



ASHA /

2018 Researcher-Academic Town Meeting



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ASHA Journals Awards





Kawana Award for Lifetime Achievement in Publications



- Named in the memory of the late Alfred K. Kawana, former director of ASHA publications, this award acknowledges the exceptional educational, scientific, or clinical value of the awardees' scholarly contributions.
- This award is reserved for outstanding researchers and scholars who have a sustained history of publication in the ASHA journals of at least 10 years.



2018 Kawana Award Winner

Kathryn Yorkston, PhD, CCC-SLP



- A specialist in motor speech disorders in adults
- Spent much of her professional career bridging research and practice
- Decades of publishing, including over 40 contributions to the ASHA Journals, covering multiple topic areas with her colleagues
- ASHA Fellow and recipient of Honors of the Association
- With colleagues, twice recognized with ASHA Journals Editor's Awards



Editor's Awards

- Each of these awards has been selected by the editors and editor-in-chief of each journal or journal section.
- These are awarded annually to the authors of the most meritorious article published in the preceding year

For a list of past winners dating back to 1970, visit [http://journals.pubs.asha.org/SS/Past Editors Awards Winners.aspx](http://journals.pubs.asha.org/SS/Past_Editors_Awards_Winners.aspx).



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2018 Editor's Award Winners (for Articles Published in 2017)



AJA AMERICAN JOURNAL
OF AUDIOLOGY



The Effects of Service-Delivery Model and Purchase Price on Hearing-Aid Outcomes in Older Adults: A Randomized Double-Blind Placebo-Controlled Clinical Trial

Authors | Larry E. Humes, Sara E. Rogers, Tera M. Quigley, Anna K. Main, Dana L. Kinney, and Christine Herring

Editor-in-Chief | Sumitrajit Dhar



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2018 Editor's Award Winners (for Articles Published in 2017)

JSLHR JOURNAL OF SPEECH, LANGUAGE,
AND HEARING RESEARCH



Do the Hard Things First: A Randomized
Controlled Trial Testing the Effects of Exemplar
Selection on Generalization Following Therapy
for Grammatical Morphology

Language section

Authors | Amanda Jean Owen Van
Horne, Marc Fey, and Maura Curran

Editor-in-Chief | Sean Redmond



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2018 Editor's Award Winners (for Articles Published in 2017)

JSLHR JOURNAL OF SPEECH, LANGUAGE,
AND HEARING RESEARCH



Cluster-Randomized Controlled Trial Evaluating the Effectiveness of Computer-Assisted Intervention Delivered by Educators for Children With Speech Sound Disorders

Speech section

Authors | Sharynne McLeod, Elise Baker, Jane McCormack, Yvonne Wren, Sue Roulstone, Kathryn Crowe, Sarah Masso, Paul White, and Charlotte Howland

Editor-in-Chief | Julie Liss



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2018 Editor's Award Winners (for Articles Published in 2017)

JSLHR JOURNAL OF SPEECH, LANGUAGE,
AND HEARING RESEARCH



Speech Recognition in Adults With Cochlear Implants: The Effects of Working Memory, Phonological Sensitivity, and Aging

Hearing section

Authors | Aaron C. Moberly, Michael S. Harris, Lauren Boyce, and Susan Nittrouer

Editor-in-Chief | Frederick Gallun



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2018 Editor's Award Winners (for Articles Published in 2017)



LSHSS LANGUAGE, SPEECH, AND
HEARING SERVICES IN SCHOOLS



Interactive Book Reading to Accelerate Word Learning by Kindergarten Children With Specific Language Impairment: Identifying an Adequate Intensity and Variation in Treatment Response

Authors | Holly L. Storkel, Krista Voelmle, Veronica Fierro, Kelsey Flake, Kandace K. Fleming, and Rebecca Swinburne Romine

Editor-in-Chief | Shelley Gray



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Disclosure Jason Roberts, PhD Origin Editorial

Financial disclosure:

- I receive a salary for managing Origin Editorial. Origin provides editorial office services for multiple scholarly and scientific clients including ASHA. My comments will simply be drawn from my experiences of running editorial offices and studying author behaviors.
- I received a travel stipend for presenting at the ASHA convention.

Non-Financial Disclosure:

- No, I do not have non financial relationships relevant to the content of the session.



