P

Percentiles

Michael Franzen
Allegheny General Hospital, Pittsburgh, PA, USA

Definition

In assessment, percentiles pertain to the percent of the population that performs below the individual being tested. Therefore, if an examinee performs at the 90th percentile, then 90% of the standardization sample performed more poorly than that examinee. Percentiles are nonstandard, although they are derived from the normal probability curve.

Current Knowledge

Percentile ranks between the 26th and the 84th percentile are considered to fall in the average range of performance. Others consider the 25th and 75th percentiles to represent the lowest and highest quarters of the distribution.

One benefit of using percentiles rather than standard scores is for communication with

professionals who rely on percentiles to either maintain or change a particular student's academic curriculum. Many school psychologists are more accustomed to percentile ranks than standard scores, such as scaled or z-scores. Percentile ranks are frequently used in measurement in other fields and, therefore, may be more readily understood than standard scores by the general public.

Cross-References

- [Normal Curve](#)
- [Normative Data](#)
- [Standard Scores](#)

Reference and Readings

- Crawford, J. R., & Garthwaite, P. H. (2009). Percentiles please: The case for expressing neuropsychological test scores and accompanying confidence limits as percentile ranks. *The Clinical Neuropsychologist*, 23(2), 193–204.