# **Can Kids Learn in a Negative Environment? By Amanda Morgan**

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You've likely seen the video by now. (*It's inching toward one million views.*) The toddler with those sweet cheeks lights up as the experimenter passes the toy across the table. The toddler plays with the parts as he's seen the experimenter do. His eyes are wide, his smile even wider. Then the "emoter" comes in.

### She's grumpy.

She argues with the experimenter. They stop, and the experimenter hands the toddler another toy.

But this time, the toddler freezes. He looks down. He doesn't play.

For twenty seconds, this toddler, who was once eager and excited, simply tries to hold still and not be noticed.

Researchers from <u>Institute for Learning and Brain Sciences</u> (I-LABS) at University of Washington created this experiment to assess the ability of toddlers to regulate behavior based on social cues. The toddlers don't play after the negative exchange because they've used an important skill called social referencing, looking at the emotional expressions of others to ascertain what type of behavior is expected.

If you haven't seen the video yet, you can find it here:

(For those of you bothered by the experimenter's somewhat robotic demeanor and scripted sing-songy voice, my guess is that's necessary to maintain consistency between samples and to prevent the experimenter from becoming another variable. For more background, <u>read this article</u> written by the mother of the toddler in the video.)

I love what this experiment sets out to explore, the possible links between impulsive behavior and the ability to read social cues, but as I watched the video a different connection was brought home to me.

Children, particularly toddlers, learn by playing and exploring. In a safe and cheerful environment, the toddler was eager and enthusiastic about exploring and playing.

Excited to learn.

In the tense, negative environment the toddler stopped. He didn't play. He didn't explore.

He didn't try to learn.

I couldn't help but think about the emotional environments in which our children live and learn. Is the emotional environment safe, warm, and loving? Then they are more likely to play, explore, take risks, and learn. Is it tumultuous, curt, or negative? Then they may be more inhibited, reticent, afraid to try.

Learning requires mistakes, but kids in negative environments don't feel safe making mistakes. So they put their heads down and just get through.

#### Sometimes they just try not to be noticed.

## Sometimes we mistake that fear for good behavior.

Whether it's the home environment or the classroom, kids recognize and respond to emotional charge. When negative environments create fear and stress, learning is blocked. That's what I personally saw as I watched the I-LABS video. To me, a child who is afraid to play is symbolic of a child who is afraid to do what it takes to really learn — play, explore, risk.

It seemed to be a perfect outward representation of what we know goes on inside the brain when children try to learn in overly stressful environments. <u>Neuroresearchers tell us</u> that when the amygdala (the part of the brain responsible for sensing and responding to threats) becomes over-activated it creates what they refer to as an "affective filter". New input literally can not get through to the memory and association circuits of the brain. This isn't just theory, it's supported by neuroimaging. As neurologist and teacher, Dr. Judy Willis, <u>states</u>:

"What is now evident on brain scans during times of stress is objective physical evidence of this affective filter. With such evidencebased research, the affective filter theories cannot be disparaged as "feel-good education" or an "excuse to coddle students" — if students are stressed out, the information cannot get in. This is a matter of science."

The brain systemically resists learning when it's fearful, stressed, or otherwise threatened. And since we know that the home is the child's first classroom, this information extends there as well.

## Protect the environment.

Discussing the study demonstrated in the video by the rosy-cheeked cherub, co-director of I-LABS, Dr. Andrew Meltzoff, said, "Through studying the roots of social-emotional learning we are illuminating an important aspect of human personality and what helps kids succeed in life and school."

I agree, and appreciate this look into the social skills kids need to succeed. I don't want to take away from this work whatsoever. But as I watch I wonder. As we look at what **skills** will benefit kids, are we also noticing what **environments** will help them succeed as well?