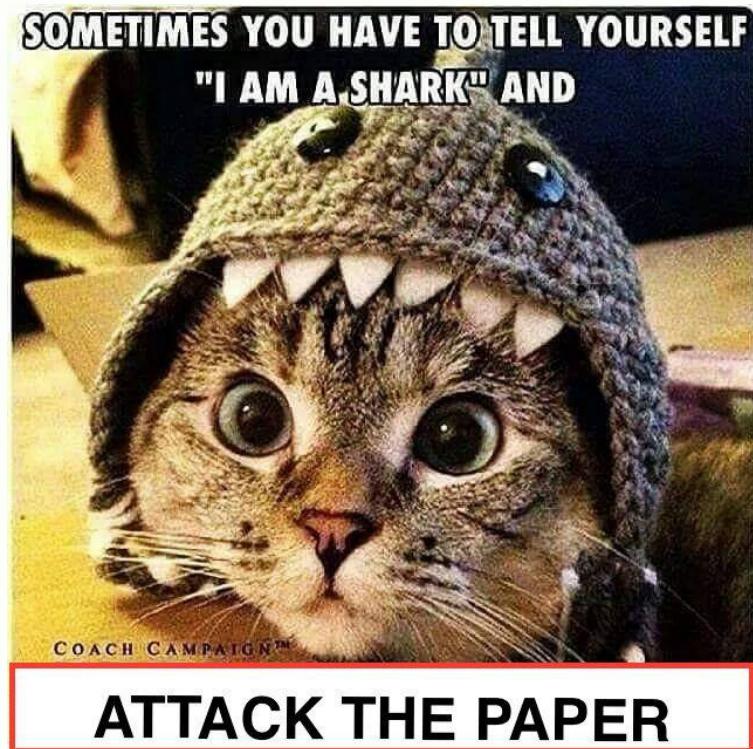


Girl Power!

# Survey Perpetual Handbook

Because research is confusing  
sometimes!



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# About Any Social Media Services

By now you should be comfortable with all inferential statistical analysis.

No? Ok. Don't freak out. We got you!

Check out these awesome tips and tricks to get you on the right path. And remember, you can always email Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu)) for help!

## Informed Consent

No means no. Really. It does.

It is your responsibility to inform your participants of what they are getting themselves into and to make it very clear that they can stop taking the survey at any time they are uncomfortable without any repercussions to them. Make them aware that some topics may be sensitive or bring up hard memories to deal with.

**BRACE YOURSELVES**

**CONFUSING NUMBERS ARE COMING**

memegenerator.net

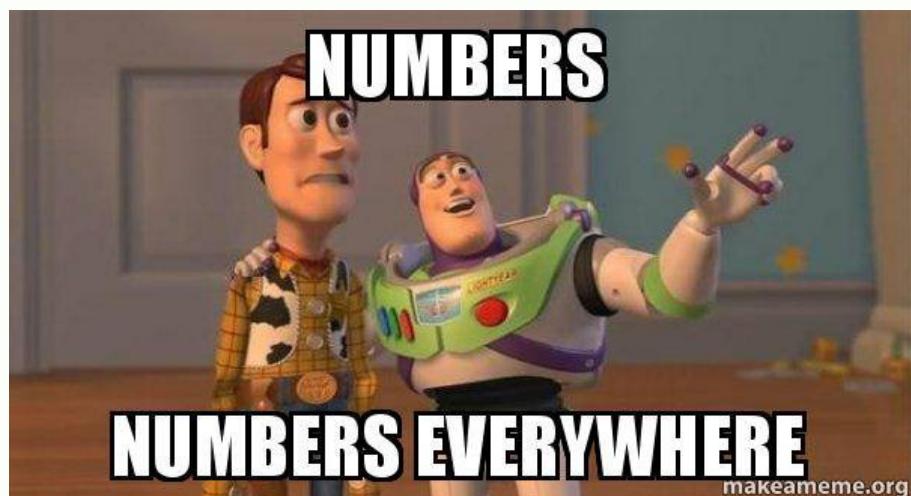
SURVEY PERPETUAL HANDBOOK

# Wording is Important

Be careful how you word your scales. Word them in a way that you don't lead your participants or tip them off as to what you are researching. Poor wording can cause social desirability bias. (Ask Dr. Dixson.)

