BEST PRACTICES FOR PREPARING AND PRESENTING RESEARCH POSTERS

DR. NANCY A. CHEEVER
PROFESSOR
COMMUNICATIONS DEPARTMENT
A research poster is a physical display of academic research presented at conferences.

It is a static representation of one study or research proposal.

Usually tacked onto a large board at eye level for easy viewing.

One or more researchers stand next to the poster.

Greets visitors
Provides short explanation
Answers questions
PARTS OF A RESEARCH POSTER

Abstract

Summary of the study

Introduction

Purpose of the study
Brief review of literature (use citations)
Research questions or hypothesis (if applicable)
PARTS OF A RESEARCH POSTER

Methodology
- Participants
- Variables (operationalized)
- Procedures
- Measures (if applicable)

Results
- Include graphical representations of data
  - Charts, tables, graphs, models, pictures
PARTS OF A RESEARCH POSTER

- Discussion
  Explains the results of the study and whether your hypothesis(es) were confirmed
- Conclusions and Limitations
- References
- Acknowledgements
POSTER DESIGN

• Can create in Power Point, but other software available (Canva, Illustrator, InDesign, etc.)
• Use white background with black type (one section can have light-colored background)
• Visual elements (graphics, subheadings, models, figures, pictures) can have color
• Font should be consistent throughout
• OK to use one font for subheadings and another for text
FONT TYPES

- Serif vs. sans serif fonts
  - Serif = has “legs” (e.g., Times New Roman)
    - Easy to read when text is small
  - Sans serif = no legs (e.g., Arial narrow)
    - Works with larger type
FONTS

• Effective fonts for subheadings (sans serif fonts)
  • Tw Cen MT
  • Calibri
  • Arial
  • Gill Sans MT

• Effective fonts for text (serif fonts)
  • Times New Roman
  • Palatino Linotype
  • Book Antiqua
FONT SIZES

- Font size depends on size of poster
- Limit font sizes to three (e.g., one for title, one for subheadings, one for text)
- For standard template use 90-110 for title, 50-70 for subheadings and 30-50 for text
- For larger posters, adjust accordingly
- IMPORTANT to be consistent!
  - Most important to have all same element types in same font type and size
POSTER DESIGN

- Use subheadings for different sections throughout
- Logical flow of material
- Separate sections with lines, dotted lines, or boxes
- Avoid thick lines
- Ensure all similar elements are spaced equally
POSTER DESIGN

PRESENT TEXT IN SHORT, BULLETED ITEMS

PUT IN EASILY UNDERSTOOD TERMS

CHOOSE LAYOUT THAT SUITS YOUR STUDY
POSTER DESIGN

• Don’t put too much information on poster
  • Better to explain in person than ask visitor to read long blocks of text
• Takes time and effort
  • Do not simply print out your study and hang on board
Introduction

- The purpose of this study was to examine social media users’ satisfaction.
- Previous research (Cheever, 2015) has shown social media users who practice social comparison are less satisfied with their online experiences.

POSTER DESIGN

- Inset type so it does not touch lines or boxes
- Use single line space or 1.15
- Use bullets
• Use plenty of white space to separate sections
• Ensure boxes are same width
• Guides / gridlines

Introduction

• The purpose of this study was to examine social media users’ satisfaction.
• Previous research (Cheever, 2015) has shown social media users who practice social comparison are less satisfied with their experiences online.

Method

• Students (N=245) completed a survey indicating their satisfaction with social media.
• Measures included:
  • The Social Media Satisfaction Scale (Cheever, 2012)
  • Social Comparison Scale (Festinger, 1954)
POSTER DESIGN / GRAPHICS

• Use high-res photos, figures, models, etc.
• Low-resolution will appear pixelated when enlarged
• At least 300 DPI (dots per inch)
Examples of Low-Res images
POSTER DESIGN

• Tables should be in APA or MLA format, depending on discipline
<table>
<thead>
<tr>
<th>My Major or Concentration is:</th>
<th>* Race/Ethnicity: Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other (please specify)</td>
</tr>
<tr>
<td>Advertising/Public Relations</td>
<td>4</td>
</tr>
<tr>
<td>% within My Major or concentration is:</td>
<td>0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.0%</td>
</tr>
<tr>
<td>Journalism</td>
<td>5</td>
</tr>
<tr>
<td>% within My Major or concentration is:</td>
<td>5.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.2%</td>
</tr>
<tr>
<td>Film, Television and</td>
<td>0</td>
</tr>
<tr>
<td>Media (or Media Studies)</td>
<td>% within My Major or concentration is:</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.0%</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
<tr>
<td>% within My Major or</td>
<td>3.2%</td>
</tr>
<tr>
<td>concentration is:</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>3.2%</td>
</tr>
</tbody>
</table>
Your Title Should Fit On One Line, size 105
Name and Institution, size 63
Contact Information

Introduction, size 68
Before designing your poster, consider your goal. Are you providing information, raising awareness of an issue, changing an opinion, or something else? What is the desired effect of your message? Use your goal to guide your decisions about what is the most important information and how to display it.

