



I've designed your final Application Assignment with the several goals in mind. I wanted to...

- ...give you a choice about what article you use
- ...challenge you to read an empirical journal article with less direction than I provided in previous application assignments. You have to find more things on your own (this is similar to how you'll be enacting your research methods knowledge in the future)
- ...require you to integrate material from across the semester and really demonstrate what you've learned
- ...give you the chance to create a popular summary of an article in a creative format

Here are the steps of this assignment:

1. **Pick an empirical journal article from the list provided** on the last page of this assignment. If you don't like any of these articles, you also have the option of using an article that you have found yourself. In all cases, turn in your choice by the deadline on Canvas (Dec 2 most likely).
2. **Answer the questions** in this assignment about the empirical journal article in a Word doc (similar to all past assignments).
3. **Create an accurate and accessible summary** of the article for a popular audience
4. **Turn it all in by midnight on Dec 13.**

During the week of Dec 7, we will have a series of office hours during which you can ask questions and get early feedback on your work. Please see Canvas for the schedule.

Questions to answer about your article

(You should write your answers directly into the form.

As usual, please use a **different color text for your responses**)

Part 1: The Basics (20 points)

1A. If your article contains more than one study, pick ONE of them (in some cases I suggest which study to use—see the list at the end of this assignment.)

Classify the major variables in the study using this table. (Hint: the major variables are usually the ones mentioned in the title, abstract, figures, or tables.) Add as many lines as you need.

Variable name (Stated at the conceptual level)	How was this variable operationalized in this study?	Names of the variable's levels (if relevant)	IV? DV? Or in the case of a correlational study, just "a variable"	Manipulated or measured?	Independent groups or within groups? Or n/a?
Smile Intensity					
Life Satisfaction					
Extraversion					
Social Relationship Satisfaction					

1B. Decide: What kind of study is this? Explain your decision.

Options:

Experiment (if so, what kind? Post-test only, pretest-posttest, concurrent measures, repeated measures? Something unlike any of these?)

Correlational study (Bivariate or multivariate? Multiple regression? Is there a moderator or mediator?)

Quasi Experiment (If so, what kind? Non equivalent control groups design—posttest only? Non equivalent control groups design—pretest-posttest? Interrupted time series? Non equivalent control groups Interrupted time series?)

1C. Sketch a graph of something in the article that is not already graphed, and insert it into the table below. For example, you might sketch a well-labeled scatterplot of a correlation coefficient they provide, or you might provide a bar or line graph of some means that they provide.

Text from the results section (paste here, and add quotation marks and the page number)	Insert a photo of your sketch of the results in this box.	Why did you decide to sketch this result? Why is it important?

Part 2: Applying the four big validities (40 points)

2A. Construct validity

Here's your chance to apply concepts in Chapter 5, Chapter 6, and (for manipulated variables) Chapter 10. Find specific content in the Method section of the article that informs construct validity, and then quote it and interpret it. You might look for reliability and validity terms like *Cronbach's alpha*, *test-retest*, *inter-rater reliability*, or look for evidence that the measures they used are valid. If your article includes an experiment, you might look for terms like *manipulation check*. If your article contains several variables, you should focus here on the main variables (usually the ones mentioned in the title or abstract).

Construct validity content (paste here, and add quotation marks and the page number)	Intepretation and evaluation. What does this content mean? Does this represent good construct validity—if so, why?	What's missing here? For example, could they provide more information to help you decide if a measure or manipulation is construct valid?

2B. Statistical validity

The core statistical validity questions are: How big is the effect? What is the CI, or precision, of the estimate? And is there evidence of replication? Put that information first.

There are probably a lot of statistics in your article. Locate the statistical test of the most important hypothesis (hint: the most important hypotheses are usually depicted in tables and figures and are probably the one they focus on in the title, abstract, or first paragraphs of the Discussion).

Second, in this section, you should also apply the concepts in Chapter 14—so pay attention to whether the study was preregistered, replicated, used a large enough sample, and so on (maybe you can't tell?). Strive to apply at least two concepts from the book's Table 14.3 in this section.

Statistical validity content (paste here, and add quotation marks and the page number). You might also include a figure or table from the article here.	Intepretation and evaluation. What does this content mean? Be sure to address effect size, and also address other questions about statistical validity.	What's missing here? For example, perhaps they don't include CIs? Perhaps there's no information on replication?

