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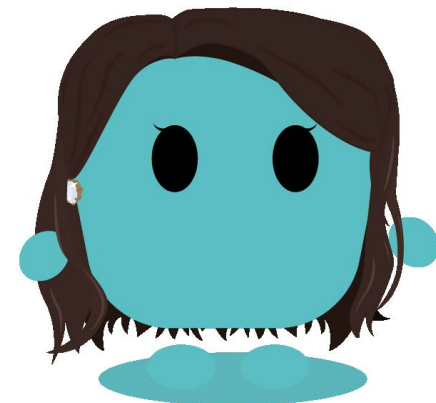
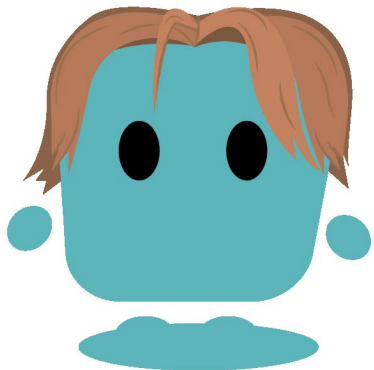


Game changer: Exploring the role of board games in the lives of autistic people

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<https://socialembodycognition.wordpress.com>



Overview

Autism, Board Games & Overlap

Our work so far

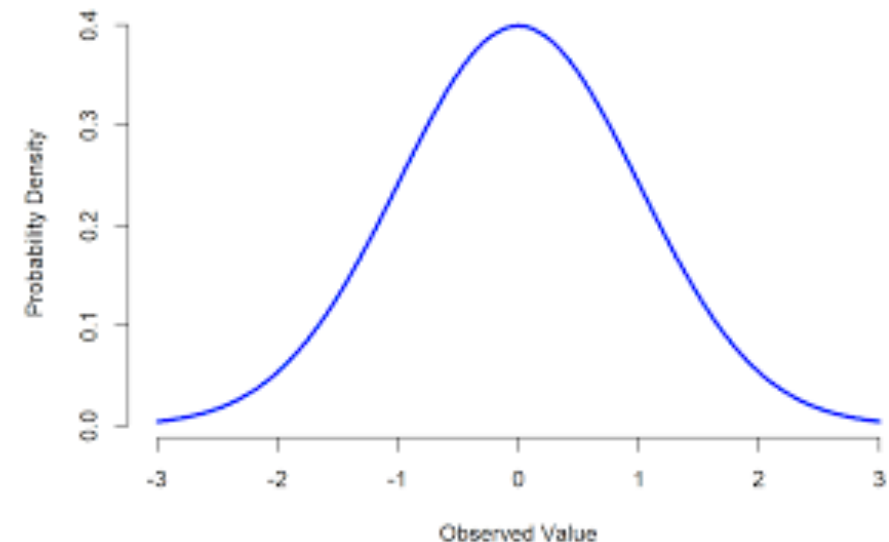
Conclusions, ongoing work, future directions

Q&A

Autism

- What is autism spectrum condition?
- Affects 1-3% of the population
- Social and communication challenges
- Theory of mind (taking perspective and reading minds)
- Propensity for systems, logic and rules
- Special Interests

- Exists on a spectrum (BAP)



Why Board Games

Traditional & Mass Market games –

Chess, Backgammon, Go, Dice, Cards , Monopoly, Cluedo.

Modern Games –

Deeper systems and mechanics, more player interaction, stronger narratives, intricate physical components



- Tools for education, communication, language and cognition
 - Intrinsically motivating (fun, engaging and social)
 - Independent and inclusive

Why Board Games & Autism

Personal observations (Increased Prevalence)

Contradicts Autism Research/Myths

Social hobby that's theory of mind heavy

Very little research in this area



Study 1

Autistic board gamer demographics

RQ 1 how prevalent is autism in this population?

RQ 2 how do non/autistic gamers differ?



Study 1

- Online survey of > 1600 board gamers

Recruited via board game groups, forums, distributor mailing lists, everyone given a free game

- Assessed demographics and gaming preferences and motivations
- Rates of mental health and developmental conditions
 - Most in line with global average
 - Only 2 Elevated condition autism (7% vs 1%) and anxiety (12% vs 7%)
 - *These conditions often co-occur*
 - Autistic traits (AQ) were significantly elevated (30% in clinical range)

Comparisons between non/autistic board gamers

- Motivations for gaming

Neurotypicals = Social interaction / Autistic = Strategizing

Autistic players preferred playing alone

- Ranked certain game themes higher (sci-fi, fantasy, transport, and animal)

- Rated the more mechanical aspects of games as more important

- Autistic players were more likely to be “hardcore” gamers than neurotypicals

Autistic and NT players seem to be getting different things from the hobby





02.

