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Standardized and Informal Language Assessments Determining the Communication Needs of Transition-Age Students With Mild Intellectual Disability

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Structured Abstract

Clinical Question: Should speech-language pathologists (SLPs) perform a formal standardized speech and language assessment and/or an informal speech and language sample to determine communication skills of students with mild ID during postsecondary transition?

Method: Literature Review

Study Sources: ASHA, ASHA Perspectives, Google Scholar, Academic Search Complete, Education Full Text, ERIC, Cochrane Library, What Works Clearinghouse, PubMed, EBSCOhost, and PsycINFO

Search Terms: speech and language assessment AND mild intellectual disability AND transition placement AND speech and language sample

Number of Included Studies: 4

Primary Results:

In order to best determine the communication skills of students with ID during postsecondary transition, SLPs should:

- 1. Conduct a formal, standardized speech and language analysis making sure to include assessments that include pragmatic, social, and functional communication, making sure to use the resulting information descriptively as needed.
- 2. Complete an informal, in-depth, and extensive speech and language sample analysis, making sure to include pragmatic, social, and functional communication in task-specific activities.
- 3. Include communication partners' perceptions of the student's speech intelligibility and language interactions prior to transition placement.

Conclusions: Studies investigating best practices for speech and language assessments of students with mild ID are limited at best. One study was located that assessed standardized language assessments in students with ID (Cascella, 2006). Language sampling has been identified as a more accurate representation of vocabulary, expressive language, and overall ability in students of varying levels of ID (Kover et al., 2012). However, lack of available information on language sampling accuracy in students with mild ID creates a significant practice gap for clinicians and educators. Incorporating both standardized speech and language testing results (which may require using findings descriptively) as well as informal, robust speech and language samples may provide the most accurate representation(s) of communication skills and abilities in students with mild ID.

Standardized and Informal Language Assessments Determining the Communication Needs of Transition-Age Students With Mild Intellectual Disability

Jane Roitsch, PhD, CCC-SLP, MBA Annemarie L. Horn, PhD Old Dominion University

Clinical Scenario

Sarah, a speech-language pathologist (SLP), provides speech and language services to high school students at three different schools in the district during the week. Her caseload includes students with a variety of speech and language disorders. Recently, Brandon, a 14-year-old student with documented mild intellectual disability (ID), moved into the school district and was assigned to her caseload.

Brandon was officially diagnosed with ID at age 7 but began receiving early intervention services at age 2. Brandon has been educated in a self-contained special education classroom since pre-K. Testing revealed that his ID is in the mild range, with an IQ of 62. Brandon made adequate progress in school, as evidenced by informal teacher assessments and data collection on annual individualized education program (IEP) goals. Over the years, his IEP team intermittently declined triennial re-evaluation testing because they felt they already had enough data to a) support continued services for Brandon and b) update his annual goals. IEP teams often choose to defer re-evaluation when they believe they have the information they need and the services will not be affected.

Sarah wanted to make sure she was sufficiently meeting Brandon's individualized needs and supporting his individualized transition plan (ITP). His last formal speech and language testing was completed more than 7 years earlier. Although it is not uncommon for high school-age students with ID to have outdated formal speech and language testing because the IEP team waived triennial reevaluation, Brandon's IEP now includes the ITP component. Sarah knows how critical transition services are and she wants to be sure Brandon's speech-language services and supports align with his short- and long-term (i.e., postsecondary) goals.

To identify Brandon's specific and current speech and language functioning, Sarah begins to plan an assessment.

However, she is not sure whether formal standardized speech and language assessments and/or informal, in-depth, and situational speech and language samples would most accurately identify Brandon's communication strengths and needs. Sarah hopes to discover the best practices for speech and language assessments for transition-aged students with mild ID. She fears that if she does not provide adequate speech-language services that support Brandon's ITP goals, she would be doing a disservice to him during the critical transition period. Conversely, seamlessly integrating appropriate speech and language services with Brandon's ITP goals both in and out of the classroom (e.g., community-based settings) may lead to positive post-school outcomes for him.

