

## Neurodiversity Resources

### [Books](#)

[Neurodiversity](#)

[Psychology Texts](#)

[Parenting](#)

[First-person experiences](#)

[Teaching](#)

[Children's Bibliotherapy](#)

[Teen and Adult Bibliotherapy](#)

[ADHD](#)

### [Online Resources](#)

#### [Articles and Research](#)

[Neurodiversity](#)

[Positive Psychology and Strengths-Based Models](#)

[Ableism and Disability](#)

[Masking and Autistic Burnout](#)

[Alternative Supportive Approaches](#)

[Intersectionality](#)

[Autism Biology](#)

[Other resources](#)

### **Books**

#### **Neurodiversity**

A Guide to Mental Health Issues in Girls and Young Women on the Autism Spectrum

<https://www.amazon.com/Mental-Health-Issues-Autism-Spectrum/dp/1785920928>

In a Different Key: The Story of Autism

<https://www.amazon.com/Different-Key-Story-Autism/dp/0307985679>

Divergent Mind: Thriving in a World That Wasn't Designed for You

<https://www.amazon.com/Divergent-Mind-Thriving-World-Designed/dp/0062876791>

Uniquely Human: A Different Way of Seeing Autism

<https://www.amazon.com/Uniquely-Human-Different-Seeing-Autism/dp/1476776245>

Neurotribes: The Legacy of Autism and the Future of Neurodiversity

[https://www.amazon.com/Neurotribes-Legacy-Autism-Future-Neurodiversity/dp/0399185615/ref=sr\\_1\\_1?keywords=neurotribes&qid=1560746220&s=books&sr=1-1](https://www.amazon.com/Neurotribes-Legacy-Autism-Future-Neurodiversity/dp/0399185615/ref=sr_1_1?keywords=neurotribes&qid=1560746220&s=books&sr=1-1)

The Power of Neurodiversity

[https://www.amazon.com/Power-Neurodiversity-Unleashing-Advantages-Differently/dp/0738215244/ref=pd\\_lpo\\_sbs\\_14\\_img\\_0?encoding=UTF8&psc=1&refRID=30H1CADNW5VWC62M8CAY](https://www.amazon.com/Power-Neurodiversity-Unleashing-Advantages-Differently/dp/0738215244/ref=pd_lpo_sbs_14_img_0?encoding=UTF8&psc=1&refRID=30H1CADNW5VWC62M8CAY)

Neurodiversity: From Phenomenology to Neurobiology and Enhancing Technologies  
<https://www.amazon.com/Neurodiversity-Phenomenology-Neurobiology-Enhancing-Technologies/dp/1615373020>

Autistic Community and the Neurodiversity Movement  
<https://link.springer.com/content/pdf/10.1007%2F978-981-13-8437-0.pdf>

## Psychology Texts

Attachment Theory in Practice  
<https://www.amazon.com/Attachment-Theory-Practice-Emotionally-Individuals/dp/146253824X>

In an Unspoken Voice: How the Body Releases Trauma and Restores Goodness  
[https://www.amazon.com/Unspoken-Voice-Releases-Restores-Goodness/dp/1556439431/ref=pd\\_bxgy\\_img\\_2/147-4220791-9606858?encoding=UTF8&pd\\_rd\\_i=1556439431&pd\\_rd\\_r=baffa6f7-0d9b-41e5-8c8a-f29c2799e336&pd\\_rd\\_w=OPmVs&pd\\_rd\\_wg=fkbss&pf\\_rd\\_p=fd3ebcd0-c1a2-44cf-aba2-bbf4810b3732&pf\\_rd\\_r=PBRN4DAEDRFAHG2D7TN7&psc=1&refRID=PBRN4DAEDRFAHG2D7TN7](https://www.amazon.com/Unspoken-Voice-Releases-Restores-Goodness/dp/1556439431/ref=pd_bxgy_img_2/147-4220791-9606858?encoding=UTF8&pd_rd_i=1556439431&pd_rd_r=baffa6f7-0d9b-41e5-8c8a-f29c2799e336&pd_rd_w=OPmVs&pd_rd_wg=fkbss&pf_rd_p=fd3ebcd0-c1a2-44cf-aba2-bbf4810b3732&pf_rd_r=PBRN4DAEDRFAHG2D7TN7&psc=1&refRID=PBRN4DAEDRFAHG2D7TN7)

Evolutionary Psychology: The New Science of the Mind

[https://www.amazon.com/Evolutionary-Psychology-New-Science-Mind/dp/1138088617/ref=sr\\_1\\_3?dchild=1&keywords=evolutionary+psychology&qid=1600971618&sr=8-3](https://www.amazon.com/Evolutionary-Psychology-New-Science-Mind/dp/1138088617/ref=sr_1_3?dchild=1&keywords=evolutionary+psychology&qid=1600971618&sr=8-3)

The Archaeology of Mind: Neuroevolutionary Origins of Human Emotions (Norton Series on Interpersonal Neurobiology)

[https://www.amazon.com/Archaeology-Mind-Neuroevolutionary-Interpersonal-Neurobiology/dp/0393705315/ref=sr\\_1\\_1?dchild=1&keywords=archelogy+of+the+mind&qid=1593632086&sr=8-1](https://www.amazon.com/Archaeology-Mind-Neuroevolutionary-Interpersonal-Neurobiology/dp/0393705315/ref=sr_1_1?dchild=1&keywords=archelogy+of+the+mind&qid=1593632086&sr=8-1)

A Liberated Mind: How to Pivot Toward What Matters

[https://www.amazon.com/Liberated-Mind-Pivot-Toward-Matters/dp/073521400X/ref=tmm\\_hrd\\_swatch\\_0?encoding=UTF8&qid=1589842658&sr=1-1](https://www.amazon.com/Liberated-Mind-Pivot-Toward-Matters/dp/073521400X/ref=tmm_hrd_swatch_0?encoding=UTF8&qid=1589842658&sr=1-1)

The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma

[https://www.amazon.com/gp/product/0143127748/ref=ppx\\_yo\\_dt\\_b\\_asin\\_title\\_o02\\_s00?ie=UTF8&psc=1](https://www.amazon.com/gp/product/0143127748/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1)

The Polyvagal Theory in Therapy: Engaging the Rhythm of Regulation (Norton Series on Interpersonal Neurobiology)

[https://www.amazon.com/Polyvagal-Theory-Therapy-Interpersonal-Neurobiology/dp/0393712370/ref=sr\\_1\\_2?keywords=polyvagal+theory+in+therapy&qid=1580099983&sr=8-2](https://www.amazon.com/Polyvagal-Theory-Therapy-Interpersonal-Neurobiology/dp/0393712370/ref=sr_1_2?keywords=polyvagal+theory+in+therapy&qid=1580099983&sr=8-2)

Beyond Behaviors: Using Brain Science and Compassion to Understand and Solve Children's Behavioral Challenges

[https://www.amazon.com/Beyond-Behaviors-Compassion-Understand-Behavioral/dp/1683731190/ref=sr\\_1\\_3?keywords=beyond+behaviors&qid=1580099727&sr=8-3](https://www.amazon.com/Beyond-Behaviors-Compassion-Understand-Behavioral/dp/1683731190/ref=sr_1_3?keywords=beyond+behaviors&qid=1580099727&sr=8-3)

Behave: The Biology of Humans at Our Best and Worst

[https://www.amazon.com/Behave-Biology-Humans-Best-Worst/dp/0143110918/ref=sr\\_1\\_1?keywords=behave&qid=1560834467&s=books&sr=1-1](https://www.amazon.com/Behave-Biology-Humans-Best-Worst/dp/0143110918/ref=sr_1_1?keywords=behave&qid=1560834467&s=books&sr=1-1)

Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment

<https://www.amazon.com/Authentic-Happiness-Psychology-Potential-Fulfillment/dp/0743222989>

The Cult of Statistical Significance: How the Standard Error Costs Us Jobs, Justice, and Lives (Economics, Cognition, And Society)

<https://www.amazon.com/Cult-Statistical-Significance-Economics-Cognition/dp/0472050079>

## Parenting

Raising Human Beings

<https://www.amazon.com/Raising-Human-Beings-Collaborative-Partnership/dp/1476723761>

The Joy of Parenting: An Acceptance and Commitment Therapy Guide to Effective Parenting in the Early Years

