

(ID), many tasks involve verbal responses and instructions are presented orally. Therefore, the administration for people with severe language deficits can be challenging. The aim of this retrospective data analysis is to examine the influence of language ability and reasoning on CAMCOG-DS performance. Study 1 examined the relationship between CAMCOG-DS, picture naming, single word comprehension and reasoning in adults with DS. Study 2 replicates and broadens the findings in a sample of children and adults with DS.

Participants and Methods: Study 1 included 40 adults with DS between 18 and 51 years ($M = 28.6$, $SD = 8.4$). 25 had a mild and 15 a moderate ID. CAMCOG-DS, the short form of the Boston Naming test (BNT), a test for single word comprehension from the Weidenfeller Testbatterie (WTB) and the Colored Progressive Matrices (CPM) were administered. Study 2 included 38 participants between 8 and 59 years (23 children, $M = 11.4$; 15 adults; $M = 31.3$). 3 had a borderline, 23 a mild, and 12 a moderate ID. The same tasks as in Study 1 were applied, but the CPM was replaced by its successor, the Raven's 2.

Results: In Study 1, participants with mild ID performed better in all tasks than those with moderate ID ($p < .05$). Moderate relationships were found between CAMCOG-DS total score and the language tasks ($r = .56$ and $r = .46$), which remained significant when level of ID was controlled for. There was also a moderate relationship between CAMCOG-DS and reasoning ($r = .46$). Regression analysis showed that BNT performance predicted CAMCOG-DS performance ($R^2 = .31$).

In Study 2, those with mild ID, compared to those with moderate ID, performed better in all tasks ($p < .05$), however, regarding the CAMCOG-DS and language tasks, this effect was larger in adults than in children. Adults performed better than children in the CAMCOG-DS and BNT ($p < .05$), but not in single word comprehension or reasoning. As in Study 1, moderate to large correlations were revealed between CAMCOG-DS and language tasks and between CAMCOG-DS and reasoning ($r > .52$), remaining significant when age and ID level were controlled for. Regression analysis showed that both naming and reasoning but not single word comprehension or age predicted CAMCOG-DS performance ($R^2 = .69$), however, performance was best predicted by naming ($R^2 = .65$).

Conclusions: Our results suggest that language ability and reasoning relate to CAMCOG-DS performance, which is best predicted by BNT picture naming. This should be considered in CAMCOG-DS interpretation, as the capabilities of patients with lesser language ability might be underestimated. Future developments of dementia assessments for people with ID should include more nonverbal tasks.

Categories: Autism Spectrum Disorders/Developmental Disorders/Intellectual Disability

Keyword 1: intellectual disability

Keyword 2: dementia - Alzheimer's disease

Keyword 3: assessment

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25 The Hybrid Learning Environment During Covid-19: A Case Study on IEP Implementation for a Student with Autism Spectrum Disorder

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Objective: An effective support system for families with children with an Autism Spectrum Disorder (ASD) consists of multiple methods of educational and therapeutic delivery. Such methods are adapted to meet a family's needs and needs of the time, like the COVID-19 pandemic. Individualized Educational Plan (IEP) are established by schools to support success in academics for children with ASD. IEPs can vary depending on the district and accessibility, thus, the effective implementation and communication between this support system is important for its success. The current case study examines academic and therapeutic outcomes of an IEP implementation during hybrid learning of a child with ASD and their family.

Participants and Methods: Purposeful sampling identified a participant from a previous IRB approved study through the UNLV Educational Psychology program that

interviewed parents on their remote learning experience. A qualitative case study was applied to further investigate student outcomes. Parent interview and the child's progress report were coded and analyzed systematically. The identified family included correspondence from the mother (Lisa, 37) and her son (Noah, 9). Noah attended third grade at a Charter School and was diagnosed with ASD in 2019. His IEP included 80% in General Education (online) with Special Education assistance (in person; reading, writing, and mathematics) and Occupational (OT), Speech/Language (SLP), and Physical Therapy (PT) (hybrid).

Results: Noah began hybrid learning in October 2020, with in-person learning two days a week and remote learning everyday for two to three hours each day. Progress report and interview were collected in April 2021 at the halfway point of his IEP implementation which described Noah's current special education and therapy services goals/outcomes in March 2021. This included 11 goals that were observed and assessed in OT (2), PT(2), Reading (2), Writing (1), Math (2), and SLP (2). Noah progressed in 9 of 11 goals, with 1 being met and 8 classified as satisfactory by displaying some improvement in respective skills mid year. The remaining OT (2) goals showed no definitive conclusion. Lisa mentioned that lack of direct observation of particular skills and too many online classes to attend led to inconclusive outcomes. Lisa and Noah came across difficulties while engaging in OT online sessions encountering emotional stress when adjusting to the mode of delivery. Lisa expressed positive emotions when referring to the support system and described it as collaborative with adequate attention to multiple aspects of his development. She voiced understanding of her's and other professionals' role and the extent of their abilities in the context of the pandemic.

Conclusions: Of the 11 IEP goals, there was adequate progress for the child amid hybrid learning. The parent preferred that OT be delivered in person as certain procedures require direct contact and affected outcomes. Hybrid learning has allowed for parents to directly access their children's endeavors and heighten communication with professionals. This suggests that maintenance of IEP standards can be satisfactory in a hybrid learning model with adequate monitoring from parents and treatment teams for children with ASD.

Categories: Autism Spectrum Disorders/Developmental Disorders/Intellectual Disability

Keyword 1: learning

Keyword 2: academic achievement

Keyword 3: academic skills

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26 Do depression, anxiety, or stress moderate the relationship between auditory learning and verbal learning?

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Objective: Attention plays a key role in auditory processing of information by shifting cognitive resources to focus on incoming stimuli (Riccio, Cohen, Garrison, & Smith, 2005). Mood symptoms are known to affect the efficiency with which this processing occurs, especially when consolidation of memory is required (Massey, Meares, Batchelor, & Bryant, 2015). Without proper focus on relevant task information, improper encoding occurs, resulting in negatively affected performances. This study examines how depression, anxiety, and stress moderate the relationship between auditory attention and verbal list-learning.

Participants and Methods: Archival data from 373 adults (Mage= 56.46, SD=17.75; Medu = 15.45, SD=2.2; 54% female; 74% white*) were collected at an outpatient clinic. Race was not available in a small percentage of cases included in analyses. Auditory attention was assessed via the Brief Test of Attention (BTA). Learning was assessed via the California Verbal Learning Test (CVLT-II) total T-Score (Trials 1-5). Mood was assessed via the Depression Anxiety and Stress Scales (DASS-42). A moderation analysis was conducted utilizing the DASS-42 as the moderator between the relationship of BTA and CVLT-II.

Results: Block 1 of the hierarchical regression was significant in that BTA contributed significantly toward verbal learning on the CVLT-II ($F(1, 378)=30.141, p < .001, \Delta R^2=.074$). The