Sarah has the benefit of working closely with the school district's special education department. Brandon's special education teacher and case manager, Diane, reports she has struggled with how to effectively improve the linguistic and communicative needs of her students during their transition years. She shared that some students on her caseload become frustrated, which results in behavioral problems in community-based settings that appear to be too demanding for their communication skills. For example, when working as a grocery store bagger, one of Diane's students struggled to understand specific bagging instructions from shoppers (e.g., putting frozen and refrigerated items in one bag and nonperishable dry goods in another). Instead of asking for help or clarification, the student threw the grocery items on the floor.

Sarah asked Diane to help her learn more about the placement of students with ID so she could better prepare them for community-based settings and ultimately transition from high school to postsecondary employment settings. This information would help drive what type of interventions Sarah implemented with Brandon. Diane told Sarah about eligibility and placement laws and how they are used in special education settings. Sarah decided to look further into Brandon's reports and then do some research regarding speech and language testing of students similar to Brandon that helped improve their individualized transition services.

Sarah and Diane felt strongly that they needed more information about Brandon's current levels of communication to determine which linguistic and communicative skills to focus on to better prepare him for postsecondary transition. Because Brandon had an individual support staff assigned to him for communitybased integration as part of his individualized transition programming, he relied on staff support and prompting to complete basic tasks. Sarah and Diane were conflicted; they felt Brandon was more capable than what his outward speech and language and behaviors, and prior standardized assessments, conveyed. Sarah decided to search the research literature for best practices for speech and language testing of students with mild ID during their transition years.

Background Information Standardized Language Assessments

Students with ID are often also identified as having a speech and language disorder (Abbeduto et al., 2016; McDuffie et al., 2017; Memisevic & Hadzic, 2013). In fact, in a study of students with mild and moderate ID, more than 70% of students also demonstrated a speech and/or language disorder (Memisevic & Hadzic, 2013). Often, SLPs analyze students' speech and language functioning through standardized tests. These types of assessments are generally quick to administer and score, and they provide the SLP with information about what language areas to focus on during therapy sessions. Because effective and optimal communication skills are critical to transition planning and postschool employment, standardized speech and language tests can help target goals for remediation; however, challenges often present themselves when any standardized test scores are applied to unique populations, including persons with ID.

For example, in their review of a standardized cognitive test (i.e., the Wechsler Intelligence Scale for Children; Wechsler, 1949) and its utility for determining cognitive function in children with ID secondary to fragile X syndrome, Hessl et al. (2009) reported cautionary translation of standardized scores due to basement effects (i.e., when an assessment has a lower limit in which scores below that number cannot be measured). The researchers posited that these child scores were resolved with z-score normalization (i.e., normalizing the value of a number to zero if it is equal to the mean of all feature values so that scores below a mean will be negative and scores above will be positive). The authors suggested that raw score transformation instead of standardized score outcomes may provide a better overall analysis of cognitive functioning in students with ID.

Similarly, standardized language tests can fall short of optimally assessing expressive and receptive language functioning in persons with ID. As noted by Hessl et al. (2009) and Channell et al. (2018), standardized language tests are often normed to only 2 standard deviations (*SD*) below the mean; thus, many students who perform lower than 2 *SD* below the mean cannot be scored. If no baseline is recorded, progress cannot be tracked. Additionally, as many standardized tests compile language domains into a singular total score, the unique language abilities and challenges of students with ID may be ill-represented. Therefore, standardized language assessments have been indicated as less-than-optimal for students with ID because of basement effects, total score limitations, and assessment of test-type language versus meaningful language use.

Speech Intelligibility

The communication abilities of persons with ID are often further limited by speech intelligibility challenges. Speech deficits or speech sound errors of persons with ID often do not mimic the typical sound error productions. In fact, atypical speech sound errors and phonological processes have been identified in persons with varying levels of ID (Coppens-Hofman et al., 2016). Although language impairments are often more commonly recognized than speech intelligibility issues in persons with ID, being misunderstood by listeners can further limit communication and impact social, emotional, and lifelong interactions (McCormack et al., 2009). Simply stated, communication assessments of persons with ID should evaluate language abilities and speech intelligibility; speech sound development, progression, and overall speech abilities often do not follow the same trajectory as persons without ID.