[https://www.amazon.com/Joy-Parenting-Acceptance-Commitment-Effective/dp/157224593X/ref=sr\\_1\\_1?keywords=joy+of+parenting&qid=1580100129&sr=8-1](https://www.amazon.com/Joy-Parenting-Acceptance-Commitment-Effective/dp/157224593X/ref=sr_1_1?keywords=joy+of+parenting&qid=1580100129&sr=8-1)

The Explosive Child [Fifth Edition]: A New Approach for Understanding and Parenting Easily Frustrated, Chronically Inflexible Children

[https://www.amazon.com/Explosive-Child-Understanding-Frustrated-Chronically/dp/0062270451/ref=sr\\_1\\_1?dchild=1&keywords=the+explosive+child&qid=1623185720&s=books&sr=1-1](https://www.amazon.com/Explosive-Child-Understanding-Frustrated-Chronically/dp/0062270451/ref=sr_1_1?dchild=1&keywords=the+explosive+child&qid=1623185720&s=books&sr=1-1)

Differently Wired: A Parent's Guide to Raising an Atypical Child with Confidence and Hope

[https://www.amazon.com/Differently-Wired-Aspergers-Giftedness-Disabilities/dp/1523506318/ref=sr\\_1\\_1?dchild=1&keywords=differently+wired&qid=1621895452&s=books&sr=1-1](https://www.amazon.com/Differently-Wired-Aspergers-Giftedness-Disabilities/dp/1523506318/ref=sr_1_1?dchild=1&keywords=differently+wired&qid=1621895452&s=books&sr=1-1)

Raising An Emotionally Intelligent Child The Heart of Parenting

[https://www.amazon.com/Raising-Emotionally-Intelligent-Child-Parenting/dp/0684838656/ref=sr\\_1\\_1?crid=13316VU03LP94&keywords=raising+emotionally+intelligent+children&qid=1560834381&s=gateway&srefix=raising+emotional%2Caps%2C199&sr=8-1](https://www.amazon.com/Raising-Emotionally-Intelligent-Child-Parenting/dp/0684838656/ref=sr_1_1?crid=13316VU03LP94&keywords=raising+emotionally+intelligent+children&qid=1560834381&s=gateway&srefix=raising+emotional%2Caps%2C199&sr=8-1)

Smart but Scattered Teens: The "Executive Skills" Program for Helping Teens Reach Their Potential

<https://www.amazon.com/Smart-but-Scattered-Teens-Executive/dp/1609182294>

## First-person experiences

Loud Hands: Autistic People, Speaking

[https://www.amazon.com/Loud-Hands-Autistic-People-Speaking/dp/1938800028/ref=sr\\_1\\_1?dchild=1&keywords=loud+hands&qid=1621894711&s=books&sr=1-1](https://www.amazon.com/Loud-Hands-Autistic-People-Speaking/dp/1938800028/ref=sr_1_1?dchild=1&keywords=loud+hands&qid=1621894711&s=books&sr=1-1)

Ido in Autismland: Climbing Out of Autism's Silent Prison

[https://www.amazon.com/gp/product/0988324709/ref=as\\_li\\_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=0988324709&linkCode=as2&tag=notanautismmo-20&linkId=f0e16dcf52f0ead406b3dd3bf9b34042](https://www.amazon.com/gp/product/0988324709/ref=as_li_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=0988324709&linkCode=as2&tag=notanautismmo-20&linkId=f0e16dcf52f0ead406b3dd3bf9b34042)

Look Me in the Eye: My Life with Asperger's

[https://www.amazon.com/Look-Me-Eye-Life-Aspergers/dp/0307396185/ref=sr\\_1\\_1?keywords=look+me+in+the+eye&qid=1560746390&s=books&sr=1-1](https://www.amazon.com/Look-Me-Eye-Life-Aspergers/dp/0307396185/ref=sr_1_1?keywords=look+me+in+the+eye&qid=1560746390&s=books&sr=1-1)

The Reason I Jump: The Inner Voice of a Thirteen-Year-Old Boy with Autism

[https://www.amazon.com/Reason-Jump-Inner-Thirteen-Year-Old-Autism/dp/081298515X/ref=sr\\_1\\_1?keywords=the+reason+i+jump&qid=1560746320&s=books&sr=1-1](https://www.amazon.com/Reason-Jump-Inner-Thirteen-Year-Old-Autism/dp/081298515X/ref=sr_1_1?keywords=the+reason+i+jump&qid=1560746320&s=books&sr=1-1)

Spectrum Women: Walking to the Beat of Autism

[https://www.amazon.com/Spectrum-Women-Walking-Beat-Autism/dp/1785924346/ref=sr\\_1\\_1?dchild=1&keywords=spectrum+women&qid=1621895083&s=books&sr=1-1](https://www.amazon.com/Spectrum-Women-Walking-Beat-Autism/dp/1785924346/ref=sr_1_1?dchild=1&keywords=spectrum+women&qid=1621895083&s=books&sr=1-1)

Been there, done that, try this

<https://www.amazon.com/Been-There-Done-That-This/dp/1849059640>

All the weight of our dreams: On living racialized autism

[https://www.amazon.com/gp/product/0997504501/ref=as\\_li\\_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=0997504501&linkCode=as2&tag=notanautismmo-20&linkId=65bb20a4b6b38c775e0f613d5724cf5d](https://www.amazon.com/gp/product/0997504501/ref=as_li_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=0997504501&linkCode=as2&tag=notanautismmo-20&linkId=65bb20a4b6b38c775e0f613d5724cf5d)

Women From Another Planet?: Our Lives in the Universe of Autism

[https://www.amazon.com/Women-Another-Planet-Universe-Autism/dp/1410734315/ref=tmm\\_pap\\_swatch\\_0?encoding=UTF8&qid=1621895184&sr=1-1](https://www.amazon.com/Women-Another-Planet-Universe-Autism/dp/1410734315/ref=tmm_pap_swatch_0?encoding=UTF8&qid=1621895184&sr=1-1)

## Teaching

A Practical Guide for Teachers of Students with an Autism Spectrum Disorder in Secondary Education

[https://www.amazon.com/Practical-Teachers-Students-Secondary-Education-dp-1849053103/dp/1849053103/ref=mt\\_other?encoding=UTF8&me=&qid=](https://www.amazon.com/Practical-Teachers-Students-Secondary-Education-dp-1849053103/dp/1849053103/ref=mt_other?encoding=UTF8&me=&qid=1849053103/dp/1849053103/ref=mt_other?encoding=UTF8&me=&qid=)

Exploring Giftedness and Autism: A study of a differentiated educational program for autistic savants

<https://www.amazon.com/Exploring-Giftedness-Autism-Trevor-Clark/dp/113883954X>

## Children's Bibliotherapy

Uniquely Wired

[https://www.amazon.com/Uniquely-Wired-Story-About-Autism/dp/1944882197/ref=sr\\_1\\_2?dchild=1&keywords=uniquely+wired+book&qid=1623194400&s=books&sr=1-2](https://www.amazon.com/Uniquely-Wired-Story-About-Autism/dp/1944882197/ref=sr_1_2?dchild=1&keywords=uniquely+wired+book&qid=1623194400&s=books&sr=1-2)

Otto Learns About His Medicine

<https://www.amazon.com/Otto-Learns-About-His-Medicine/dp/1557987718>

Isaac and His Amazing Asperger Superpowers

<https://www.amazon.com/Isaac-His-Amazing-Asperger-Superpowers/dp/0763681210>

## Teen and Adult Bibliotherapy

The Aspie Girl's Guide to Being Safe With Men

<https://www.amazon.com/Aspie-Girls-Guide-Being-Safe/dp/1849053545>

Sex, Sexuality, and the Autism Spectrum

<https://www.amazon.com/Sexuality-Autism-Spectrum-Wendy-Lawson/dp/1843102846>

Sex, Drugs, and Asperger's Syndrome

<https://www.amazon.com/Sex-Drugs-Aspergers-Syndrome-ASD/dp/1785921967>

Freaks, Geeks, and Asperger's Syndrome

[https://www.amazon.com/Freaks-Geeks-Asperger-Syndrome-Adolescence/dp/1843100983/ref=pd\\_bxgy\\_img\\_1/146-8089093-9538941?pd\\_rd\\_w=O9dUR&pf\\_rd\\_p=fd3ebcd0-c1a2-44cf-aba2-bbf4810b3732&pf\\_rd\\_r=2EZKW108JDS8HQV1X9DJ&pd\\_rd\\_r=09809f42-7f28-47b5-afee-880d0753f7b6&pd\\_rd\\_wg=qXHJd&pd\\_rd\\_i=1843100983&psc=1](https://www.amazon.com/Freaks-Geeks-Asperger-Syndrome-Adolescence/dp/1843100983/ref=pd_bxgy_img_1/146-8089093-9538941?pd_rd_w=O9dUR&pf_rd_p=fd3ebcd0-c1a2-44cf-aba2-bbf4810b3732&pf_rd_r=2EZKW108JDS8HQV1X9DJ&pd_rd_r=09809f42-7f28-47b5-afee-880d0753f7b6&pd_rd_wg=qXHJd&pd_rd_i=1843100983&psc=1)

