe in her new preschool environment and needs more time to adapt and acculturate.
- Being in a larger group setting of peers is overwhelming and she is having difficulty expressing her feelings and needs appropriately.
- A visit to her pediatrician might be in order to rule out an ear infection, water behind her ear drums, or other auditory concern.

- Consider establishing a school "buddy" to assist her to adjust to her new environment.

Slides 22 - 24: Parenting Quality (15 mins)

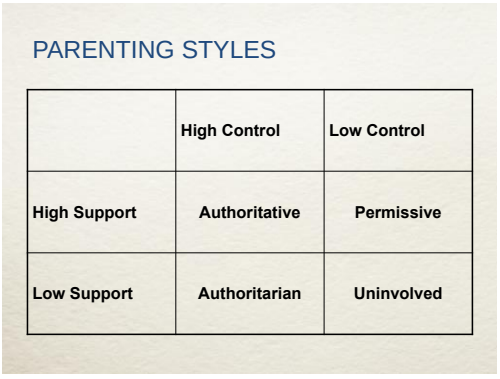
As the parent-child relationship continues to grow and develop, the systematic nature of parent responses to the child defines their parenting style. Beyond infancy research has found that the manner in which parents respond to their children continues to be an important determinant of children's outcomes. Two primary dimensions have been identified as critical in defining parenting style.



- Responsiveness: how warm, supportive, and accepting a parent is of his or her child
- Demandingness: the extent to which parents expect/demand mature and appropriate behavior from children.

When cutting these dimensions into high and low, and crossing them, we can classify parent-child interactions into four categories, which have been referred to as parenting styles

- Authoritative: high responsiveness, high demandingness
- Authoritarian: low on responsiveness, high on demandingness
- Permissive: high on responsiveness, low on demandingness
- Indifferent: low on responsiveness, low on demandingness



Authoritative parents set an atmosphere of supportiveness, communication is give and take, parents show that they recognize, are aware of, and sensitive of children's feelings. Encourage the child to be autonomous within reason. Encourage child's individuality and independence, but set limits and enforce rules.

Children with authoritative parents have the most positive outcomes:

- Psychologically competent
- Creative, curious
- Adaptive
- Socially skilled
- Better school achievement
- More self-reliance and self-control
- More friendly and cheerful

Authoritarian parents tend to prioritize their ability to maintain control. They demand obedience ("Because I said so."). Tend to be more likely to use physical control and corporal punishment than other styles of parenting.

Children of authoritarian parents are described as more dependent, passive, less socially adept, less self-assured, less intellectually curious. They are more moody, passively hostile, and more vulnerable to stress.

Permissive parents give children lots of freedom and may not demand or expect anything. Expect the child to conform because the child will want to. Parents rely on reasoning and explanations.

As children develop, permissive parenting can become more problematic. Infants only have needs, giving into the needs is good. Infants will tell you what they need: cry. Toddlers start to grow wants, not just needs. Children of permissive parents are less mature, less responsible, more conforming to peers, less likely to hold leadership positions, and low on self-reliance and self-control.

Indifferent parents are uninvolved, not much warmth support or demands.

Children of indifferent parents are more likely to be delinquent, experiment with drugs, alcohol, and smoking.

Slides 25 - 31: Self-Control (25 mins)

Parenting interactions are a critical foundation for the development of children's self-control. Self-control refers to the ability to adaptive and voluntary control your over thoughts, feelings, and actions. This ability allows children to cooperate, follow directions, control impulses, and manage negative emotions.

Better self-control in early childhood is critical for a host of positive adult outcomes such as few physical and mental health problems, high socioeconomic status and income, and fewer arrests.

Think about a school aged child that has trouble controlling emotions and impulses. In class they are easily frustrated, when they can't understand what is being taught. Instead of raising their hand and asking the teacher for help, the child becomes angry. They put their head down on the table and give up. The teacher tells them they need to sit up and work, and the child stands up and pushes their desk across the room. The child's outburst leads to being sent to the office, falling further behind in school, and having trouble maintaining friends.

Self-Control in Infancy: babies rely almost entirely on caregivers for their control. Their systems are not yet able to regulate their emotions or behaviors without external help.

Infants learn about how to communicate emotions, how to read other's emotions, and how to regulate emotions, from their caregivers.

They learn self-control through these interactions with their caregivers. Parents who can help soothe their children, teach their children that stress is manageable, and teach them how to manage that stress.

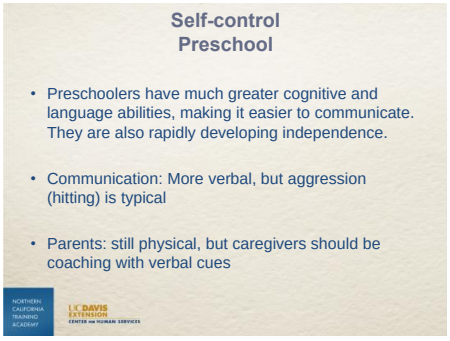
For the first year this is primarily physical. Babies are soothed through touch, rocking, sucking, holding. But into the second half of the first year no physical actions can sooth babies as well. For example, for a 6 month old, just seeing their caregiver might make them stop fussing. Or for a 9 month old, hiding their head into their caregiver's shoulder might stop them from crying when a stranger approaches.

Self-Control in Toddlerhood: After the first year children are still mostly learning through physical interactions (non-verbal). They start to use more emotion language as they approach 2 years, which allows them to begin to verbalize their emotional states and needs.

It is important to note that some cultures (including our own society) tend to focus language learning of objects and neglect teaching emotions. So some children will be quite verbal (know names of animals, sounds they make, names of people) but unable to adequately communicate about their emotions until later in development. However, during this developmental period children can learn to identify basic emotions and should be encouraged to talk about them. Caregivers can do this by labeling emotions as they are expressed using simple terms "You are happy." "You are stomping your feet. You are mad." This sets the foundations for children to identify their emotions and begin to learn how to control them.

Attentional processes become more salient, but physiological controls are still necessary (touch, rocking, toddlers and pacifiers/nursing). Caregivers can help focus toddlers' attention toward/away from things (distraction away from overstimulating things).

Sucking is still important for soothing, pacifiers and thumbs are good ways to soothe toddlers. They only needs these tools when they are upset, not all the time.



As children enter into the preschool years their cognitive abilities reach a point where they have the capacity to actively self-regulate.

