

Factors That Influence Assessment

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Factors that impact or influence performance in a testing situation include client/patient/student factors, clinician factors, environmental factors, and those involving the actual testing process itself. This brief highlights these factors for both adult clients and children/students.

Factors that influence child and school-based assessment

The challenge:

While the assessments used in school settings have varying degrees of standardization and psychometric properties, most have more than acceptable levels of reliability and validity. So, when used appropriately with fidelity, assessments can be expected to provide useable information about students. However, in addition to whether standardized testing is a good indicator of student performance, there is also debate on whether certain aspects in life—physical, mental, or situational—affect students' assessment results. When working with educators, it is important that Clinicians and School Psychologists have a firm understanding of these factors in order to more accurately communicate the results obtained from assessment and other measures of student performance and behaviour.



Pearson

Factors That Influence Assessment



Physical factors

- Age level—The chronological age of a student is typically accounted for in test or assessment form selection
- Developmental level—Should be considered if a student is developmentally delayed or advanced when comparing to same-age cohorts
- Physical disabilities—Hearing loss, visual impairment, motor ability, etc.
- General health condition
 - > Had the student eaten that day?
 - > Did the student get enough sleep?
 - > Is there a history of substance abuse?
 - > What is their receptive and expressive language ability?
 - > Is the child on medication or off his/her normal medication?
 - > Is the student suffering from cold, flu, allergies, or other condition?



Mental/behavioural factors

What is the student's:

- Motivation level
- School learning ability level
- Special Ed, IEP, or other accommodations
- Activity/attention level (e.g., impulsive, distracted, etc.)
- Cognitive level (developmentally delayed or advanced)
- Specific mental health history (including comorbid or previous diagnoses, past trauma)
- Behaviour (e.g., agitated, noncompliant, aggressive, shy, withdrawn, compulsive, anxious, frustrated, insecure, rejected, etc.)



Home factors

- Is the child homeless?
- Is the child in foster care?
- Is the child a member of a migrant family?
- Are there cultural differences?
- Does the student have a stable home life, or have they had a recent change at home?
- Do the parents support assessment? Do they have issues with assessments and tests?
- Is the student a native speaker of another language, is he/she bilingual, or is the primary home language not English?
- Do the parent(s) or caregiver take an interest in their child's education or do they have an issue with education?

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School factors

- Does the student feel safe and/or connected at school?
- Does the student have a history of chronic absenteeism?
- Was there a fire drill or other unplanned emergency drill?
- Is the student markedly over- or under-age for the grade?
- Does the student have cultural support or disconnection?
- What is the student's level of socialization and peer support?
- How well does the student relate to teachers and other school professionals?
- Was the child pulled from a class or school event he/she enjoys for the session?
- What is the testing environment (e.g., classroom or office lighting, noise level, temperature, amount of interruptions)?



Rater/teacher/clinician factors

- Cultural differences
 - > Language differences?
 - > Implicit bias?
- Rapport and management skills
- Previous experience with the student
 - > Amount and frequency
- Physical and mental state of the tester
- Fidelity to assessment qualifications and instructions
- Familiarity with the testing environment and test materials
- Interpretation experience/knowledge (e.g., discrepancy analysis, growth scale values, etc.)

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Factors that influence adult and older adult assessment

The challenge:

Even when a thorough process is followed for instrument selection, other conditions are often present during the testing session that may impact the performance and test results. Clinician awareness of these factors and their potential impact on testing results is important to ensure maximum performance and accurate results.



Physical & sensory factors

- Fatigue
- Polypharmacy
- Substance use
- Medication effects
- Impaired vision or hearing
- Hunger and/or poor nutrition
- Altered cognition due to delirium
- Impaired gross or fine motor skills
- Chronic or acute medical conditions
- Severely slowed psychomotor speed
- Severely impaired language function



Mental/Behavioural factors

- Substance abuse
- History of trauma
- Significant agitation
- Intellectual disability
- Cognitive impairment
- Significant impulsivity
- Severely impaired attention
- Alcohol and drug interactions
- Poor effort / lack of cooperation / low arousal
- Specific mental health issues (significant anxiety, depression, or comorbid conditions)

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Environmental factors

- Accessibility
- Literacy level
- Bedside vs. office
- Caregiving concerns
- Cohort effects/culture
- Test stimulus materials
- Digital anxiety/familiarity
- Family influence/expectations
- Access to healthcare/medication
- Primary language other than English
- Living situation (stable, isolated, homeless)
- Availability of appropriate corrective devices, accommodations
- Environmental concerns (lighting, ventilation, temperature, free from distractions)



Clinician factors

- Test selection
- Cultural differences
 - > Language differences
 - > Implicit bias
- Administration and/or scoring errors
- Norms appropriate for person being assessed
- Interpretation experience/knowledge (i.e. discrepancy analysis, use of multivariate base rates, etc.)

Conclusion:

Accurate test scores and test score interpretation are necessary to assure appropriate placement and/or treatment, and clinicians have a responsibility to ensure that test scores capture the examinee's true ability or condition by being aware of factors that may affect the examinee's test performance.