## ADHD

ADHD & Us: A Couple's Guide to Loving and Living With Adult ADHD

[https://www.amazon.com/ADHD-Us-Couples-Loving-Living/dp/1647397057?fbclid=IwAR1PMOsbhevlVq\\_l47FsFoQEUvNIIA5cZQRalhW32RnPB9dl3QCeTjItYQ](https://www.amazon.com/ADHD-Us-Couples-Loving-Living/dp/1647397057?fbclid=IwAR1PMOsbhevlVq_l47FsFoQEUvNIIA5cZQRalhW32RnPB9dl3QCeTjItYQ)

ADHD 2.0: New Science and Essential Strategies for Thriving with Distraction--from Childhood through Adulthood

<https://www.amazon.com/ADHD-2-0-Essential-Strategies-Distraction/dp/0399178732>

Finally Focused: The Breakthrough Natural Treatment Plan for ADHD That Restores Attention, Minimizes Hyperactivity, and Helps Eliminate Drug Side Effects

[https://www.amazon.com/Finally-Focused-Breakthrough-Treatment-Hyperactivity/dp/0451496590/ref=sr\\_1\\_1?dchild=1&keywords=finally+focused&qid=1621895385&s=books&sr=1-1](https://www.amazon.com/Finally-Focused-Breakthrough-Treatment-Hyperactivity/dp/0451496590/ref=sr_1_1?dchild=1&keywords=finally+focused&qid=1621895385&s=books&sr=1-1)

## Online Resources

### Autistic Self Advocacy Network

“The Autistic Self Advocacy Network seeks to advance the principles of the disability rights movement with regard to autism. ASAN believes that the goal of autism advocacy should be a world in which autistic people enjoy equal access, rights, and opportunities. We work to empower autistic people across the world to take control of our own lives and the future of our common community, and seek to organize the autistic community to ensure our voices are heard in the national conversation about us. Nothing About Us, Without Us!”

<https://autisticadvocacy.org/>

### Neuroclastic

We are a collective of neurodivergents cataloguing the experience, insights, knowledge, talents, and creative pursuits of autistics. We hope to build a repository of information about the lived exploits, inner lives, Work, soul, interests, and culture of the neurodivergent spirit.

<https://neuroclastic.com/>

### The Aspergian: A Neurodivergent Collective

“We are a collective of neurodivergents cataloguing the experience, insights, knowledge, talents, and creative pursuits of autistics. We hope to build a repository of information about the lived exploits, inner lives, Work, soul, interests, and culture of the neurodiverse spirit.”

<https://theaspergian.com/>

### Spectrum News

“We provide comprehensive news and analysis of advances in autism research. Through our work, we hope to catalyze new collaborations and perspectives on autism.”

<https://www.spectrumnews.org/>

### Neuroguides

“NeuroGuides is a unique service, bringing direct, personal life coaching to autistic persons. We provide individualized life coaching and direct connections with the best possible matches for our autistic clients in the best approaches suited for them.”

<https://neuroguides.org/>

### Ask Dr. Tony Attwood

“Dr. Tony Attwood directly addresses the most pressing questions of those touched by autism, including parents, teachers, public servants, social workers, and more.”

<http://www.autismhangout.com/>

### ADDitude

Since 1998, tens of millions of readers have trusted *ADDitude* to deliver expert advice and caring support, making us the leading media network for parents and adults living with attention deficit hyperactivity disorder (ADHD). *ADDitude* is not only the world’s most trusted source of strategies and information about ADHD and related condition such as learning disabilities, anxiety, depression, and oppositional defiant disorder, we are also the voice and advocate of the ADHD community.

<https://www.additudemag.com/>

### Autistic Women & Nonbinary Network

“The mission of Autistic Women & Nonbinary Network (AWN) is to provide community, support, and resources for Autistic women, girls, nonbinary people, and all others of marginalized genders.

AWN Network is dedicated to building a supportive community where we can share our experiences in an understanding, diverse and inclusive environment. AWN is committed to recognizing and celebrating diversity and the many intersectional experiences in our community.”

<https://awnnetwork.org/>

### Not an Autism Mom

Meghan Ashburn is a former elementary school teacher living in Virginia Beach. She's passionate about helping families, boosting autistic voices, and creating a better world for our children. This type of change doesn't come easily. It takes learning and listening. It takes planning and intent. It takes cooperation and collaboration.

<https://notanautismmom.com/>

### The SCERTS Model

"The SCERTS® Model is a research-based educational approach and multidisciplinary framework that directly addresses the core challenges faced by children and persons with ASD and related disabilities, and their families. SCERTS® focuses on building competence in Social Communication, Emotional Regulation and Transactional Support as the highest priorities that must be addressed in any program, and is applicable for individuals with a wide range of abilities and ages across home, school and community settings."

<https://scerts.com/>

### Spectrum Women

Spectrum Women is an international collaboration by and for autistic women. Our aim is to create a supportive community for women, girls and identifying females who are uniquely different. Our approach is to bring to our readers books, articles, stories and interviews by women of all ages who have a neurodivergent outlook on life in a positive, inspiring and unique way.

<https://www.spectrumwomen.com/>

### Seth Perler

If you're a parent or an educator who wants better strategies for helping struggling students so they can have better lives, I made this site for you. Sign up below and I email you my latest work on Sundays and a free Executive Function micro-course to help you understand and implement my approach to helping kids.

<https://sethperler.com/>

### Mona Delahooke Blog

Mona Delahooke, PhD is a licensed clinical psychologist with more than 30 years of experience caring for children and their families. She is a senior faculty member of the Profectum Foundation, an organization dedicated to supporting families of neurodiverse children, adolescents and adults. She is a trainer for the Los Angeles County Department of Mental Health.

<https://monadelahooke.com/blog/>

### Conscious Discipline

The methodology of Conscious Discipline is based in scientific and developmental research. It is recognized by SAMHSA's National Registry of Evidence-Based Programs and Practices (NREPP). Conscious Discipline creates a compassionate culture and facilitates an intentional shift in adult understanding of behavior via the Conscious Discipline Brain State Model. It then provides specific brain-friendly, research-backed strategies for responding to each child's individual needs with wisdom. This highly effective approach is proven to increase self-regulation, sense of safety, connection, empathy and intrinsic motivation in both children and adults.

<https://consciousdiscipline.com/>



### Kindness Curriculum

Practice kindness with your early learning students by implementing the Kindness Curriculum, a series of lessons developed and researched by the Center for Healthy Minds at the University of Wisconsin-Madison that has shown to have a positive impact on academic performance, peer relationships, and teacher-perceived social competence.

<https://pbswisconsineducation.org/kindness/about/>

### The Inclusive Design Guide

The Inclusive Design Guide can be applied to digital design as well as to the design of services, the built environment and physical products. It can be applied to processes like workshops, meetings, conferences, and even our daily interactions with one another. It can be used by anyone. The Guide is ever-evolving as we learn more about how to design inclusion into all that we do. We rely on your feedback and contributions to continue developing these ideas.

<https://guide.inclusivedesign.ca/>

## **Articles and Research**

### **Neurodiversity**

#### Neurodiversity: Some Basic Terms and Definitions

A few key neurodiversity-related terms, their meanings and proper usage, and the ways in which I most commonly see them *misused*.

<https://neurocosmopolitanism.com/neurodiversity-some-basic-terms-definitions/>

#### An Interview with the Australian Sociologist who coined the term 'Neurodiversity'

“For me, the key significance of the Autism Spectrum lies in its call for and anticipation of a politics of neurological diversity, or ‘neurodiversity.’ The neurologically different represent a new addition to the familiar political categories of class/gender/race and will augment the insights of the social model of disability. The rise of neurodiversity takes postmodern fragmentation one step further. Just as the postmodern era sees every once too solid belief melt into air, even our most taken-for granted assumptions: that we all more or less see, feel, touch, hear, smell, and sort information, in more or less the same way, (unless visibly disabled) – are being dissolved.”