Study 2

Interviews with autistic board gamers

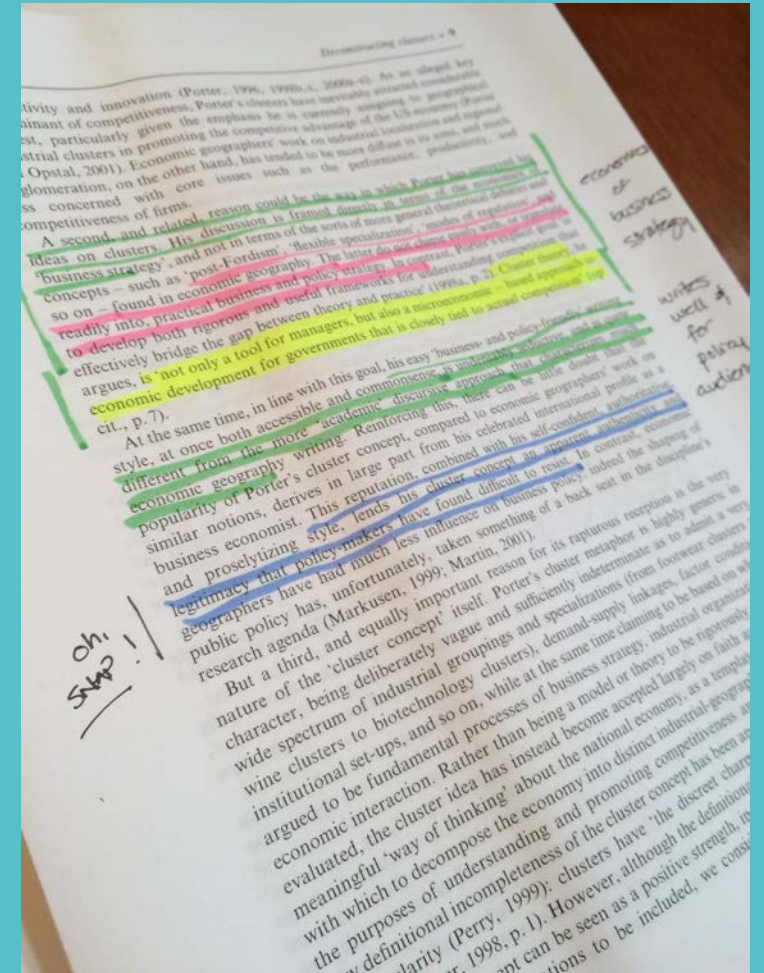
R3: What do autistic board gamers get out of the hobby?

13 Interviews with autistic gamers (10M 3 F)

IPA analysis - Emergent (user led) analysis, 2 coders.

Themes	Frequency in Interviews	Frequency of themes
Systems are Stimulating & Comforting	9	38
Special Interests & Escapism	9	34
Games as a Social Lubricant	11	50
Social Games & Deception	9	10

Table 1. Frequency count of subthemes within interview data.



Themes



Systems are stimulating and comforting

Special interests & escapism

Games as a social lubricant

Social Games and Deception

-

+

The obvious thing that comes to mind is the structure... there are rules and you can learn all the rules you don't have to worry about any weird other rules that somehow everybody else knew that you didn't get the memo about... you can safely interact in this environment without having to worry about something unexpected popping out

Board games enabled me to get out of that headspace...to escape my sort of the ... just being myself which is so pressurising, and you know it's a break so to speak... like an island of calm.

It's a structured environment in which to interact with other humans. We haven't got to worry as much about the whole insane social interaction thing...interacting via the game, via the rules of the game, that's the centre attention. Eyes are on the board, not on you.

The deception, I wonder whether that's necessarily a skill that we need to know. I mean I am an advocate of truth and something I've always struggled with is people lying.