## Don't Forget Reverse Polarity!

If you create your own scales, remember to use reverse polarity in a few questions. This will insure that your participants aren't just going down the questions clicking on the same answer and it encourages them to slow down for each question. Note which questions are reversed for your data crunching later on.



# Don't Recreate the Wheel

Tried and true scales exist out there in Researchland. You can find ones that will work for your specific research and have been proven reliable.

LOOK FOR THEM! Some resources:

Rubin, R.B., Palmgreen, P., Sypher, H.E. (2004). *Communication Research Methods: A Sourcebook*. New York, NY: Routledge.

Rubin, R.B., Palmgreen, P., Sypher, H.E. (2009). *Communication Research Methods: A Sourcebook II*. New York, NY: Routledge.

Google is your friend.

# Know How to Use Your Scales

Be aware that you don't use Cronbach alpha on every scale to check reliability. Question about the scale you are using? Yep. Email Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

## 5 point vs 7 point Likert

Depending on how in depth you want your analysis to be, a 7 point Likert scale will better delineate smaller differences in the responses of your participants.

Example:

The difference between 3 and 5 is smaller on a 7 point Likert scale than on a 5 point Likert scale.

## Places to Create Your Survey

YOU DON'T HAVE TO PAY FOR YOUR SURVEY TO BE HOSTED ON A WEBSITE! YOU ARE A PURDUE STUDENT. USE YOUR QALTRICS PRIVILEGES!

Access Qualtrics through  
<https://www.itap.purdue.edu/learning/tools/qualtrics.html>

You will need your Purdue sign on information, which you can access through go.pfw.edu.

# Distribution Methods

Social media can be your friend in being able to distribute your survey to a wide variety of people, as long as you are specific in your wording for who you are looking to have as participants. For example, if you are looking for a specific age group, list that in your post. If your post is open, you can ask people to share the link.

Other methods could be providing paper copies in classes (always ask permission from the instructor first). Instructors might be willing to email a link to their students.

You can email a link to specific people, or ask them directly to take your survey if there are requirements that only certain people meet.

Get creative!

Be mindful of your subject and who you are looking for as participants and focus on getting it to the right people. If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

# Which Test is the Right Test?

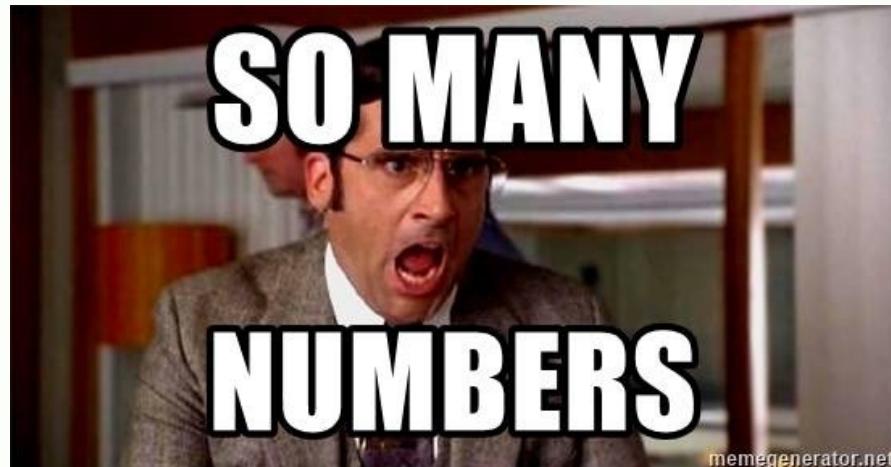
Look at the types of data you are gathering BEFORE you gather it. Think about which test you want to perform, and check with Dr. Dixson and your classmates to make sure you are right. There's nothing like gathering your data with one test in mind and then not being able to perform it!