<http://www.myspectrumsuite.com/meet-judy-singer/>

#### Clearing Up Some Misconceptions about Neurodiversity

“Baron-Cohen mentions “social difficulties” as a disability in autism, and for many autistic people, their social struggles are indeed disabling. But that’s an incomplete picture. Some autistic people genuinely prefer their own company. Many autistic people socialize better with other autistic people than with typical peers, so perhaps we shouldn’t judge their social skills solely on their interactions with neurotypicals. And, perhaps most importantly, one of the biggest social difficulties faced by autistic people is neurotypical people’s reluctance to interact with those they perceive as “different.” That’s a social problem caused for autistic people by nonautistic people, not a social disability in autism.”

<https://blogs.scientificamerican.com/observations/clearing-up-some-misconceptions-about-neurodiversity/?redirect=1>

## Positive Psychology and Strengths-Based Models

### Finding strengths in autism

“For decades, however, the mainstream scientific community overlooked or even dismissed the idea of unusual abilities in autism. Even when they showed up in studies, researchers often cast them as deficits. Such distortions are costly for science: Glossing over or misinterpreting autistic strengths distorts scientific understanding of autism, Soulières says. It may also lead doctors, teachers and others to pathologize and try to suppress useful traits in people with autism.”

<https://www.spectrumnews.org/features/deep-dive/finding-strengths-in-autism/amp/>

### A Strengths-Based Approach to Autism: Neurodiversity and Partnering with the Autism Community

The autism community represents a broad spectrum of individuals, including those experiencing autism, their parents and/or caregivers, friends and family members, professionals serving these individuals, and other allies and advocates. Beliefs, experiences, and values across the community can be quite varied. As such, it is important for the professionals serving the autism community to be well-informed about current discussions occurring within the community related to neurodiversity, a strengths-based approach to partnering with autism community, identity-first language, and concepts such as presumed competence. Given the frequency with which speech-language pathologists (SLPs) serve the autism community, the aim of this article is to introduce and briefly discuss these topics.

<https://pubs.asha.org/doi/10.1044/persp2.SIG1.56>

### Punished by Rewards

*“Rewards are just as undesirable as punishment by virtue of being controlling, they're likely to be experienced as aversive in the long run. The reason is that while students would certainly like to have the goody itself—the pizza or money or gold star—none of us enjoys having the very things we desire used as levers to control our behavior. So it's the contingency of the goody—“Do this and you'll get that”—that accounts for its punitive status over the long haul.”*

<https://www.alfiekohn.org/article/punished-rewards-article/>

### A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation

“A meta-analysis of 128 studies examined the effects of extrinsic rewards on intrinsic motivation. As predicted, engagement-contingent, completion-contingent, and performance-contingent rewards significantly undermined free-choice intrinsic motivation ( $d = -0.40, -0.36, \text{ and } -0.28$ , respectively), as did all rewards, all tangible rewards, and all expected rewards. Engagement-contingent and completion-contingent rewards also significantly undermined self-reported interest ( $d = -0.15, \text{ and } -0.17$ ), as did all tangible rewards and all expected rewards. Positive feedback enhanced both free-choice behavior ( $d = 0.33$ ) and self-reported interest ( $d = 0.31$ ). Tangible rewards tended to be more detrimental for children than college students, and verbal rewards tended to be less enhancing for children than college students. The authors review 4 previous meta-analyses of this literature and detail how this study's methods, analyses, and results differed from the previous ones.”

<https://pubmed.ncbi.nlm.nih.gov/10589297/>

### The Emerging Neuroscience of Intrinsic Motivation: A New Frontier in Self-Determination Research

“Intrinsic motivation refers to people's spontaneous tendencies to be curious and interested, to seek out challenges and to exercise and develop their skills and knowledge, even in the absence of operationally separable rewards. Over the past four decades, experimental and field research guided by

self-determination theory (SDT; Ryan and Deci, [2017](#)) has found intrinsic motivation to predict enhanced learning, performance, creativity, optimal development and psychological wellness. Only recently, however, have studies begun to examine the neurobiological substrates of intrinsic motivation. In the present article, we trace the history of intrinsic motivation research, compare and contrast intrinsic motivation to closely related topics (flow, curiosity, trait plasticity), link intrinsic motivation to key findings in the comparative affective neurosciences, and review burgeoning neuroscience research on intrinsic motivation. We review converging evidence suggesting that intrinsically motivated exploratory and mastery behaviors are phylogenetically ancient tendencies that are subserved by dopaminergic systems. Studies also suggest that intrinsic motivation is associated with patterns of activity across large-scale neural networks, namely, those that support salience detection, attentional control and self-referential cognition. We suggest novel research directions and offer recommendations for the application of neuroscience methods in the study of intrinsic motivation.”

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5364176/>

#### Food Reinforcement and Eating: A Multilevel Analysis

“Eating represents a choice among many alternative behaviors. The purpose of this review is to provide an overview of how food reinforcement and behavioral choice theory are related to eating and to show how this theoretical approach may help organize research on eating from molecular genetics through treatment and prevention of obesity. Special emphasis is placed on how food reinforcement and behavioral choice theory are relevant to understanding excess energy intake and obesity and how they provide a framework for examining factors that may influence eating and are outside of those that may regulate energy homeostasis. Methods to measure food reinforcement are reviewed, along with factors that influence the reinforcing value of eating. Contributions of neuroscience and genetics to the study of food reinforcement are illustrated by using the example of dopamine. Implications of food reinforcement for obesity and positive energy balance are explored, with suggestions for novel approaches to obesity treatment based on the synthesis of behavioral and pharmacological approaches to food reinforcement.”

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2219695/>

#### A Key Concept for Neurodiversity: Niche Construction

“When I suggest that neurodiverse individuals, such as those with autism or ADHD, might have been labeled gifted in other times and in other cultures, the quick retort is: “Well, we don’t live in other times or cultures. People have to adapt to the culture they’re in right now.” So what does the person who is a round peg have to do to fit into a square hole? Answer: Shave off enough of its wood to fit, uncomfortably, usually, into the square hole. That’s one solution. The other solution is to round off some of the square hole so that the round peg can stay a round peg and still fit in. That’s niche construction.”

<https://www.institute4learning.com/2010/02/25/a-key-concept-for-neurodiversity-niche-construction/>

#### Should we change targets and methods of early intervention in autism, in favor of a strengths-based education?

“Early intensive behavioral intervention (EIBI) and its recent variant, naturalist developmental behavioral intervention (NDBI) aim to increase socialization and communication, and to decrease repetitive and challenging behaviors in preschool age autistic children. These behaviorist techniques are based on the precocity and intensity of the intervention, face-to-face interaction, errorless learning, and information fragmentation. Once considered to be “scientifically proven”, the efficacy of these

approaches has been called into question in the last decade due to poor-quality data, small effects, low cost-efficiency, and the evolution of ethical and societal standards. Grounded on a reappraisal of the genetic and cognitive neuroscience of autism, we question three aspects of EIBI/NDBI: their focus on prerequisites for typical socio-communicative behaviors, their lack of consideration of autistic language development and learning modes, and their negative view of repetitive behaviors and restricted interests. We propose alternative predictions for empirical validation, based on the strengths of prototypical autistic children: (a) their non-verbal intelligence should be normally distributed and within the normal range; (b) improving access to non-communicative verbal and written auditory language material should favor their subsequent speech development and (c) decrease their problematic behavior; (d) lateral tutorship should increase the well-being of children and parents to a greater extent than personalized, face-to-face interventions by professionals; (e) admission to regular, but supervised daycare centers, combined with parental support and on-site crisis solving, represents a more cost-effective educational intervention than EIBI/NDBI.”

<https://link.springer.com/article/10.1007/s00787-017-0955-5>

#### Autism Spectrum Disorder Research: Time for Positive Psychology

Many individuals with ASD, as well as their families, face significant stressors and challenges, but they can also experience strength and resilience. The investigation of positive experiences could be used to support and encourage families as they confront adversities and can increase these families' life satisfaction. ASD research, to date, has been largely focused on the identification and remediation of deficits. The purpose of this paper is to describe the existing gap related to the absence of positive psychology within ASD research and suggest actions and directions to be taken by the research community to address this gap. This can be achieved by integrating positive psychology into ASD research with the goal of creating a balanced view of people and their experiences. For example, research into the role of positive emotions in resources-building and resilience-promotion is needed. Additionally, on-going investigation into the experience of life satisfaction by individuals with ASD and their families will help to inform professional intervention and support of these families. An argument for a shift in theoretical framework will be made and implications for future research will be discussed.

