

## Episode 09: Don't Count Your Cognitions Before They Hatch

### Show Notes

Kids can learn a lot by playing games. In this episode I talk with Dr. Jennifer Blessing about the skills that children learn by playing games, such as turn taking, goal setting, and number sense.

### Game References

Candyland, Chutes and Ladders, Count Your Chickens, Don't Break the Ice, Happy Salmon, Hi Ho! Cherry-O, Hungry Hungry Hippos, Memory, Operation, Rock 'em Sock 'em Robots, Ticket to Ride

### Research References

Ramani, G. B., & Siegler, R. S. (2008). Promoting broad and stable improvements in low-income children's numerical knowledge through playing number board games. *Child development*, 79(2), 375-394.

### Transcript

Hello! This is Episode 9 of the Cognitive Gamer podcast. I am your host, Steve Blessing. Today we have a special guest, Dr. Jennifer Blessing. We will be talking about what children learn by playing games. First though, I'll let Jenn introduce herself!

Steve: First, why should we talk about kids playing games on a podcast about cognitive psychology?

Jenn: Parents find games boring, but there are important features that are important to kids developing cognition.

These are all in the bottom 10,000 on boardgamegeek.

Steve: What kind of features?

Jenn: Turn taking and self control (talk about later). A whole category of games that involve high active, goal oriented games, like don't break the ice and hungry hungry hippos; rock 'em sock 'em robots. Fishing games. These also might include things like Operation; fine motor skills.

Happy Salmon; high energy, matching

But, there are slower, goal oriented games. The goals for those games are ones that parents tend not to find enjoyable. For example, Candyland. Color matching.

Most games have numbers rather than colors.

Jenn asks Steve about Hi ho Cherry-O

Number sense

Three basic principles of counting: one-to-one, stable order, cardinality. (all up to five objects)  
Don't take a 3-year to a craps table. Doesn't mean they are accurate, need to practice. At 4-5 years old, pretty good; now practicing adding and subtracting. Chutes and Ladders. Sorry.

Talk about automaticity. (call back to Stroop, episode 3). Wil Wheaton's wife.

Evidence that these games are helpful. Siegler's studies with low-income kids.



I hope this discussion of what children learn by playing games has been interesting. For those of you who have kids or who play games with kids, maybe you'll look more favorably on your hundredth game of Candyland or Chutes and Ladders. While simple, these games can help in developing important cognitive skills like turn taking, goal setting, and number sense. On the next episode, we will talk about language and the use of narrative in playing games. As always, I welcome any comments or questions you may have, so please email me, [steve@cognitivegamer.com](mailto:steve@cognitivegamer.com) and also visit my website, [cognitivegamer.com](http://cognitivegamer.com). Also, you can like me on Facebook, Cognitive Gamer, or follow me on Twitter, [@cognitive\\_gamer](https://twitter.com/cognitive_gamer). Until next time, remember to think about what you play, and have fun doing it.