Harnessing Affinities to Inform our Understanding of Autism

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Thoughts on Affinities

• There is not an “Affinity Therapy” *per se.*
• Shared interests are powerful social motivators
• Affinities *can be* more of a pathway then a prison
• Movies, Anime, Maps, Minecraft, Shining Time Station, Disney, Animation
• Positive context with another person – oxytocin
• Engagement in a child’s affinities can put a focus on ability
• By respecting someone’s affinity, you are respecting them. All have a right to respect, dignity and pursuit of happiness
• Harnesses role play and technology
• If valuable, what might be the mechanism?
Attention to people

Pelphrey et al., 2002, JADD
Figure 3. Child Participant's fMRI Results

http://journals.plos.org/plosbiology/article?id=info:doi/10.1371/journal.pbio.0040125
ANOVA
Face > All

Face Effect
Fusiform Gyrus

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Pivotal Response Training (PRT)
Neuro-prediction of treatment response

Yang et al. (in press)
*Nature: Translational Psychiatry*
Change in brain, driving change in behavior

Yang et al. (in press)
*Nature: Translational Psychiatry*
Using Robots to Prime Neuropredictive Brain Circuits in Children

https://cmssite9.gwu.edu
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The Exceptional Minds Program
Stem 3 Academy – The Help Program

www.STEM3Academy.org
• Half of autistic adults have average or above-average intellectual ability, yet their unemployment rate is extraordinarily high—up to 80%

• Most efforts focus on treating relative weaknesses in people with autism.

• > 60% of cognitively able individuals with autism have relative cognitive strengths including being detail oriented and having excellent mnemonic skill.

• Corporations are beginning efforts to engage such individuals in their workforce.
  • Microsoft
  • SAP
  • Freddie Mac

• Cybersecurity and Autism (video)
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NINDS
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