Disclosure
Sumitrajit Dhar, PhD
Northwestern University
Panelist

Financial disclosure:

- I do not have financial relationships relevant to the content of the session.
- Salary -- Northwestern University
- Consultant – Various
- Royalty -- Plural Publishing, Etymotic Research
- Grant – National Institutes of Health
- I received a waiver of the registration fee from ASHA for participating in this presentation.

Nonfinancial disclosure:

- I do not have non financial relationships relevant to the content of the session.



Disclosure Rebecca McCauley, PhD The Ohio State University Panelist

Financial disclosure:

- I am a salaried faculty member at The Ohio State University. This is a continuing relationship. The chief way in which this might be relevant is that as a researcher in this position, I need to follow the kinds of guidelines that will be discussed.
- I also receive royalties for 5 books from Paul Brooks Publishing and for one book from Wolters Kluwer--both are ongoing relationships. These may be relevant because they discuss research but do not follow strict guidelines such as we will discuss.
- I received a waiver of the registration fee from ASHA for participating in this presentation.

Nonfinancial disclosure:

- Nothing to disclose

Reporting Guidelines for Improving the Transparency, Accuracy, and Reliability of Published Research

Jason Roberts, PhD
Senior Partner, Origin Editorial
jason@origineditorial.com



AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

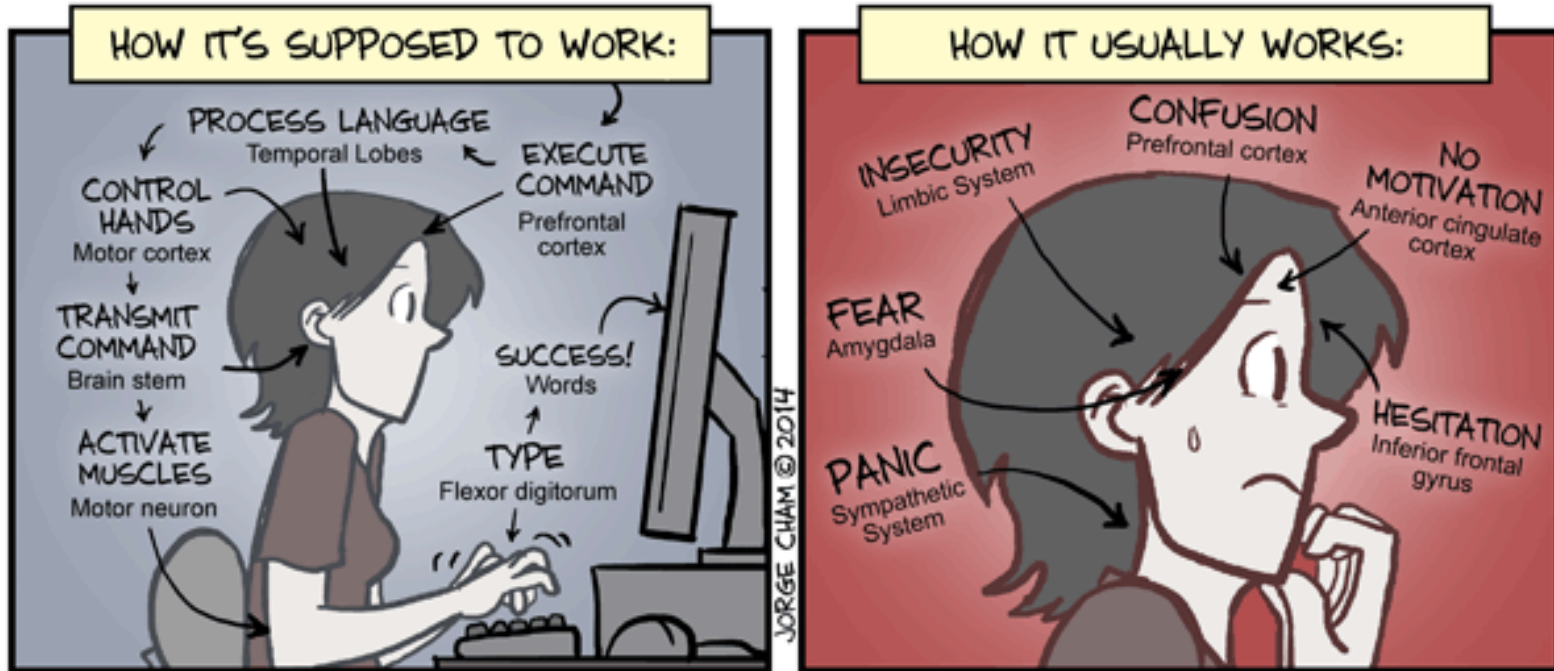
Presentation Outline

- Incomplete Reporting: the problem
 - Selective Reporting of Outcomes
- Reporting Guidelines: the solution
- Stakeholder Relevancy and Impact
- Summary

Conflict of Interest Statement

- **Jason Roberts** is the Senior Partner of Origin Editorial. Origin receives income from multiple organizations such as the American Speech-Language-Hearing Association to provide peer review management for journals.
- My spouse, Larissa Shamseer, has contributed to the development and impact assessment of several prominent Reporting Guidelines. She has also volunteered her time to support both the CONSORT Statement and PRISMA.

THE NEUROBIOLOGY OF WRITING



WWW.PHDCOMICS.COM

- Evidence suggest the research community as a whole is not doing a good job writing fit-for-purpose manuscripts
- Very little formal training on the completeness of reporting
 - *Journals enforcing standards is actually very late in the process*

Complete Reporting: what is it?

“Adequate reports of research should clearly describe which questions were addressed and why, what was done, what was shown, and what the findings mean. However, substantial failures occur in each of these elements.”

Glasziou, P et al “Reducing waste from incomplete or unusable reports of biomedical research” The Lancet, 2014.

Incomplete Reporting: what is it?

- Failure to adequately report essential elements of study design, study procedures, and all study results
