



Center on the Developing Child
HARVARD UNIVERSITY

The Brain Architecture Game: Every Brain Tells a Story

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 @HarvardCenter

A Collaboration

Bringing together expertise on
the science of early brain development,
communication for social good,
and game theory.

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NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD



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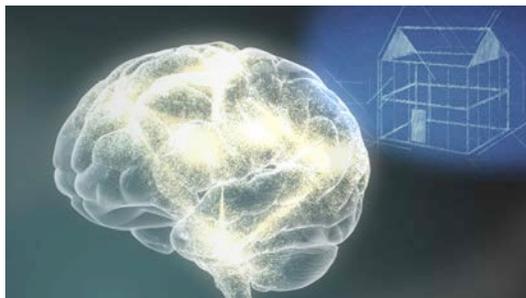
The Science of Early Brain Development



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Key Concepts in the Science of Brain Architecture

- 1) Experiences build brain architecture
- 2) "Serve & return" shapes brain circuitry
- 3) Toxic stress derails healthy development



A strong foundation in the early years improves the odds for positive outcomes and a weak foundation increases the odds of later difficulties.

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Goal of the Game

Build a "Brain" that is:
TALL (= functionality) and
STRONG (= can withstand life stresses)



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Choose Your Roles

Each team should pick one person to be in charge of one of the following:

- 1) Unpack the game (and repack at the end)
- 2) Rule book
- 3) Life Journal
- 4) Roll the die
- 5) Life Experience Cards
- 6) Materials
- 7) Time-keeper
- 8) Photographer



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Getting Started: Build Your Base and Get Your Social Supports



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Playing the Game: Ages 1-5



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Pause at
the end of
Age 5!
25 mins

Begin!

3 people in each group take a single card from each year, one year at a time.

Mark on your life journal the type of experience each card is.

Use all of the materials you get each year before moving on.



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The Brain Architecture Game: Ages 6-8



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Test Your Resilience

Ages 6-8

Remember the new rules: *(no more straws!)*

- ☺ Positive = 1 pipe cleaner
- 😊 Tolerable = same as before
- ☹ Toxic = 1 weight
(hang on the highest point of your structure)



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When You Finish...

- Take a photo of your brain!
☺ [facebook.com/brainarchitecturegame](https://www.facebook.com/brainarchitecturegame)
- Tally the total number of positive, tolerable, and toxic experiences you had. What kinds of experiences were positive vs. toxic?
- As a group, read the story of your brain as it was recorded.
- How did your experiences affect the outcome?
- How did the number of Social Supports you received at the beginning affect the outcome?

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Discussion

- 1) How did the life experiences of your “child” shape your brain’s development?
- 2) How important were early social supports?
- 3) Can you have a brain that withstands life stresses later in life after experiencing toxic stress early in life? What made that possible?
- 4) What are the social supports in your community that are available for supporting children’s healthy brain development?
- 5) How does this relate to your work?

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