

The Ainsworth Strange Situation

This PowerPoint set consists of 132 slides illustrating the Ainsworth Strange Situation Procedure. It was designed for use in lecture courses, where students often find it difficult to see and follow key behaviors in real time. Using slides allows the instructor to pause and resume more easily than is often the case with tape or digital files.

The presentation includes brief statements of key concepts from Bowlby-Ainsworth attachment theory. There are also references to a few key empirical studies. This information is provided as context for classroom presentations. Published work should refer to full length articles, not to this .ppt.

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The Ainsworth Strange Situation



Mary Ainsworth

The hallmark of infant attachment is using one or a few people as a secure base from which to explore and as a haven of safety when needed.

This behavior occurs across time and across contexts. As such, it is difficult and time-consuming to assess in homes and unconstrained outdoor settings.

The Strange Situation is a semi-structured laboratory procedure that allows us to identify, without lengthy home observation, infants who effectively use a primary caregiver as a secure base.

The Ainsworth Strange Situation

The Strange Situation is not a test of whether the infant is attached to the adult. The procedure is conducted with someone who is assumed to be an attachment figure.

The question is not whether the baby is attached or not attached to the adult. We assume that all normal home reared 12-18 month-olds are attached to their primary caregiver.

The Strange Situation is designed to tell us something about the quality of the relationship.

The Ainsworth Strange Situation

Specifically, is the infant able to use the person it is attached to as a secure base from which to explore and as a haven of safety and comfort?

Or, is the infant lacking confidence in the caregiver's availability and responsiveness and thus unable to use the caregiver effectively?

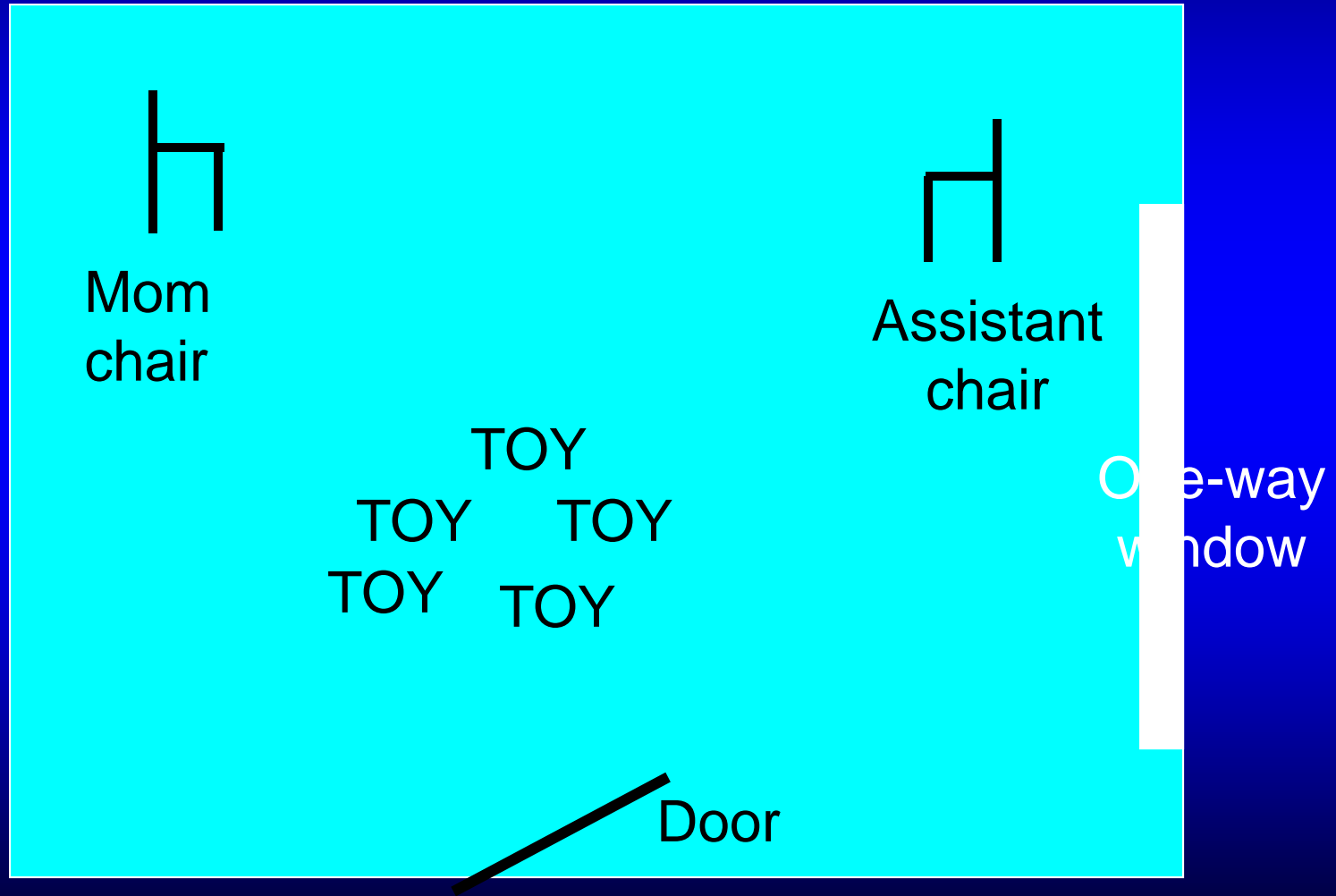
Ainsworth, Blehar, Waters & Wall (1977) and Vaughn & Waters (1990) validated the Strange Situation as an indication of how smoothly and effectively an infant uses a particular caregiver as a secure base at home.