Language Samples

As defined by Channell et al. (2018), language samples involve compiling a snapshot of an individual's expressive language in a natural environment such that an accurate

representation of language ability can be determined. Language samples have been shown to provide realistic representations of the language skills of persons with varying levels of ID (Abbeduto et al., 2012) and other populations with known communication disorders (e.g., autism spectrum disorder; Wittke et al., 2017), and even typically developing individuals. The work by Channell et al. (2018) found that narratives can help identify and assess expressive language abilities of persons with ID. Language sampling can help assess adolescents' later language development by focusing on curriculum or task-specific syntax, vocabulary, and pragmatic skills (Nippold, 2014). However, SLPs often report challenges to language sampling, including the time involved in scoring, a lack of standardization of measures to rate and score outcomes, and few or no norm references available (Kemp & Klee, 1997).

Tests exist to evaluate the potential communication abilities of younger children (Sigafoos et al., 2000) and to describe the communication abilities of persons with severe intellectual and developmental disabilities (i.e., the Communication Complexity Scale; Brady et al., 2012). But validated measures to test speech and language abilities of students with mild ID are not readily apparent in the literature.

Postsecondary Transition for Students With Mild ID

Increasing inclusive opportunities in community and workplace settings for individuals with disabilities promotes autonomous functioning and may lead to more positive postsecondary outcomes (Test et al., 2009). In fact, providing community-based employment opportunities during the transition years has been shown empirically to increase the likelihood that individuals go on to become employed later in life (Test et al., 2009). However, there are often barriers for students with ID. Poor communication skills may have a negative impact on community-based options and consequently affect postsecondary outcomes for individuals with ID. For example, limited social and communicative abilities may pose challenges in community settings for persons with ID when they interact with persons without disabilities (Cummins & Lau, 2003). In contrast, being adept in using appropriate social and communicative behaviors (e.g., demonstrating mastery in receptive and expressive language in various settings) has been shown to positively impact personal well-being and result in successful outcomes for persons with ID (Cummins & Lau, 2003).

Identifying social and communicative support needs is of great importance to positively affect postsecondary outcomes for persons with ID.

Clinical Question

Sarah applied the PICO format (population, intervention, comparison, outcome; Sackett et al., 2000) to develop the following question to guide her review of the literature: Should SLPs (P) perform standardized language assessments (I) and/or informal, in-depth, and situational language sample analyses (C) to most accurately identify areas of strengths and weaknesses in the communication skills of students with mild ID during postsecondary transition (O)?

Search for the Evidence

Sarah began the research process by delineating the inclusionary criteria for her search. She hoped to identify empirical research, reviews of literature, systematic reviews, and meta-analyses in order to have a comprehensive representation and analysis of assessments. Because Sarah wanted to discern which speech and language tests are given to persons with mild ID regardless of age, she included studies that met the following criteria: 1) individuals with a diagnosis of mild OR moderate ID, AND/OR speech and language practitioners and ID, AND/OR communication partners and ID; 2) reported speech and language testing; 3) were original research or reviews of original research; and 4) were conducted in the past 20 years. Research design did not limit study inclusion. She searched databases and websites (i.e., ASHA, ASHA Perspectives, Google Scholar, Academic Search Complete, Education Full Text, ERIC, Cochrane Library, What Works Clearinghouse, PubMed, EBSCOhost, and PsycINFO) for the following terms: transition services AND high school AND language assessments OR testing AND language sample OR language sample analysis AND postsecondary transition OR postsecondary employment AND mild intellectual disability OR ID OR moderate intellectual disability OR ID OR mental retardation OR MR AND systematic review OR review OR meta-analysis. Sarah had access to her local university library to search the databases and access the articles she needed. Her goal was to synthesize the available research on the type of standardized speech and language testing and language sample analysis in students with mild to moderate ID in order to inform her next steps.

