



Instructions for Poster Presentations - Southwest ACSM Annual Meeting

1. Poster Dimensions and Preparation

Posters must fit within a display board measuring 4 feet high × 8 feet wide (48 × 96 inches; approximately 1.2 × 2.4 meters). Posters may be smaller than these dimensions but must not exceed the available display area.

Posters may be printed as a single large-format paper or fabric poster or assembled from individual printed sheets (not recommended). Avoid thick or heavy backing materials that may be difficult to secure. Push pins will be provided at the meeting for mounting posters.

For readability, we recommend the following:

Title: Approximately 72–100-point font.

Section headings: Approximately 32–44-point font.

Body text: Approximately 24–28-point font, when practical.

Figure labels and legends: At least 18-point font.

These are recommendations rather than strict requirements. Text should be readable from approximately 3 feet away.

Use high-contrast colors, consistent formatting, and a clean layout. Avoid excessive text, crowded figures, and color combinations that may be difficult for individuals with color vision deficiencies to distinguish.

2. Poster Organization and Content

The TITLE, AUTHOR(S), AND INSTITUTION(S) should be prominently displayed across the top of the poster.

The ABSTRACT should appear in the upper-left corner.

Organize the remaining content in a logical sequence, typically moving from left to right and top to bottom. A two- or three-column layout is often effective.

A scientific poster should communicate the main message of the research clearly, even when the presenter is not standing beside it.

The following sections are recommended:

INTRODUCTION AND PURPOSE - Briefly explain the scientific background and rationale for the study. Clearly identify the research question, purpose, specific aims, or hypotheses.



METHODS - Describe the study design, participants, procedures, measurements, and statistical analyses, as applicable. Include sample size and relevant participant characteristics.

RESULTS - Present the most important findings using graphs, tables, or figures whenever possible. Avoid repeating all numerical results in paragraph form. Clearly label axes, units, groups, and statistical comparisons. Figure legends should allow readers to understand the results without referring extensively to the main text.

DISCUSSION AND CONCLUSIONS - Summarize the major findings, explain their significance, and identify the primary conclusions or practical applications.

ACKNOWLEDGMENTS - Recognize funding sources, institutional support, and individuals who contributed to the research but are not listed as authors.

3. Tips for an Effective Scientific Poster Presentation

- A poster presentation is an opportunity to communicate your research, receive feedback, and engage in scientific discussion. To make the most of this experience:
- Focus on the main message. Attendees should be able to understand the purpose and principal findings of your study within a few minutes.
- Prioritize figures over text. Clear graphs, diagrams, and tables often communicate results more effectively than lengthy paragraphs.
- Keep the design simple. Use sufficient white space and avoid overcrowding the poster.
- Prepare a brief explanation. Practice a 2–3-minute overview covering the research question, methods, major findings, and conclusions.
- Be ready for questions. Understand your methods, statistical analyses, study limitations, and the implications of your findings.
- Engage with attendees. Introduce yourself, explain your research clearly, and welcome questions and constructive feedback.
- Students and first-time presenters are encouraged to practice their presentations with their faculty mentors or colleagues before attending the meeting.
- Presenters may include a QR code linking to additional information, references, or contact details. Handouts are optional.

4. Poster Setup, Presentation, and Removal

Presenters are encouraged to transport posters as carry-on luggage whenever possible to minimize the risk of loss or damage. Please arrive before your assigned poster session to allow sufficient time to locate your display board and mount your poster. Push pins will be available on-site. Presenters should remain near their posters during their assigned presentation sessions to discuss their research and answer questions. All posters must be removed at the conclusion of the assigned session.

Please consult the Southwest ACSM meeting program for your poster presentation time, location, and any additional instructions.

SAMPLE

P-curve analysis of the Köhler motivation gain effect in exercise settings: A substantive-methodological synergy



Christopher R. Hill¹, Stephen Samendinger², Amanda M. Rymal¹

¹California State University, San Bernardino, ²Drexel University



INTRODUCTION

- Meta-science research has highlighted that journals often favor publishing studies that report statistical significance.
- This trend could create situations where effect size estimates are inflated and not representative of the true, underlying effect size.
- Publication bias could lead to other troubling outcomes such as p-hacking.
- P-curve analysis is a tool that can be used to find if publication bias exists in studies focused on a single effect.
- P-values have a uniform distribution when there is no effect and have a highly skewed distribution when there is likely a true underlying effect.
- The purpose of this study was to demonstrate the p curve technique in a sample of studies that examined the Köhler motivation gain effect in exercise settings.

METHOD

- We conducted a literature review for research examining the Köhler motivation gain effect in adult populations in exercise settings
- Thirteen unique statistical test values with the reported degrees of freedom were extracted.
- P-curve online application (version 4.06) was used for all calculations.

A p-curve can examine a body of literature for the presence of potential p-hacking.

The Köhler motivation gain is likely **not** an outcome of p-hacking practices.

P-curve analysis can be a useful tool that is easy to implement.

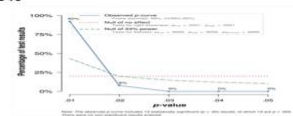
P-curve application and related papers:
<https://www.p-curve.com>

christopher.hill@csusb.edu



RESULTS

- A binomial test indicates that the effect size for the 13 studies have evidential value and are likely not the product of p-hacking ($p = .0001$)
- A continuous test using the aggregate with Stouffer Method indicates there is evidential value using
 - Full p-curve ($Z = -13.61, p < .0001$)
 - Half p-curve ($Z = -12.82, p < .0001$)
- Evidence in power included in the p-curve was 99%



DISCUSSION

The p-curve for studies examining the Köhler effect demonstrates that this effect is likely not a by-product of p-hacking.

The p-curve analysis can be used to examine p-hacking in entire fields, examine specific effects, or examine journals for the presence of p-hacking.

The p-curve can easily be implemented in meta-analyses and other reviews to better understand the nature of the underlying effect.