Here's a handy chart!

Data Type 1	Data Type 2	Do Test:
Nominal	Nominal	Chi-Squared (independent)
Nominal	Ratio	t-test (independent)
Nominal	Ratio	ANOVA (multiple variables)
Ratio	Interval	Correlation
Nominal	Interval	t-test (independent)

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

## Time to Crunch the Data!



## It's Ok to be Confused!

Data can be very confusing, especially if you haven't included ideas about crunching it in your planning stages. But fear not! If we can get through this, YOU can get through this! You and your classmates are in this together. Breathe and remember:

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

# Start Early!

DO NOT wait until the last minute to start looking at your data and crunching it. Have a plan as to when your survey is going to be cut off, and stick to it. Then download your data and start crunching.

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

# When Your Data Looks like Greek...

You can go cross-eyed looking at your data, and sometimes the more you look at it, the more confusing it becomes. Before you start crunching data, set a meeting with Dr. Dixson and go over what you have, what you think you need to do, and make sure you are right. There's no sense in crunching data incorrectly if you don't have to!

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

# Know Your Tests!

Knowing what type of data you have can lead you to the right test to perform. (Yep. Same chart as before. It's that important!)

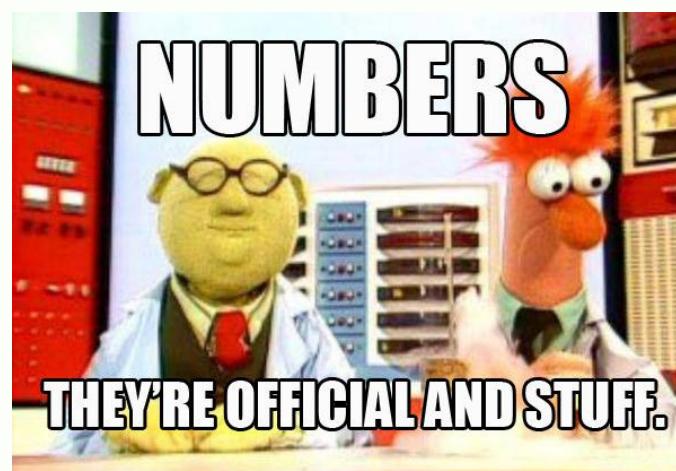
Data Type 1	Data Type 2	Do Test:
Nominal	Nominal	Chi-Squared (independent)
Nominal	Ratio	t-test (independent)
Nominal	Ratio	ANOVA (multiple variables)
Ratio	Interval	Correlation
Nominal	Interval	t-test (independent)

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

# Notes Notes Notes!

As you are working through your data, make notes about what you are doing so you remember. You can use those notes to write your paper and also answer questions that come up from Dr. Dixson and your classmates.

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))



# Know Your Cronbach!

Not every set of data can have a Cronbach alpha run on it. Make sure you have the proper type for this test! And don't forget to report this in your Methods section!

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

## Keep in Mind...

Though not required, keep in mind that if you find something that is interesting, you can always run a post hoc test on it to see if it's important. Sometimes our data gives us more information than we were expecting. Make sure you check that out! You might have a cool discovery in your research that you can pose further research on!

Seriously...two for one here!

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

# Methods Section

In your Methods section, you need to put your Cronbach, if it was appropriate, as discussed above. Don't forget to add in an example question or two from your survey. Whet the reader's appetite! Get them interested in what you are doing.

Put a full copy of your survey in the appendix too!

If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))

# Vital Reporting Information!!!!

Reporting in APA format is a MUST! Failure to do this is a stain on the entire program. NAY! On the entire body of Purdue!