- Facilitated partly by the rapid maturation of frontal lobes and limbic circuit in the brain.
- Leads to the strong sense of independence and defiance that often characterize the toddler years.
- Begin showing empathy, which is a complex emotional response to a situation. Feeling empathy requires that a child not only read emotional clues from others but understand the distinction between self and others. Actually putting one's self in the other's position also is required for empathy.

Communication

- Begin to understand basic rules of family, school, and society concerning how they express some of their emotions.
- Begin to recognize nonverbal cues of emotion from others.
- Begin to distinguish between negative emotions such as sadness, anger, and fear. have empathy, but knowledge of others' feelings generally is limited.
- Positive development depends on positive, culturally acceptable emotional exchanges with peers. Negative emotional influences can lead to emotional problems, even psychopathology. "when others are angry they hit, when I am angry I hit"

Regulation

- But children this age are still not consistently regulating their own emotions, they still rely on external regulation.
- They need caregivers to talk to them about the challenges they face. Hear their emotions, validate their emotions, tell them what to do, how to respond

- Around 30-months of age children engage in relational and physical aggression. Parent's reactions to child's aggressive behavior can promote or impair the child's subsequent emotional regulation.

Self-Control in School-age: School-age children have a much more developed tool box for self-control. These abilities are facilitated by:

- Ability to take the perspective of others and recognize differences between behavior and intention.
- More logical thought processes facilitated by advancements in brain development in regions related to problem solving.
- Ability to remember events for longer periods of time and draw upon them for reflection and learning.
- Can appraise a situations before it happens, and avoid negative or challenging situations (anticipation)

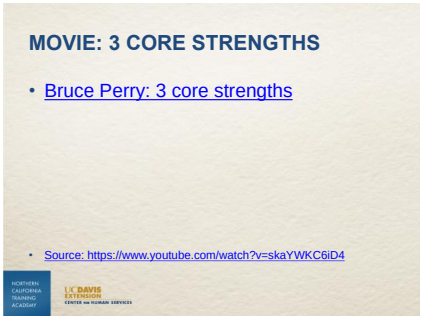
Communication

- Use language more effectively to communicate needs and cope with events.
- Better understanding and appreciation of social rules help to guide behavior with others.

Regulation

- These developmental advancements allow school age children to have more control over their behavior and emotions.
- It is still not easy for most children to maintain control especially in times of stress. They will still rely on caregivers for support and help with processing complex social situations.

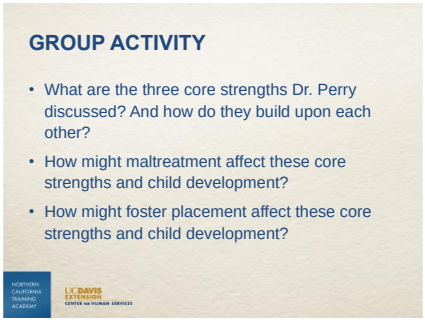
VIDEO: 3 Core Strengths



Video Introduction

Note to the trainees that the content from the morning can be considered foundational processes that support typical developmental processes. Each one contributes to a larger whole. While they are all necessary, none alone is sufficient. The following video talks about how components of development fit together to a larger whole.

Video Discussion: Display slide 34 for group discussion.



- What are the core strengths discussed in the video? And how do they build upon each other?
    - Attachment, Regulation, Affiliation
    - Attachment is necessary for regulatory processes to develop
    - Regulation is necessary to build affiliation
    - Affiliation is how we connect with others
- How might maltreatment affect these core strengths and child development?
- How might foster placement affect these core strengths and child development?

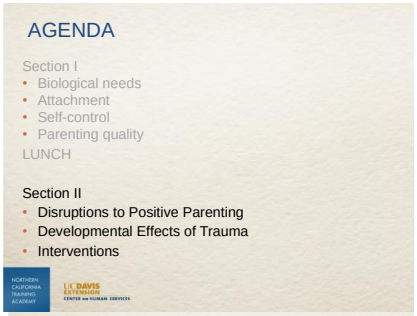
Additional points for discussion:

- Why is affiliation an essential core strength? What does it allow to happen that may be essential for development?

- What are the implications of this in someone with a disrupted attachment history?

Note for participants that they may work with children who demonstrate an inability to affiliate and that in such cases it is important to consider the preceding core strengths that may not be functioning.

LUNCH BREAK

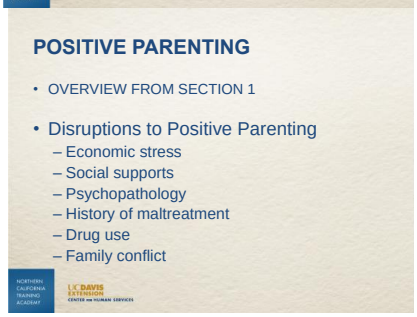


We are now going to shift from talking about normative development to talking about how disruptions to these processes affect typical developmental patterns. The goal of presenting this content is for you to have an awareness of how the children you come into contact with may behave given their history.

Thinking back to what you learned about parenting from this morning, what is important about the parent-child relationship? What may disrupt this relationship? (or something similar to generate active engagement with the previous material)

Aim for the following: (list) – reveal these on the slide:

- Economic stress
- Social supports
- Psychopathology
- History of maltreatment
- Drug use
- Family Conflict



While these systems are naturally occurring and resilient to an extent, they are vulnerable to disruption. The most relevant factors identified in research are economic stress, lack of social support, psychopathology of the parent, drug use, and the parents' own history of maltreatment (tie this back to attachment templates)

The majority of families you will work with will likely be dealing with one or more of these factors

We will focus our discussion on the last 4 since these are most likely to be involved in treatment plans for the children in your caseload.

Slides 34 - 39: Disruptions to Positive Parenting (35 mins)

Explain that the information that will be presented is intended to provide an overview of the contexts likely to be encountered by CPS cases and does not necessarily represent an exhaustive list of every circumstance that may disrupt the parenting system.

Parental psychopathology: The research on the relationship between parental mental health problems and child maltreatment is less extensive than the research on the roles of substance abuse and domestic violence in child maltreatment. Nonetheless, a few studies suggest an association between parental mental health problems and child abuse and neglect.

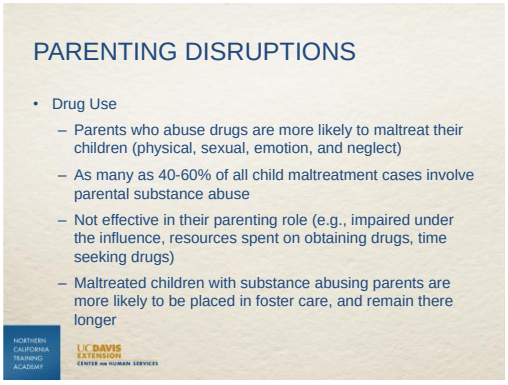
- Parental psychopathology contributes to poor maternal emotional regulation and parenting stress, which undermine the mother-child relationship and parenting behavior.
- Parents with depression and parents with anti-social personality disorder both were found to be approximately five times more likely to abuse their children than parents without these problems. The study also found that parents with these diagnoses were even more likely to neglect their children.