 - *One aspect of incomplete reporting is selective reporting*
 - *Reporting of only a selection of study outcomes/analyses*
 - *Can lead to publication bias (when reported results are selected on the basis of statistical significance)*

Incomplete Reporting: why should you care?

- **Unusable** – research cannot be used to its full potential if we can't tell what was done/found
- **Untrustworthy** – inaccurate and selectively reported evidence-base used to informing clinical decisions
- **Unethical** – waste of participant contributions and study funding
- **Non-replicable** – difficult to replicate effective therapies in practice

Incomplete Reporting

“Journals, some of which have been in the business of reporting research for many decades, are still **not producing articles that are clear enough to really judge a study’s conduct, quality, and importance**, let alone to allow other researchers to reproduce or build on it.”

Trish Groves, former deputy editor, BMJ 2008

Examples of incomplete reporting

- 50% of efficacy outcomes and 65% of harms outcomes incompletely reported in 102 RCTs (Chan, 2004)
- 11% of 262 RCTs in prominent oncology journals contained complete information about cancer interventions (e.g., drug name, dose) (Duff et al, 2010)
- Only 39/80 trials and systematic reviews provided adequate description of treatments (i.e. procedure, education, equipment) (Glasziou, 2008)

Some problems plaguing speech, language, hearing research

- Inconsistent adherence to standard research methodology
- Lack of key information about study participants
 - *What inclusion/exclusion criteria was used to select participants*
 - *How was randomization achieved?*
- Interventions not sufficiently detailed
 - *Planned vs. actual intervention, modifications to the intervention not reported*
 - *56 papers on CPT intervention found reporting insufficient or incomplete (Cruice et al, Aphasiology 2018)*
- Outcome reporting
 - *“Measurement reporting continues to be a problem” - Whittington D. Educational & Psychological Measurement, 1998*

Examples of poor reporting

Samples of peer reviews from an ASHA journal over a 6 month window

- “I find no information in the methods section about participants selection criteria for each group.”
- “Audiometric measurements (which most commonly refers to behavioral audiometry), if they were taken, were not actually reported.”
- “Details about threshold assessment such as starting level, step size, bracketing criteria, residual noise while declaring lack of a response, criteria for detection etc. are not provided, making it difficult to reproduce the method.”
- *Failed to report sample size:* “How can we be assured that the sample size is adequate (outside of taking the authors’ word for it)?”
- “The Methods section does not include adequate detail for replication. How were participants recruited, what was the order of procedures, how were surveys answered, who cleaned the aids?”

