CENTER FOR Autism Spectrum Disorders

www.childrensnational.org/CASD



CASD CHAT E-Newsletter

How to Read Research Like a Psychologist: Part 1

Searching for Articles and Noticing Red Flags

"What am I even looking at right now?"

If you're like most people, this is the thought that goes through your head when you sit down to try to understand the latest research on Autism. When I first started graduate school, the numbers, figures, and statistics in research articles were overwhelming, so it was difficult and sometimes impossible, to make sense of the information.

Most importantly, it was difficult to understand the problems with the study (because no study is perfect), so it was hard to understand when the study was relevant for a specific person. It can be really hard to find the information you want to think about when you are not sure what you are looking at.

Also, while most of us enjoy the latest blog post (or medical center newsletter!) that summarizes research, many of us also want to go right to the primary source and see for ourselves what the latest research about Autism has to say.

The goal of this and next month's CHAT is to help you break down the best ways to find research, evaluate it, and extract relevant information.

Where to Find Articles

Psychologists have a lot of different ways to find articles on the latest research. Typically, we search on research databases which are search engines specifically for scientific research. Some are broader (i.e., PubMed) and some are specific to the field of psychology (i.e., APA PsycArticles).

The problem with using these databases as a non-psychologist is that you have to pay for most of the articles and it can be expensive. In order to get around this requirement (a paywall), you're going to want to look for what's called "Open Access Journal." Although there can be great articles in these journals, they also tend to

accept lower quality pieces than the journals that are behind a paywall. You're going to want to pay special attention to the "red flags" section below so you can evaluate the quality of the article you're looking at.

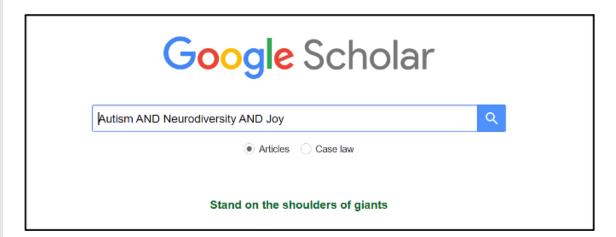
Some well-known, reputable journals with a focus on neurodevelopmental conditions include:

- Autism (https://journals.sagepub.com/loi/AUT)
- Research in Developmental Disabilities
 (https://www.sciencedirect.com/journal/research-in-developmental-disabilities/issues)
- Journal of Autism and Developmental Disorders (https://link.springer.com/journal/10803/volumes-and-issues)
- Frontiers in Psychology (Open access!)
 (https://www.frontiersin.org/journals/psychology)

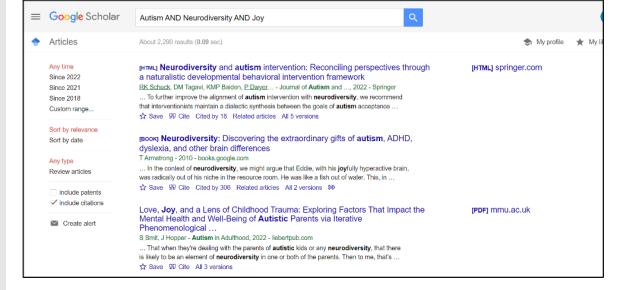
Whenever you're selecting a journal or article to browse, you'll want to look for something indicating that it is "peer-reviewed" meaning that other scientists have read it and approved it.

I also highly recommend Google Scholar which is a database run by Google that includes both open-access and paywall-limited articles. You'll have to sort through more results, but you'll get the most results for your efforts.

Which brings us to: How do I search a database? Answer: with 'keywords.' Keywords are a combination of two or three words that are related to the information you're looking for. For example, if I want to know more about the latest in neurodiversity research I might type in the words: "Autism AND Neurodiversity AND Joy" like so:

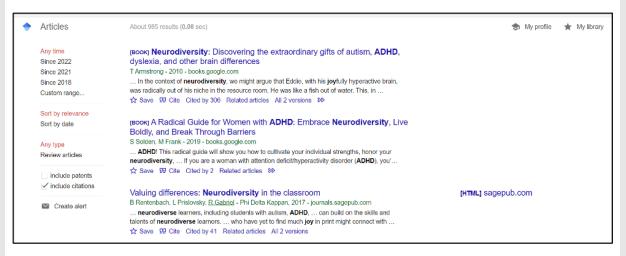


And here's an example of what I get:



To make sure you're getting the most up-to-date results, you can select a recent publication year on the left-hand side (for example, "Since 2021"). If you're not getting the results you want, switch up your keywords.

Let's see what I get when I use the words "ADHD AND Neurodiversity AND Joy" instead:



How to Judge the Quality of an Article (Red Flags)

Of course, even when we pull them from reputable sources, not all research is going to be of the same quality. Red flags are used to warn us about problems. For research, red flags refer to problems to think about regarding the accuracy of the findings. (Bonus: These "red flags" apply to articles you read in any source, so keep them in mind when you are scrolling on your tablet or phone.) The first thing I look for to determine how much stock to put in the findings is the number of participants and the diversity of the participants.