*'I do enjoy those kinds of games, but I have to feel comfortable in the setting to be able to play it'.
'I think it would probably surprise people that I enjoy, like interactive games, social games, party games, probably more than you might expect.'*





03.

Study 3

Focus groups with autism clubs

R4: What do autistic board gaming 'newbies' think about the hobby after being introduced?

Participants:
30 autistic adults, across UK.
(groups of 5/10)

Procedure

Played games for 2 hours

Dixit, Werewolf, Deception in
Hong Kong, Codenames


Then took part in focus groups
about experiences





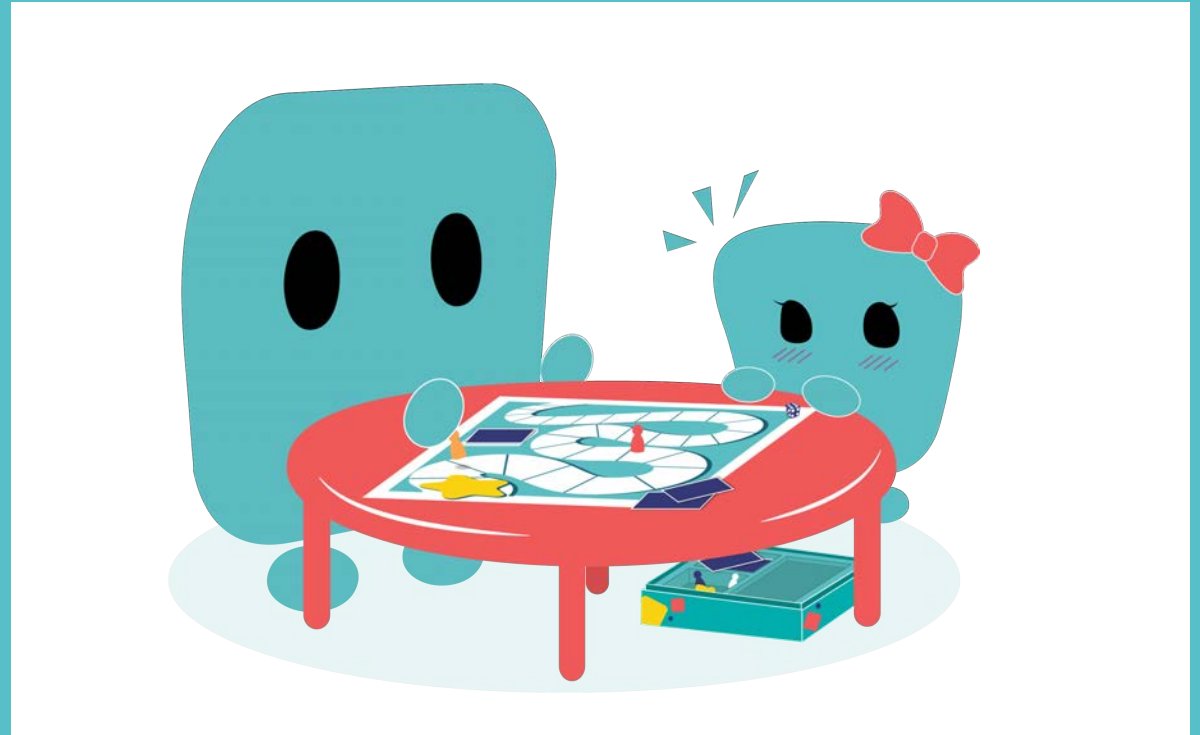
Board games can forge social relationships

The board games are interesting. And we were all interested. I mean, there was no one who felt left out or didn't participate. Because when you're on the spectrum, we find just making conversation, small talk, rather difficult. Couple that with 'we've got a common interest together,' rather than you're trying to construct chit chat about the weather, and now you're also interacting with other people.



Board games can build skills

New games were a challenge, when I played them I was challenged more. So with these games, like with my autism, I've been encouraged to tolerate change more.



04.

Study 4/5

Year long game groups with school/community groups

R5: Can games afford benefits long term

Atherton, G., Dawson, E., & Cross, L. (in press). We've all come together, A board gaming approach for working with autistic people. *American Journal of Play*

Participants:
SEN school and adult community centre
Liverpool and Manchester (over 1 year)

11 children with ASC
14 adults with autism and other
neurodevelopmental disabilities

Procedure:
Weekly 1 hour sessions playing board
games including:
Dixit, Werewolf, Spyfall, Codenames,
Interviewed participants and staff



Interviews with SEN school and Community group for adults with autism and ID (following 1 year)



Analysed using IPA

I think it's made them come together a bit more. Even though they've had their arguments they have probably the most conversations. They're sat round the table together, and that's huge for them.