Your message's effect is influenced by your audience, the environment in which it is delivered, and its design features. For example, are you presenting to experts or a mixed audience? You will need to tailor your content to suit your particular audience's values and needs. Also consider the environment: Will your poster be one in ten or one in fifty? How much do you need to stand out? Will you stand by your poster to explain it in person, or will it stand alone?

Layout
There are many different options for poster layout. Select one that allows the most important information to stand out.

Avoid the temptation to cram too much content into a space that the text has to be shrunk, or that you lose the opportunity for your viewer's eyes to relax with some negative/blank space. Consider using bullet points instead of paragraphs, or diagrams instead of wordy explanations.

Layout ideas:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Design Principles
Contrast, size 36
Use contrast in style to communicate an organized hierarchy of information and to guide your viewer's eye.

- Contrast using a contrasting font for your heading.
- You can also use size, italics, bolding, and color coding to increase contrast between pieces of text.
- Avoid black type on darkly-colored backgrounds, or white type on light-colored backgrounds.

Repetition
Repeat visual elements such as color, shapes, textures, borders, and fonts to unify the poster.

- Make sure all headers are the same font size.
- Make sure spacing between elements is consistent.

Alignment
Check for horizontal and vertical alignment.

By zooming in 100% or more, you can more easily check margins as well as inter-marginal space. White padding around text makes it easier to read.

Proximity
Placing elements close together creates a relationship between them. Try to create visual units using close proximity. For example, the image above goes with 'Alignment' not 'Proximity' because it is slightly closer to the alignment text.

Enclosures also help create relationships. If you have a lot of information consider adding white boxes or outlines to delineate information. Proximity is especially important for graphs. Make sure you give graphs and charts enough space above and below them.

Software Options
Adobe InDesign
If you have time, learn it. InDesign is the best for layout, text, and image handling.

Adobe Illustrator
A great alternative to InDesign. Illustrator has great alignment tools and working with layers makes designing posters much easier.

PowerPoint / Google Slides / Keynote
You can do a lot with slideshow programs! But, some have limited alignment tools.

Images
Use images 500 x 500 or larger. If using another person's image, make sure to cite the source.

To proportionately scale an image, press and hold shift while dragging a corner.

Resources
DesignLab Resources Webpage
Designing Conference Posters: Blog post by Colin Parrington

Acknowledgments
If you need any help with your poster—from the first concept to final revisions—connect with the DesignLab!
PREPARATION

- Practice a summary of your research project
- Practice answers to anticipated questions
- Prepare a one- to two-page summary of your work to pass out to visitors
- Consult with your mentor!
EXAMPLES
Accepted Without Evidence: 
On Magical Thinking and Technology Usage 
Rokkum, J. N. B.A., Cheever, N. A., Ph.D. 
California State University, Dominguez Hills

Introduction
- 54% of the U.S. believe in psychic healing (Newport, 2001)
- 36% of the U.S. believe in telepathy (Newport, 2001)
- 40% of the U.S. report a belief in devils, ghosts and spiritual healing (Rice, 2003)
- Superstitious behavior is more likely to be invoked by those in high stress situations with a greater desire for control (Kienan, 1994)
- A significant illusion of control belief can exist in an online only environment (Matute, 1994/1995).
- The Internet has become a place of social interaction, which has spurred a revolution in communication and interpersonal behavior (Weiser, 2001; Bimie & Horvath, 2002).

Purpose of Study
- To examine the interactions between Magical Thinking and Technology Usage.
- The influence that digital media technology has on critical thinking hasn’t been studied extensively.

Hypotheses
- H1: People with greater magical thoughts will be more likely to seek out social support.
- H2: People that have more magical thoughts are more likely to use more technology.