- Families with repeat child welfare contact are substantially more likely to have an adult with mental illness in the family than families with no repeated contact (20% versus 10%). Likewise, maternal PTSD predicts heightened punitive behaviors and psychological aggression and increases the risk of child maltreatment.

History of maltreatment: Our discussion of attachment and brain development is relevant when thinking about how a history of maltreatment may be disruptive to one's own parenting.

- Attachment sets up our templates for how relationships are experienced.
- We also know that experiencing maltreatment can affect development in ways that can undermine the parenting system – such as increasing the chances for mental illness or poor emotion regulation.
- It is important to keep in mind that while experiencing abuse does increase the likelihood that they will abuse their children, most adults who were abused as children do not go on to abuse their kids.

Drug use: Parental substance abuse is recognized as a risk factor for child maltreatment and child welfare involvement.



- Research shows that children with parents who abuse alcohol or drugs are more likely to experience abuse or neglect than children in other households.
- Parental substance abuse (specifically, maternal drug use) is one of five key factors that predicted a report to child protective services for abuse or neglect.
- Once a report is substantiated, children of parents with substance use issues are more likely to be placed in out-of-home care and more likely to stay in care longer than other children.
- The National Survey of Child and Adolescent Well-Being estimates that 61 percent of infants and 41 percent of older children in out of-home care are from families with active alcohol or drug abuse.

A parent's substance use disorder may affect his or her ability to function effectively in a parental role. Drug use can disrupt parenting in a number of ways:

- Physical or mental impairments caused by alcohol or other drugs
- Reduced capacity to respond to a child's cues and needs
- Difficulties regulating emotions and controlling anger and impulsivity
- Disruptions in healthy parent-child attachment
- Spending limited funds on alcohol and drugs rather than food or other household needs
- Spending time seeking out, manufacturing, or using alcohol or other drugs
- Incarceration, which can result in inadequate or inappropriate supervision for children
- Estrangement from family and other social supports

Family life for children with one or both parents that abuse drugs or alcohol can be chaotic and unpredictable. Children's basic needs—including nutrition, supervision, and nurturing—may go unmet, which can result in neglect.

Drug use can be linked with other problems—such as mental illness, domestic violence, unemployment, and housing instability—that also affect parenting and contribute to high levels of stress.

A parent with a substance abuse disorder may be unable to regulate stress and other emotions, which can lead to impulsive and reactive behavior that may escalate to physical abuse.

Different substances may have different effects on parenting and safety (Testa & Smith, 2009). For example, the threats to a child of a parent who becomes sedated and inattentive after drinking excessively differ from the threats posed by a

parent who exhibits aggressive side effects from methamphetamine use. Dangers may be posed not only from use of illegal drugs, but also, and increasingly, from abuse of prescription drugs (pain relievers, anti-anxiety medicines, and sleeping pills).

Family conflict: Experiencing intense and frequent conflict within the family can be disruptive to the parenting system. When resources are spent managing conflict with other members of the family it leaves less emotional resources for parenting and attending to children's needs.

- Research finds that parents are more likely to be withdrawn from their children after being involved in marital conflict.
- Child centered conflicts are considered to be more destructive. This means that when parents argue about the child, the child feels responsible for the conflict.
- It is common, even in non-child centered conflict, for children to feel responsible for the conflict, or responsible for breaking up the fight. This can be especially damaging for children, compared to those who avoid the conflict and immerse themselves in activities outside of the home such as school and peers.

Group Activity

Display slide 40. Note the following points in the discussion:

Group activity: what is disrupted parenting?

Instructions: Think about a family that has a history of these problems, what types of behaviors would you expect to find within this family? How does these problems impact the parents? How would you expect these to effect the child? Within your groups, try to think of a typical scenario for each of these conditions reflecting on the behaviors of the parents and the implications for the children. (give 5 mins)

Psychopathology/ traumatic history

replicating past behavior patterns with the kids (intergenerational transmission of abuse and trauma)
parenting behavior will depend on the pathology
depression = withdrawn or hostile
bipolar = inconsistent

Drug use

neglect, withdrawal from the family, seeking out drugs, high on drugs, crashing from drugs makes parents unable to care for kids. Older children in the family might be responsible for caring for the parents and the younger children (parentification)

Marital conflict

violence in a romantic relationship can spillover and become violence in the parent-child relationship. Parents that use force and aggression with their partners use more of these behaviors with their kids

Point out to trainees that not all of these behaviors will reach the threshold of "abuse" or "trauma" but they do affect the developmental processes that rely on warm and consistent interactions to develop in a typical fashion.

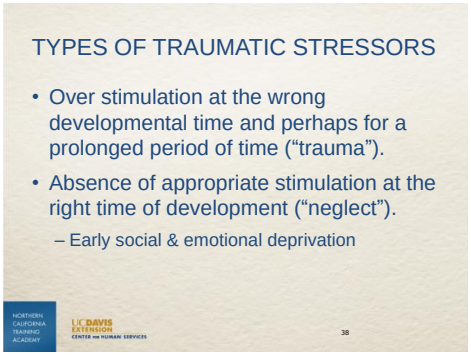
Note on Spanking For additional discussion: The data on spanking reflect that physical punishment in all its forms is not conducive to optimal development.

Spanked children have higher rates of:

- aggression, antisocial behavior (antisocial behaviors are disruptive behaviors such as overt or covert hostility and aggression),
- externalizing problems (externalizing behaviors are behaviors like lashing outward at others with aggression and violence, being defiant and engaging in criminal behaviors),
- Internalizing problems (these are actions that are taken out toward the self, such as hurt him or herself, or depressive or anxiety symptoms)
- mental health problems
- negative relationships with their parents

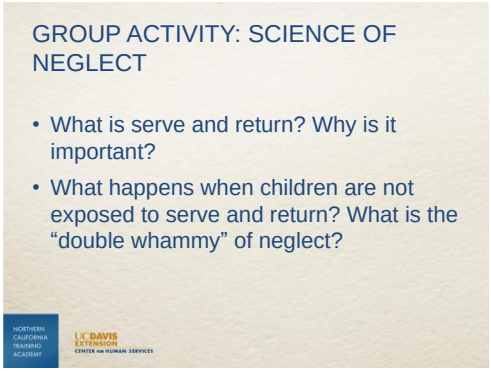
Spanked children also have lower self-esteem, cognitive ability, and moral internalization (or the understanding and acceptance of morals, right vs wrong, and helping others)

When there are severe and ongoing disruptions to the ability of parents to provide positive and quality parenting, the result is often either neglect (the removal of attention and care), or harsh parenting which is typically demonstrated as verbal or physical aggression. We won't go too much into the specifics of the various forms of abuse and neglect that occur across maltreatment settings since there is a class dedicated to that. However, we will just briefly touch on them here in order to think about the effects these environments have on children's development.



