

Phil 12
Winter 2008

Second Writing Assignment

Write a short paper (1-2 pages, double-spaced, typed) on the question assigned for your section. These are to be turned in **before** class on Thursday, March 6. (Do not disrupt the class to turn your paper in—there will be a penalty of one full letter grade for papers turned in during the lecture. If turned in after class or later that day, the penalty is 1/3 of a letter grade.) Present your answers totally in your own words—do not quote material either from the website, the lecture powerpoints, or anyone else.

A-01. Use one of the following drug company press releases as a source, or find one of your own for any drug you're interested in reading about, perhaps something that someone you know is taking (you can find these on company websites under "news" from the last few years). If you are using an original source, provide a hard copy of the press release stapled to your paper.

http://mediaroom.pfizer.com/portal/site/pfizer/index.jsp?ndmViewId=news_view&ndmConfigId=1006533&newsId=20071106006080&newsLang=en

<http://investors.amylin.com/phoenix.zhtml?c=101911&p=irol-newsArticle&ID=1084689&highlight>

<http://newsroom.lilly.com/ReleaseDetail.cfm?ReleaseID=273033>

For this study, briefly identify what the primary research hypothesis was, what the dependent and independent variables were, whether the study used a within subjects or between subjects design, and what sort of control group was used (e.g. placebo or a competing treatment). How did the researchers try to control for possible subject variable confounds? Discuss what specific sorts of confounds might have been controlled for by virtue of blinding the study. What would it mean for someone to object to the external validity of the study, and what specific sorts of features of the study might make this a reasonable objection? Identify where the company uses the term "significant" in describing a particular result. Discuss what you think they intend to convey by that term, in the context in which they used it.

A-02. Use one of the following science magazine articles as a source, or find a similar one of your own for any experiment you're interested in reading about (such as Science magazine, Science News Online, Nature, Scientific American, or any similar source). If you are using an original source, provide a hard copy stapled to your paper.

<http://www.nature.com/news/2008/080225/full/news.2008.619.html>

<http://www.nature.com/news/2008/080226/full/news.2008.625.html>

<http://science-community.sciam.com/blog-entry/Mind-Matters/Stress-Poverty-Changes-Brain/300009584>

<http://www.sciam.com/article.cfm?id=stem-cells-fix-stroke-afflicted-rats>

What were the main theoretical constructs being studied, and what were the operational definitions of these constructs used in the study? Briefly state what the research hypothesis was, what the primary dependent and independent variables were, whether the study used a within subjects or between subjects design, and what sort of control group was used. Do you think any procedural variables were

likely to be potential confounds? Why or why not? Do you think any subject variables were likely to be potential confounds? Why or why not? Discuss which, if any, features of the study design or the specific operational definitions chosen might limit the external validity of the study. If you don't think there are any such features, explain why not.

A-03. Design an experimental study to determine whether eating chocolate is a cause of migraine headaches. What are the main theoretical constructs being studied, and what are the operational definitions of these constructs you will use in the study? Briefly state what the research hypothesis is, as well as what the primary dependent and independent variables are. Discuss all of the critical factors that should be considered in designing such an experiment, and defend the choices you make in designing the study. Be sure to discuss what confounds could arise and how they are to be controlled for. Discuss which, if any, features of the study design or the specific operational definitions chosen might limit the external validity of the study. If you don't think there are any such features, explain why not. Identify under what conditions you will be able to conclude that eating chocolate is a cause of migraine headaches.

A-04. Design your own retrospective study to determine whether earning a law degree is a causal factor in becoming a successful politician. What are the main theoretical constructs being studied, and what are the operational definitions of these constructs you will use in the study? Briefly state what the research hypothesis is, as well as what the primary dependent and independent variables are. Discuss the critical factors that need to be considered in developing the best possible retroactive study. Discuss what can be concluded from the study depending on its outcome and the limitations of such a study. Be sure to discuss possible confounds that might be involved.