Predictors for Magical Thinking

<table>
<thead>
<tr>
<th></th>
<th>Television</th>
<th>Number Of Facebook Friends</th>
<th>Emotional Support</th>
<th>Videochatting</th>
<th>General Smartphones Usage</th>
<th>General Facebook Usage</th>
<th>Videogames</th>
<th>Number Of Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precognition</td>
<td>-.12*p</td>
<td>.12**</td>
<td>.12**</td>
<td>.22**</td>
<td>.09</td>
<td>.20**</td>
<td>.101*</td>
<td>.210**</td>
</tr>
<tr>
<td>Extraordinary Life Forms</td>
<td>.145**</td>
<td>.119*</td>
<td>.132**</td>
<td>.142**</td>
<td>.104*</td>
<td>.145**</td>
<td>.152**</td>
<td>.140**</td>
</tr>
<tr>
<td>Spiritism</td>
<td>.110*</td>
<td>.140**</td>
<td>.116**</td>
<td>.143**</td>
<td>.116*</td>
<td>.143**</td>
<td>.116*</td>
<td>.107**</td>
</tr>
<tr>
<td>Superstition</td>
<td>.103**</td>
<td>.148**</td>
<td>.245**</td>
<td>.134**</td>
<td>.108**</td>
<td>.134**</td>
<td>.108**</td>
<td></td>
</tr>
<tr>
<td>Witchcraft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
** p < .01

Procedures
- Participants: A total of 561 ethnically diverse participants were recruited from California State University Dominguez Hills (CSUDH). All participants were at least 18 years of age.
- Online survey with three different instruments measured Magical Thinking and Technology Usage.

Results
- The number of friends (offline and online) are strong predictors for magical thinking.
- Videogame usage is a strong predictor of magical thinking.
- Television, Smartphone and general Facebook usage are predictors of Superstition, Precognition and Psi.

Discussion
- Even though it was hypothesized that magical thinking would have an influence upon technology, it can be seen from the data that the social aspect of the Internet was a greater predictor of magical thinking.
# ACADEMIC RESEARCH POSTER TEMPLATE

**Subtitle for Digital Academic Research Poster (16.9)**

**Introduction**


**Methods**

Mauris orci mi, varius id diam id, egestas auctor enim. Praesent ut massa nibh. Duis purus neque, facilisis cursus ultrices vel, ullamcorper ac augue. Donec semper lorem:

**MAURIS ORCI VARIUS ID DIAM**
- Sed in risus nibh. In nisl quam, aliquet sed nibh sit amet, faucibus placerat dui.
- Fusce quis augue societatis, luctus rum sed.

**EUROLOM JUSTO VITAE PURUS**
- Proin semper ipsum donec semper placerat.
- Finibus quam tempor, vitae congue et.

**Data Analysis**

Mauris orci mi, varius id diam id, egestas auctor enim. Praesent ut massa nibh. Duis purus neque, facilisis cursus ultrices vel, ullamcorper ac augue. [See Figure A]. Donec:

A. Sed in risus nibh. In nisl quam, aliquet sed nibh sit amet, faucibus placerat dui.
B. Fusce quis augue societatis, luctus rum sed, ut dolor, pulvinar urna in eros posuere.
C. In elementum orci dignissim proin semper ipsum.

**Results**


**Graphic Elements**

1. A
2. B
3. C
4. D
5. E

**References**

1. Phasellus nec lectus bibendum, posuere nibh id, lacinia magna
2. Mauris orci mi, varius id diam id, egestas auctor enim
3. Duis vitae lobortis tortor, vitae sollicitudin magna
4. Aenean et est sem. Phasellus nec lectus bibendum, posuere
5. Lacinia magna. Mauris orci mi, varius id diam id, egestas auctor
6. Mauris orci mi, varius id diam id, egestas auctor enim
Emotional and Attitudinal Responses to Viewing Mixed Martial Arts

BACKGROUND

Mixed martial arts (MMA) is a combat sport held in a ring or cage, in which two men viewing short and slow-motion clips of the sport. The study examines emotional and behavioral reactions to viewing MMA among three groups of viewers—extreme (hardcore) fans, casual observers, and non-fans—to determine the levels of desensitization, aggression, excitement, and other psychological factors of viewers viewing MMA.

METHODS

Experimental study of mixed martial arts viewing on 40 male non-fans (35%), casual fans (35%), and hardcore fans (26%).

- Recorded responses to watching MMA matches using Classroom Response Devices (students).
- Responses recorded during neutral, fight, and post-fight clips.
- Rated their intensity of their reactions on a 5-point scale (1 = not at all, 5 = highest level).
- Neutral clips shown to bring men back to normal levels and mixed baseline responses.
- Poststudy questionnaire regarding general attitudes and opinions toward MMA and demographic questions.

