

Gilliam Autism Rating Scale Second Edition Gars 2

Understanding the Gilliam Autism Rating Scale Second Edition (GARS-2)

The journey toward an accurate autism diagnosis can feel overwhelming for families, educators, and clinicians alike. Among the many tools available to help navigate this complex process, the **Gilliam Autism Rating Scale Second Edition (GARS-2)** has established itself as a widely respected and frequently utilized assessment instrument. Designed to assist in identifying autism spectrum disorder in individuals aged 3 through 22, the GARS-2 offers a structured approach to evaluating behavioral characteristics that align with the diagnostic criteria for autism. This article provides a comprehensive exploration of the GARS-2, including its structure, administration, scoring, clinical applications, strengths, limitations, and its place within the broader landscape of autism assessment.

What Is the Gilliam Autism Rating Scale Second Edition?

The Gilliam Autism Rating Scale Second Edition, commonly referred to as the GARS-2, is a standardized instrument used to help identify autism spectrum disorder in children and young adults. Developed by James E. Gilliam, this rating scale was first published in 1995 and later revised to its second edition in 2006. The GARS-2 is designed to be completed by parents, teachers, or other professionals who have had meaningful contact with the individual being assessed. Its primary purpose is to assist in the diagnostic process by providing a reliable measure of autism-related behaviors.

The scale is grounded in the diagnostic criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), and it aligns closely with behavioral characteristics commonly associated with autism spectrum disorder. Although the diagnostic landscape has evolved with the publication of the DSM-5, the GARS-2 remains a relevant and informative tool when used as part of a comprehensive evaluation battery.

The Theoretical Foundation of the GARS-2

James Gilliam developed the GARS-2 based on his extensive experience working with individuals on the autism spectrum. The scale draws from observable behavioral patterns and does not require specialized training in autism to administer, making it accessible to a wide range of professionals including school psychologists, speech-language pathologists, and clinical diagnosticians. The underlying assumption is that autism manifests through consistent, measurable behaviors across three core domains, which the GARS-2 systematically evaluates.

Key Components and Structure of the GARS-2

The Gilliam Autism Rating Scale Second Edition is organized into three distinct subscales, each assessing a specific domain of behavior associated with autism. These subscales work together to provide a comprehensive profile of an individual's behavioral characteristics.

The Three Core Subscales

Stereotyped Behaviors – This subscale evaluates repetitive motor movements, unusual mannerisms, and rigid behavioral patterns. Items in this section focus on observable behaviors such as hand flapping, rocking, spinning objects, or other repetitive actions that are commonly associated with autism spectrum disorder. The Stereotyped Behaviors subscale helps quantify the presence and severity of restricted and repetitive patterns of behavior.

Communication – The Communication subscale assesses both verbal and nonverbal communication skills. This includes evaluating an individual's ability to initiate and maintain conversations, use appropriate gestures, understand figurative language, and engage in reciprocal social communication. Deficits in this area are a hallmark feature of autism, making this subscale particularly valuable for diagnostic purposes.

Social Interaction – This subscale measures the quality and nature of an individual's social engagement with others. Items examine eye contact, facial expressions, peer relationships, social reciprocity, and the ability to understand social cues. Difficulties in social interaction are central to autism spectrum disorder, and the Social Interaction subscale captures these challenges in a structured, quantifiable manner.

Item Composition and Rating

The GARS-2 contains a total of 42 items across the three subscales, with each subscale comprising 14 items. Raters score each item on a four-point Likert scale based on the frequency of the observed behavior:

- **0** – Never observed
- **1** – Seldom observed (1-2 times per month)
- **2** – Sometimes observed (1-2 times per week)
- **3** – Frequently observed (1-2 times per day)

The rater selects the response that best describes how often the specific behavior has been observed over the previous three months. This timeframe ensures that the assessment reflects consistent, ongoing patterns rather than isolated incidents.

How the GARS-2 Is Administered and Scored

Administering the Gilliam Autism Rating Scale Second Edition is a straightforward process that requires minimal training. The scale is typically completed by a parent, teacher, or caregiver who has known the individual for at least two to three months and has had ample opportunity to observe their behaviors across various settings.

Administration Process

The rater is provided with a response booklet containing the 42 items organized by subscale. Clear instructions guide the rater through the process, and each item includes a brief description of the behavior to ensure consistency in interpretation. The entire rating process takes approximately 10 to 15 minutes to complete, which makes the GARS-2 an efficient screening and assessment tool in busy clinical, school, or home environments.

Once the ratings are completed, the examiner transfers the scores to a summary sheet and calculates raw scores for each subscale. These raw scores are then converted into standard scores, percentile ranks, and an overall Autism Index using age-based normative tables.

Understanding the Autism Index

The **Autism Index** is the most critical score derived from the GARS-2. It is a composite standard score that combines the results from all three subscales into a single metric. The Autism Index has a mean of 100 and a standard deviation of 15, consistent with many other standardized assessment tools.