Although Sarah knew it would be difficult to rate the quality of the surveys and assessment guidelines, she quickly discovered that few studies existed on her topic and even fewer publications involved empirical research. Therefore, she decided to include surveys and practice guidelines in her results. Sarah used a multistep process to identify article abstracts. Initially, her search terms provided 24 records. After excluding duplications and using the inclusion criteria, the list was narrowed to 21 possible articles. Upon further analysis, 10 articles were deemed appropriate for full text analysis. Nine studies had been removed because they included information gathered from parent, teacher, or parent and teacher surveys only, and two studies had been eliminated when Sarah discovered they did not involve speech and language assessments. After full text analysis of the 10 remaining articles, Sarah was left with four articles that met the inclusion criteria (see Figure 1). Four studies included only students with severe ID, two studies involved students with moderate-severe ID, one case study involved a student with a primary diagnosis of severe emotional behavioral disorder who was unable to participate in a speech or language assessment, and one study reported the student was "suspected to have" mild ID but was "never formally diagnosed." A hand search of references revealed no other articles were missed during the online search.

Evaluating the Evidence Standardized Language Assessments

Cascella (2006) reviewed the normative data from standardized speech and language tests of students with ID. The author reported that in the 49 tests reviewed and published, students with mild ID were included in the norm group for 23 tests (20 language tests and 3 speech tests). Separate norms for students with ID were reported in 15 tests. Overall, the tests assessed vocabulary, grammar, and syntax (receptive and expressive) but not pragmatic communication. The author encouraged SLPs to supplement or augment standardized tests with nonstandardized means to accurately identify a student's pragmatic, social, and functional communication.

Spontaneous Speech Testing in Persons With Mild-Moderate ID

The work by Coppens-Hofman et al. (2016) recorded 34 adults with mild-moderate ID during spontaneous

speech and picture-naming tasks. Blinded raters were then asked to rate the intelligibility of the participants' speech. Results suggested that persons with mild-moderate ID demonstrated difficulty with speech production tasks that adversely impacted their intelligibility and verbal productions. The authors suggested that assessment of speech function and subsequent treatment planning to address speech deficits in persons with mild-moderate ID can improve communication functioning in this population.

Chadwick et al. (2019) queried 55 speech and language therapists to determine what types of communications assessments they used to evaluate communication abilities in students with profound intellectual and multiple disabilities (PIMD). The authors reported that the therapists used informal and formal assessments, both published and unpublished. The decision of which test(s) to administer was reported to be based on usefulness, detail sensitivity, and overall applicability. The authors caution that variations in testing measures challenge informed decision-making and limit the ability to interpret results. They suggest further explorations to determine optimal communication assessments for persons with PIMD.

Case Report of Student With Severe ID

Forster and Iacono (2007) interviewed people working with and interacting with a student with ID to explore their perceptions of communication. The authors included a rich language sample from the participant. This research included the student's communication partners and their characterization of the participant's abilities throughout a goal-setting process. The authors reported that the perspectives of communicative stakeholders can play a significant role in the overall outcomes of persons with ID and should be considered during assessment and intervention planning.

The Evidence-Based Decision

Because transition services for students with disabilities is an important topic, Sarah recognized she needed to accurately assess Brandon's language ability. She decided to use what she had gathered from the reviews to assess his current communication strengths and weaknesses.

Because she found very limited information during her search, Sarah was unable to address her clinical question. However, once she compiled the information from the literature and created a table (see Table 1), she was better able to determine her next steps. Her clinical and professional judgment led to her decision to 1) conduct a standardized speech and language sample, making sure to include assessments that address pragmatic, social, and functional communication (Cascella, 2009), and 2) complete an in-depth and extensive language sample analysis and include Brandon's communication partners in the communication environments that Brandon encounters or may encounter. This analysis would also include speech and language reports (e.g., the Social Skills Rating System; Gresham & Elliot, 1990) from Brandon's communication partners and their perceptions of his speech intelligibility (Coppens-Hofman et al., 2016).