Strange Situation Procedure

The Strange Situation is conducted in a room with:

- A one-way window for observing and filming
- A door for adults to enter and leave
- A collection of toys for the infant to explore
- A chair for mother to sit in
- A chair for a research assistant to sit in

Strange Situation Procedure



Strange Situation Procedure

The procedure consists of 8 brief episodes:

- Ep. 1 - Mother and baby are introduced into the room. (1 minute)
- Ep. 2 - Mother sits and baby plays freely for 3 minutes. Mother is responsive if baby initiates play or interaction.

Strange Situation Procedure

Ep. 3 - Female research assistant enters, sits quietly for 1 minute, talks to mother for 1 minute, and then sits on floor and engages baby for 1 minute.

The research assistant (often called "the stranger") is not there to scare the baby. She is there as a companion so the baby will not be entirely alone when mother leaves.

Strange Situation Procedure

Ep. 4 - Mother says "bye bye" and leaves the room for 3 minutes.

Once out of the room, mother joins the researchers at the one-way window.

25% of babies cry. Mother can stop the procedure if the baby seems too distressed.

Whether the baby cries or not tells us very little about attachment quality.

Strange Situation Procedure

Ep. 5 - Mother returns. (Stranger leaves quietly.)

Mother pauses just inside the door.

Holds out her hands toward baby and says pleasantly, "I'm back".

If baby wants to be picked up, mother does so.

If necessary, mother comforts baby.

Mother tries to get baby back to play.

Behavior in reunion episodes is the most useful indicator of attachment quality.

Strange Situation Procedure

Ep. 6 - Stranger has already left.

Mother leaves for 3 minutes.

Infant is alone.

Mother watches from behind one-way window.

This is the most stressful episode. If infant cries continuously for 1 minute, mother returns early.

Strange Situation Procedure

Ep. 7 - Stranger returns for a 3 minute episode.

She picks the baby up if necessary to comfort it.

She tries to interest baby in the toys.

If baby won't be comforted, stranger sits and waits for mother to return.

This episode is primarily used to show that babies are not merely averse to being alone - they want mom.

Strange Situation Procedure

Ep. 8 - Mother returns. (Stranger leaves quietly.)

Mother pauses just inside the door.

Holds out her hands toward baby
and says pleasantly, "I'm back".

If baby wants to be picked up,
mother does so.

If necessary, mother comforts baby.

Behavior in the two reunion episodes (Ep. 5 & Ep. 8) is
the key to evaluating attachment security.