The interpretation of the Autism Index is as follows:

- **Below 70** – Very low probability of autism
- **70-84** – Low probability of autism
- **85-100** – Average probability of autism
- **101-115** – Increased probability of autism
- **Above 115** – High probability of autism

The GARS-2 also provides subscale standard scores with a mean of 10 and a standard deviation of 3, allowing clinicians to identify specific areas of strength or difficulty. This detailed profile can be invaluable for developing targeted intervention plans.

Reliability and Validity of the GARS-2

For any assessment tool, reliability and validity are essential considerations. The Gilliam Autism Rating Scale Second Edition has been studied extensively, and the research generally supports its use as a reliable and valid instrument for identifying autism-related behaviors.

Reliability

The GARS-2 demonstrates strong internal consistency, with alpha coefficients ranging from 0.80 to 0.90 across the three subscales and the overall Autism Index. Test-retest reliability is also robust, with coefficients above 0.80 for repeated administrations over short intervals. Interrater reliability, which measures agreement between different raters observing the same individual, is moderate to strong, though it tends to be higher when raters have similar backgrounds and observational contexts.

Validity

Content validity was established through careful item selection based on DSM-IV-TR criteria and expert review. Criterion validity studies have shown that the GARS-2 effectively differentiates between individuals with autism and those with other developmental disabilities. However, some research has suggested that the GARS-2 may under-identify higher-functioning individuals on the autism spectrum, which is an important consideration for clinicians.

Concurrent validity studies comparing the GARS-2 with other established autism assessment tools, such as the Childhood Autism Rating Scale and the Autism Diagnostic Interview-Revised, have yielded mixed results. Some studies report strong correlations, while others indicate more modest agreement. This highlights the importance of using the GARS-2 as part of a multidisciplinary evaluation rather than as a standalone diagnostic tool.

Clinical Applications and Uses

The GARS-2 is employed across a variety of settings and for multiple purposes, making it a versatile instrument in the assessment of autism spectrum disorder.

Diagnostic Assessment

The primary use of the GARS-2 is to assist in the diagnostic process. When combined with developmental histories, direct observation, and other assessment tools, the GARS-2 helps clinicians determine whether an individual meets the behavioral criteria for autism. Its standardized format ensures consistent administration, which supports reliable diagnostic decision-making.

Educational Planning

School psychologists and special education teams frequently use the GARS-2 to inform individualized education programs. The subscale scores provide specific information about a student's strengths and challenges in communication, social interaction, and behavior. This data can guide the selection of appropriate interventions, accommodations, and support services within the school setting.

Research Applications

The GARS-2 is also widely used in research studies examining autism spectrum disorder. Its standardized scoring and strong psychometric properties make it a suitable tool for measuring behavioral characteristics in clinical trials, intervention studies, and longitudinal research. Researchers appreciate the GARS-2 for its efficiency and its ability to provide quantifiable data on core autism symptoms.

Progress Monitoring

Although the GARS-2 was designed primarily as a diagnostic tool, it can also be used to monitor changes in behavior over time. Repeated administrations can help clinicians and educators evaluate the effectiveness of interventions and adjust treatment plans accordingly. However, it is important to note that the GARS-2 may not be as sensitive to subtle changes as some other behavioral rating scales.

Strengths and Limitations of the GARS-2

No assessment tool is perfect, and the Gilliam Autism Rating Scale Second Edition has both notable strengths and important limitations that users should understand.

Strengths

- **Ease of administration** – The GARS-2 requires minimal training and can be completed in a short amount of time, making it practical for busy clinicians and educators.
- **Clear behavioral focus** – Items are based on observable behaviors, reducing the need for subjective interpretation by the rater.

- **Age range** – Covering ages 3 through 22, the GARS-2 is useful for both children and young adults.
- **Standardized scoring** – Normative data allows for meaningful comparisons with same-age peers.
- **Multirater capability** – The scale can be completed by parents and teachers, providing perspectives from different environments.

Limitations

- **Potential for under-identification** – Some studies suggest the GARS-2 may miss higher-functioning individuals with autism, particularly those with strong verbal skills.
- **DSM-IV alignment** – The GARS-2 was developed based on DSM-IV-TR criteria, which differ somewhat from the current DSM-5 criteria for autism spectrum disorder.
- **Rater bias** – As a rating scale, results can be influenced by the rater's familiarity with the individual, their understanding of the items, and potential biases.
- **Limited scope** – The GARS-2 focuses exclusively on autistic behaviors and does not assess adaptive functioning, cognitive abilities, or comorbid conditions.
- **Mixed validity evidence** – While generally supportive, the research on concurrent validity with other autism measures shows variability that warrants caution.

Comparison with Other Autism Assessment Tools

Understanding how the GARS-2 compares to other widely used autism assessment instruments helps clinicians select the most appropriate tools for their needs.

GARS-2 vs. Childhood Autism Rating Scale

The Childhood Autism Rating Scale is another commonly used autism assessment tool that relies on direct observation and clinical judgment. While the CARS provides a broader assessment that includes sensory and relational aspects, the GARS-2 focuses more narrowly