Using the information from her review of the research, Sarah believes she can create an updated and accurate representation of Brandon's speech and language skills, needs, and potential in order to help his transition planning. She knows incorporating this information is critical to fully meet the individualized needs of any student with a disability receiving speech and language services during their transition years. For Brandon, his speech and language needs are compounded by his ID; therefore, it is essential to have a method to clearly identify his strengths and needs and to seamlessly integrate speech and language services with the delivery of his ITP.

Appropriate transition supports can promote independence and postsecondary success for transitionaged students with ID (Collins & Wolter, 2018). To date, a specific assessment tool has not yet been established for determining the speech and language needs of students with mild ID during their transition years. Although Sarah was unable to answer her clinical question, she was able to identify current practices and combine recommendations from practice guidelines, surveys, and research findings to reach a conclusion she felt comfortable pursuing. She needs to complete both a comprehensive standardized speech and language assessment and work with Brandon and his communication partners to obtain an informal, robust language sample for analysis. Once completed, Sarah believes she will have an accurate representation of Brandon's communication strengths and weaknesses and can create a treatment plan, complete with communicative supports, from those results.

Authors' Note

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Annemarie L. Horn, PhD is an assistant professor in the Department of Communication Disorders and Special Education at Old Dominion University. Her research interests include postsecondary transition for students with disabilities, eCoaching with bug-in-ear technology, and increasing the application of evidence-based practices during transition years.

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References

- Abbeduto, L., Kover, S. T., & McDuffie, A. (2012).
 Studying the language development of children with intellectual disabilities. In E. Hoff (Ed.), *Research methods in child language: A practical guide* (pp. 330–346). Wiley-Blackwell Publishing Ltd. https://doi.org/10.1002/9781444344035.ch22
- Abbeduto, L., McDuffie, A., Thurman, A. J., & Kover, S. T. (2016). Language development in individuals with intellectual and developmental disabilities: From phenotypes to treatments. In R. M. Hodapp & D. J. Fidler (Eds.), *International review of research in developmental disabilities* (Vol. 50, pp. 71–118). Academic Press. https://doi.org/10.1016/bs.irrdd.2016.05.006
- Blackstone, S. W., & Hunt Berg, M. (2003). Social Networks: A communication inventory for individuals with complex communication needs and their communication partners: Manual. Augmentative Communication Inc.
- Bloomberg, K., West, D., Johnson, H., & Iacono, T. (2009). *Triple C: Checklist of Communication Competencies* (Rev. ed.). Scope.

- Brady, N. C., Fleming, K., Thiemann-Bourque,
 K., Olswang, L., Dowden, P., Saunders, M.
 D., & Marquis, J. (2012). Development of the
 Communication Complexity Scale. American
 Journal of Speech-Language Pathology, 21(1), 16–28.
 https://doi.org/10.1044/1058-0360(2011/10-0099)
- Cascella, P. W. (2006) Standardised speech-language tests and students with intellectual disability: A review of normative data. *Journal of Intellectual & Developmental Disability*, 31(2), 120–124. https://doi.org/10.1080/13668250600681503
- Chadwick, D., Buell, S., & Goldbart, J. (2019). Approaches to communication assessment with children and adults with profound intellectual and multiple disabilities. *Journal of Applied Research in Intellectual Disabilities*, 32(2), 336–358. https://doi.org/10.1111/jar.12530
- Channell, M. M., Loveall, S. J., Conners, F. A., Harvey, D. J., & Abbeduto, L. (2018). Narrative language sampling in typical development: Implications for clinical trials. *American Journal* of Speech-Language Pathology, 27(1), 123–135. https://doi.org/10.1044/2017_AJSLP-17-0046
- Collins, G., & Wolter, J. A. (2018). Facilitating postsecondary transition and promoting academic success through language/literacy-based selfdetermination strategies. *Language, Speech, and Hearing Services in Schools, 49*(2), 176–188. https://doi.org/10.1044/2017_LSHSS-17-0061
- Coppens-Hofman, M. C., Terband, H., Snik, A. F. M., & Maassen, B. A. M. (2016). Speech characteristics and intelligibility in adults with mild and moderate intellectual disabilities. *Folia Phoniatrica et Logopaedica*, 68(4), 175–182. https://doi.org/10.1159/000450548
- Coupe, J., Barton, L., Barber, M., Collins, L., Levy, D., & Murphy, D. (1985). *The Affective Communication Assessment.* M.E.C.
- Cummins, R. A., & Lau, A. L. D. (2003). Community integration or community exposure? A review and discussion in relation to people with an intellectual disability. *Journal of Applied Research in Intellectual Disabilities*, *16*(2), 145–157. https://doi.org/10.1046/j.1468-3148.2003.00157.x