Examples of poor reporting

Samples of peer reviews from an ASHA journal over a 6 month window

- “The authors detailed the inclusionary and exclusionary criteria for the PHIs, but did not provide recruitment criteria or demographic characteristics for the SOs or AUDs”
- “The measurement instruments need a thorough description. What are the psychometric properties of the online surveys? How many items?”
- “The methodology presented in a manuscript is very important in allowing other researchers to both understand and replicate the study. The method section in this manuscript is insufficient in detail to meet this aim. For example, the method section outlines that participants were trained to use the app. How were they trained? How did the researchers (across 2 sites) ensure the training and instructions provided were identical across the two sites?”

Poorly written, hard to validate results

“Failure to publish an adequate account of a well-designed clinical trial is a form of scientific misconduct which can lead those caring for patients to make inappropriate treatment decisions.”

Chalmers | “Underreporting research is scientific misconduct”

JAMA, 1990

readers to
a study—they are

measurement would make
AS, 2018

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struggle to find key
t the results they
for purpose.”

Potential negative/harmful outcomes on practice



Selective Reporting of Outcomes

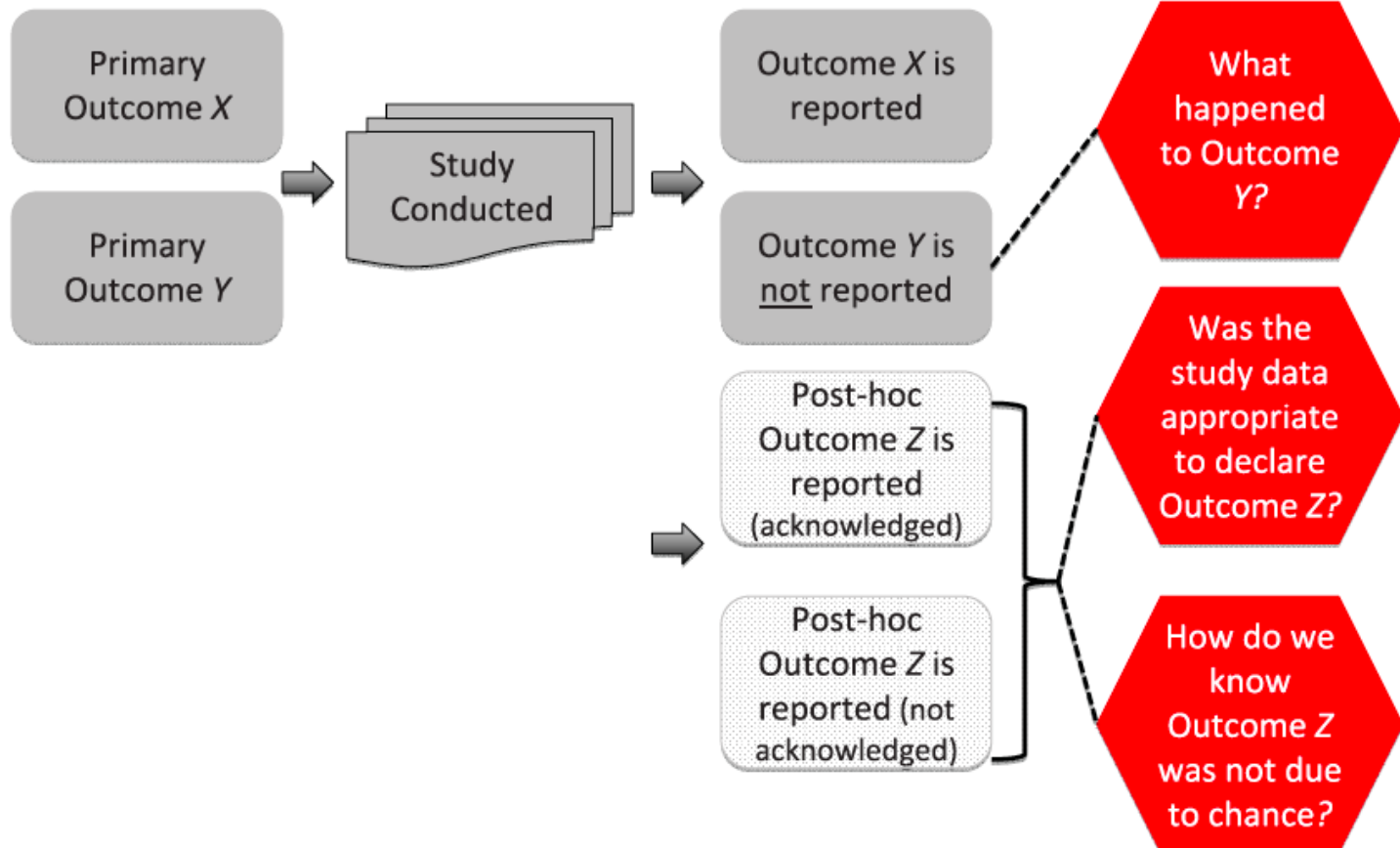
- Paucity of published studies that define the primary outcome measurements
 - *Compare outcomes reported in clinical trial registrations and those later published often see extent of selection bias among trialists*
 - *Howard et al, (PLOS One, 2017) in a study of 180 RCTs in neurology found:*
 - *6% of papers demoted the primary outcome*
 - *21% omitted the primary outcome altogether*
 - *34% of the studied papers presented unregistered primary outcomes*
 - *Dwan et al. (PLOS One, 2008) found that 40 to 62% of reviewed trials had at least one primary outcome that was changed, omitted, or newly introduced*
- Why is all this problematic?
 - *Most obviously, because it impacts clinical decision making*
 - *Leads to more questions than answers: what was hidden and why was it obscured?*