<https://www.longdom.org/abstract/autism-spectrum-disorder-research-time-for-positive-psychology-37429.html>

#### Results of a RCT on a Transition Support Program for Adults with ASD: Effects on Self-Determination and Quality of Life

Few evidence-based services exist for people with Autism Spectrum Disorder (ASD) as they transition into adulthood, particularly those that foster appreciation of one's own goals and strengths. We developed a transition service for adults with ASD (without Intellectual Disability), and conducted a randomized controlled trial (RCT) focusing on self-report of Quality of Life and Self-Determination outcomes. Thirty participants aged 18-29 were randomized to immediate or delayed intervention, with 26 participants analyzed after 4 were lost to follow-up. Curriculum was tailored to participants' self-expressed needs in three areas: social communication, self-determination, and working with others. Groups of four-to-six participants with ASD and two facilitators met weekly for 10 weeks. Positive intervention effects were observed on self-report of Quality of Life; the intervention group scored on average 2 points higher than the control group, 95% CI [-0.2, 3.9]. Positive effects were also observed on the Self Determination Scale (Interpersonal Cognitive Problem-Solving subdomain), where the intervention group scored 2 points higher than control group 95% CI [0.082, 3.4]. In addition, participants rated skills targeted by the curriculum 6 points higher after versus before intervention, 95%

CI [3.7, 8.6]. This was echoed by a subset of parents rating their child's skills as seven points higher after versus before intervention, 95% CI [1, 14]. Autism Research 2018, 11: 1712-1728. © 2018 International Society for Autism Research, Wiley Periodicals, Inc. LAY SUMMARY: These findings indicate that it is possible to increase Self-Determination and subjective Quality of Life in adults with ASD through a brief group-format service, and provide a model for doing so. Self-Determination abilities are linked to improved adult outcomes in individuals with other disabilities. These often overlooked factors should be incorporated in programming for adults with ASD as they transition to adulthood.

<https://pubmed.ncbi.nlm.nih.gov/30451392/>

#### Changing the story: How diagnosticians can support a neurodiversity perspective from the start

“An alternative framing could, as soon as the family begins the diagnostic process, use a strengths-based approach (Urbanowicz et al., 2019) and draw on the idea of neurodiversity (Singer, 1999; Walker, 2012). Neurodiversity proponents believe that human neurological diversity is valuable (Armstrong, 2010) and that an individual has a disability because of a complex interplay between the physical, cognitive and emotional traits of that individual and the characteristics of their physical and social environments. While neurodiversity proponents and autistic advocates acknowledge autism’s disabling aspects, they also push back against society’s often overly restrictive and prescriptive notions of ‘normal’ and celebrate autism as an inseparable and often positive part of their identity (Milton & Sims, 2016).”

<https://journals.sagepub.com/doi/full/10.1177/13623613211001012>

### **Ableism and Disability**

#### Editorial Perspective: Neurodiversity – a revolutionary concept for autism and psychiatry

Should we continue to refer to autism as a ‘disease’ or ‘disorder’, or is the framework of ‘neurodiversity’ a more humane and accurate lens through which to view people with autism? Evidence at the genetic, neural, behavioural and cognitive levels reveals people with autism show both differences, and signs of disability, but not disorder. Disability requires societal support, acceptance of difference and diversity, and societal “reasonable adjustment”, whilst disorder is usually taken to require cure or treatment. These are very different frameworks. It will be important to see how the concept of neurodiversity is applied to the 300 diagnoses in DSM-5, and if it revolutionizes both the science and the practice of psychiatry.

<https://acamh.onlinelibrary.wiley.com/doi/10.1111/jcpp.12703>

#### Autism and the Pathology Paradigm

“At this time, sadly, the pathologization of autistic minds, bodies, and lives still has not been widely recognized – especially not within the academic and professional mainstream – as being yet another manifestation of this all-too-familiar form of institutionalized oppression and othering. The academic and professional discourse on autism, and the miseducation on autism given to each new generation of professionals, remain uncritically mired in the assumptions of the pathology paradigm. And since bad assumptions and unexamined prejudices inevitably become self-reinforcing when mistaken for facts, this entrenchment in the pathology paradigm has kept autism-related theory, praxis, and education stuck in a self-perpetuating cycle of ignorance and bigotry.”

<https://neurocosmopolitanism.com/autism-and-the-pathology-paradigm/>

#### The Ableist History of Autism Speaks

<https://intheloopaboutneurodiversity.wordpress.com/2019/09/13/the-ableist-history-of-autism-speaks/?fbclid=IwAR3yaw1ruFGE4Nt1lv0i67Jv7tVuL0OIXM5dOzfuPDuWdXkqjXL6Ma2yVaQ>

Toward a common language for functioning, disability, and health

<https://www.who.int/classifications/icf/icfbeginnersguide.pdf>

Autism: From Awareness to Understanding to Acceptance and Appreciation

<https://autisticadvocacy.org/2012/07/autism-from-awareness-to-understanding-to-acceptance-and-appreciation/>

The Convergence of Neurodiversity and Autism

“Critics of the neurodiversity movement say it paints autism and certain other diagnoses in a positive light, when in fact they can be incredibly disabling. What that critique misses, is this: autism is a medical diagnosis bestowed by a trained clinician. There is no limit to how severe autistic disability can be. Neurodivergence, on the other hand, is an identity a person adopts. Whether you are clinically diagnosed or you just see traits of autism or ADHD in yourself, you are free to say, “I identify as neurodivergent.”

<https://www.psychologytoday.com/us/blog/my-life-aspergers/201906/the-convergence-neurodiversity-and-autism>

Independence is an Ableist Myth: Unlocking the Power of Community in Healing

“Society pushes self-sufficiency without recognizing that independence is an impossible ideal. The logistics just don’t work out. Most of us live in cities or small towns, where we are clearly interconnected. Yet people are still pushed to live separately, travel separately, eat separately, and even heal separately. Reaching for this unattainable goal of total independence harms all of us – and most impacts disabled folks.”

<https://thebodyisnotanapology.com/magazine/independence-is-an-ableist-myth-unlocking-the-power-of-community-in-healing/?fbclid=IwAR2ZmWpkctT8O3tDuay2h5ebTB2R7X7YWWHUevpUUdQa2ikVMuZqfBJyMt0>

Autism and the double empathy problem: Implications for development and mental health

This article proposes a link between autistic people being misperceived by the neurotypical majority and their being at risk of poor mental health and well-being. We present a transactional account of development in which the misperceptions (and consequent behaviour) of the neurotypical majority influences the perceptions and behaviour of autistic people such that they become increasingly separate and indeed isolated from mainstream society. This jeopardizes their mental health and prevents autistic people from developing to full potential. The situation is not only problematical for the development of autistic people but is also to the detriment of wider society, in so far as autistic people are effectively prevented from contributing fully. This account assumes that some (not necessarily all) autistic people yearn to be included, to be productive and to be useful. It thus directly opposes accounts that view autism as an extreme case of diminished social motivation.

<https://bpspsychub.onlinelibrary.wiley.com/doi/full/10.1111/bjdp.12350>

Double empathy, explained

There are other signs that people on the spectrum connect well with one another. Autistic people report feeling more comfortable with other autistic people than with non-autistic people. Many adolescents with autism prefer to interact with autistic peers over non-autistic ones. And people with autism often build a greater sense of rapport and share more about themselves when conversing with others on the spectrum. One reason for this pattern may be that autistic people are less concerned with typical social norms, such as conversational reciprocity, and so don't mind as much when these rules are not followed.

<https://www.spectrumnews.org/news/double-empathy-explained/>

#### Autism, Inc.: The Autism Industrial Complex

"We contend that, within capitalism, the Autism Industrial Complex (AIC) produces both autism as commodity and the normative cultural logic of intervention in relation to it. Comprised of ideological/rhetorical as well as material/economic infrastructure, we argue that the AIC is *not* the myriad businesses and industries that capitalize and profit from it; rather, these constitute its epiphenomenal features. In the production of autism as commodity, the AIC also simultaneously produces that commodity's market, its consumers, and its own monopoly control of that market through production for consumption of *need for*, *consent to*, and *legitimacy of* interventionist logics. Within this apparatus, almost anyone can capitalize on and profit from autism. And within the AIC, autistic people—their very bodies—function as the raw materials from which this industrial complex is built, even as autistic people—their very identities and selves—also become unwitting, and often unwilling, products of the AIC."