Forster, S., & Iacono, T. (2007). Perceptions of communication before and after a speech pathology intervention for an adult with intellectual disability. *Journal of Intellectual* & Developmental Disability, 32(4), 302–314. https://doi.org/10.1080/13668250701654425

- Gresham, F. M., & Elliot, S. N. (1990). *Social Skills Rating System manual.* American Guidance Service.
- Hessl, D., Nguyen, D. V., Green, C., Chavez, A., Tassone,
 F., Hagerman, R. J., Senturk, D., Schneider, A.,
 Lightbody, A., Reiss, A. L., & Hall, S. (2009). A
 solution to limitations of cognitive testing in children
 with intellectual disabilities: The case of fragile X
 syndrome. *Journal of Neurodevelopmental Disorders*, 1,
 33–45. https://doi.org/10.1007/s11689-008-9001-8
- Kemp, K., & Klee, T. (1997). Clinical language sampling practices: Results of a survey of speechlanguage pathologists in the United States. *Child Language Teaching and Therapy*, *13*(2), 161–176. https://doi.org/10.1177/026565909701300204
- Kiernan, C., & Reid, B. (1987). *Preverbal Communication Schedule* (PVCS). NFER.
- Kover, S. T., McDuffie, A., Abbeduto, L., & Brown,
 W. T. (2012). Effects of sampling context on spontaneous expressive language in males with fragile X syndrome or Down syndrome. *Journal of Speech, Language, and Hearing Research, 55*(4), 1022–1038. https://doi.org/10.1044/1092-4388(2011/11-0075)
- McCormack, J., McLeod, S., McAllister, L., & Harrison, L. J. (2009) A systematic review of the association between childhood speech impairment and participation across the lifespan. *International Journal* of Speech-Language Pathology, 11(2), 155–170. https://doi.org/10.1080/17549500802676859
- McDuffie, A., Thurman A. J., Channell, M. M., & Abbeduto, L. (2017). Language disorders in children with intellectual disability of genetic origin. In R. Schwartz (Ed.), *Handbook of child language disorders* (2nd ed., pp. 52–81). Taylor & Francis. https://doi.org/10.4324/9781315283531

Memisevic, H., & Hadzic, S. (2013). Speech and language disorders in children with intellectual disability in Bosnia and Herzegovina. *Disability, CBR & Inclusive Development, 24*(2), 92–99. https://doi.org/10.5463/dcid.v24i2.214

Nippold, M. A. (2014). *Language sampling with adolescents: Implications for intervention.* Plural Publishing.

