

Summary

To meet the CSUSM writing requirement, each student must write at least 2500 words (about 10 pages) and get detailed feedback on their writing style. This assignment will meet that goal.

Due Date

- Papers are due **Thursday, April 19th by 11pm** (electronic / online upload).
- Details for how to upload your paper will be provided on the class website.
- Late papers will suffer a substantial point deduction (see details in the syllabus).

Topics

- This semester we have focused on 8 CogLab experiments, each of which recreates a “classic” research experiment from Cognitive Psychology. Each student will pick one of these papers to write about.
- You may choose from one of the 8 CogLabs that were assigned this semester. There will be a limited number of signup spots for each paper, so you may not get your first choice – please have a second and third choice ready.
- Signups will begin in class Thursday March 15th. Everyone should choose a topic by March 27th.
- Some of the research papers are more complicated than others – the highest scores will be for those doing a good job on a difficult topic.

#	Name	Publication	CogLab #	Difficulty
1	Partial Report	Sperling (1960)	18	Medium
2	Brain Asymmetry	Federmeir (2005)	15	Medium
3	Visual Search	Treisman (1980)	7	High
4	Stroop Effect	Stroop (1935)	13	Low
5	Mental Rotation	Shepard (1971)	38	Low
6	Encoding Specificity	Thomson (1970)	28	Medium
7	Prototypes	Posner (1968)	48	High
8	False Memory	Roediger (1995)	33	High

Instructions

- Read the original research article (available on class website).
- Take the CogLab version of the experiment online (again if needed) so you are familiar with the procedure.
- Review the CogLab Global Data (not your individual data or the class data) and use this for your paper.
- Write your review paper (see detailed outline and sample assignment below)

Collaboration

You are invited to collaborate with other students who are working on the same topic as you; however, all writing must be 100% in your own words. *Please be very careful to avoid “close paraphrase” (a form of plagiarism in which the words, phrases, ideas, and order of ideas in your writing is too similar to other material).*

Format & Length:

APA format, 2500 words (about 10 pages double-spaced). The length will be judged by word count (excluding any large quotations). If the paper is a little short or a little long but clearly meets all the goals, then it will not hurt your grade.

Outline of your paper:

- Abstract
- Background
 - Review the topic using our textbook
 - Introduce the original paper
 - Introduce the CogLab version of the experiment
- Review
 - Review the Original Paper
 - Review the CogLab version of the experiment
- Discussion
 - Compare & Contrast the differences in methods and results
 - Conclusion
- References

Grading

The paper is worth 100 points, scored as approximately 20 points for (1) Style, Grammar References & APA format (2) Abstract (3) Background (4) Review (5) Discussion

(Continued)

Detailed Outline:

Please use APA format and follow this outline format carefully. A sample paper is included at the end.

Abstract

Write an APA-format abstract that summarizes your paper. [Hints: Write this last, as the abstract is not an introduction, but rather a summary of each section of your paper with about 1-2 sentences per section. Make sure the abstract doesn't include any information that doesn't appear in the paper. Length: about 200 words]

BackgroundHigh-Level Construct

Describe and define the topic within Cognitive psychology that your original research paper is within; generally this would be the same as one of the chapters in the textbook or perhaps a sub-section of a chapter in some cases. For example, *Attention* might be the high-level construct, or it could be a little more specific, e.g. *Input Attention*. (1-2 paragraphs).

Specific Construct

Define and describe the specific construct that is under investigation. For example, *Spotlight Attention* might be a specific construct. (1-2 paragraphs)

Original Paper

Introduce the original paper and provide an APA format reference and short description.

CogLab Experiment

Introduce the CogLab experiment and provide an APA format reference and short description.

ReviewSummarize the Original paper

Summarize the Subjects, Materials, and Methods. Clearly state the Independent Variable (IV) and the Dependent variable (DV). Summarize the Results and the main Conclusions. [Note: some papers have more than one experiment – please focus only on the experiment which is most similar to the CogLab experiment]

Summarize the CogLab Experiment

Summarize the Subjects, Materials and Methods. Clearly state the IV and DV. Summarize the Results (using the "Global Data" from CogLab). From this data, draw your own conclusions about the meaning of the results.

DiscussionCompare & Contrast the Original Paper with the CogLab Experiment

Use the following sub-headings:

- Important similarities/differences in Subjects
- Important similarities/differences in Materials & Methods
- Important similarities/differences in Measures (IV and DV)
- Important similarities/differences in Results

Conclusion

Decide whether you think the CogLab data is consistent with and supports the old paper, or whether you think the data raises some questions or perhaps even contradicts the old paper.

References

This should be an APA-style references section listing no fewer than three references: Your textbook, the original research paper, and the CogLab website

Sample Paper:

The sample paper on the next page would get roughly a "B-" grade if it were completed: The abstract and background are short and somewhat vague. Portions are not long enough and lacking detail. Graphs and/or Tables should be included to summarize the major results. This sample is about 800 words long and your final paper needs to be around 2500 words. Note that this sample paper is fake (e.g. it's not really about the van Restorff effect).

Comparing the Original von Restorff Task with a Modern Computerized Replication (CogLab)

Abstract: too short, lacking details. Does

not summarize the major construct

(Attention or automaticity). Mean and

Standard Deviation M(SD) should be given.

Units are missing from the measures (e.g.

seconds, milliseconds) Should give more

details about methods & subjects. CogLab

needs an APA-style reference. Fails to

mention important terms such as inhibition.