Friendship

We are with them all the time, and sometimes we forget that they are actually capable of doing stuff on their own. So we always sort of take over and say like 'well I'll do this', but with this game they've had to do it themselves and its been a bit of a learning curve for us to know that they are actually capable of doing it.

Independence

I changed. Learning and adapting to this new game that I haven't played before in my life, and just to see what's going on in that game. Learning and adapting

Skill building

2 groups of 5 autistic adults ,

8 weekly 3 hours sessions

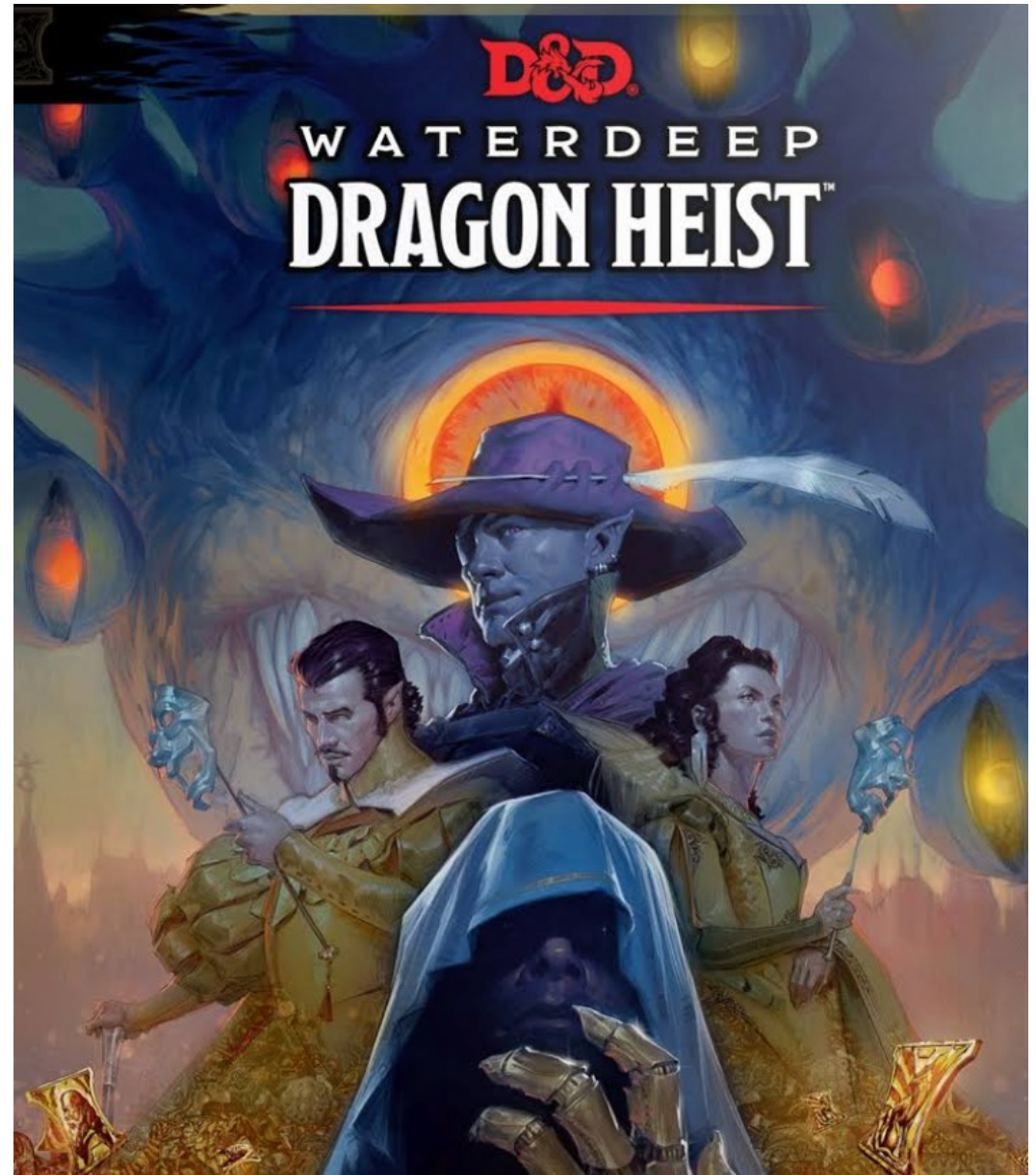
interviewed about experiences at the end

3 themes

1 – Struggles of social life

2 – Different interaction in TTRPG's

3 – Bleed & emotional investment



Conclusions



Board games provide skill building in areas related to social cognition, though these also represent challenges (ie skills like bluffing).