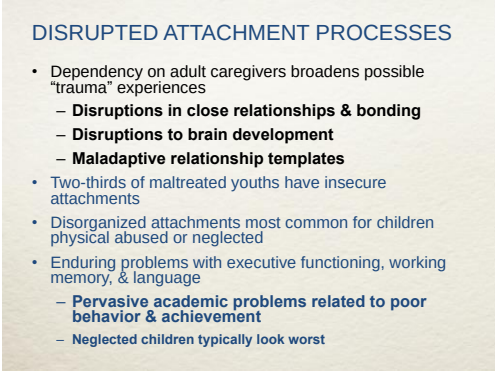
One of the traumas that children can experience is neglect. In the next video, we will hear about the effects of neglect on the developing child.

VIDEO: Science of Neglect: Show the video then display slide 43 for discussion questions



Slides 40 - 43: Disrupted Attachment (20 mins)

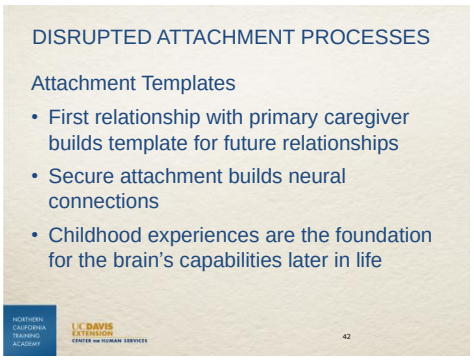
One of the most prevalent systems to suffer from trauma in childhood is the attachment system.



Attachment problems in children are often the result of mistimed, abnormal, or absent caregiving interactions and may represent a special case of neglect. More than 85% of children removed from their parents for abuse or neglect have disturbed attachment capacity (Perry, 2002).

The disruption to the attachment system serves as one of the foundational causes of later behavioral and academic problems often addressed by the child welfare system. This is due to the formation of maladaptive attachment templates that serve as a filter for information processing. What is an attachment template?

TEMPLATES:



According to Schore (1997b, p. 30 [italics in original] in Applegate & Shapiro, 2005), the child's first relationship with the primary caregiver "acts as a template for the imprinting of circuits in the child's emotion-processing right brain, thereby permanently shaping the individual's adaptive or maladaptive capacities to enter into all later emotional relationships."

Dr. Bruce Perry also uses the "template" concept to corroborate this observation:

As we study the nature of early, emotional connections, we are finding out how important they can be for the future development of the child. Indeed, many researchers and clinicians feel that the maternal–child attachment provides the working "template" for all subsequent relationships that the child will develop. A solid and healthy attachment with a primary caregiver appears to be associated with a high probability of healthy relationships with others. Poor attachment with the mother or primary caregiver appears to be associated with a host of emotional and behavioral problems later in life." (B. Perry)

Schore also notes:

"Secure attachment & adequate nurturing…builds neural connections…Abuse & neglect induce chaotic biochemical changes…" (Schore, 2001 cited in Stien & Kendall, 2004, in the Virginia Child Protection Newsletter, 2006)

Dr. Perry adds:

"Experiences in childhood act as the primary architects of the brain's capabilities throughout the rest of life. If these organizing childhood experiences are consistent, nurturing, structured and enriched, the child develops the ability to be flexible, responsible and a sensitive contributor to society as an adult. However, if childhood experiences are neglectful, chaotic, even violent and abusive, the child could become aggressive, remorseless, and intellectually impoverished" (B. Perry).

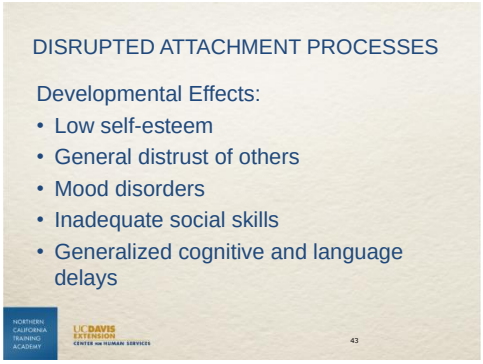
Highlight for participants that this is pervasive in children within the child welfare system and affects how they experience and adapt to placements and other adults who are attempting to build trust.

Ask participants to reflect on how these issues may affect how they work with children who have experienced a disrupted attachment process. What barriers would this create for their work? What are the short term issues they would want to be sensitive to? Long term issues?

Repeated separations interfere with the development of healthy attachments and a child's ability and willingness to enter into intimate relationships in the future.

Children who have attachment problems may suffer significant developmental effects such as:

- Low self-esteem
- A general distrust of others
- Mood disorders, including depression and anxiety
- Delayed social skills
- Generalized cognitive delays
- Language delays



Note these behaviors may not be seen in all cases

Child welfare caseworkers can identify children with behaviors that indicate attachment issues and can help children and their families learn how to develop and maintain healthy attachments. Parents who have abused or neglected their children may have maladaptive attachment in their own histories. Many parents and children can be helped to strengthen the capacity to attach.

Slides 44 - 49: Attachment and Foster Care (20 mins)

Follow with slides 44 – 47 regarding *foster care and attachment* processes to build a discussion applying these attachment concepts to the foster care system. Reflecting back to the 4 elements necessary for attachment to frame the discussion.

Synchrony:

When caregivers are intrusive or neglecting, children miss the opportunity for interactions that build a sense of control over the environment and over their own ability to regulate. Children in the child welfare system are especially unlikely to have caregivers who behave in synchronous ways. This, combined with other adverse experiences, places these children at risk for problems regulating physiology and behavior (e.g., Bernard, Butzin-Dozier, Rittenhouse, & Dozier, 2010; Fisher, Stoolmiller, Gunnar, & Burraston, 2007). Compared to children from low-risk environments, children of neglecting parents show a more blunted diurnal pattern of cortisol production (Bernard et al., 2010; Bruce, Fisher, Pears, & Levine, 2009) and are more vulnerable to behavioral dysregulation (e.g., Pears & Fisher, 2005).