Strange Situation Classifications

Secure

65-75% of middle-class, home-reared, 1-year-olds

Confident in caregiver's availability & responsiveness.

Good secure base use at home.

Strange Situation Behavior:

May or may not cry.

Acknowledges mother's return.

No angry avoidance or uncomfortable contact.

Returns to play when comforted.

Strange Situation Classifications

Insecure - Avoidant

10-15% of middle-class, home-reared, 1-year-olds

Lacks confidence that caregiver is available & responsive.

Inconsistent secure base use at home.

Strange Situation Behavior:

Less likely to cry - esp. 1st separation.

May ignore mother's return.

May approach and then stop or turn away.

May continue play without acknowledging mother.

Elevated heart-rate.

Strange Situation Classifications

Insecure - Disorganized

<5% of middle-class, home-reared, 1-year-olds

- Potentially as many as 50-75% of high risk 1-year-olds.
- Interpretation of this classification is still under study.
- It may be that a motivational system other than attachment is driving the infant's responses. Strongly associated with significant outcomes some of which may reflect risk status rather than insecure attachment per se.

Strange Situation Behavior:

A wide range of “odd”, “out of context” behaviors not seen in other groups. Some are fleeting followed by ordinary attachment behavior. Sometimes key is mixing signs of A and C criteria across episodes.

Strange Situation Classifications

Insecure - Resistant

15-20% of middle-class, home-reared, 1-year-olds

Lacks confidence that caregiver is available & responsive.

Inconsistent secure base use at home.

Strange Situation Behavior:

Hard crying during both separations.

Weak or absent approach when mother returns.

May cry to be held and then struggle to be put down.

Angry slapping at toys offered

May not return to good quality play.

Patterns of Attachment In The Strange Situation

Secure
Insecure Avoidant
Insecure Resistant
Disorganized

Group B

Secure



Mother leaves.



Baby crawls to door.



Baby at door - crying.



Won't accept comfort from Stranger.



Mom returns. Baby steps toward her.



Baby looks up at Mom.



Baby reaches to be picked up.



Held by Mom. Arms around;
legs around; head down.



Left arm wrapped around; hand down.



Remains in contact.



More contact; head down; crying stopped.



Mom sits; Baby maintains close contact.



Relaxes a bit. Stays on lap; interacts with Mom.



Initiates familiar play (Greek Dance).



Interest in environment recovers.
Points to bird mobile.



Looks for Mom's reaction.



More interaction with Mom.
“How big are you?” game.



How big are you?, again.



Sooo big!. Mom-baby face-to-face.



Affectionate contact. Fully recovered from separation.
Baby then went off Mom's lap to play with toys.

Group A

Avoidant



First separation. Baby cried. Mother returns.
Baby crawls toward her. No eye-to-eye contact.



Doesn't complete approach



Turns past Mom toward piano.



Continues toward piano as Mom reaches.



Continues away as Mom touches him.



Continues toward piano.



Mom removes hand.
Baby looks at piano.



Explores piano.



Continues looking at piano.
Ignores Mom.



Play seems superficial. No obvious object.
Mother goes to chair.



Note look and touch are not coordinated.
Suggests “empty” play. Still ignores Mom.

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Mom pauses to watch.
Baby still hasn't checked her location.

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Mom approaches to pick up baby.
Baby sits still as she approaches.



Mom reaches; Baby ignores.



Mom grasps baby. Baby ignores.



Mom lifts. Baby doesn't notice or help.



Second reunion. Baby was crying.



Mom returns. Baby cries. Turns away.
Neck, back, ankles stiff.

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Turns face all the way across body.



Mother approaches. Baby ignores.



Mom reaches to lift baby.



As Mom lifts baby, he goes limp.
This makes him difficult to lift.



Held in Mom's arms. Limp in Mom's arms.
Doesn't look into her face.