<https://brill.com/view/journals/jdse/aop/article-10.1163-25888803-bja10008/article-10.1163-25888803-bja10008.xml?language=en>

#### Learning Differences and Digital Equity in the Classroom

"This chapter addresses digital equity in the classroom for students with learning differences, as well as the role of technology in the provision of equitable education for the full diversity of students. The chapter discusses the evolving opportunities and challenges that information technology in the classroom presents to students with learning differences and their teachers.

To meaningfully understand this topic requires an understanding of the complex context, the forces at play, and their relation to students with learning differences. Among the forces at play are policies, regulations, the accessibility movement, technical trends, instructional design strategies, educational publishing, open education resources, pedagogical trends, quality control approaches in education, and governance of formal education. The chapter highlights the benefits to all students of designing the classroom experience for students with learning differences."

[https://link.springer.com/referenceworkentry/10.1007%2F978-3-319-71054-9\\_74](https://link.springer.com/referenceworkentry/10.1007%2F978-3-319-71054-9_74)

#### Critical realism, community psychology, and the curious case of autism: A philosophy and practice of science with social justice in mind

Community psychology (CP) is a transformative subdiscipline of psychology which aims to address inequality and social injustice and to attend to wellbeing. It has been argued that CP lacks an underpinning philosophy of science. Philosophies of science provide road maps for values, methods, and objectives, thus ultimately framing all research. This study will highlight how traditional philosophies of science such as positivism, interpretivism, and social constructivism fail to support the complexity of CP and often essentialise complex phenomena, such as autism, to the detriment of stakeholders. Critical realism will then be introduced as a promising philosophy of science for CP, which can reinvigorate CPs

push for impactful research and social change. The study will highlight how CP provides a platform for appreciating the complexity of autism and for transforming structures of inequality experienced by autistic people, together with autistic people.

<https://onlinelibrary.wiley.com/doi/full/10.1002/jcop.22764>

## **Masking and Autistic Burnout**

### Staying safe – Autism and predatory behaviour

“Autistic people are often taught to be compliant. Some of the ‘therapies’ out there are all about teaching compliance and doing what you are told to do. Often there is no distinction between compliance which is helpful and that which is damaging in this ‘training.’ Even for autistic people not subjected to unhelpful therapies, we often want to please others. People who are bullied or ostracised often develop a strong sense of wanting to be accepted. Sometimes this acceptance is by a predator. This can be the case with domestic and family violence situations. The will for acceptance by a partner can be so much that an abuser takes advantage of this. Another difficulty in this area for autistic people is related to the fact that we are generally quite kind and trustworthy. People tend to assume that other people have similar motivations to them so if you are kind and decent you might expect others to be the same. Some people are unable to imagine that another person could be predatory. We also tend to be very trusting and open. Another issue in this space is the difficulty many of us have in understanding facial expressions, body language and other non-verbal cues. Where others might realise someone’s intentions from these cues, we often struggle to decipher this information, leading to creepy situations which others might have spotted a lot earlier and taken steps to avoid.”

[https://yennpurkis.home.blog/2019/09/07/staying-safe-autism-and-predatory-behaviour/?fbclid=IwAR2u-exqYJF7fo24ErUVw8OLj1\\_jzrYL\\_2jITHvU3okP1Y7jNqNPOiDD32k](https://yennpurkis.home.blog/2019/09/07/staying-safe-autism-and-predatory-behaviour/?fbclid=IwAR2u-exqYJF7fo24ErUVw8OLj1_jzrYL_2jITHvU3okP1Y7jNqNPOiDD32k)

### Authenticity and Autism

“The process of unravelling learnt behaviors and differentiating them from the authentic self is often incredibly complex for autistic individuals and can present a major obstacle to authenticity. For many years, the therapeutic space around autism focused on modifying the behavior and superficial presentation of the individual in order to align with expectations of society. This enforcement of behavior that is not innately autistic is at odds with the concept of authenticity. There is increasing awareness and understanding that it is not ethical to prioritize normalization over mental health and well-being, and there is a rise in approaches that aim to better meet the individual’s needs and preserve their autistic nature while supporting development and teaching skills as needed.”

<https://www.psychologytoday.com/ca/blog/insights-about-autism/202001/authenticity-and-autism?fbclid=IwAR3V1ymYxQN9dGNmrnbRWQtkpJREZLFBAY8MF6uKRwZSdqcgQGfFuC88FU>

### The costs of camouflaging autism

“Many girls hide their autism, sometimes evading diagnosis well into adulthood. These efforts can help women on the spectrum socially and professionally, but they can also do serious harm.”

<https://www.spectrumnews.org/features/deep-dive/costs-camouflaging-autism/>

### New method aims to quantify ‘camouflaging’ in autism

“As a group, women with autism have higher camouflaging scores than men, the researchers found. This finding meshes with anecdotal reports that women feel pressure to fit in and try to do so by imitating socially successful peers. This may also contribute to the gender bias in autism — that is, more women



have autism than the reported sex ratio indicates because many women with the condition fly under the diagnostic radar.”

<https://www.spectrumnews.org/news/new-method-aims-quantify-camouflaging-autism/>

#### “Having All of Your Internal Resources Exhausted Beyond Measure and Being Left with No Clean-Up Crew”: Defining Autistic Burnout

“Autistic adults described the primary characteristics of autistic burnout as chronic exhaustion, loss of skills, and reduced tolerance to stimulus. They described burnout as happening because of life stressors that added to the cumulative load they experienced, and barriers to support that created an inability to obtain relief from the load. These pressures caused expectations to outweigh abilities resulting in autistic burnout. Autistic adults described negative impacts on their health, capacity for independent living, and quality of life, including suicidal behavior. They also discussed a lack of empathy from neurotypical people and described acceptance and social support, time off/reduced expectations, and doing things in an autistic way/unmasking as associated in their experiences with recovery from autistic burnout.”

<https://www.liebertpub.com/doi/10.1089/aut.2019.0079>

#### Quantifying and exploring camouflaging in men and women with autism

“Autobiographical descriptions and clinician observations suggest that some individuals with autism, particularly females, 'camouflage' their social communication difficulties, which may require considerable cognitive effort and lead to increased stress, anxiety and depression. Using data from 60 age- and IQ-matched men and women with autism (without intellectual disability), we operationalized camouflaging in adults with autism for the first time as the quantitative discrepancy between the person's 'external' behavioural presentation in social-interpersonal contexts (measured by the Autism Diagnostic Observation Schedule) and the person's 'internal' status (dispositional traits measured by the Autism Spectrum Quotient and social cognitive capability measured by the 'Reading the Mind in the Eyes' Test). We found that the operationalized camouflaging measure was not significantly correlated with age or IQ. On average, women with autism had higher camouflaging scores than men with autism (Cohen's  $d = 0.98$ ), with substantial variability in both groups. Greater camouflaging was associated with more depressive symptoms in men and better signal-detection sensitivity in women with autism. The neuroanatomical association with camouflaging score was largely sex/gender-dependent and significant only in women: from reverse inference, the most correlated cognitive terms were about emotion and memory. The underlying constructs, measurement, mechanisms, consequences and heterogeneity of camouflaging in autism warrant further investigation.”

<https://pubmed.ncbi.nlm.nih.gov/27899710/>

#### “Putting on My Best Normal”: Social Camouflaging in Adults with Autism Spectrum Conditions

“Camouflaging of autistic characteristics in social situations is hypothesised as a common social coping strategy for adults with autism spectrum conditions (ASC). Camouflaging may impact diagnosis, quality of life, and long-term outcomes, but little is known about it. This qualitative study examined camouflaging experiences in 92 adults with ASC, with questions focusing on the nature, motivations, and consequences of camouflaging. Thematic analysis was used to identify key elements of camouflaging, which informed development of a three-stage model of the camouflaging process. First, motivations for camouflaging included fitting in and increasing connections with others. Second, camouflaging itself comprised a combination of masking and compensation techniques. Third, short- and long-term

consequences of camouflaging included exhaustion, challenging stereotypes, and threats to self-perception.”

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5509825/>

#### What About the Girls? Sex-Based Differences in Autistic Traits and Adaptive Skills

“There is growing evidence of a camouflaging effect among females with autism spectrum disorder (ASD), particularly among those without intellectual disability, which may affect performance on gold-standard diagnostic measures. This study utilized an age- and IQ-matched sample of school-aged youth ( $n = 228$ ) diagnosed with ASD to assess sex differences on the ADOS and ADI-R, parent-reported autistic traits, and adaptive skills. Although females and males were rated similarly on gold-standard diagnostic measures overall, females with higher IQs were less likely to meet criteria on the ADI-R. Females were also found to be significantly more impaired on parent reported autistic traits and adaptive skills. Overall, the findings suggest that some autistic females may be missed by current diagnostic procedures.”