Nurturance:

Children whose parents are emotionally unavailable when they are distressed, or are frightening (at any time, regardless of whether children are distressed), often develop disorganized attachments to their parents (Lyons-Ruth, Bronfman, & Parson, 1999; Schuengel, Bakermans-Kranenburg, & van IJzendoorn, 1999). Children in the child welfare system are at much greater risk for developing disorganized attachments than children not in the system (Carlson, Cicchetti, Barnett, & Braunwald, 1989; Cyr, Euser, Bakermans-Kranenburg, & van IJzendoorn, 2010). Disorganized attachments are associated with a host of problematic outcomes, most especially an increased risk for behavioral dysregulation as seen in externalizing problems (Fearon, Bakermans-Kranenburg, van IJzendoorn, Lapsey, & Roisman, 2010; Madigan, Moran, Schuengel, Pederson, & Otten, 2007).

Although nurturing care tends to be driven primarily by caregivers' qualities (van IJzendoorn, 1995), children who have experienced early adversity often behave in ways that fail to elicit nurturing care from caregivers (Stovall-McClough & Dozier, 2004). Children who experience disruptions in care after about a year of age are especially likely to turn away from caregivers rather than seek them when distressed. Children's behaviors elicit complementary behaviors from caregivers (e.g., children who avoid caregivers elicit rejecting behavior by caregivers).

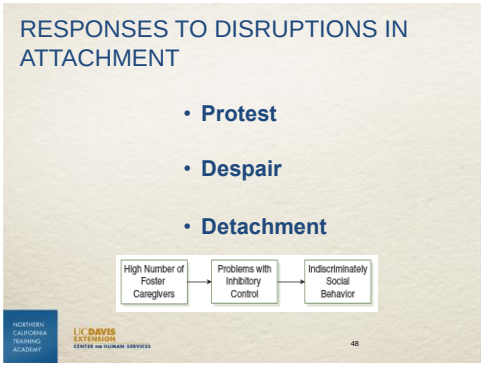
Stability:

for many children in the child welfare system, relationships with primary caregivers are disrupted, sometimes multiple times (Casanueva et al., 2012). Among other problems, children who experience more disruptions in care can show deficits in executive functioning, such as in their ability to inhibit behavior (Lewis, Dozier, Ackerman, & Sepulveda-Kozakowski, 2007). Stability of care is critical for young children

Commitment:

Foster parents vary in their commitment to the children in their care. To assess commitment, parents who took part in the This is My Baby interview (Bates & Dozier, 1998) were asked basic questions such as "How much would you like to raise this child?" Commitment was greater among foster parents who had fostered fewer children in the past (Dozier & Lindhiem, 2006). At a behavioral level, more committed foster parents showed more delight in their children than less committed foster parents (Bernard & Dozier, 2011). Commitment matters because humans are an altricial species (i.e., depend on a parent at birth), and infants expect to have a committed caregiver. From an evolutionary perspective, human infants probably would not have survived without committed caregivers. When children do not have caregivers who are committed to them, they are at increased risk for negative self-perceptions and problem behaviors (Ackerman & Dozier, 2005; Lindhiem & Dozier, 2007). While synchrony and nurturance are variable even among low-risk parents, stability and commitment represent constructs that are unique to high-risk caregiving.

When attachment is disrupted, there is a distinct 3-stage process that results. This can then lead to the developmental disruptions that we discussed earlier.



Slides 50 - 59: Developmental Effects of Trauma (35 mins)

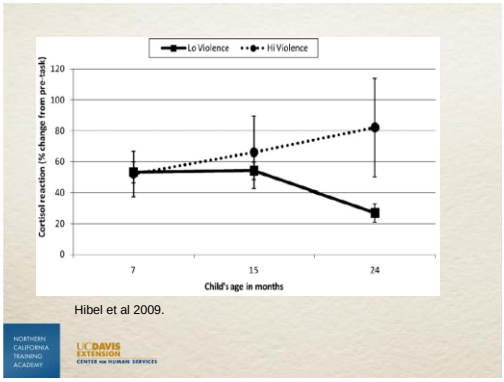
Trauma disrupts typical developmental processes and limits a child's ability to develop a strong healthy attachments caregivers. Trauma exposure leaves children vulnerable to stress such that they have trouble controlling and expressing emotions, and may react violently or inappropriately to situations. However, how trauma manifests, may depend on:

- The age of the child
- The degree of trauma
- The length of the exposure

In this next section we will describe the developmental effects of trauma from infancy to middle childhood and adolescence.

Trauma in Infancy: Because infants' cognitive and regulation systems are not yet developed, infants will experience trauma in a very physical way. They will have trouble regulating their moods (in part because they rely on caregivers for this essential function) and generally go into a state of stasis in a way, where they don't thrive. They don't take in the proper nourishment or get the sleep that is required for development to progress. In severe cases it can look much like a medical condition known as failure to thrive.

Here is one example of the physiological response of infants over this time period after exposure to violence. The dotted line represents the level of cortisol in children that were exposed to marital violence. Cortisol is a hormone that is released during the body's stress response. You can see here that those in hi-violence environments have increasing levels of reactivity. The children that were not exposed show a decreasing pattern as they learn to regulate their emotions and physiology across the first two years of life. The exposed children have significantly higher cortisol reactivity to the stressor.



Hibel et al 2009.

Thus, over time these environments can result in significant wear and tear on the child's physiological system.

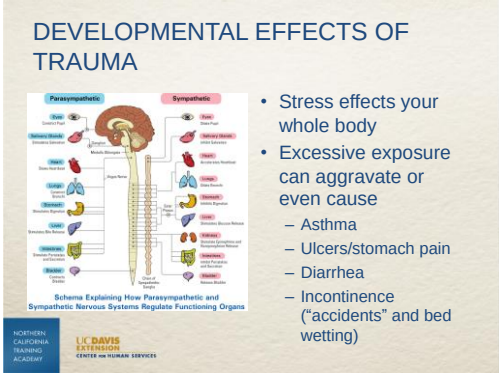
For kids living in stress there is no time to calm (they're lives are constantly stressful) and they don't have the tools to calm down because they have never developed them.

Now we will watch a short video that will discuss how this stress process affects development over extended periods of time.