Not really, but seriously, you need to know how to report your statistics properly. Check out this handy guide on how to report statistics in APA format.

(And remember: If you have questions, ask Dr. Dixson ([dixson@pfw.edu](mailto:dixson@pfw.edu))!!!)

## Cronbach's Alphas

**Values to report:** the number of items that make up the subscale, and the associated Cronbach's alpha.

### Examples

The extraversion subscale consisted of 8 items ( $\alpha = .66$ ), the agreeableness subscale consisted of 6 items ( $\alpha = .70$ ), and the neuroticism subscale consisted of 7 items ( $\alpha = .52$ ).

Cronbach's alphas for the 12 academic and 13 social self-efficacy items were .80 and .68, respectively.

The stress inventory was found to be highly reliable (20 items;  $\alpha = .86$ ).

## Correlations

**Values to report:** correlation ( $r$ ) and significance level ( $p$ ).

### Examples

Self-efficacy and grade-point average were significantly correlated,  $r = .54$ ,  $p < .05$ .

There was a nonsignificant correlation of .08 ( $p = \text{n.s.}$ ) between self-efficacy and grade point average.

## Regression

**Values to report:** R<sup>2</sup>, F value (F), degrees of freedom (numerator, denominator; in parentheses separated by a comma next to F), and significance level (p),  $\beta$ . Report the  $\beta$  and the corresponding t-test for that predictors for each predictor in the regression

### Example

Multiple regression analysis was used to test if the personality traits significantly predicted participants' ratings of aggression. The results of the regression indicated the two predictors explained 35.8% of the variance ( $R^2 = .38$ ,  $F(2,55)=5.56$ ,  $p<.01$ ). It was found that extraversion significantly predicted aggressive tendencies ( $\beta = .56$ ,  $p<.001$ ), as did agreeableness ( $\beta = -.36$ ,  $p<.01$ ).

## t-Tests

**Values to report:** means (M) and standard deviations (SD) for each group, t value (t), degrees of freedom (in parentheses next to t), and significance level (p).

### Examples

Women ( $M = 3.66$ ,  $SD = .40$ ) reported significantly higher levels of happiness than men ( $M = 3.20$ ,  $SD = .32$ ),  $t(1) = 5.44$ ,  $p < .05$ .

Men ( $M = 4.05$ ,  $SD = .50$ ) and women ( $M = 4.11$ ,  $SD = .55$ ) did not differ significantly on levels of extraversion,  $t(1) = 1.03$ ,  $p = \text{n.s.}$

## ANOVA's

**Values to report:** means (M) and standard deviations (SD) for each group, F value (F), degrees of freedom (numerator, denominator; in parentheses separated by a comma next to F), and significance level (p).

### Examples

The main effect of year in college was not significant,  $F(3, 98) = 2.33, p = \text{n.s.}$  First-, second-, third-, and fourth-year participants did not differ on the reported amounts of alcohol consumed (see Table 1 for means).

A main effect of year in school was found for satisfaction with life,  $F(3, 98) = 10.21, p < .03.$  Freshmen ( $M = 3.88, SD = .67$ ) and seniors ( $M = 3.90, SD = .60$ ) reported significantly less satisfaction with life than did sophomores ( $M = 4.32, SD = .50$ ) and juniors ( $M = 4.44, SD = .44$ ).

A main effect of testing time was found,  $F(2, 99) = 12.24, p < .001.$  Participants reported significantly more boredom after the experiment ( $M = 5.00, SD = 0.33$ ) than either before ( $M = 3.33, SD = .80$ ) or during the experiment ( $M = 2.50, SD = 1.00$ ).

From:

American Psychological Association. (2009). *Publication Manual of the American Psychological Association 6th ed.* Washington, DC: American Psychological Association.

Never fear!

**SuperMarcia**

EST. 2018

is here!

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