<https://rd.springer.com/article/10.1007/s10803-017-3413-9>

### **Alternative Supportive Approaches**

#### Context matters: A review to formulate a conceptual framework for coaching as a disability accommodation

“Although dyslexia affects 5–8% of the workforce this developmental disorder has not been sufficiently researched in adult populations. Yet a diagnosis confers legal protections as employers must provide disability ‘accommodations’ to assist work functioning and performance. The implementation of such accommodations, including coaching, lacks theoretical framing and evaluations of impact in practice. Recognizing a need for conceptual work, we undertook a narrative, systematic scoping review from a realist pragmatic epistemology, taking an iterative approach to define and address the review question: ‘to what extent, and under what conditions, can face-to-face learning interventions improve Working Memory (WM) and Self-Efficacy (SE) and can these lead to functional improvements related to work performance?’ Informed by expert and stakeholder consultation and user data, our review extracted and synthesized 25 studies from eleven countries to identify potentially applicable learning intervention theories, their effects upon WM and SE but also functional outcomes such as comprehension. We suggest that intervention protocols informed by Social Cognitive Learning Theory can improve SE, as would be expected, and more surprisingly also WM. The development of metacognition, stress management and fidelity to Goal Setting Theory were identified as valuable intervention features. We propose that coaching activities may provide a more contextualized environment for transfer of learning from WM to functional skills such as comprehension, when compared to computerized training interventions. We call for theoretically underpinned, primary studies to evaluate interventions with adult dyslexic populations to further our understanding of disability accommodations.”

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0199408>

#### Animals may act as social buffers: Skin conductance arousal in children with autism spectrum disorder in a social context

“Children with autism spectrum disorder (ASD) experience high rates of social stress and anxious arousal. Preliminary evidence suggests that companion animals can act as buffers against the adverse effects of social stress in adults. We measured continuous physiological arousal in children with ASD and typically developing (TD) children in a social context during four conditions: (a) a baseline of reading

silently, (b) a scripted classroom activity involving reading aloud, (c) free play with peers and toys, and (d) free play with peers and animals (guinea pigs). Our results confirmed heightened arousal among children with ASD compared to TD children in all conditions, except when the animals were present. Children with ASD showed a 43% decrease in skin conductance responses during free play with peers in the presence of animals, compared to toys. Thus, animals may act as social buffers for children with ASD, conferring unique anxiolytic effects.”

<https://onlinelibrary.wiley.com/doi/abs/10.1002/dev.21310>

#### Effects of Dog Assisted Therapy for Adults with Autism Spectrum Disorder: An Exploratory Randomized Controlled Trial

“Effective treatments of highly prevalent stress-related outcomes such as depression and anxiety are understudied in adults with autism spectrum disorder (ASD). A randomized controlled trial with baseline, post-intervention, and 10-week follow-up, that explores the effects of animal assisted therapy (AAT) was conducted. In total, 53 adults with ASD with normal to high intelligence were randomized in an intervention (N = 27) versus waiting list control group (N = 26). The remarkable adherence to the therapy program by study participants and the program's clinically relevant effects indicate that AAT with dogs can be used to reduce perceived stress and symptoms of agoraphobia, and to improve social awareness and communication in adults with ASD with normal to high intelligence.”

<https://pubmed.ncbi.nlm.nih.gov/30900194/>

#### Music improves social communication and auditory–motor connectivity in children with autism

“Music has been identified as a strength in people with Autism Spectrum Disorder; however, there is currently no neuroscientific evidence supporting its benefits. Given its universal appeal, intrinsic reward value and ability to modify brain and behaviour, music may be a potential therapeutic aid in autism. Here we evaluated the neurobehavioural outcomes of a music intervention, compared to a non-music control intervention, on social communication and brain connectivity in school-age children (ISRCTN26821793). Fifty-one children aged 6–12 years with autism were randomized to receive 8–12 weeks of music (n = 26) or non-music intervention (n = 25). The music intervention involved use of improvisational approaches through song and rhythm to target social communication. The non-music control was a structurally matched behavioural intervention implemented in a non-musical context. Groups were assessed before and after intervention on social communication and resting-state functional connectivity of fronto-temporal brain networks. Communication scores were higher in the music group post-intervention (difference score = 4.84, P = .01). Associated post-intervention resting-state brain functional connectivity was greater in music vs. non-music groups between auditory and subcortical regions (z = 3.94, P < .0001) and auditory and fronto-motor regions (z = 3.16, P < .0001). Post-intervention brain connectivity was lower between auditory and visual regions in the music compared to the non-music groups, known to be over-connected in autism (z = 4.01, P < .00001). Post-intervention brain connectivity in the music group was related to communication improvement (z = 3.57, P < .0001). This study provides the first evidence that 8–12 weeks of individual music intervention can indeed improve social communication and functional brain connectivity, lending support to further investigations of neurobiologically motivated models of music interventions in autism.”

<https://www.nature.com/articles/s41398-018-0287-3>

#### Transformative Somatic Practices and Autistic Potential: An autoethnographic Exploration

“There is a dearth of research and literature on the use of transformative practices by autistic people as a means of pursuing self-actualization and the realization of positive psychospiritual potentials. In this

autoethnographic inquiry I examine my experience as an autistic participant in transformative somatic practices, with a focus on my four decades as a student and teacher of aikido and my two decades as a member of an experiential research group exploring movement-oriented ritual as a tool for accessing the realms of the unconscious and the transpersonal. In reflecting upon my experiences, I aim to derive broader insights regarding the ways in which practices like the ones in which I've engaged can interact with autistic ways of knowing and being, and regarding the use of such practices toward the realization of autistic potentials and the cultivation of psychospiritual wellbeing and self-actualization in autistic people."

[https://neurocosmopolitanism.com/wp-content/uploads/2020/02/Nick\\_Walker\\_Dissertation.pdf](https://neurocosmopolitanism.com/wp-content/uploads/2020/02/Nick_Walker_Dissertation.pdf)

### Brain-body connection may ease autistic people's social problems

In a 2013 study, we showed that listening to this audio for one hour on five sequential days normalizes auditory processing and increases the vagal regulation of the heart<sup>2</sup>. Then, in a randomized trial in 2014, we showed that the method decreases auditory hypersensitivity and improves spontaneous speech, behavioral organization and emotional control<sup>3</sup>. Last year, I was awarded a patent for the technology embedded in the intervention. The patent includes a claim for an acoustic vagal nerve stimulator.

<https://www.spectrumnews.org/opinion/viewpoint/brain-body-connection-may-ease-autistic-peoples-social-problems/amp/>

## **Intersectionality**

### Biological sex affects the neurobiology of autism

"In autism, heterogeneity is the rule rather than the exception. One obvious source of heterogeneity is biological sex. Since autism was first recognized, males with autism have disproportionately skewed research. Females with autism have thus been relatively overlooked, and have generally been assumed to have the same underlying neurobiology as males with autism. Growing evidence, however, suggests that this is an oversimplification that risks obscuring the biological base of autism. This study seeks to answer two questions about how autism is modulated by biological sex at the level of the brain: (i) is the neuroanatomy of autism different in males and females? and (ii) does the neuroanatomy of autism fit predictions from the 'extreme male brain' theory of autism, in males and/or in females?"

Neuroanatomical features derived from voxel-based morphometry were compared in a sample of equal-sized high-functioning male and female adults with and without autism ( $n = 120$ ,  $n = 30$ /group). The first question was investigated using a  $2 \times 2$  factorial design, and by spatial overlap analyses of the neuroanatomy of autism in males and females. The second question was tested through spatial overlap analyses of specific patterns predicted by the extreme male brain theory. We found that the neuroanatomy of autism differed between adult males and females, evidenced by minimal spatial overlap (not different from that occurred under random condition) in both grey and white matter, and substantially large white matter regions showing significant sex  $\times$  diagnosis interactions in the  $2 \times 2$  factorial design. These suggest that autism manifests differently by biological sex. Furthermore, atypical brain areas in females with autism substantially and non-randomly ( $P < 0.001$ ) overlapped with areas that were sexually dimorphic in neurotypical controls, in both grey and white matter, suggesting neural 'masculinization'. This was not seen in males with autism. How differences in neuroanatomy relate to the similarities in cognition between males and females with autism remains to be understood. Future research should stratify by biological sex to reduce heterogeneity and to provide greater insight into the neurobiology of autism."