Video Clips

Participants were shown instructional videos, as practice videos, and a 42-minute video trilogy: two- to three-minute segments of MMA fights and the neutral phase (the same portion of a large, slow-motion scene with rules of a real-life style watching pattern, which were used in the computer game).

HYPOTHESES

H1: Participants who are hardcore MMA fans will show no significant difference in levels of aggression, anxiety, and disgust after viewing the MMA clips than after viewing baseline clips.

H2: Participants who are not MMA fans will show significantly higher levels of anxiety and disgust, while casual fans will show significantly higher levels of aggression and excitement, after viewing the MMA clips.

RESULTS

| Table 1: Significant changes in baseline and post-fight levels of emotions by fan level |
|------------------------------------------|----------------|----------------|----------------|----------------|
| Condition | Time of Measurement | Level | Effect Size | df |
| Normal | Non-fan | Aggression | 1.40 (1.4) | 2.19 (1.6) | -0.82 | 13 |
| | | Disgust | 1.17 (1.3) | 2.08 (1.3) | -2.57 | 13 |
| | Casual | | 1.91 (1.8) | 2.16 (1.6) | 0.47 | 13 |
| | | Anxiety | 1.75 (1.5) | 2.70 (1.7) | -1.00 | 13 |
| | | Excitement | 2.79 (1.2) | 3.51 (1.4) | -2.23 | 13 |
| | Hardcore | Aggression | 1.34 (1.2) | 2.19 (1.0) | -0.82 | 11 |
| | | Disgust | 1.58 (1.3) | 2.01 (1.2) | 0.29 | 11 |

| Table 2: Significant changes in pre-fight and post-fight levels of agreement among all participants |
|------------------------------------------|----------------|----------------|----------------|----------------|
| Level | Time of Measurement | Pre-fight | Post-fight | Effect Size | df |
| Normal | Aggression | 2.01 (1.2) | 2.35 (1.6) | -0.63** | 28 |
| | Disgust | 1.47 (1.0) | 1.96 (1.0) | -0.35** | 28 |
| | Anxiety | 1.85 (1.0) | 2.38 (1.1) | -1.25** | 28 |
| | Excitement | 2.08 (1.1) | 2.52 (1.2) | -2.78** | 28 |
| | Involvement | 2.67 (1.3) | 2.96 (1.1) | -0.32** | 28 |
| | Sympathy | 1.71 (0.8) | 2.39 (0.6) | 0.49** | 28 |

CONCLUSION

MMA Viewing Intuces Aggressive Feelings

- Fans return to normal levels immediately after viewing.
- Nonsensical cues in aggressive cues to aggression; when watching it for the first time.
- Low level of aggression for the fan audience was a low 2.5 after viewing the clip.

- Aggression is higher, not more behavior, not support for MMA illustrating violent behavior.
- Some aggression is normal, may be more related to mental health standards.

Viewing Levels Indicate Reaction Levels

- Casual fans feel more excited, anxious, and aggressive after watching MMA.
- Hardcore fans feel more involved.
- Results appear to be consistent with previous research (Cheever, 2000) that showed two types of fans, casual and hardcore.
- Desensitization among extreme (hardcore) fans.
- Various qualities of MMA may cause feelings of disgust in first-time viewers, especially in ground fighting.

LIMITATIONS AND IMPLICATIONS

- Sample includes college students.
- Visual sample size.
- Procedure: Self-report.
- Recorded reactions to behavior.
- Clues may influence representation of the extreme fan.
- MMA may cause sadness to do violence to the end.
- Participants who do not understand the sport may have negative view.
- Popularity is indicative of American's tolerance for violence on television.

OBJECTIVE

This experimental study aims to continue to determine the emotions and behavioral reactions to viewing MMA among three groups of viewers: extreme (hardcore) fans, casual observers, and non-fans and to determine the levels of desensitization, aggression, excitement, and other psychological factors of viewers viewing the media.
**Media and Technology Used to Cope with Posttraumatic Stress Disorder**

Jose Lara-Ruiz, B.A. | Nancy A. Cheever, Ph.D. | California State University, Dominguez Hills

