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Structured Abstract

**Purpose:** The purpose of this study was to survey the report of power in articles published in the Journal of Speech, Language and Hearing Research (JSLHR) in the year 2009.

**Method:** Articles published in the six volumes of JSLHR, 2009 and reporting at least one inferential test were selected (n = 91). Percentages of articles reporting power in each of the six volumes were calculated and plotted.

**Results:** About 99% (90/91) of the articles failed to report power in their studies.

**Implications:** Power provides information about the chances of making Type II error and hence its’ use is advocated.
All articles published in the six volumes of JSLHR in the year 2009 were examined to identify experimental studies.

Articles reporting at least one inferential test were selected for the survey.

All inferential test reports in each of the 91 selected articles were examined to note the report of power.

Percentages of articles reporting power in each of the six volumes of JSLHR are calculated and reported.
Results

Ninety of the 91 articles (98.9%) examined did not report power and 1/91 (1.1%) did.

There was consistency in the number of articles not reporting power from one volume to another (See Fig. 1).

Researchers consistently chose to disregard any risk of committing type II error that might be present in their experiments.
Figure 1. Number of articles reporting power for each volume of JSLHR, 2009
Discussion

Experiments with low power fail to detect the presence or absence of differences or relationships of interest, decrease the reliability of the findings, and waste resources used for research.

It is recommended that power be routinely calculated before conducting any study and be reported in every study published.
Suggestions for use of power.

1. Conduct a power analysis before conducting the study if the effect sizes can be reasonably estimated from existing research.

2. Consider conducting a pilot study to quantify effect sizes if reasonable estimates of effect sizes are not available.
Some resources to learn about power and power analysis.

