

the internet. Exclusion criteria was applied to create a preliminary dataset. The videos were categorized into general evidence-based practice (EBP), non-evidence-based practice (NEBP), and both EBP and NEBP. The NEBP-related videos were then qualitatively described using a priori codes based on the literature regarding signs of pseudoscience, as well as an iteratively developed codebook through a constant comparative method between two independent coders.

**Results:** Total videos from the YouTube search using the query “Autism Treatment” were capped at 150 videos. Total videos in English were 138. Total discrete videos (non-repeated) were 134. Total NEBP-related discrete videos were 62 (46% of final dataset); Total EBP-related videos were 38 (28.3% of final dataset); and total videos containing both EBP and NEBP as subject matter were 25 (18.6% of final dataset). Of the NEBP-related in the final dataset, the most frequent NEBP which occurred was stem cell therapy (n=26), followed by the Son-Rise program (n=13), Cannabis/marijuana (n=5), transcranial magnetic stimulation/magnetic e-resonance therapy (n=5), neurofeedback (n=1), brain rehabilitation (n=1), suramin (n=2), fecal transplants (n=2), Hyperbaric Oxygen therapy (n=1), Ayurvedic medicine (n=1), virtual reality (n=1), and others. The constant comparative method of coding yielded results specific to videos about NEBPs in autism, including: statements declaring a treatment will be effective, a banner on the YouTube page indicating if the channel is from a reputable source, a parent testimonial, a parent or caregiver display of emotion with respect to treatment efficacy, statements regarding pre-intervention repetitive or challenging behaviors, statements regarding demonstrated effects of the treatment, statements of a definitive cause of autism, statements regarding the severity of the autism in the treatment subject, specific words in reference to autism, including “disease”, “toxin”, or “inflammation”, discussion of the financial aspect of the treatment, and videos with both high and low production values.

**Conclusions:** The likelihood of a caregiver encountering and watching videos containing NEBP-related material when using a general query to search the internet for information on autism intervention is high. Additionally, videos regarding NEBPs have more engagements (e.g., likes, comments, shares) than videos regarding EBPs, oftentimes by multitudes. The information contained within videos in which an

NEBP is the subject aligns with pre-established warning signs for pseudoscience for autism interventions, however this study also contributes new warning signs through the construction of the iterative codebook. Specifically, statements about treatment efficacy in the absence of cited research, an emotional parent testimony about the individual with autism’s experience with the NEBP therapy, statements regarding behavioral improvements linked to participation in the therapy oftentimes in the context of inflated claims, and clear and confident statements regarding the cause of autism with no cited research.

**Categories:** Autism Spectrum Disorders/Developmental Disorders/Intellectual Disability

**Keyword 1:** autism spectrum disorder

**Keyword 2:** transdisciplinary research

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## 16 Learning-Related Challenges and their Association with Special Education Receipt and Vocational Outcomes in Autistic Adults

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**Objective:** Relative to their typically developing peers, autistic individuals experience greater difficulties in domains of functioning that are relevant to learning and adult outcomes, such as sensory sensitivities, anxiety, and social. However, little is known about how difficulties in these domains relate to the receipt of special education services as well as adult outcomes, such as vocational achievement. The current study sought to fill this gap by examining if difficulties in various learning-related domains as ascertained via the Learning Needs Screening Tool (LNST) were associated with historical special education receipt and vocational status.

**Participants and Methods:** 400 autistic adults, recruited via the Simons Powering Autism Research (SPARK) participant registry Research Match service, participated in this study (40.5% male, mean age=28.9 years). All participants completed the LNST, which collects responses to 13 core questions about learning (such as challenges with memorization, note taking, spelling and identifying arithmetic signs), as well as 7 additional questions with checkbox and free response options, and yields a total score from 0-30. LNST item 14 and its response options (1-9) capture suspected causes of learning difficulties (e.g., 'too much noise or activity bothers me,' 'I get nervous taking tests'). These individual questions as well as the total of endorsed learning related challenges were then evaluated in relation to historical special education receipt ("yes" vs. "no") and vocational outcomes ("yes" vs. "no" engaging in 10+ hours of postsecondary education or employment without supports), as assessed via the Taylor Vocational Index.

**Results:** Logistic regression was utilized to predict the dependent variables of interest. Models included sex assigned at birth and age in the first step as covariates. Then either the total of learning related challenges endorsed or the 9 individual learning-related challenges from the LNST were included as independent variables of interest. For historical special education receipt, two items – "It's hard for me to work by myself" ( $B = .78, p < .05$ ) and "I get nervous taking tests" ( $B = .49, p < .05$ ) were positively associated with a history of special education services. For vocational outcomes, the total learning related challenges ( $B = -.25, p < .001$ ) as well as endorsement of one item – "It's hard for me to work by myself" ( $B = -.88, p < .05$ ) were associated with poorer vocational outcomes.

**Conclusions:** These findings shed light on the possible learning-related challenges that are experienced by autistic adults. Further examination of the role these learning related challenges play in the receipt of special education and on vocational outcomes is warranted. In particular, difficulties with independence in work was related to both special education receipt and poorer vocational outcomes, indicating that it may be a fruitful area of focus for vocational training programs.

**Categories:** Autism Spectrum Disorders/Developmental Disorders/Intellectual Disability

**Keyword 1:** autism spectrum disorder

**Keyword 2:** pediatric neuropsychology

**Keyword 3:** academic skills

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## 17 Studying the Use of Politeness in Employment Specific Scenarios in Youth with Autism Spectrum Disorder.

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**Objective:** Employment is crucial in the lives of adults with Autism Spectrum Disorder (ASD) as gainful occupational activity creates opportunities to form meaningful social relationships, participate in community life, and become financially independent. Impairments in pragmatic language skills (i.e., use of language to achieve social goals) negatively impact the ability to make and maintain cooperative work relationships with employers and coworkers, which are critical aspects of employment. A specific pragmatic skill key to workplace communication includes using a suitable degree of politeness, loosely defined as demonstrating the appreciation of the thoughts and feelings of your listener. Politeness can be measured with politeness markers (PMs). Appropriate PM use promotes positive, cooperative relationships. There are two main categories of PMs: positive and negative PMs. Positive PMs express appreciation or praise to the listener. Negative PMs avoid conflict and marks consideration of the thoughts and feelings of the listener. Crucially, negative PMs require more monitoring of social boundaries as they require consideration of the conversational partner's potential reactions to statements and their emotional states. This makes PMs a novel new approach to evaluating speech in persons with