VIDEO: Toxic Stress

After the video ask the trainees: Thinking back to the content from this morning and the movie you just watched, what happens when you are stressed? How do young children respond to stress? Look for the following responses:

- Chemicals signal increases in heart rate, and breathing rate
- Children's The stress response system is immature and relies on external forces to regulate it



As discussed in the previous movie, exposure to stress causes your biology to change. Usually these changes are just quick short term changes to help you respond to an immediate stress. For example, does your heart sometimes race or do you get butterflies in before raising our hand in class? Or confronting a tough situation on the job? These biological changes help you be alert, think on your feet, and read the cues around you. But once you are out of these situations, your biology returns to baseline. Part of this return to baseline is because you are out of the stressful environment, but part of it is also because you have been taught to cope. You know how to do "self-care" by taking a deep breath, calming yourself down by telling yourself it will be ok, going for a run, calling up a friend, or relaxing a reading a good book.

For kids living in stress there is no time to calm (they're lives are constantly stressful) and they don't have the tools to calm down because they have never developed them.

This constant stress activation has effects on more than just the brain and brain neurons. This slide shows all the organs your stress system connects to. As you can see…. It's almost everything! This is why many of the children you work with are not just emotionally troubled, but physically sick as well. They might have asthma from inflammation in their brocci and lungs, or stomach aches from ulcers, or digestive issues, or incontinence. These can all be problems stemming from an over active stress response.

Most of the effects of trauma in infancy will be physiological, wiring the system in non-optimal ways. As children get older, trauma can continue to have these effects but due to developments in other higher order processes, trauma effects can be evident across multiple domains.

Trauma in Preschool: In the preschool period children exposed to trauma will experience a range of developmental difficulties across domains. They may suffer cognitive delays or general lack of development of cognitive skills. Emotionally they may act immature and have difficulty in their social relationships with their peers. They may also display physical symptoms like headaches or stomach aches.

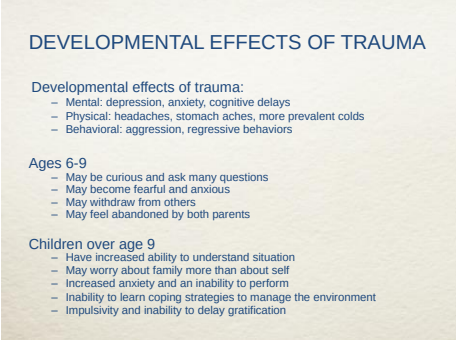
In general, children of this age and older may display a regression of a skill. The most common one seen in this age group is regression of toilet training. Remember that development will go in a forward manner. Regression of a skill is something to take note of.

Finally at this age children do not yet have the cognitive capacity to fully understand that someone can have motivations and intentions that are separate from themselves (theory of mind). Thus it is difficult for children of this age to

understand behaviors that don't involve them in some way. In trauma situations, this results in children to blaming themselves for abuse.

Note that at this age social workers must still rely heavily on these behaviors to know whether the child is suffering. Children at this age are still not able to articulate clearly their experiences or their internal emotions or thoughts. May be further hampered by developmental delays resulting from the trauma.

Trauma in School Age: Note that the effects of early behaviors persist – cognitive disruptions become compounded over time; disrupted social behaviors result in maladaptive social relationships as they get older and social groups become more sophisticated

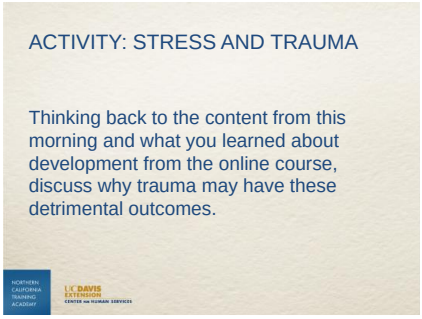


Reflect on the developmental consequences over time if these effects are not addressed. Note the following: difficulty in school, limited social connections, inability to cope all can lead to poor outcomes in adulthood.

Note to trainees that that most children they encounter at this stage of development will have a history of unaddressed trauma that can have developmental effects. Their chronological age may then be inconsistent with their developmental age. The inconsistency may be more prevalent in certain domains of development depending on the individual and the trauma. For instance, a school age child may appear cognitively consistent with their age (they do well in school, able to understand complex situations and navigate them) but emotionally they have the capacity of someone much younger (unable to process emotionally complex information, shut down in times of conflict).

Note to the trainees that when dealing with children who have a history of abuse that workers approach them at their developmental age and not their chronological age. This highlights the importance of understanding typical developmental stages and behaviors.

Ask the trainees: Thinking back to the content from this morning and what you learned about development from the online course, discuss why trauma may have these detrimental outcomes? Look for the following responses:



The stress response system is immature and relies on external forces to regulate it

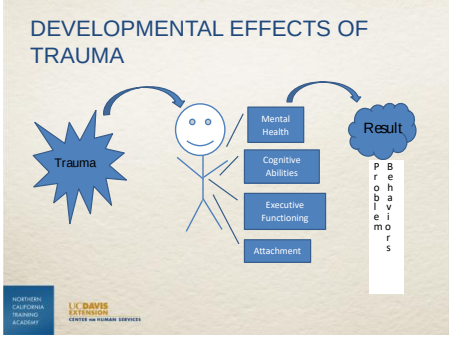
Attachment depends on warm and nurturing caregiver responses

Disrupted attachments can result in insufficient wiring of the brain

Younger children do not yet have the ability to regulate their behavior and won't understand why they are being punished

Use the next slide to talk about why trauma disrupts development

The disrupted behavior that results from trauma can be due to a few underlying factors. These can be considered the intermediary processes that link trauma to disrupted behaviors.



Clinical Disorders

- Depression
- Anxiety (including Separation Anxiety Disorder and Posttraumatic Stress Disorder)
- Conduct (including Oppositional Defiant Disorder)

Cognitive Abilities

- Disrupted problem solving capacity
- Limited cognitive processing skills
- Delayed cognitive development

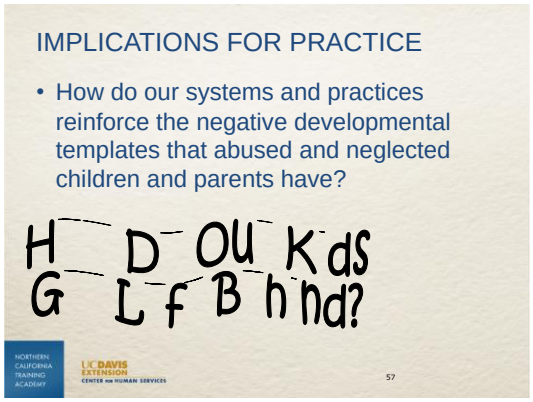
Executive Functioning Skills

- Disruptions to behavior regulation
- Limited capacity to control emotions
- Lack of impulse control

Attachment

- Limited ability to enter into close relationships
- Inability to maintain close connections with others
- Lack of trust

These disrupted internal systems are what ultimately lead to the problem behaviors that you will often deal with when working with children. While these behaviors are often the impetus for interventions, it is important to realize that they are the result of underlying developmental disruptions that were directly impacted by the trauma.