I talked a bit about this in the piece I wrote about the Gluten and Casein free diets (https://riseandshine.childrensnational.org/can-a-gluten-free-casein-free-diet-improve-autism-symptoms/) but typically studies with smaller groups of people run a higher rick of gotting results that don't apply to most other people, and a higher rick of

higher risk of getting results that don't apply to most other people, and a higher risk of results just being a "fluke" or coincidence. The same goes for when the study is only white people, only males, only middle-class, etc.

Red flags to keep an eye out for are 1) when there are very few participants in a study, 2) when the sample is limited to one particular group of people (unless you're looking for info specifically on that group), or 3) when an article makes a big sweeping claim.

Scientists know that it takes a lot of data and a lot of doing the same study over and over again (this is called *replication of findings*) to be reasonably sure about something. Be VERY wary of broad, sweeping claims such as phrases like "totally eliminate difficult behaviors," "cure" anything autism related, "we are *sure* that X causes Y" etc.

Real science is slow and cautious, and if something sounds too good to be true- IT PROBABLY IS If you notice these statements, put the article down and move on. What you're looking for are phrases like, "given the findings, we think it's likely that X impacts/is related to Y, but more research should be done on ABC to see if it supports these findings." This shows that the person is aware of the complexity of the issue and respectful of the cautious nature of the scientific process.

Final Thoughts

Science and knowledge are for everyone and part of our mission here at CASD is to make that knowledge as accessible as possible to the families that we serve. Although we hope it's helpful, this is obviously a very brief overview of a complicated topic! Next month, we will review the different sections of articles and suggest strategies to make it easier to get the most information from what you read.

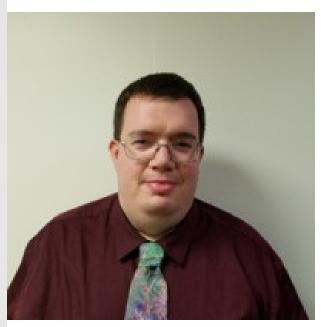
For those who want a more in-depth look, the Organization for Autism Research (OAR) has a free guide written for families and self-advocates who want to dive into the research, and it is much more detailed. Linked here! file:///C:/Users/amuskett/Downloads/A Parents Guide to Research (Color PDF).pdf

Also, if you have worked with a professional – such as the clinician who evaluated someone in your family or current therapist- ask for a consultation to discuss if a therapeutic approach you've learned about is right for you or your family.

Happy reading!!

This article was developed by Ashley Muskett, Ph.D., CASD Clinical Psychologist with the assistance of Andrea Lopez, B.S., CASD research assistant. Scroll down for a list of resources (including tools you can download), announcements of community programs, and research opportunities. Our goal is to help families and providers so please use the QR code at the end of the CHAT to give us feedback.

Profiles Celebrating Neurodiversity



Sam Leckrone is a successful adult with autism who is committed to advocating for individuals with disabilities. Sam was the first student with autism to be included in regular classes in the Ypsilanti, Michigan school district. Using the public school system to work on social skills, peer interactions, and problem solving, Sam graduated from Ypsilanti High School and was admitted to the University of Michigan College of Engineering.

Sam was able to pursue his passion for road design and transportation Engineering, develop lifelong friendships with other Engineers, and successfully complete his Bachelor's Degree at U of M. He then accepted a graduate fellowship, and completed his Master's Degree of Transportation Engineering at Purdue University. Sam was able to navigate the interview process, and was hired by the Virginia Department of Transportation. He enjoys problem-solving, interacting with his colleagues, and enjoys a good relationship with his Supervisors. VDOT has been extremely accommodating and supports Sam and other individuals with disabilities in a positive work environment.

2022 Calendar of Events

Free Parent Support Group

Where: Virtual

When: Every Monday at 1 PM EST

Dr. Dan Shapiro, friend of CASD, will be offering a free parent support group,

every Monday at 1 PM EST. To register, click here.

Anxiety & ADHD Discussion Groups with Dr. Dan Shapiro

Where: Virtual

When: Winter 2023: Thursday Evenings

Two different 2-session workshops: 1) Anxiety and 2) ADHD. Sign up for either or both. Different registration and zoom link for each course. To register, <u>click here</u>.

Dr. Shapiro is offering new courses for parents of different age groups on a wide range of topics. Choose the topics that interest you. Real-life challenges. Real-life solutions.. To learn more about these courses, visit <u>parent-child excursions</u>: More

information on various programs can be found on his

website: http://www.parentchildjourney.com/

Participate in Research

RDoC Executive Function Research Project

Georgetown University Developmental Cognitive Neuroscience Laboratory and Children's National Hospital are studying executive function skills like attention, memory, and learning using magnetic resonance imaging (MRI). Using MRI technology, we expect to pinpoint the parts of the brain that are responsible for these cognitive functions and hope to determine the potential of using MRI as a tool to help clinicians personalize treatment. We are recruiting 8-13 year olds with a clinical psychological diagnosis (of any kind), no genetic conditions, no metal in their bodies, and no neurological conditions.