<https://pubmed.ncbi.nlm.nih.gov/23935125/>

### "They Don't Know, Don't Show, or Don't Care": Autism's White Privilege Problem

"A Google image search for the word "autism" yields a plethora of (mostly white) children, puzzle pieces, and colorful infographics bearing lists of symptoms, warning signs, graphs, and statistics. Like these images, the majority of autistic characters in popular media (e.g., Atypical's Sam, Parenthood's Max, The Good Doctor's Shaun, and Big Bang Theory's Sheldon) tend to be white and male. They bear little resemblance to Arnaldo Rios, Reginald "Levi" Latson, JT Torres, Kayleb Moon-Robinson, or David Ramos—all autistic individuals of color who were unjustly (and in most instances, violently) mistreated by U.S. police officers."

<https://www.liebertpub.com/doi/full/10.1089/aut.2020.0077>

### Gender and sexuality in autism, explained

"Clinicians who work in gender clinics may want to screen for autism, and those working in autism clinics may want to discuss gender identity and sexual health, researchers say. They should also be sensitive to different information processing styles, Dewinter says. Some autistic people may struggle to express their feelings regarding gender. Even when they do express these feelings, they often face doubts from clinicians because of stereotypes about autistic people, which can block their access to medical care. In a 2019 paper, one autistic and gender-diverse person wrote, "The combination is seen to be too complex for the majority of clinicians, which led to long waiting times for specialized psychiatric care."

<https://www.spectrumnews.org/news/gender-and-sexuality-in-autism-explained/>

### Structural Racism and Autism

"Significant racial inequities exist in access to services for youth with autism spectrum disorder (ASD). Multiracial children are diagnosed with ASD later than their white counterparts, report difficulty accessing treatment services, and ultimately experience worse health outcomes. Empirical data on the mechanisms of inequities are generally lacking, although traditional contributors (structural racism, prejudice, education, income) are certainly at play."

<https://pediatrics.aappublications.org/content/146/3/e2020015420>

### Socioeconomic Inequality in the Prevalence of Autism Spectrum Disorder: Evidence from a U.S. Cross-Sectional Study

"The stronger SES gradient in ASD prevalence in children with versus without a pre-existing ASD diagnosis points to potential ascertainment or diagnostic bias and to the possibility of SES disparity in access to services for children with autism. Further research is needed to confirm and understand the sources of this disparity so that policy implications can be drawn. Consideration should also be given to the possibility that there may be causal mechanisms or confounding factors associated with both high SES and vulnerability to ASD."

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2902521/>

## **Autism Biology**

### Association Between Gut Microbiota and Autism Spectrum Disorder: A Systematic Review and Meta-Analysis

Autism spectrum disorder (ASD) is characterized by stereotyped behavior and deficits in communication and social interactions. Gastrointestinal (GI) dysfunction is an ASD-associated comorbidity, implying a

potential role of the gut microbiota in ASD GI pathophysiology. Several recent studies found that autistic individuals harbor an altered bacterial gut microbiota. In some cases, remodeling the gut microbiota by antibiotic administration and microbiota transfer therapy reportedly alleviated the symptoms of ASD. However, there is little consensus on specific bacterial species that are similarly altered across individual studies. The aim of this study is to summarize previously published data and analyze the alteration of the relative abundance of bacterial genera in the gut microbiota in controls and individuals with ASD using meta-analysis. We analyzed nine studies, including 254 patients with ASD, and found that children with ASD had lower percentages of Akkermansia, Bacteroides, Bifidobacterium, and Parabacteroides and a higher percentage of Faecalibacterium in the total detected microflora compared to controls. In contrast, children with ASD had lower abundance of Enterococcus, Escherichia coli, Bacteroides, and Bifidobacterium and higher abundance of Lactobacillus. This meta-analysis suggests an association between ASD and alteration of microbiota composition and warrants additional prospective cohort studies to evaluate the association of bacterial changes with ASD symptoms, which would provide further evidence for the precise microbiological treatment of ASD.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6673757/>

#### Respiratory sinus arrhythmia and auditory processing in autism: Modifiable deficits of an integrated social engagement system?

The current study evaluated processes underlying two common symptoms (i.e., state regulation problems and deficits in auditory processing) associated with a diagnosis of autism spectrum disorders. Although these symptoms have been treated in the literature as unrelated, when informed by the Polyvagal Theory, these symptoms may be viewed as the predictable consequences of depressed neural regulation of an integrated social engagement system, in which there is down regulation of neural influences to the heart (i.e., via the vagus) and to the middle ear muscles (i.e., via the facial and trigeminal cranial nerves). Respiratory sinus arrhythmia (RSA) and heart period were monitored to evaluate state regulation during a baseline and two auditory processing tasks (i.e., the SCAN tests for Filtered Words and Competing Words), which were used to evaluate auditory processing performance. Children with a diagnosis of autism spectrum disorders (ASD) were contrasted with aged matched typically developing children. The current study identified three features that distinguished the ASD group from a group of typically developing children: 1) baseline RSA, 2) direction of RSA reactivity, and 3) auditory processing performance. In the ASD group, the pattern of change in RSA during the attention demanding SCAN tests moderated the relation between performance on the Competing Words test and IQ. In addition, in a subset of ASD participants, auditory processing performance improved and RSA increased following an intervention designed to improve auditory processing.

<https://www.sciencedirect.com/science/article/abs/pii/S0167876012006691>

#### Genetic Causes and Modifiers of Autism Spectrum Disorder

Autism Spectrum Disorder (ASD) is one of the most prevalent neurodevelopmental disorders, affecting an estimated 1 in 59 children. ASD is highly genetically heterogeneous and may be caused by both inheritable and de novo gene variations. In the past decade, hundreds of genes have been identified that contribute to the serious deficits in communication, social cognition, and behavior that patients often experience. However, these only account for 10–20% of ASD cases, and patients with similar pathogenic variants may be diagnosed on very different levels of the spectrum. In this review, we will describe the genetic landscape of ASD and discuss how genetic modifiers such as copy number variation, single nucleotide polymorphisms, and epigenetic alterations likely play a key role in modulating the phenotypic spectrum of ASD patients. We also consider how genetic modifiers can alter convergent

signaling pathways and lead to impaired neural circuitry formation. Lastly, we review sex-linked modifiers and clinical implications. Further understanding of these mechanisms is crucial for both comprehending ASD and for developing novel therapies.

<https://www.frontiersin.org/articles/10.3389/fncel.2019.00385/full>

## **Other resources**

### The Neuroscience of Community

“A set of graphics by Janae Elisabeth, informed by Dr. Stephen Porges, Deb Dana, Peter Levine, Justin Sunseri, Stanley Rosenberg, Bessel van der Kolk, Pete Walker, D.W. Winnicott, Layla F. Saad, Sonya Renee Taylor, Adult Children of Alcoholics workbooks, and neurodiversity activists.”

<https://medium.com/age-of-awareness/the-neuroscience-of-community-9f0a437d3a4f>

### Very Grand Emotions: How Autistics and Neurotypicals Experience Emotions Differently

“Characterizations of Autistic people often reflect a profile of a stoic, unfeeling, emotionless automaton. Many times, the only emotion ascribed to autistics, especially by the lay writers who populate the dustbin of Amazon Kindle’s self-published section, is explosive anger. This is an accusation which has often been leveled against me, usually much to my confusion.”

[https://neuroclastic.com/2019/03/23/very-grand-emotions/?fbclid=IwAR0FXmlq\\_SzVLGbRC0wgP8-SD8T9fqoX3j\\_vKdkcuMYEj0Yy6ue4fc8-bko](https://neuroclastic.com/2019/03/23/very-grand-emotions/?fbclid=IwAR0FXmlq_SzVLGbRC0wgP8-SD8T9fqoX3j_vKdkcuMYEj0Yy6ue4fc8-bko)

### Hidden Faces: a Diaspora of Autistic Persons in Today’s Culture

“Perhaps the loneliness would be endurable in a misery loves company sort of way if it were not potentially lethal. Unfortunately, as human beings - we are wired for relationship with others. We know this from infancy, and it has been demonstrated true. Deprive the youngest of humans touch, being loved and they fail to thrive, often die. Autistic persons are no different than other human persons, only in the way their minds work. Deprive autistic persons of relationships and they wither as persons.”

<https://medium.com/@AutismLifeGuide/hidden-faces-a-diaspora-of-autistic-persons-in-todays-culture-d26869ac5e20>