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Brain References

Presents

Parenting & Reparenting, Part 1



Trust Is a Developmental task

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Trust is a key developmental task that ideally is learned during the first 12 months of life

Synonyms: confidence, credence, faith



Some descriptions use the words *proper*, *fit*, *apt*, *suitable*, and *becoming*; which suggest that genuine trust is evidence-based and congruent with the circumstances involved

You learn how to trust, when it is safe to trust, and when it is imperative not to trust for your own safety and well-being . . .

Children Learn Early ...

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Whether or not it is safe to trust. As a baby when you were cold, wet, hungry, lonesome, or sick, did a parent lovingly respond to your cries to comfort you and help you feel better?



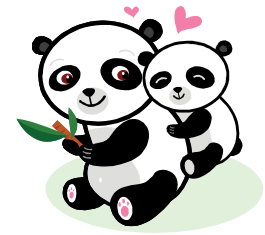
If yes, you likely learned it was safe to trust; if no, you likely learned that it wasn't safe to trust

An inability to trust leads to a sense of being unsafe, which leads to an inability to defer gratification, which leads to a plethora of undesirable behaviors ...

Questions to Ask

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In childhood, did you learn how to trust? If not, you may need to reparent yourself and learn now how to trust safely: yourself and others



Do your children trust you? They tend to feel safer and be happier when they perceive their parents, caregivers, and teachers as reliable and dependable and trust-worthy

Their level of trust impacts their ability to defer immediate gratification for a delayed larger or more desirable reward—which influences all their choices, behaviors, and ultimate success in life

Without Trust...

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You may exhibit a lack of confidence in everything and everyone, including yourself (and a Higher Power that is part of your lifestyle) or you may trust blindly and unwisely

You may confuse caretaking with caring, control with concern, intensity with intimacy, and obsession with dedication

You may succumb to apathy or total despair or exhibit any number of behaviors that result in negative outcomes (addictions of many types, bullying actions, failure in school and life)

Study Observations

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Studies by Walter Mischel, a Stanford University researcher, showed that children with absent fathers often prefer immediate, lesser rewards over delayed more valuable rewards (1961)

Children's willingness to wait is negatively impacted by uncertainty about the likelihood, value, or temporal availability of the future reward (1964)



A Longitudinal Study

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In the mid 1970's Walter Mischel began a longitudinal study to evaluate links between the ability to defer gratification and one's long-term success—653 four to six year-olds were in the original study

Mischel promised a second marshmallow to any child who could postpone eating their marshmallow until the researcher returned to the room in about 15 minutes

Observations

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Some of the study participants ate their marshmallow immediately or within a very few minutes



Some children waited with great difficulty for longer amounts of time before succumbing (the mean was 5-6 minutes of waiting)

Some who ate their marshmallow before the time was up tried to ‘bully’ other children into giving up their marshmallow (bullying behaviors are learned . . .)

Observations, Cont'd

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Some of the children in the study appeared to think differently and exhibited creativity in trying to wait

For example, one little boy went to sleep in a corner, waking up when the researcher returned to the room



Others sang songs, tapped their feet, told each other stories, played games, walked / marched around the room, and figured out other ways to distract themselves while waiting

Initial Results

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Of the 653 4 to 6 year old children:

- ✓ **Nearly 1/3 waited the 15-20 minutes and won a second marshmallow**
- **2/3 ate their marshmallow before the researcher returned to the room (the mean wait time before eating was 5-6 minutes)**



Conclusion: The quality of self-control—defined as the capacity to defer gratification as one single skill—is twice as powerful a predictor of latter success in life as IQ

Fourteen Years Later 1988

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The first major evaluation of the original participants and how they were doing



The participants who had not waited were already much less successful and were more indecisive, stressed, and stubborn . . .

Those who had won a 2nd marshmallow were more socially competent and self-assertive, exhibited more resilience in dealing with life's frustrations, and had applied the ability to delay gratification in pursuit of their goals

Two Years Later - 1990

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Those who had won a second marshmallow were found to have averaged 200 points higher on SATs (Scholastic Assessment Test)

The SAT has a possible 2400 points (with an average in the 1500-1600 point range). Above average scores improve one's chances of getting into a more selective or preferred school and of getting 'grants' rather than 'loans'

They were also much less likely to be involved in substance abuse ...

Brain Imaging Studies - 2011

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Brain imaging studies were performed on a sample group from the original Stanford Marshmallow Experiment participants, all of whom were now in mid-life



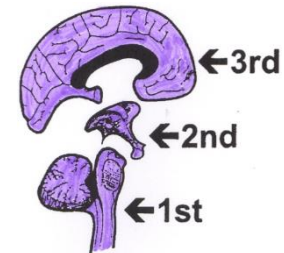
Studies showed key differences in two brain areas between the participants with high delay times versus those with low delay times

Prefrontal cortex and the Ventral Striatum

Brain Scans - High Delay Times

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The **Prefrontal Cortex** was more active (plan, evaluate, decide, set goals, choose, and activate will power ...)



The **Ventral Striatum**—linked with the 2nd brain layer and with functions related to association learning and addictions—was more active when participants were trying to control their responses to alluring temptations; its activity was greatest when the individuals expected to be rewarded for their decision with high certainty

A Two-Part Experiment – 2012

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Researchers at the University of Rochester, NY, gave children a ‘reliability’ pre-test (“Wait 2½ minutes for new crayons”)



- **Group 1 got a broken promise from an unreliable tester**
- **Group 2 received a fulfilled promise from a reliable tester**

The children were given a break and then went into the marshmallow experiment

Marshmallow Experiment Results

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Group 1 - unreliable tester:



Only **7.1%** of children in the repeat of the Stanford Marshmallow Experiment waited the full 15 minutes and earned a second marshmallow

Group 2 - reliable tester:



64.3% of the children waited the full 15 minutes and received a second marshmallow

Summary

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The percentage of children in the reliable-tester group who got a second marshmallow nearly doubled when compared with the initial Stanford Marshmallow Experiment

There appears to be a strong link between the ability to trust (reliable tester) and the ability to delay gratification—which is key for success

Regardless of reliability, some will still choose immediate gratification for any number of reasons . . .

Conclusions

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Young children's decision making on the marshmallow test is moderated by beliefs about environmental reliability

Young children are capable of delaying gratification in the face of temptation when provided with evidence that waiting will pay off

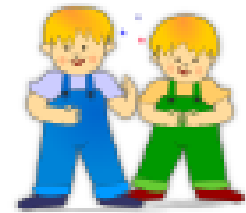


Two potentially important factors are *self-control capacity* and *established beliefs*

Conclusions, Cont'd

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Even very young children possess sophisticated decision-making capabilities for reasoning about physical causality, social behavior, future events, concepts and categories, and word meanings



They also use their rational decision-making abilities in a domain of behavioral inhibition—a sustained delay-of-gratification task

What Are You Role-Modeling?

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Trust is a developmental task that develops during the first 12 months of life

- 1. Be CAREFUL what you promise**
- 2. Then ALWAYS follow through**



Can you be trusted to do what you say you will do—and consequently role model that God can be trusted to do what He says He will do?

This one factor has a great deal to do with a child's daily choices and success in life . . .