If you are interested, please contact Laura Campos:

• Phone: 301-765-5478

• Email: lcampos@cnmc.org



ASD Research Study

George Washington University and George Mason University are study brain development in autism. As part of the study, participants play child-friendly computer games while we track their gaze and brain function. Families can early up to \$90 for participating.



We are recruiting 5-17 year olds with an autism diagnosis.

If you are interested in participating, please contact Chelsea Armour:

 Email: <u>aarmour@childrensnational.org</u> or <u>andilab@email.gwu.edu</u>

New Featured Resources

Arc Maryland, "Together We're Better"

The Arc Maryland, with its statewide partners, provides a school inclusion program called <u>"Together We're Better" (TWB)</u>. The objective of the program is to raise

awareness of the value and importance of inclusion of students with disabilities. The program involves a 4-way partnership with the Maryland State Department of Education, the Maryland Developmental Disabilities Council, the Maryland Department of Disabilities, and The Arc Maryland. Visit the website here to see the different components to the program, broken up for elementary, middle, & high school students.

Unstuck & On Target Resources



The *Unstuck* author team has created short videos to help parents of children with executive functioning difficulties. Please click the playlists below to view the videos in both English and Spanish! We have



A resource for PARENTS!

Free, online supports for preventing overload, compromising and staying motivated

Created by educators, and experts

- 15 3-5 min videos
- 5 also in Spanish
- Tip sheets

"The videos made me feel less alone...and hopeful that there are more things 1 can try to help [my child]."



Un recurso para PADRES

 Apoyos gratuitos en línea para padres de niños con dificultades para manejar las emociones, concentrarse, hacer planes y más

Creado por educadores y

<u>aquí</u>

- 5 videos de 3-5 minutos en español
- Hojas de consejos

"Los videos me hicieron cosas que puedo intentar para ayudar [a mi hijo]."

added new videos to address feedback from parents. Please click on our playlist to view our new 3-part video series on "troubleshooting."



Playlist of all videos



Click here for the video

Recursos para padres

The Talk—Black, Autistic, and
Male: One Family's Experience
We would like to share an interview
with a family of a college-bound
autistic young adult and an
accompanying reflection by Tawara
Goode, Director of the National
Center for Cultural Competence and
Director of the Georgetown University
Center for Excellence in
Developmental Disabilities.

Additional Resources

DC Autism Collaborative

The <u>DC Autism Collaborative</u> (DC-AC) has developed several resources for parents of young children and professionals (including health providers, early childhood educators, and community leaders) on topics related to autism spectrum disorder (ASD). All materials have been, or are in the processes of being, translated into both Spanish and Amharic. These resources can be downloaded as PDFs, though we encourage you to <u>visit the website here</u> as we plan to update these regularly.

Pathfinders for Autism

Pathfinders provides a list of programs for all ages including video group for spouses/partners of adults with Asperger's; Transitioning services and Job skills; Baby and Family Navigator programs, and new this month, Autism from the Autistic Perspective and free Pediatric Occupational Therapy Screening and more! https://pathfindersforautism.org/calendar/

20+ free resources available to view anytime, anywhere!

Enjoy these <u>information-packed free webinars</u> on your own or make them a powerful group learning event with your colleagues, friends, and family members. Topics include:

- Working/learning in groups
- Face-to-face communication
- Social anxiety
- Executive functions
- Children's stress
- Self-regulation
- Individual webinars on 10 core Social Thinking Vocabulary

Hosted by Social Thinking

Supporting Mental Well-being

Yetta Myrick, Executive Director/President of <u>DC Autism Parents (DCAP)</u> and CDC's Act Early Ambassador to the District of Columbia has multiple resources to share with families to support mental well-being.

Tips to Help Parents Keep Calm Every Day

Additional Resources

Advocacy Resources

<u>Autistic Self Advocacy Network-Navigating College: A Handbook on Self Advocacy</u>

Resources on Anti-Racism

Spectrum Support's Social Stories on Racism

ASAN's What is Police Violence?: A Plain Language Booklet

@TheMorganCruise Worksheets for Black Children

COVID-19 Safety Resources

Behavioral Directions LLC's Safety Teaching Protocol

COVID-19 National and Local Government Resources

Centers for Disease Control and Prevention

World Health Organization

DC Department of Health

Maryland Department of Health

Virginia Department of Health

<u>U.S Department of Education's Individuals with Disabilities Education Act (IDEA) Part C Dispute Resolution Procedures</u>

<u>U.S Department of Education's Individuals with Disabilities Education Act (IDEA) Part B</u>
<u>Dispute Resolution Procedures</u>



If you have feedback or suggestions, please scan the QR code and complete the survey! Thank you!