SAMPLE REPRESENTATIVENESS

What is it?

A representative sample is a group that closely matches the characteristics of its population as a whole.

How do I know if a sample is representative?

If you are trying to determine whether or not a screening tool accurately measures children's skills, you want to ensure that the sample that is used to validate the tool is representative of your population of interest.

To do this, you must have a clear understanding of the population identified by the developer of the screening assessment. A population could be as large as a country or as small as a school. The answer to the guestion "Is the sample representative?" lies in a complementary guestion, "To whom should children's scores be generalized?" If a sample's scores should be compared to a national benchmark, then the demographics of the sample should look like the demographics of the nation. If, instead, a sample's scores are to be compared to the population of a state, then the sample's demographics should look like the state and not the nation.

Example

A baker makes 100 cookies, where 60% of the cookies are chocolate chip and 40% are sugar cookies. She wants to sell batches of 10 cookies that are representative of the larger batch. So, her sample batches of cookies should include six chocolate chip cookies and four sugar cookies. With this proportion of cookies in her sample, she knows that she is accurately representing the larger batch of cookies.

How does this apply to the NCII's tools charts?

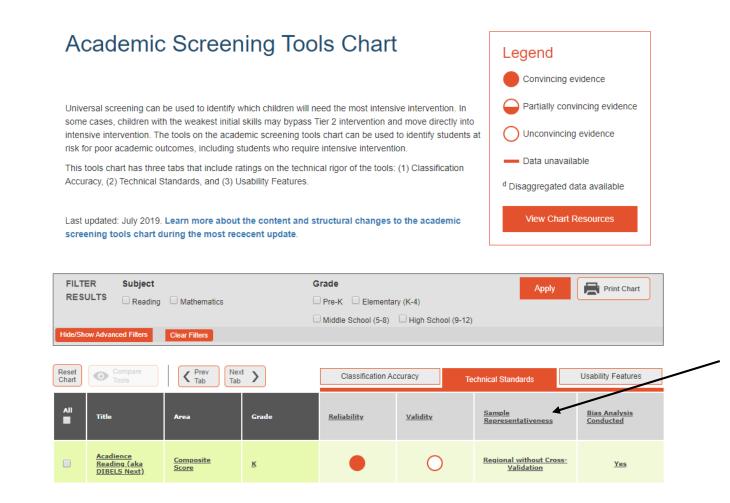
Achieving sample representativeness can occur in several ways. In this brief, we quickly highlight two mechanisms that the National Center on Intensive Intervention (NCII) uses to assess sample representativeness. First, a sample can be considered representative when data collection occurs across multiple sites or across one nationally representative sample. Second, a group of samples can be considered representative if the statistical analyses between the samples result in approximately the same results. For instance, if the correlation between a reading screening assessment score and a reading state test score is similar across the groups of samples, then sample representativeness for that screening assessment can be achieved.

Where do I go from here?

To learn more about the sample representativeness of screening measures, visit NCII's academic and behavior screening tools charts. NCII publishes these charts to assist educators and families in becoming informed consumers who can select screening tools that best meet their needs.

For more information on literacy screening processes, see resources from the National Center on Improving Literacy: https://improvingliteracy.org/.





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