Sackett, D. L., Straus, S. E., Richardson, W. S., Rosenberg, W., & Haynes, R. B. (2000). *Evidence-based medicine: How to practice and teach EBM* (2nd ed.). Churchill Livingstone. https://doi.org/10.1177/088506660101600307

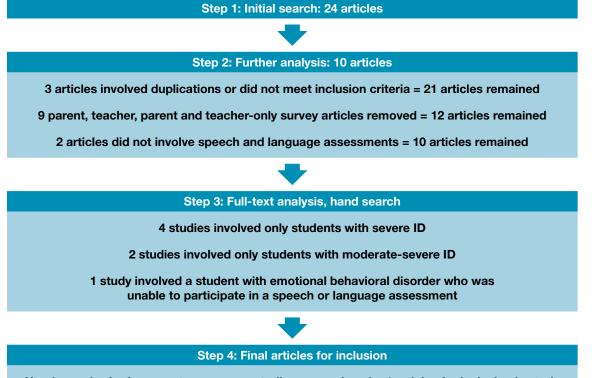
Sigafoos, J., Woodyatt, G., Keen, D., Tait, K., Tucker, M., Roberts-Pennell, D., & Pittendreigh, N. (2000). Identifying potential communicative acts in children with developmental and physical disabilities. *Communication Disorders Quarterly*, 21(2), 77–86. https://doi.org/10.1177/152574010002100202 Test, D. W., Fowler, C. H., Richter, S. M., White, J., Mazzotti, V., Walker, A. R., Kohler, P., & Kortering, L. (2009). Evidence-based practices in secondary transition. *Career Development and Transition for Exceptional Individuals*, 32(2), 115–128. https://doi.org/10.1177/0885728809336859

Wechsler, D. (1949). Wechsler Intelligence Scale for Children. Pearson.

Wittke, K., Mastergeorge, A. M., Ozonoff, S., Rogers, S. J., & Naigles, L. R. (2017). Grammatical language impairment in autism spectrum disorder: Exploring language phenotypes beyond standardized testing. *Frontiers in Psychology*, *8*, 532. https://doi.org/10.3389/fpsyg.2017.00532

Table 1. Summary of Research Articles					
Article	Participants	Purpose	Type of language testing	Results	Implications
Cascella (2006)	N/A; 49 standardized speech-language test publications were reviewed	To identify performance- based standardized speech- language tests used to assess students with ID and the skills measured within	A total of 49 assessments were reviewed: 20 language tests; 3 speech tests	The normative sample of the speech-language tests reviewed included students with ID. Several tests included specific normative subgroups for students with ID, which aided the SLP's ability to interpret students' results compared to the corresponding sample.	SLPs should consider nonstandardized speech- language assessments in addition to standardized options when working with students with ID. Doing so may give a more accurate description of the student's language abilities.
Chadwick, Buell, & Goldbart (2019)	55 SLPs who work with students with ID	Survey for speech-language therapists to learn current practice based on core assessment and the rationale behind selecting those communication assessments	3 assessments cited by > 5 SLTs: Preverbal Communication Schedule (PVCS, Kiernan & Reid, 1987) 25; 45.5%), the Affective Communication Assessment (Coupe et al., 1985; 21; 38.2%), and the Checklist of Communication Competence (Triple C; COC5; Bloomberg et al., 2009; 9; 16.4%)	Therapists used formal and flexibly developed informal (unpublished) assessments.	Need for more psychometrically valid communication assessments for the target population. There is a great need for discovering communication assessments that lead to effective interventions; researchers state this group is commonly "overlooked."
Coppens- Hofman, Terband, Snik, & Maassen (2016)	36 adults with mild or moderate ID	Speech intelligibility via a picture-naming task and spontaneous speech samples	Both standardized tests and language samples	High error rates, deviant speech development vs. incomplete phonemic inventory	SLPs should provide guidance and training to those who work with students with ID. Tailored therapeutic management schemes can act as measures to evaluate treatment results.
Forster & lacono (2007)	Parents and support staff of young man with ID and a profound hearing impairment	Determine caregiver/ communication partner impressions of man with ID	Interviews	Three themes emerged: 1) The Social Networks Inventory (Blackstone & Hunt Berg, 2003) can be used to describe students according to their level of communication. 2) Repeating the inventory over time can reveal changes in who contributes to said changes. 3) The inventory can be used to identify communication partnets across five circles of frequent communicative partnets.	Findings demonstrate the importance of conducting informal assessments, such as conversations, with individuals with ID.





Hand search of references to ensure no studies were missed = 4 articles for inclusion in study