GROUP DISCUSSION: Display slide 55 and ask trainees to reflect.

Note that being a "foster kid," a "group home kid," and changing caregivers or schools reinforce children's negative templates, often shaping children's interactions with the world by causing them to be apprehensive and feel undervalued.

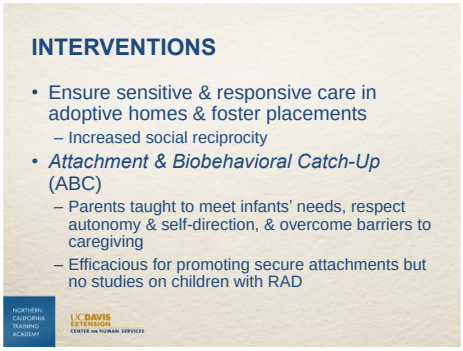
Ask the group what they and the child welfare system can do to change these templates. Allow a few minutes to process their ideas.

Note to the trainees that humans are biologically wired to attach to others for their care and survival. This drive does not shut down when removed from the home. Children will engage in the attachment process with other adults who care for them.

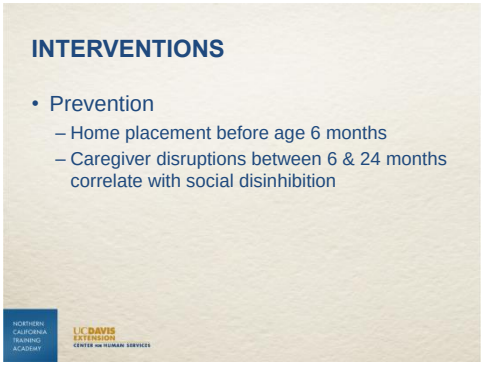
Slides 60 - 64: Interventions (20 mins)

Now we will turn our discussion toward what can be done about these disruptions to development caused by disrupted parenting and trauma.

There has been a lot of advancements made with interventions to target the developmental disruptions caused by trauma. Some of them focus on caregiver responsiveness and improving the serve and return process.

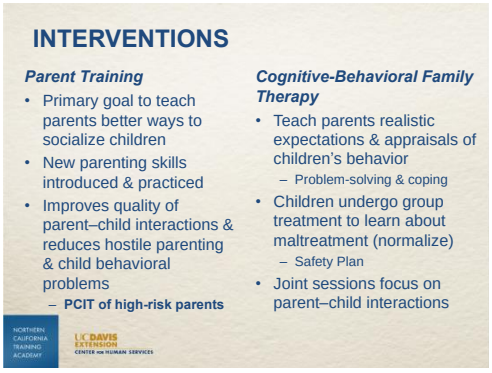


There is also an emphasis on early placement of children prior to the attachment process becoming solidified. This is seen as a preventative measure to avoid disrupting the attachment bond during removal. However, multiple placements will also need to be avoided during this time.



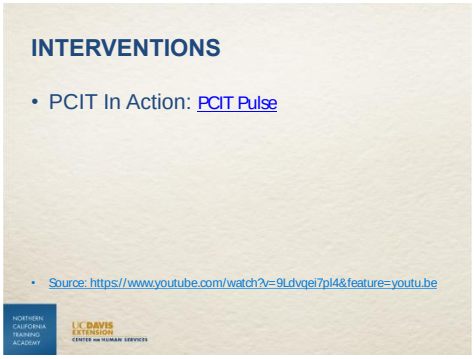
UC Davis CAARE Diagnostic and Treatment Center:
http://www.ucdmc.ucdavis.edu/children/clinical_services/CAARE/

There are also a host of interventions that serve to teach parents how to respond appropriately in order to maintain their parental status. Two of the most common are direct parent training and cognitive-behavioral therapy. Each of them focus on helping parents learn new ways of responding to their children.



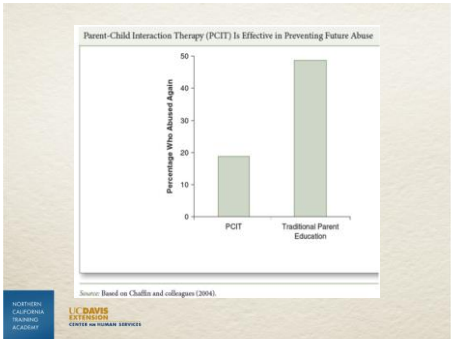
VIDEO: PCIT Pulse

These approaches can be quite effective. The following video shows one example of these types of interventions – called PCIT. (show video then note the effect of PCIT in the following slide)



This graph shows how effective this intervention has been found to be in a sample of parents with a history of abuse. In this study, parents were randomly assigned to PCIT or a community group intervention delivered through a nonprofit agency with an established history of delivering the program.

Differences between PCIT and Traditional Parent education were significantly different. Median follow-up time = 850 days through the statewide child welfare administration database (excluding reports that were screened or ruled out). So you can see that the disruptions to parenting and the delivery of the necessary inputs we have been talking about can be done.



Now, to end on a high note, we are going to watch a brief video that highlights some of these points, and focuses on strong relationships in building resilient children

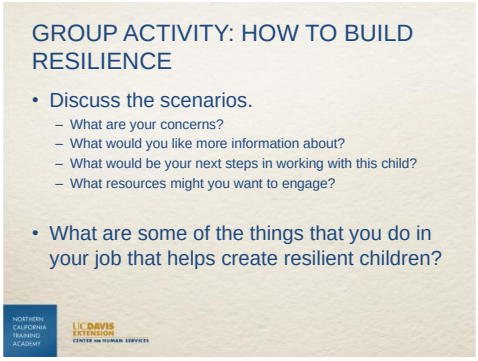
Slides 65 - 67: Wrap-Up and Application (25 mins)

Application Scenarios: Tammy & Marcus

Preparation: Bring copies of the Tammy & Marcus scenarios to class.

Application: Hand out the scenarios to the class groups with ½ receiving Tammy and the others Marcus. Have them discuss the questions on Slide 68 in their groups. Bring the class back together to discuss their responses with the other groups.