Group C

Ambivalent/Resistant



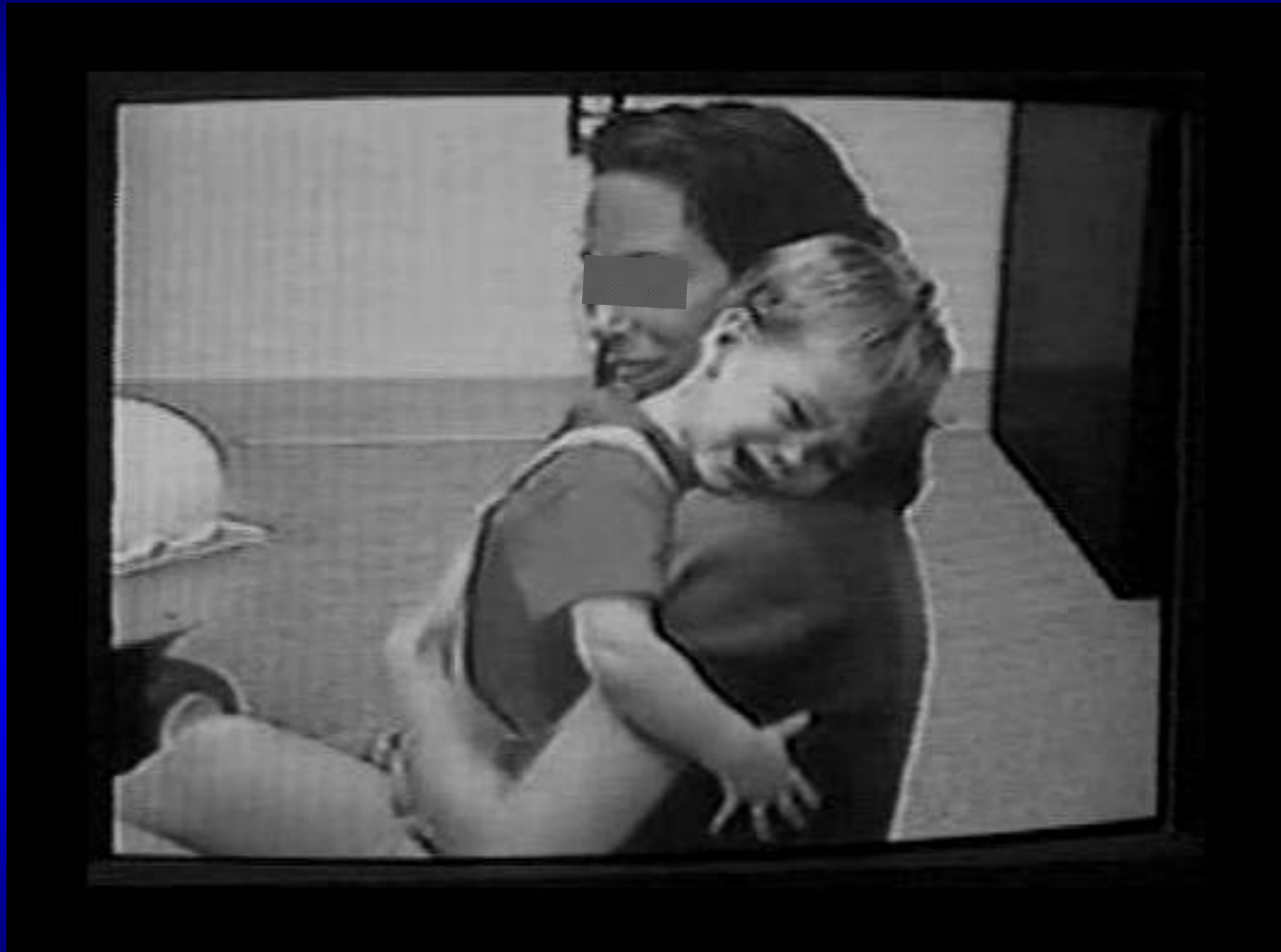
Mother and baby playing - before separation.



Baby cries hard when mother leaves.
Picked up and held when Mom returns.



Baby is difficult to comfort.
Notice arm drops.



Cry continues.



Mother continues trying to comfort baby.
Cry increases.