Selective Reporting of Outcomes

- Two problems: suppressed primary outcomes & *undisclosed* secondary outcomes. Why are these problematic?
 - *What happened to the primary outcome measures and why are we not being told?*
 - *Was the initial study question and its design abandoned? Why?*
 - *Was the primary outcome simply a null result?*
 - *Still a result*
 - *Study population may not be appropriate or sufficiently-sized to answer the secondary question*
 - *Selective reporting can introduce bias and spin*
 - *To be clear: secondary outcomes are not “wrong”, but failure to identify the results as a secondary outcome is misleading and poor practice*

Selective Reporting of Outcomes

- ✓ Research questions posed
- ✓ Study population defined
- ✓ Analysis planned
- ✓ Trial registered



Selective Reporting of Outcomes

- Solutions include:
 - *Registering study protocols*
 - *Use the SPIRIT Guidelines - outlines utterly essential items to be included in the protocol for any interventional study*
 - *Offer to provide this information to journals to assist them in their peer review processes*

What can be done about incomplete reporting?

• Reporting Guidelines

- *A minimum set of items that need to be addressed when reporting a study**
- *Explicit text to guide authors in reporting a specific type of research*

** Moher D, Schulz KF, Simera I, Altman DG. Guidance for developers of health research reporting guidelines. PLoS Medicine, 2010; 7(2):e1000217*

• Reporting guidelines facilitate clarity and openness

- *“transparency in reporting how studies were conducted and, during the peer-review process, can help to expose misleading or selective reporting”*

