

EMPIRE STATE SCREEN: Learning Needs Screen for Spanish Speaking Adults

Overview

The Empire State Screen (Abwender, 2005) is a brief assessment tool designed to help identify Spanish speaking adults with certain developmental cognitive disabilities that could be expected to interfere with a person's ability to, for example, obtain or hold a job. It consists of a series of questions, mostly about personal and educational history, that can be asked by anyone, such as a caseworker, who is fluent in Spanish. Most of the questions can be answered with "yes" or "no."

The Empire State Screen (ESS) is not, by itself, a full diagnostic test of any disorder, and the results of the test should never be used by themselves to make a diagnosis. The ESS yields a numerical score; if the examinee's score is above a specified cut-off level, then that examinee would likely benefit from a thorough diagnostic evaluation, usually conducted by a licensed psychologist, to determine the presence and nature of a cognitive disorder. Again, the ESS itself does not diagnose these conditions.

Why use the ESS, if it doesn't diagnose anything? In some ways, it would be ideal to be able to conduct a thorough diagnostic evaluation of all individuals in the social service system, to determine the presence and extent of cognitive disabilities. Although these conditions can be disabling, they are often not obvious, and sometimes come to light only when they are identified by careful psychological testing. But such psychological evaluations are time-consuming and there simply aren't enough professionals around to perform all of those tests, and even if there were the cost would be prohibitive. So the best practical solution is to refer for testing only those persons who are identified by a screening device as being likely to benefit from a full diagnostic evaluation. The ESS serves this role by identifying persons who are likely to have a condition that should be examined more carefully. Non-mental health professionals are therefore not put in a position of making actual diagnoses; rather, the ESS gives them information they can use to make referrals for diagnostic testing as appropriate.

The ESS was developed from a large scale research project. The initial goal of this project was to compare four brief Spanish language tests that might be useful in the identification of learning disabilities. One of the most noteworthy results of the study was that none of the four could differentiate learning disabilities from other kinds of developmental cognitive disabilities. It was also noted that none of the four potential screens proved to be adequate for the task of identifying Spanish speaking adults with these disabilities. Since none of the four passed muster, an additional goal of the project was to create a fifth, composite screen made up of promising items from the four original screening tests. Because it is difficult for any screen of this type to differentiate between learning disability and other cognitive disabilities, and because all of these developmental cognitive disabilities can be impediments to successful daily and occupational functioning, the fifth screen was created to help identify the general presence of developmental cognitive disabilities. Incidentally, as originally conceived, seven states were to take part in this endeavor, but only New York State made a commitment to see the project through to its conclusion. Thus, the newly created composite test is called the Empire State Screen.

Technical and psychometric properties

The ESS contains eight items addressing background personal and educational matters, but these items do not contribute to the ESS's numerical score. They are included to provide the person administering the test with an opportunity to develop some rapport with the examinee prior to asking the questions that are scored. These first eight items may also provide useful information that can help the person administering the test make "judgment calls" about referrals. The remainder of the screen consists of eleven items featuring a Yes/No response format. Responses to these questions yield the numerical score upon which the decision whether or not to refer the examinee for additional testing is based.

The eleven items in the core of the ESS were adapted, with permission, from three of the four screening tests under study: the Cooper Screening of Information Processing (Cooper, 2000); the Adult Learning Disability Screen (Mellard, 2000); and the Initial Screen (Flores-Charter, 1999). In the initial data set of almost 600 low-income, Spanish speaking adults, the items comprising the ESS were selected through logistic regression analysis to provide maximal diagnostic identification (including sensitivity and specificity) of persons with what we refer to as “learning needs” (broadly defined to include various developmental cognitive disabilities). With the initial data set split randomly into two subsets, and the goal being to distinguish between those with learning needs and those without learning needs, the ESS demonstrated 78% diagnostic accuracy (82% sensitivity, 75% specificity) in the first subset, and 76% accuracy (82% sensitivity, 68% specificity) in the second, cross-validation subset. In a second wave of data collection, using the ESS as a standalone test with 78 new cases, the ESS showed 83% diagnostic accuracy (83% sensitivity, 84% specificity).

Using the ESS

For a brief screening test, the ESS appears to do a good job of identifying persons with learning needs who could benefit from a more thorough diagnostic evaluation. That is, most of the people who have these conditions will score above the ESS’s cut-off score (and most of the people who score above the cut-off will have one or more of these conditions). Likewise, most of the people who do not have any of these conditions will score below the ESS’s cut-off (and most of the people who score below the cut-off will not have any of these conditions). So, referring people who score above the cut-off for further testing should result in many of them being properly and formally diagnosed with learning disability, mental retardation, etc., at which time appropriate steps can be taken to better manage the individual’s service needs. Through its construction, and its use of a fixed cut-off score, the ESS is designed to minimize the need for persons administering the ESS to rely on their own judgment; in fact, in most cases it’s probably best to make the referral decision strictly on the ESS score. Nevertheless, because some persons with these conditions will score below the ESS’s cut-off, if the person administering the ESS has strong, compelling reason to believe that the examinee does indeed need additional evaluation, then in this situation professional judgment should take precedence, and a referral should be made.

References

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