Mother looks for a toy to offer.



Baby clings and protests when mother
turns to reach for toy.



Pause in crying.
Mother offers a toy.



Mother offers a toy.



Sharp cry.



Baby slaps at toy.



Baby slaps at toy.



Baby slaps at toy.



As baby watches, without holding on.
Mother offers a different toy.



Baby slaps away the second toy.



Baby slaps away the second toy.



Baby slaps away the second toy.



Baby slaps away the second toy.



Mother hugs baby.



Mother tries face-to-face interaction.



Mother tries face-to-face interaction.



Baby looks away - reaches for mother
at the same time.



Baby hugs onto mother - crying.



Baby hugs mother. Crying - not clinging.
Wants contact but isn;t comforted by it.

Group D - Disorganized

Examples of "Odd" Behavior

Face Down When Mother Returns Followed by Ordinary Interaction



Mother away.
Baby interacts with stranger.



Mother returns. Baby looks promptly.
No greeting.



Turns away.



Lurches forward.



Face down.



Onto carpet.



Mother sits on chair.
Baby sits up.



Turns toward a toy (ball).



Reaches expressively for ball.



Gets ball.



Looks directly to mother.



Face relaxed. Looking directly at mother.



Tosses ball toward mother.
Seemingly ordinary interaction.

Arched Back / Falls Back
On Reunion and When Held



Playing with broom during separation.



Mother returns. Pauses at door.



Baby looks at mother.
Waves broom.





Shows doll.



Mother moves toward chair.



Baby arches neck. Arches back.



Leans back.



Remains stiff. Continues back.



Free falls onto back.



Baby on back. Fussing.



Mother lifts baby.



Baby remains stiff when lifted.



Mother moves baby into sitting position.



Sits baby down. Baby doesn't resist.



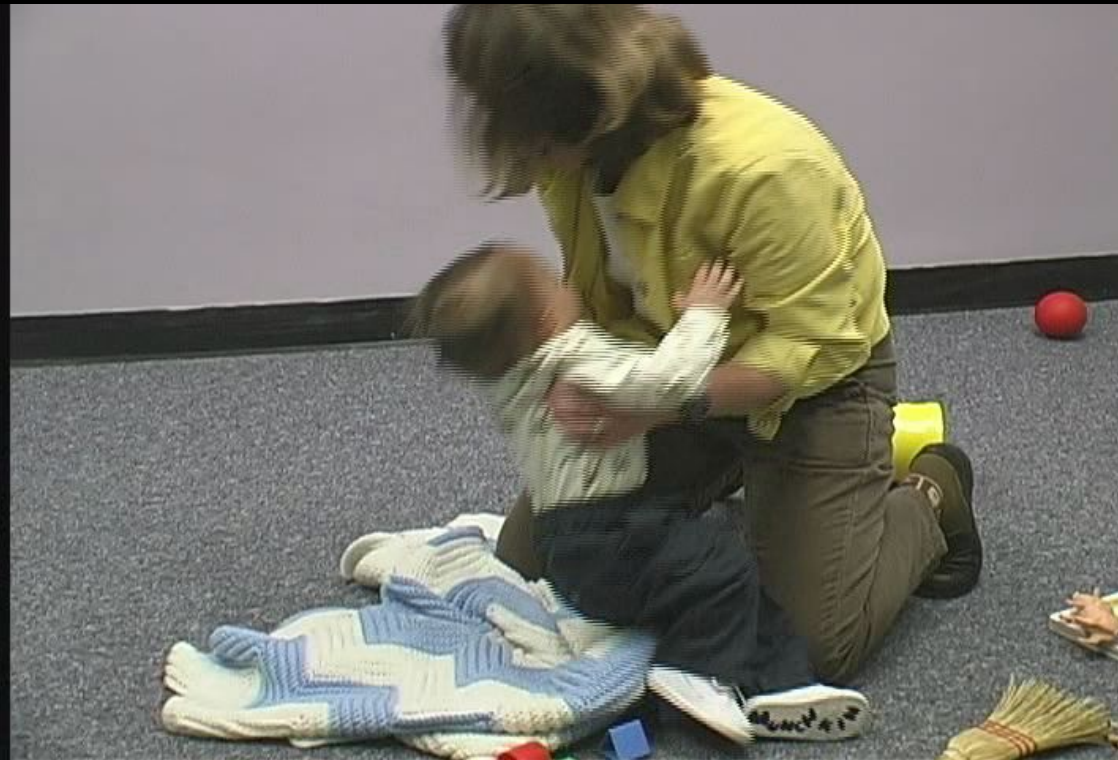
Baby lifts arms. Arches back strongly.