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2C. Internal validity

When you assess internal validity, you need to apply the 12 threats (if it's an experiment) -- how do the threats apply to this study (or not?). Note that many published experiments *can* support causal claims! If it's not an experiment, assess the variables that are and are not controlled for statistically. If some important variable was not controlled for, how might it be related to both of the variables in the causal claim? You should use your old application assignments, homeworks, causation videos, and the Working it Through sections of your textbook as models for your work.

Internal validity content (paste here, adding quotation marks and the page number).	Intepretation and evaluation. What does this content mean for internal validity? Does the study achieve this, or not?

2D. External validity

What about the participants: Where did they come from? What kind of sampling did they appear to use? Is external validity likely a priority in their study—why or why not? Here's your chance to apply concepts from Chapter 7 and Chapter 14.

Extrenal validity content (paste here, adding quotation marks and the page number).	Intepretation and evaluation. What does this content mean for external validity? Does the study achieve this, or perhaps you don't know?

Part 3: Assessing a causal claim (20 points)

First, **quote a causal claim** from the study's article and paste the quote in the table (hint—a good place to look for a causal claim would be the abstract or the first couple paragraphs of the Discussion). Of course, you will add “” and the page number it appears on. If there are no causal claims in the article, write down a causal claim the authors (or a clueless journalist) might wish to make from the key variables in their study. Then, analyze the causal claim fully (you should know the drill by now).

Next, apply the three causal criteria to this claim.

Causal claim (see instructions above)	Analyze the claim here and draw a conclusion.

Part 4: Share it (20 points)

Here's where I hope you will be creative. Write a short, accurate, and accessible summary of this article as if you wanted to share it with the world. Be careful—only make a causal

statement if the study can support it. Include a few key details in your summary, but also make the study sound interesting and fun. Here are some ideas for the format this part can take:

- Write a short, catchy blog post or Reddit item (it would be fun to add a photo—be sure to cite the photo’s source)
- Film a TikTok about the study
- Write a Twitter thread about the study
- Record a short rhyme or rap about the study
- Adapt a visual meme that captures the study’s main point

In addition to including this with your assignment, you also need to post your “Share It” summary to Discussions in Canvas so that others can enjoy your work. You may need to upload your file separately—that’s OK because Canvas can accept multiple files.

Articles You Can Use

If you’d like to find your own article, that is an option; you just need to get your article approved by me first. If you’re looking for your own, I suggest you start here to learn about potential lines of research: <https://www.psychologicalscience.org/news>. The stories on this website are written by journalists, so you’ll need to find the original empirical article behind the story to analyze for this application assignment.

Remember—you can access the articles for free from the UD Library (e-journals).

Brummelman, E., Thomaes, S., de Castro, B. O., Overbeek, G., & Bushman, B. J. (2014). “That’s not just beautiful—that’s incredibly beautiful!”: The adverse impact of inflated praise on children with low self-esteem. *Psychological Science*, 25, 728-735. doi:10.1177/0956797613514251

Chan, K. Q., Tong, E. M. W., & Tan, Y. L. (2014). Taking a leap of faith: Reminders of God lead to greater risk taking. *Social Psychological and Personality Science*, 5, 901-909. doi: 10.1177/1948550614537309

Kircanski, K., Lieberman, M. D., & Craske, M. G. (2020). Feelings into words: Contributions of language to exposure therapy. *Psychological Science*, 23(10), 1086-1091. doi: 10.1177/0956797612443830

Ronay, R., & von Hippel, W. (2010). The presence of an attractive woman elevates testosterone and physical risk taking in young men. *Social Psychological and Personality Science*, 1, 57-64. doi: /10.1177/1948550609352807 [focus on “skateboarding” and “testosterone mediation” results]

Saslow, L. R., Muise, A., Impett, E. A., & Dubin, M. (2013). Can you see how happy we are? Facebook images and relationship satisfaction. *Social Psychological and Personality Science*, 4, 411-418. doi:10.1177/1948550612460059 [Study 2]

Seder, J. P., & Oishi, S. (2012). Intensity of smiling in Facebook photos predicts future life satisfaction. *Social Psychological and Personality Science*, 3, 407-413.
doi:10.1177/1948550611424968 [focus on Study 1]

Wong, E., Ormiston, M., Haselhuhn, M. (2011). A face only an investor could love: CEOs' facial structures predict their firms' financial performance. *Psychological Science*, 22, 1478-1483. doi: 10.1177/0956797611418838.