Conclusion is weak.

Term Paper for Psychology 362 (Cognitive Processes)

19 April 2018

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Abstract

Von Restorff's classic (1933) study of verbal learning in a distinctive a letter task suggested that humans have both automatic and conscious processes and that these can either help, or hurt each other. Von Restorff had subjects learn lists of letters, some of which in a different color ink. Results showed a reaction time of 63.3 in the "same" condition and 110.3 in the "different" condition, suggesting an inhibition effect. The CogLab experiment re-created this experiment using computers, and different methods. Results were generally similar to Von Restorff's, showing a reaction time of 918 in the "same" condition and 1099 in the "different" condition. Differences in the subjects and methods are discussed in terms of supporting the original hypothesis.

Background

Attention is an important but complicated concept in the field of Cognitive Psychology. Ashcraft (2014) provides six separate definitions. For purposes of this paper we are focusing on the concept of controlled attention, automaticity, facilitation and inhibition.

Background: the introductory paragraph is probably a bit too short.

Attention

Controlled attention is the idea that humans ... [continue for about 1-2 paragraphs]

Automaticity, Facilitation and Inhibition

Automaticity is the concept that...[continue for about 1 paragraph]

Facilitation and inhibition are the related ideas that ... [continue for about 1 paragraph]

Von Restorff's Task

Von Restorff (1933) examined these concepts using a clever experimental design (detailed below).

CogLab Experiment

CogLab (Cengage, 2015) is an online computerized set of experiments. Experiment #32 is called the "Von Restorff Effect" and is an attempt at replicating Von Restorff's 1933 results.

Background: there should be a transition sentence or short paragraph too...

Review

The Von Restorff Task

Von Restorff's classic paper (1933) described several experiments which tried to examine these theories. Although the paper had 3 different experiments, only experiment 2 will be described here.

Subjects, Materials, and Methods

Good: remember to only focus on the experiment(s) that are relevant to your CogLab

Von Restorff used 70 college undergraduates (20% male, 80% female). Other demographics such as age, school level, were not specified. Subjects were described as "volunteers" for whom the "motivation was good" (p. 20). Stimuli were described as letters printed on a piece of paper in 27 pt "New York lower case type" (p. 20) in two columns. They also included a version in which the order was reversed. Subjects were randomly split into two groups. Each subject read both forms but in each group the order was reversed.

Independent and Dependent Variables

The independent variable was the experimental condition: *same* or *different* which represents the case when the letter color was the same as other letters. The dependent variable (DV) was reaction time.

Results

[Summarize the major results. Be sure to include means and standard deviations, which you may abbreviate as M (SD). The best papers will include a Table or Graph here as well. Only include results for the experiment(s) that are directly being replicated in the CogLab version.]

Conclusion

Based on these results, Von Restorff concluded that automatic and conscious processes can indeed interfere. Her logic was that letters would "stand out" when in a different color would be easier to remember.

Too short: you may want to add a direct quote from the paper as well. Relate this back to the constructs.

CogLab Experiment 32

The CogLab experiment 32 "Von Restorff Effect" is an attempt to ...

Subjects, Materials, and Methods

CogLab is an online web-based system. For this paper, the "global data" is used (which is a collection of all subjects who have taken the test online. Demographics are not provided, but it is likely that college students represent most of the subjects. The test is run inside a web browser, and provides a black screen with a white "+" symbol as a fixation point. Subjects are instructed to ... [continue to describe the CogLab experiment in detail for 1-2 paragraphs]

Independent and Dependent Variables

The independent variable was the experimental condition: *same* or *different* which represents the case when the letter color was the different than other letters. The dependent variable (DV) was reaction time.

Results

[Summarize the major results. Be sure to include N of subjects, means and standard deviations, which you may abbreviate as M(SD). The best papers will include a Table or Graph here as well.]

Conclusion

CogLab results were as predicted: reaction time in the *different* condition was quite a bit slower than in the *same* condition, which supports the idea that inhibition is happening.

Too short - provide a little more detail here.

Discussion

Comparison of Subjects

Although both Von Restorff (1933) and CogLab (2015) used college students, there are important differences in the subjects...[Describe what differences you think are relevant]

Comparison of Materials and Methods

Von Restorff used letters printed in a single list on a sheet of paper. CogLab used letters presented one at a time on a computer screen.

Explain why this matters and how you think it could have affected the results...

Comparison of Measures (IV and DV)

Both the original experiment and CogLab replication used the same IV (condition: *same* or *different*) and the same DV (*time*). However, Von Restorff measured the total time it took to read the list, whereas CogLab measured the reaction time for each letter individually.

Explain why this matters and how you think it would have affected the results.

Comparison of Results

[Summarize the important differences or similarities in the two experiment's results, about 1 paragraph]

Conclusion

Von Restorff (1933) showed facilitation effects when subjects read a list of printed letters where the color was the *same* or *different* from other letters. CogLab (2015) showed very similar results, in spite of fairly significant differences in Subjects, Materials, Methods, and Measures. The fact that the results were generally the same in spite of these differences suggests the effect may be robust.

A little short, consider expanding this to refer back to the original constructs that you described in the Background section.

References

[This should be an APA-style references section listing no fewer than three references: Our textbook, the original research paper, and the CogLab website for the specific experiment you chose.]

END OF SAMPLE ASSIGNMENT.