Strategizing and gaming systems are compatible with ASC



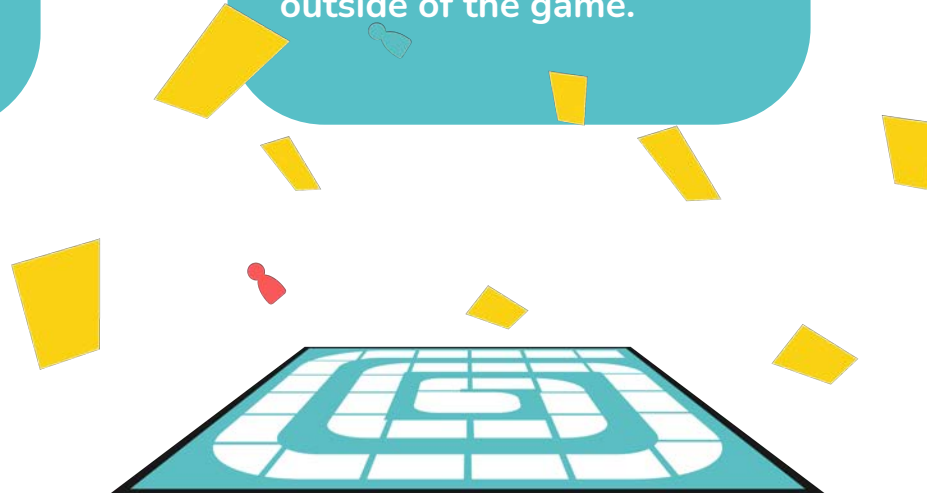
Board games are a social lubricant for autistic people.

They reduce social anxiety and uncertainty. People can talk about the game and this leads to discussions outside of the game.



Board games may present an important intervention for autistic adults and children.

It helps build friendships and allows practice of social skills in naturally engaging settings.



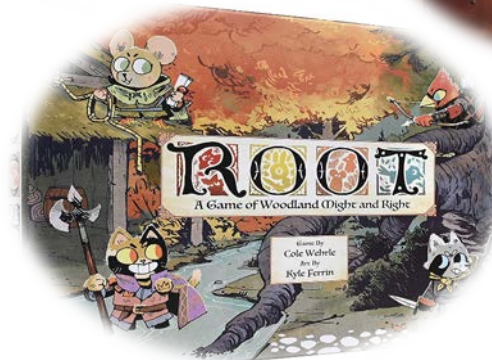
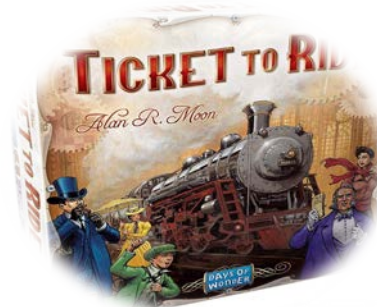
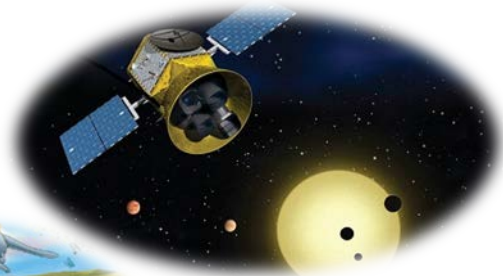
Big picture — Overlap between autism and gaming

Cognitive differences in ASC

- Social skills/Communication
- Structure/'systems'
- Theory of mind/Perspective taking
- Special interests

Commonalities in boardgames

- Cooperating/Hinting/Sportsmanship / Turn taking
- Rules/Logic/Strategy
- Bluffing/Simulating
- Popular board game themes



