

Elements of the Structured Abstract

The following descriptions and examples are based on: Preminger JE. (2003) Should significant others be encouraged to join adult group audiologic rehabilitation classes? *J Am Acad Audiol* 14:547–558.

Element names marked with an asterisk (*) are mandatory. Enter data for other elements as appropriate. Abstracts must be limited to 500 words.

Background*

Statement concerning the context of the study or the problem it addresses: summarizing a trend, presenting a statistic, or reporting the state-of-the-art in some area to explain why it is important.

Example:

The benefit of participation in group audiologic rehabilitation (AR) classes was examined for adults with hearing loss (subjects) and their significant others (SOs). No previous investigation has compared the benefit of group audiologic rehabilitation classes for adults with hearing loss who attended class with their significant others compared to those who attended class without their significant others.

Purpose*

What the research focused on and/or why. Try converting your research questions to statements. Start with a verb phrase such as:

- To evaluate
- To measure
- To examine
- To review
- To investigate

Example:

To determine whether subject plus significant other classes resulted in greater reduction of subject hearing handicap than subject alone classes and to analyze changes in hearing handicap following group AR classes separately for subjects and for their significant others.

Research Design*

The structure or methodology used in a research project to address a defined set of questions. Use one or more of the following terms as appropriate.

Term	Definition
Descriptive	Measuring the central tendency or dispersion of variables.
Correlational	Measuring the association between different variables.
Experimental	Using random assignment to either a treatment group or a control group to measure the impacts of an intervention (or of access to an intervention) on outcomes.
Quasi-experimental	Using a treatment group and a comparison group, chosen in some way other than random assignment, to estimate the effects of an intervention on outcomes.
Case Report(s)	Collections of reports on the treatment of individual patients with the same condition, or of reports on a single patient, to illustrate an aspect of a condition, the treatment, or the adverse reaction to treatment
Case Control Studies	Patients who already have a certain condition are compared with people who do not.
Cohort Studies	A case-defined population who presently have a certain exposure and/or receive a particular treatment are followed over time and compared with another group who are not affected by the exposure under investigation.
Randomized Controlled Studies	A study in which there are two groups, one treatment group and one control group. The treatment group receives the treatment under investigation, and the control group receives either no treatment (placebo) or standard treatment. Patients are randomly assigned to groups
Double Blind Method	A type of randomized controlled clinical trial/study in which neither the experimenter nor the subject knows which of several possible treatments/therapies the patient is receiving.
Meta-analyses	A systematic, objective way to combine data from many studies, usually from randomized controlled clinical trials, and arrive at a pooled estimate of treatment effectiveness and statistical significance.
Systematic Reviews	A comprehensive survey of a topic that takes great care to find all relevant studies of the highest level of evidence, published and unpublished, across each study, synthesize the findings from individual studies in an unbiased, explicit, and reproducible way, and present a balanced and impartial summary of the findings with due consideration of any flaws in the evidence.
Longitudinal	Measuring outcomes over time to understand development and/or change among individuals or groups.
Cross-sectional	Measuring outcomes at a single point in time to ascertain differences across groups.
Qualitative	Study relying on data collection through interviews, focus groups, document review, or direct observation.
Interview	Qualitative, semistructured data collection technique involving the gathering of open-ended responses to questions.

Example: A quasi-experimental cohort study. Subjects were assigned to one of two treatment groups: 40% were randomly assigned, and the remaining subjects were assigned to groups based on convenience

Study Sample

Number of sample members and information on relevant demographic variables (e.g., age, degree of hearing loss, education level, gender). Include both control and experimental groups if appropriate. Provide pertinent descriptive details related to subgroups.

Example:

Twenty-five adults with hearing loss and their SOs served as subjects. All people with hearing loss were experienced hearing aid users with scores of at least 30 on the Hearing Handicap Inventory.

Intervention

Clear description of the intervention implemented and how (if applicable) it differed from what the control/comparison group received. Include concrete details so that a reader wishing to replicate the study would know what to do.

Example:

All subjects attended six 90-minute classes consisting of informational lectures and training in communication strategies and auditory and visual speech perception. Thirteen subjects attended classes with their significant others, and 12 subjects attended classes without significant others.

Data Collection and Analysis

Clear description of how and when outcomes were measured, including any instruments used, when data were collected, and statistical methods used to analyze data.

Example:

Self-assessment scales measuring hearing aid benefit and use of communication strategies were completed prior to class participation and following the completion of all classes.

Results*

Estimates of intervention's effects on measurable outcomes for the study sample and for subgroups.

Example:

The majority of subjects reported increased use of communication strategies following class

participation. A significant reduction in hearing handicap following class participation was measured across all subjects and significant others, and the greatest reduction in handicap was measured for subjects who attended the classes with their significant others.

Conclusions*

Descriptions of conclusions and recommendations of author(s) based on findings and overall study. Be careful not to overgeneralize. Conclusions should be warranted by the study and data.

Example:

SO participation in group AR classes should be encouraged.

Sample Structured Abstract

Mueller HG, Bentler RA. (2005) Fitting hearing aids using clinical measures of loudness discomfort levels: an evidenced-based review of effectiveness. *J Am Acad Audiol* 16:461–472.

Background: Clinical measurement of the loudness discomfort level (LDL) historically has been part of the hearing aid fitting procedure, and this clinical practice remains popular today. LDL measurements also are recommended in contemporary hearing aid fitting protocols. Yet, surveys show that many hearing aid users are dissatisfied with the loudness of their hearing aids.

Purpose: To evaluate whether clinical measurements of LDL for adult patients are predictive of aided acceptance and satisfaction of loudness for high inputs in the real world.

Research Design: A systematic review of evidence based literature.

Study Sample: Articles published between 1980 and 2005 which used a randomized control, a quasi-experimental, or a nonintervention descriptive research design; used adult subjects; measured either unaided or aided LDL; measured hearing aid performance in the real world; and used self-report of loudness acceptance. Nearly 200 articles were reviewed; three met the criteria.

Results: The evidence supported using unaided LDLs for selecting the maximum real-ear output of hearing aids.

Conclusions: The limited number of studies, the level of evidence, and the statistical power of the studies prevents us from making a strong recommendation concerning the clinical use of LDL measures. Additional research in this area, especially research employing randomized controlled trials would be a useful addition to this body of literature.