Student Research Week Workshop:
Writing Presentation Abstracts

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Student Research Week Workshop, 24 February 2023
Overview

• What’s an abstract?
• Purposes of abstracts
• Structuring an abstract
• Some do’s and don’ts
• Providing keywords
• Some common questions
• Questions and answers
What’s an abstract?

• A brief summary of a presentation or piece of writing
• Some items that often have abstracts
  – Oral presentations
  – Poster presentations
  – Scientific papers in journals
  – Grant proposals
• Commonly 250 words or less
Some Purposes of Abstracts

• To help conference planning committees decide which research should be presented
• To help attendees decide which presentations to attend
• To help readers decide which articles to read
• To orient reviewers to grant proposals
• To remind attendees, readers, or reviewers of the content of presentations, papers, or proposals
Structure of an Abstract

• Much like that of a lab report or journal article:
  – Title
  – Background
  – Methods
  – Results
  – Discussion or Conclusions

• May include headings or not

• Headings can help guide both the writer and reader
SRW Abstract Outline Example

*This is an OUTLINE for creating an abstract to help competitors in the abstract writing process and is not a required template, but is a resource for assistance*

<table>
<thead>
<tr>
<th>Content</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal, Hypothesis or Description</td>
<td>Explaining the research goal, purpose or hypothesis. Should be around 1 - 2 sentences long introducing your research hypothesis/goal.</td>
</tr>
<tr>
<td>Background Information and Participants</td>
<td>Include sufficient background information and details relevant to the research process.</td>
</tr>
<tr>
<td>Methods</td>
<td>Explain the research process/theoretical framework steps and what lead to your results/data.</td>
</tr>
<tr>
<td>Results or Explanation of Findings</td>
<td>Analysis of findings or predicted findings and how your research supports your hypothesis.</td>
</tr>
<tr>
<td>Significance</td>
<td>How your research is relevant and relates to your hypothesis.</td>
</tr>
<tr>
<td>Conclusions/Final statement</td>
<td>Provide information on results or considerations for future research.</td>
</tr>
</tbody>
</table>

Notes - Abstracts should be around 150-300 words, limited to one page, and be a brief comprehensive summary of research that includes: purpose under investigation, participants, method, hypothesis, results/data so far and final statement.

Note: Past abstracts are available on the Student Research Week website (https://srw.tamu.edu/).

Source: Competitors – Student Research Week (tamu.edu) (https://srw.tamu.edu/competitors/)
Late submission of assignments is a serious problem for college students, often resulting in lowered final grades. Therefore, we developed an app, featuring blah blah blah blah blah, to encourage students not to procrastinate about their assignments. We then tested the effectiveness of this app.

Methods. During the fall 2022 semester, 300 Texas A&M undergraduates majoring in science were randomly assigned to either receive the app, receive weekly nagging by a senior administrator, or have no intervention. Using Canvas, we then determined for each group the proportion of assignments that were submitted late and the proportion of students whose grades were lowered because of late assignments.

Results. The proportion of assignments submitted late was 10% in the students receiving no intervention, 2% in the students receiving the app, and 47% in the students receiving weekly nagging by a senior administrator. These differences were statistically significant. Among the students receiving no intervention, 5% had lowered final grades because of late work. The corresponding percentage for the app group was 1%, and that for the nagging-by-administrator group was 32%. These differences too were statistically significant.

Conclusion. Our app appeared to be effective in reducing both the amount of student work submitted late and the number of final grades lowered because of late work. Our next steps include testing the app in students from a wider range of majors and testing it in students at other universities.
Verb Choice in Abstracts

• Established facts (for instance, in background): present tense
  – Example: “Diabetes is a common and serious disease.”

• What you did: past tense
  – Example: “We interviewed 27 high school science teachers.”

• What you found: past tense
  – Example: “Calcium levels increased for 3 hours and then decreased.”

• Your conclusions: present tense
  – Example: “We conclude that chocolate produces happiness.”
Some Do’s

• Know your audience.
• Provide a title that is informative and concise.
• Write readably. For example, avoid needlessly long words, phrases, sentences, and paragraphs.
• Minimize use of specialized jargon. If you will use terms unfamiliar to readers, define them.
• Minimize use of acronyms and other abbreviations. If you will use acronyms, spell them out in full on first mention.
Writing Concisely

– Use simple, common words.
  • attempt →
  • fundamental →
  • utilize →
  • cephalgia →
– Delete needless words.
  • red in color →
  • fellow classmate →
  • totally destroyed →
– Condense wordy phrases.
  • at this point in time →
  • has the ability to →
  • the majority of →
  • in the event that →
– Use verbs, not nouns made from them.
  • produce relief of →
  • provide an explanation →
More Do’s

• Format the abstract readably:
  – Standard, readable typeface
  – Large enough type (in general, 10 to 12 point)
  – Large enough margins (in general, about 1 inch)
  – Unjustified (ragged) right margin

• Revise, revise, revise.

• Proofread the abstract carefully. Perhaps also have someone else do so.
Some Don’ts

• When you prepare your first draft, don’t worry about the length. Later, when you revise, you can condense or expand the text.
• In general, don’t include references. (The abstract should stand on its own.)
• Don’t include information that won’t be included in the oral presentation or poster presentation.
Providing Keywords

- Keywords: terms indicating main content of an item
- Helpful in searching
- Can be single words or slightly more
- Example:
  - Title of fictional abstract: Evaluation of an App to Prevent Late Submission of Student Work
  - Some possible keywords: software, educational technology, reminder, time management, student success . . .
More About Keywords

• Commonly shouldn’t be words in the title
• Accompany SRW abstract with 1 to 5 keywords
• SRW keywords should be clear to educated general readers
Some Questions Asked

• How long should an abstract be?
  – For SRW, about 150–300 words

• How should an abstract be structured?
  – Please see the earlier part of this presentation.

• How can I get started on writing an abstract?
  – Some possibilities:
    • Tell someone about your research.
    • Jot down points about your research, and then organize and develop them.
    • List subheadings, and then start filling in the text.
More Questions Asked

• How specific should the abstract be? For example, should primer sequences be included?
  – For SRW, the abstract should mainly give a broad audience the gist.
  – Thus, technical details generally aren’t called for.

• How can I make my abstract attention-grabbing?
  – Some thoughts:
    • Use a clear, lively title. (How about one for the fictional abstract?)
    • Up front, make clear how the research relates to what readers care about.
    • Write readably.
Some Previous Questions

• May I use first person (“I” or “we”) in an abstract?
  – Yes, that’s fine (and often desirable).

• May I include a figure or table in an abstract?
  – It generally depends on the instructions.
  (Note: Some journals have visual abstracts.)

• What if the research is still in progress?
  – (Please see the accompanying examples.)
Wishing you all the best!