- Highly motivating -> can lead to expertise
- Enjoyable and engaging

Therapeutic application of Dixit

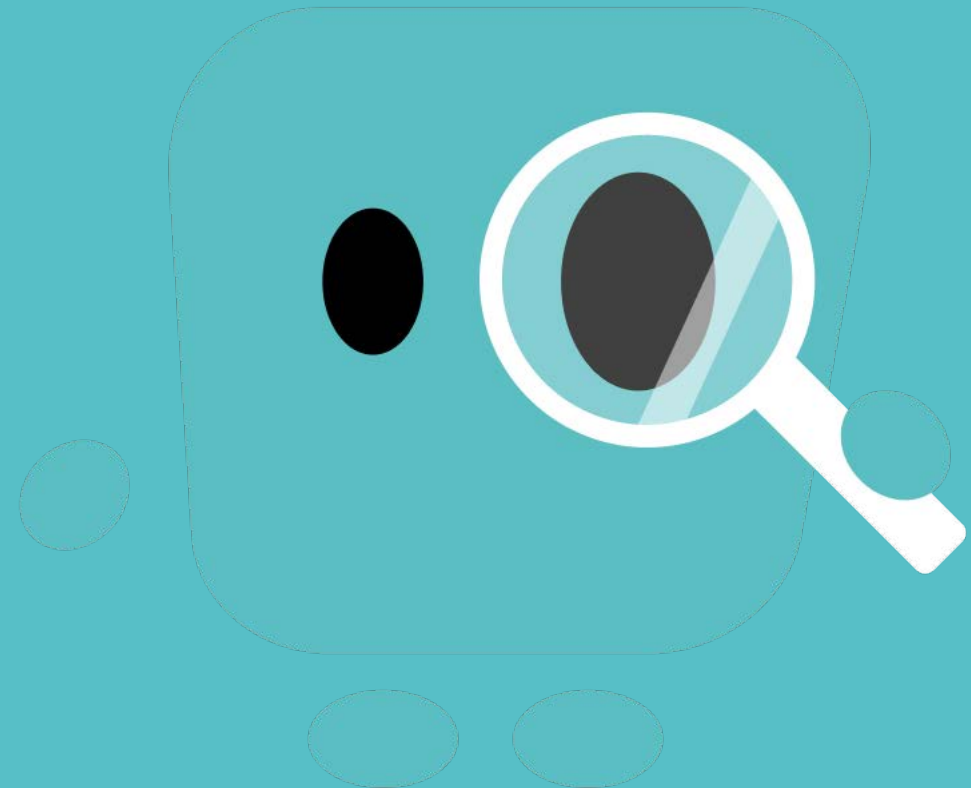


Pick a card for the
word 'autism'

Why did you pick
this card?



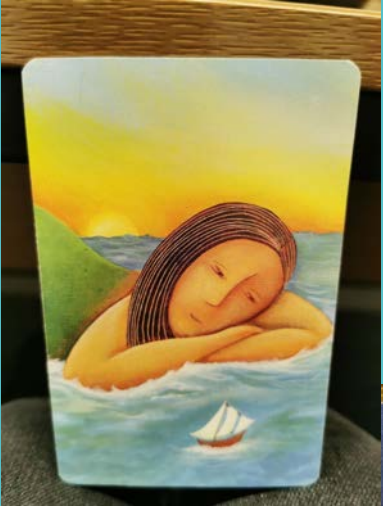
**Future
Directions**



The word is 'autism'

