Collaboration in neurodivergent teams

March 2018
<table>
<thead>
<tr>
<th>Life Goal</th>
<th>Common Occupations</th>
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<tbody>
<tr>
<td>social conformance</td>
<td>employees</td>
</tr>
<tr>
<td>knowledge</td>
<td>scientists &amp; engineers</td>
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<tr>
<td>action</td>
<td>entrepreneurs</td>
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<tr>
<td>art</td>
<td>artists</td>
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<tr>
<td>power</td>
<td>executives &amp; politicians</td>
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<table>
<thead>
<tr>
<th>Neurotypical Disorder</th>
<th>90% (roughly)</th>
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<tbody>
<tr>
<td>Autism Spectrum Disorder(s)</td>
<td>1.5% (1 in 68)</td>
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<tr>
<td>Attention Deficit and Hyperactivity Disorder</td>
<td>5% (1 in 20)</td>
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<tr>
<td>Bipolar Disorder</td>
<td>2.5% (1 in 40)</td>
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<tr>
<td>Psychopathic Disorder(s)</td>
<td>1% (1 in 100)</td>
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creativity = knowledge + art + action

Neurodiversity – The core of creativity: [https://ciic.s23m.com/2017/01/26/ciic-off-melbourne/](https://ciic.s23m.com/2017/01/26/ciic-off-melbourne/)
One example of autistic collaboration – Paul Erdős

In an appropriate environment, in this case a self-selected subset within the mathematical community, an autist is enabled and not disabled.

- Erdős utmostly believed mathematics to be a social activity, living an itinerant lifestyle with the sole purpose of writing mathematical papers with other mathematicians.
- He was known both for his social practice of mathematics (he engaged more than 500 collaborators) and for his eccentric lifestyle.
- He spent most of his life as a vagabond, traveling between scientific conferences, universities and the homes of colleagues all over the world.
- He would typically show up at a colleague’s doorstep and announce “my brain is open”, staying long enough to collaborate on a few papers before moving on a few days later. In many cases, he would ask the current collaborator about whom to visit next.
- https://en.wikipedia.org/wiki/Paul_Erd%C5%91s

Other autists are loners and yet others prefer to collaborate only with a small trusted circle of peers. They all produce valuable knowledge artefacts and unique artistic output, but they can only thrive in a supportive environment that values neurodiversity.

N is a Number : https://www.youtube.com/watch?v=wN4yLPPvRBg
**Culture** is constructed one trusted relationship at a time

David Sloan Wilson @David_S_Wilson · Mar 18
There is a lot to said for thinking of a pair as a group, complete with its own culture.

Geoffrey Miller @primalpoly
Every long-term relationship, whether lovers or friends, becomes its own two-person subculture, with its own dialect, myths, rituals, ethics, and aesthetics. The better matched the people, the weirder that subculture ends up looking to everyone else.
Neurotypical knowledge and skill profile

- broad and shallow general knowledge and skills
- average depth of intuitive social skills
- average depth of professional knowledge and skills

Domains

Knowledge
If you are a software professional, you likely have a few **autistic traits**, … and there will be at least one aspie or autist on your team!
Example of an autistic knowledge and skill profile

- **average depth of professional knowledge and skills**
  - formal conceptual modelling
  - product and service lines
  - visual languages
  - human social behaviour

- **exceptional depth of knowledge and skills**

- **distinctly limited intuitive social skills**

- **narrow and quite deep general knowledge and skills**
Collaboration for Life

Trust building

**Autistic**

1. Based on experienced domain-specific competence

2. When young assumes everyone is telling the truth

3. When older can become very cynical

4. **Can be fooled by people** who appear to be logical but **who have no scruples fabricating evidence**

5. Is slow in learning to read social cues, and can’t do so in an environment of sensory overload

**Neurotypical**

1. Based on socially transmitted reputation

2. Quickly learns that deception is part of the social “game”

3. Is proficient in the social “game”, and may even enjoy it

4. Relies on social [non verbal] cues to detect deception

5. **Can be fooled by fake social cues**, even if these are in conflict with the evidence at hand
Making friends

**Autistic**

1. Search for people with shared interests, *usually online*
2. Confirm a shared interest
3. Start having fun by knowledge sharing
4. Explore what can be achieved with joint capabilities and capacities
5. **Embark on significant joint projects to have more fun**

**Neurotypical**

1. Approach people who look attractive or have a high social reputation, *often in a group setting*
2. Use smalltalk to start a conversation
3. If an emotional bond is established, spend more time together and do various things together
4. **Spending time together is more important than what the time is spent on**
Collaboration for Life

The smalltalk challenge

average depth of intuitive social skills

broad and shallow general knowledge and skills

distinctly limited intuitive social skills

narrow and quite deep general knowledge and skills
Collaboration for Life

The **smalltalk solution**

Talk about the stuff you enjoy most or do for a living … and the Aspie will love to soak up the knowledge

Don’t hesitate to explicitly indicate when the Aspie goes off on a special interest / tangent that bores you to death

The really interesting part, because it falls within the Aspie’s narrow range of topics considered worthwhile spending time on, and because there is something to learn!

Rugby, soccer, gossip about “important” people, and the typical range of smalltalk topics …

Don’t go here :-}
Common form of Aspie & Aspie collaboration

overlap

no social skills required :-)

Collaboration for Life
Complete Aspie & Aspie disconnect

zero overlap
Rare Aspie & Aspie mind-meld

overlap
Common Aspie & Neurotypical “collaboration” attempt

From the Aspie’s perspective there is nothing to learn :-(

- incompatible social skills
- limited shared interests
- distinct professional knowledge

overlap
Mutually enjoyable **Aspie & Neurotypical** collaboration

The Aspie interface to the NT world

- NT adapts to Aspie social skills
- limited other shared interests
- shared professional knowledge

Sharing of experience & mutual learning :-)
Sources of misunderstandings

Aspie
- confused or overwhelmed by non-verbal signals
- questioning all socially constructed beliefs
- conscious of many open questions

Neurotypical
- confused by communication of uncertainty and evidence
- uncomfortable with open questions
- influenced by a large number of subconscious, socially constructed beliefs

- mismatch of expectations
- non-verbal signals get lost in translation
- uncertainties and evidence are ignored

Questions

Beliefs
How to **minimise misunderstandings**

**Aspie**
- be well rested to be able to cope with ketchup (*) in all the wrong places, and lower expectations regarding the use of precise language
- use a phone or chat to level the playing field
- non-verbal signals get lost in translation
- uncertainties and evidence are ignored

**Neurotypical**
- don’t be confused by an Aspie Poker face
- replace non-verbal signals with ketchup (*) in the right places, and meet critical expectations regarding the use of precise language
- reduced mismatch of expectations

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Coping with the daily confrontation with socially constructed beliefs

Reduce sensory overload

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Aspie cultural non-conformance is not a social game

Become aware of, and reduce the use of free floating symbols (social constructions)
Thank you!

S23M

info @ s23m.com

Nothing beats capturing the knowledge flow of leading domain experts to co-create organisations & systems that are understandable by future generations of humans & software tools.