Falls back out of mother's arms.



Falls to floor. Back arched. Fussing.



Mother lifts baby.



Almost immediately, baby is relaxed.
Leaning against mother.

Stability and Change

Strange Situation classifications tend to be quite stable from 12-18 months of age. However, Bowlby's theory predicts that an infant's expectations about its caregiver's availability and responsiveness can be revised in light of changing experience.

Vaughn, Egeland, Waters, & Sroufe (1979) demonstrated that Strange Situation classifications can indeed change as a function of stressful events impinging on family circumstances.

Attachment Security Is Not A Trait

Psychologists often refer to infants (and adults) as “Secure” or “Insecure”, “Avoidant” or “Resistant” – as if these were trait-like personality or temperament characteristics.

Particularly in infancy and early childhood, the term “Secure” is shorthand for “Secure as to (confident about) a particular caregiver’s availability and responsiveness”. This is not a trait that applies to caregivers (or people) in general. Indeed, the correlation of infant Strange Situation classifications with mother and father is consistently near zero.

Attachment Security Is Not A Trait

If attachment security were a general trait, we would expect infants to receive the same classification from one occasion to the next, even if family circumstances are changing. In addition, we would expect infant attachment classifications to be the same from one caregiver to the next.

The fact that attachment security can change with circumstances and differ from one caregiver to another supports Bowlby's idea that infant attachment security is based on the infant's actual experiences. Attachment security is more an Expectation than a personality trait or a temperament style.

Cross-Cultural Generality

Bowlby theorized that the capacity to form secure base relationships with one or a few primary caregivers is characteristic of humans across cultures.

Early sought evidence for this by looking at the distribution of Strange Situation classifications across cultures. However, within the Bowlby-Ainsworth framework, there is no reason to expect that the distribution of Strange Situation classifications should be the same across cultures.

Cross-Cultural Generality

A better test of the cross-cultural generality of Bowlby's theory would be to look at infant secure base behavior across cultures. Posada et al. (1995) showed that infants in a wide range of cultures relate to primary caregivers as “secure base” figures.

In addition, Posada et al. (1999) demonstrated that, in a variety of cultures and across ordinary and emergency contexts, maternal behavior is the best predictor of infant secure base use.

These studies support Bowlby's views about the nature and origins of infant attachment relationships.

Validity and Psychological Significance

A wide range of studies has demonstrated that infant attachment security is related to later relationship functioning and adjustment.

Part of this is probably related to the fact that, in many areas of development, cognitive and social influences tend to stabilize early formed representations and expectations.

In addition, it seems likely that the same primary caregiver would behave somewhat similarly throughout infancy and childhood.

Validity and Psychological Significance

Despite its influence on a wide range of developmental and adjustment related outcomes, attachment security is not the only influence on social, cognitive, or emotional development.

For example, attachment security cannot be the only factor, or even the primary factor, in making decisions about child custody. Secure attachment cannot outweigh the risk associated with a substance abusing, or violent, or negligent caregiver.

Both Bowlby and Ainsworth clearly understood this.

Validity and Psychological Significance

From Maslow to Bowlby to Sroufe, psychologists have understood that it is a great asset for a child to grow up believing that one or a few primary caregivers is “Always there for me.”

The Strange Situation provides an empirical tool for judging whether an infant is skilled at using a particular adult as a secure base outside the laboratory.

The availability of a standardized assessment procedure has been a very strong impetus to research on attachment development and its roles in adjustment.