Autism is unlocked in the brain

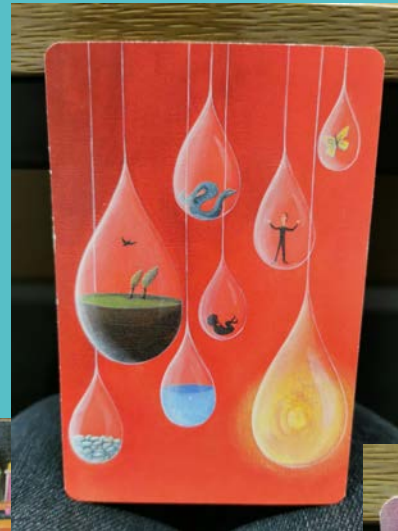
Autistic people can be lonely



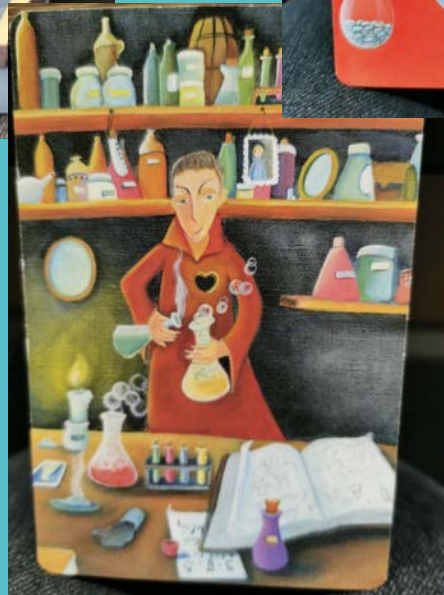
Autistic people think outside the box



Autistic people can be isolated



Autistic people like to collect things



Autistic people are ingenious



Autistic people can be manipulated

Future Projects using Dixit

Uses:

Therapeutic intervention to understand how people view a condition

Comparison between how different people conceptualise topics (i.e. autistics/NTs)

'Gamifying' therapy, ie therapeutic play
i.e. discussing 'hard to talk about' topics

Qualitative analysis using photo-elicitation
and thematic anylasis



Thanks to



Rhys Hathaway



Dr Michael Sousa



Emily Dawson



Francesca Belshaw

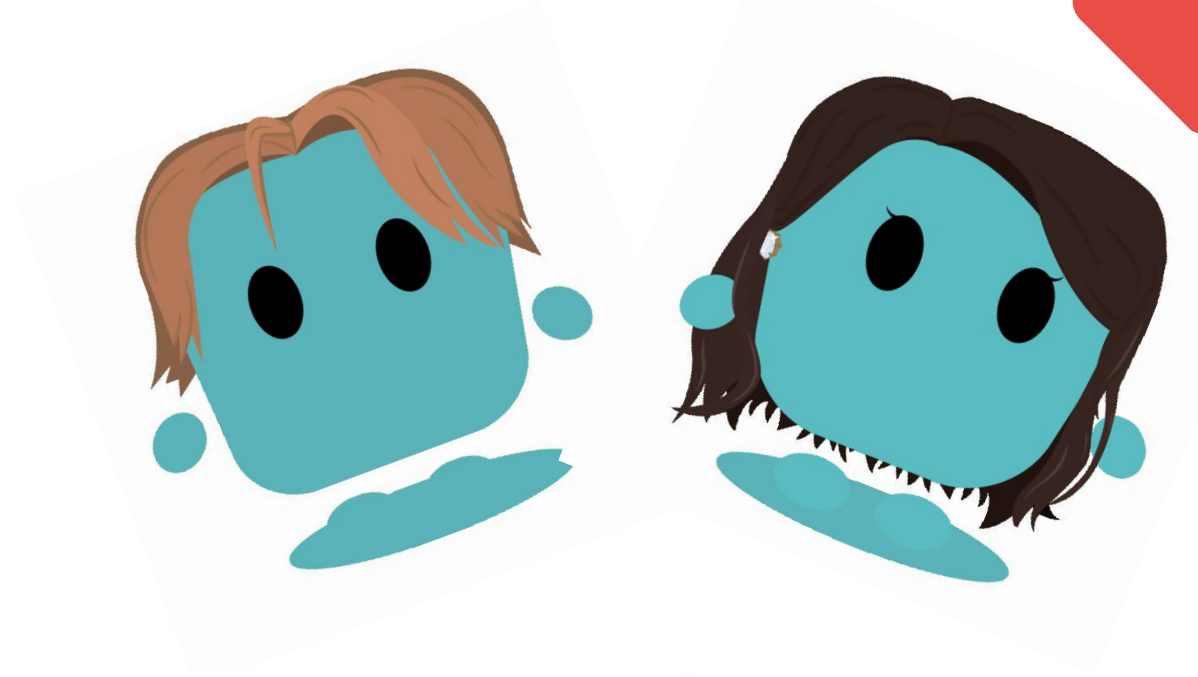


Dr Andrea Piovesan



Dr Peter Wright

Thank you !



We are doing a new project!

An interview based project (online) with parents who have played board games with their autistic child

*If you are interested email:
gray.s.atherton@vanderbilt.edu