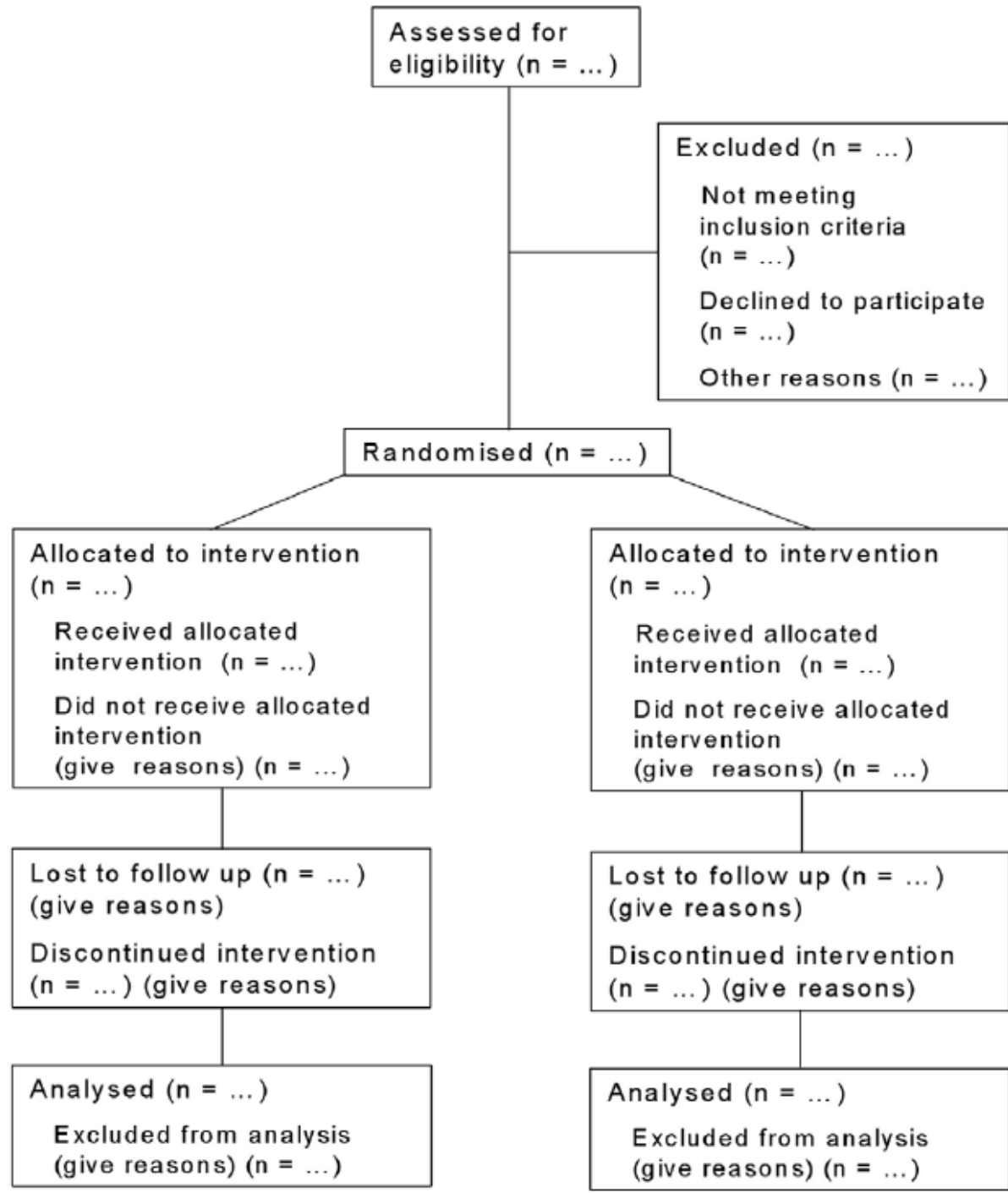
Chan L, Heinemann AW, Roberts JL. Archives of Physical Medicine and Rehabilitation (2014)

Reporting Guidelines (RG)

- Who created RGs and how are they developed?
 - *Consensus process with world-renowned methodologists, journal editors and content experts*
 - *Careful validation process follows development*
 - *Subject areas/fields of study often then develop extensions*

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Using Reporting Guidelines



Authors recognized their use of a reporting guidelines in their manuscript.

“To ensure best practice was followed the Transparent Reporting of Evaluations with Nonrandomised Designs (TREND) checklist (Des Jarlais, Lyles, Crepaz, & TREND Group, 2004) was used to report this trial (see supplementary material)”

Volunteered to present supporting TREND information as a supplementary file upload with the manuscript submission.

Reporting Guidelines

- Are they burdensome?
 - *If consulted from the start: no*
 - *If compelled to go back and add details at the point of submission because the relevant RG was not consulted/used, the act of slowing down submission is frustrating for authors*
- What are authors doing wrong?
 - *Go to great pains to complete the RG checklist at submission but do nothing to actually improve reporting in the paper*
 - *Picking the wrong reporting guideline – often an indicator that their methods are possibly flawed*

Why use Reporting Guideline checklists?