---

### Introduction
- Posttraumatic Stress Disorder (PTSD) has been linked to impulsive, risky and addictive behaviors; including alcohol, drugs and self-harm behaviors (American Psychiatric Association, 2013; Weiss, Tull, Viana, Anestis & Gratz, 2012)
- A number of PTSD comorbid disorders (e.g., General Anxiety Disorder, Substance Use Disorders, Mood disorders) have been linked to excessive internet and media use (Hornes, Kearns & Timko, 2014; Yellowlees & Marks, 2007)
- Research has also found a link between media exposure and increased PTSD symptomatology (Ahern et al., 2002, 2004; Schuster et al., 2001; Schlienger et al., 2002)

### Purpose
- This study investigated the alternate avoidance mechanisms used by veterans and non-veterans to cope with PTSD

### Hypotheses
- **H1**: Media and technology will be used as a maladaptive coping mechanism by those with PTSD compared to those without PTSD.
- **H2**: Participants with PTSD would engage in more online risky behaviors.

### Sample
- **N = 302**
  - Student Veterans (SVs) (n = 65)
  - Non-SVs (n = 235)
- **Female (51%), Male (49%)**
- **Age**: 18 – 61 yrs.
- **Ethnicity**: Asian (13%), African-American (18%), Caucasian (17%), Hispanic/Latino (45%), Other (7%)

### Method
- **Impact of Event Scale** (IES: Horowitz, Wilner, & Alizov, 1979)
- **Media and Technology Usage and Attitudes Scale** (Rosner, Whaling, Carrier, Cheever & Rokum, 2013)
- **Online Risky Behavior Inventory**

### Results

#### H1: ANOVA results for Media and Technology Use by Level of PTSD in each sample

<table>
<thead>
<tr>
<th></th>
<th>Veterans</th>
<th>Civilians</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTUS/Internet</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>E-mailing</td>
<td>27.41</td>
<td>3.17</td>
</tr>
<tr>
<td>Text messaging</td>
<td>21.78</td>
<td>7.51</td>
</tr>
<tr>
<td>Phone calling</td>
<td>14.17</td>
<td>3.84</td>
</tr>
<tr>
<td>Social network usage</td>
<td>58.64</td>
<td>21.93</td>
</tr>
<tr>
<td>TV viewing</td>
<td>8.94</td>
<td>5.47</td>
</tr>
<tr>
<td>Media sharing</td>
<td>16.41</td>
<td>8.98</td>
</tr>
<tr>
<td>Internet surfing</td>
<td>27.00</td>
<td>9.88</td>
</tr>
<tr>
<td>Video gaming</td>
<td>15.20</td>
<td>3.85</td>
</tr>
<tr>
<td>Social media usage</td>
<td>43.61</td>
<td>20.61</td>
</tr>
<tr>
<td>Facebook friendships</td>
<td>10.66</td>
<td>9.54</td>
</tr>
<tr>
<td>Online media</td>
<td>4.36</td>
<td>3.23</td>
</tr>
</tbody>
</table>

**Note**: *p < .05

#### H2: Individuals with higher levels of PTSD were four times more likely than those with low levels of PTSD to engage in online risky behavior, (ExpB = 4.298, p < .05)

### Discussion
- Findings support previous research that has determined that individuals with PTSD engage in risky behaviors to cope
- Results suggest that media and technology are indeed commonly used to cope with PTSD
  - SVs play more video games
  - Non SVs use more social media
- The findings have implications for treatment, development and/or improvement of programs to better serve individuals dealing with PTSD

### Future Directions
- Continued research is needed with Student Veteran populations
- Research should focus on the association between PTSD and problematic Internet and media use

### Acknowledgments
- George Marsh Applied Cognition Laboratory
- NIGMS Minority Biomedical Research Program
- Grant # R25GM063787-10
- MBRs-RISE CSUDH Program
- Grant#: NIH/MBRS R25 GM6225
- CSUDH Veterans Alliance
POSTER PRINTING

• Leave yourself enough time to print
  • Print shop may get backed up with volume of posters
• Show to multiple people before printing
  • Mentor(s), peers, professors
• Consider vinyl if you want to keep (costs more but lasts forever)
DAY OF CONFERENCE

• Dress appropriately
• Be prepared!
• Bring copies of your abbreviated study
• Bring tacks (if none provided)
• Arrive early
• Treat everyone equally
  • You never know who is judging you!
RESOURCES

- Canva: Visual Suite for Everyone (free design software)
- https://www.posterpresentations.com/html/research-poster-design-samples.html (has free PowerPoint academic poster templates)
- http://colinpurrington.com/tips/academic/posterdesign (tips for creating dynamic posters)
Thank you!