Questions: What are your concerns? What would you like more information about? What would be your next steps in working with this child? What resources might you want to engage?



Tammy

Tammy is 4 years old and currently lives in a foster home. Tammy has been in child protective custody for one month, since she was found wandering on a busy street by herself. Tammy was removed from her birth mother, Sue and her adoptive mother Jeannie (Sue's partner). After Tammy was found alone on the street, Sue admitted to using drugs and often sleeping until 11 or 12, leaving Tammy to get herself up in the morning when Jeannie is not home. Jeannie's job requires frequent travel and Jeannie notes that Sue has been the primary caregiver. Jeannie states that she was aware that Sue was drinking a lot, but she was not aware of the full extent of the problem. The team explored options with Jeannie including Jeannie taking a leave of absence to stay home with Tammy. Jeannie does not feel able to make that change. Jeannie noted she has a substance abuse history as well and is not clean and sober herself.

Tammy has been doing well since she has been in foster care. She goes to preschool in the mornings, three days a week. The foster mother, Mary, tells you that Tammy loves to play with the family dog and can dress herself now with minimal help, something that she could not do when she arrived.

At school, Tammy struggles with expressing herself. Her feelings are easily hurt by the other children. The teacher says that more than any other child in the class Tammy will find an isolated corner and stay there introspectively playing by herself. She is not easily comforted by the teacher and does not show a preference for one teacher over another, like most of the other children. She can follow simple two-step directions and likes books with colorful pictures. On the playground, Tammy likes to climb the stairs to the slide and to go down. She is learning to ride a tricycle and can now pedal by herself. She was not potty trained when she moved to the foster home but now she is and rarely has an accident. This is a source of pride for Tammy. She is curious about her body and understands now about where potty comes out and can recognizes the sensations associated with simple body functioning. When the foster mother comes to pick her up from her school, Tammy does not run to her and sometimes does not even seem to recognize her. The transition from school to home is often emotional with Tammy refusing to talk or react to the foster mother for a couple of hours afterwards.

Tammy has been referred for developmental assessment and therapeutic play. The process for beginning this assessment and treatment has been underway for about three weeks and as the social worker you are building Tammy's treatment team.

Sue has started drug treatment and has been doing well. Jeannie has participated in outpatient treatment. Both Jeannie and Sue have begun learning new ways of interacting with Tammy and learning about child development. They are eager to see Tammy and try out their new parenting skills. As the social worker, you attend the next supervised visit. When you arrive you notice Tammy and Mary sitting, reading a book. Tammy is smiling and appears relaxed. Sue and Jeannie arrive and you go with them and Tammy into the play room for the visit.

Tammy immediately becomes quiet, goes to the far end of the room, and sits down facing away from Sue and Jeannie. Tammy begins sucking her thumb and holding a book very tightly. Sue asks how Tammy is doing. Tammy just looks at her, vacantly. Sue looks hurt, gets angry, and tells Tammy that she is not her friend. Sue goes and sits on the opposite side of the room and begins to play with a puzzle refusing to look at Tammy or at you. Jeannie looks to you to take action and does not make any effort to engage Tammy.

Marcus

You are the social worker for Marcus. Marcus is 11 years old and of normal height and weight for his age range. He is Latino and lives with his maternal grandparents, who also care for his older brother and younger sister. Marcus has another brother who has a different father and the brother lives with that paternal grandmother. Marcus' mother, Carmen is in prison on drug related charges. She is serving a three-year sentence; however, for the past six years Carmen has been incarcerated for most of the time. When Carmen is released she quickly gets strung out on drugs and then gets picked up again. Marcus tells you that this is the only reason that she is still alive. Marcus and his siblings lived with their mother for the first two years of their life and then for short periods when she was not incarcerated. During that early period the case file suggests that Carmen led a transient lifestyle with many people coming in and out of the home and her focus was on obtaining drugs and partying. Marcus' father, Miguel was incarcerated during Marcus' early years. When he was released from prison 2 years ago Miguel tried to re-establish contact with Marcus, but Marcus' maternal grandparents were very opposed to any contact and Miguel became discouraged. Miguel has recently resumed efforts to build a relationship with Marcus, but the situation is challenging because the grandparents do not trust Miguel and have not allowed him to be in touch with Marcus.

Marcus talks lovingly about his mother and of wanting to take care of her when she comes out of jail. His grandparents regularly tell him that his mother needs to clean up, grow up, and come take care of her children as they are getting old and will not be around for very much longer. They are angry and heartbroken about their daughter.

Marcus' grandparents own a modest home in a part of the community that used to be well respected. As the community has moved on to attract affluent people from surrounding cities this part of town is no longer looked upon with as much respect as it once was. Marcus' grandparents are proud people who believe that they should be able to take care of their own and to keep their own business private. It is very difficult for them to have child protective services in their life and they wonder what they did to Carmen to make her lead this lifestyle. They do not believe in allowing outside people into their family to help them and resist any type of therapy for the children or themselves. When the Department insists, they reluctantly take the children to their appointments, but it has been difficult to engage them with a therapeutic team for Marcus. Their life has not turned out as they had imagined and they cycle from lovingly talking about taking care of the children to being resentful that they are forced to care for them.

Marcus does not seem to have many friends, but really wants them, and the opinions of the other children seem extremely important to him. Marcus can sit with you and read a book and work on his homework if you sit quietly next to him. He will not sit for very long and do his work on his own. Marcus does not do extracurricular activities, like sports, etc.… He was sent home last week for getting into a fight during a basketball game with the other children because someone went over the line with his feet and the point was still good. The other children told him that there had been agreement before they started that it was allowed to go over the line but Marcus apparently did not understand that. He was suspended from play with the other children for a week.

At grandmother's house, if you speak to the grandmother without him being the focus of attention, he will act out by knocking something off of the coffee table or irritating the other children. If the conversation is about Marcus, he will get very red in the face, scream a profanity, and storm out of the house. At your last visit, the grandmother said that she was fearful that Marcus was a "pervert" as he talks about his "dick" and girls all of the time and she caught him masturbating in his bedroom the other morning.

Your office is very close to the school and on most days for the past two weeks you have been called to the school to come pick up Marcus in the middle of the day as the office tells you that he has had a blow-out. When you get to his classroom Marcus is usually sitting in a chair with his arms crossed, his face flushed, looking down at the floor

with an angry stare. When you ask what happened the teacher tells you that she asked Marcus to go get his homework out of his backpack in the coat room and Marcus jumped up and looked confused. She insisted that he go get it and he jumped on the table and started kicking books off of it with his feet.