- A way for **authors** to remember to report (often complex) design, conduct, and results of their research
- Facilitate critical appraisal of a research report under review for **reviewers** and **editors**
 - *Places authors, peer reviewers, and editors on a level playing field as to the importance of a minimum set of items that should be included when reporting and assessing research reports*
- Typically they are evidence-based
- They can be updated quickly

Reporting guidelines (RGs)

- RGs can help to:
 - *Improve accuracy and transparency of publications*
 - *Improve reliability of literature searches*
 - *Facilitate methodological assessment of research*
 - *Improve usability of findings in future research and decision making*
- Quality of reporting vs. completeness of reporting
 - *“completeness” = completely reported all concepts addressed by particular checklist item*
- Over 200 RGs indexed on EQUATOR Network Library
www.equator-network.org

Reporting Guidelines to consider

- *CONSORT (Randomized Controlled Trials) 2010
 - *and CONSORT for non-pharmacological interventions (2017)*
- *PRISMA (systematic reviews)
- *STARD (Diagnostic Accuracy Studies)
- *TREND (nonrandomized evaluations of behavioral and public health interventions)
 - *template for intervention description and replication*
- SCRIBE for single case behavioural interventions
- TIDieR for reporting (complex) interventions
 - *especially relevant in this field*
- Familiarity with TOP Guidelines might be required in the future
 - *Data and code sharing*
 - *Transparency in design, analysis plan and research materials*

* endorsed by ASHA

Table 1 | Items included in the Template for Intervention Description and Replication (TIDieR) checklist: information to include when describing an intervention. Full version of checklist provides space for authors and reviewers to give location of the information (see appendix 3)

Item No	Item
Brief name	
1	Provide the name or a phrase that describes the intervention
Why	
2	Describe any rationale, theory, or goal of the elements essential to the intervention
What	
3	Materials: Describe any physical or informational materials used in the intervention, including those provided to participants or used in intervention delivery or in training of intervention providers. Provide information on where the materials can be accessed (such as online appendix, URL)
4	Procedures: Describe each of the procedures, activities, and/or processes used in the intervention, including any enabling or support activities
Who provided	
5	For each category of intervention provider (such as psychologist, nursing assistant), describe their expertise, background, and any specific training given
How	
6	Describe the modes of delivery (such as face to face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group

Reporting Guidelines

- What they are not:
 - *A research standard of correct methods*
 - *A critical appraisal tool*
 - *A list of items that can be summed as a score*
 - *Instructions for devising a protocol*

“Accurate and transparent reporting is like turning on the light before you clean up the room: it doesn’t clean it for you but does tell you where the problems are”

(Frank Davidoff, Annals of Internal Medicine)

Stakeholder Relevancy and Impact

Stakeholder	Impact of Incomplete Reporting	Benefits of Reporting Guidelines
Authors	Unable to secure publication of research	Provide a template to enhance reporting completeness
Editors/Reviewers	Unable to validate study results	<ul style="list-style-type: none"> • Better quality reporting could enable a more thorough vetting of results, which also reflects well on the reputation of a journal • Tool to potentially expose spin, bias or selective reporting • Enables journals to better support or guide struggling authors
Reader	<ul style="list-style-type: none"> • Trust in the results presented may be undermined • Unable to replicate poorly reported studies 	Trust restored in the quality of the research reported and the validity of the results presented
Funders	Wasted grant money on unusable research	Improved quality, completeness and consistency

Stakeholder Relevancy and Impact

Research Institutions and Instruction in Better Reporting:

- Use RGs and protocol guidelines as a writing training tool in graduate school courses teaching research methods
- Encourage/require relevant RG use by students submitting research proposals and completed research for grading consideration
 - *Withhold marks for incomplete reporting?*
- Offer training to senior researchers on relevant reporting and protocol guidelines within each specialty
 - *Talk about reporting issues in research rounds*
 - *Consider appointment of a publications officer to offer training*
 - *Could also work with authors during pre-submission to look for reporting completeness*

Summary

Why good reporting is essential:

Enables research to
be understood

Enables research to
be appraised

Enables research to
be replicated

Enables research to
be synthesized

Summary

Benefits to the field:

- Guides authors through documenting complexity
- Maximizes reproducibility
- Minimize the potential for bias
- Facilitates rigorous peer review



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Panel Question & Answer Session

- Sumitrajit Dhar, PhD
- Rebecca McCauley, PhD
- Jason Roberts, PhD



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Thank you for coming!

**Enjoy the rest of the
2018 ASHA Convention!**