

6

Telling an Original Story Through a Research Paper

It is best to do things systematically, since we are only human, and disorder is our worst enemy.

—HESIOD, *WORKS AND DAYS*

Many of the types of scientific writing that you will be asked to complete in your psychology classes will be variations on the theme of this chapter—writing the research paper—and yes, that process is quite organized and systematic. A lab report is often a miniature version of a research paper, and a literature review could be thought of as a specialized and elongated version of an Introduction section. Because of the importance of the research paper format and the necessity of using American Psychological Association (APA) Style and format, this chapter presents real examples of research paper sections from undergraduate students (with their permission, of course), culminating in a complete paper in Chapter 7.

To make the paper preparation process more real for you, just as in Chapter 5 where I presented Izzy's original draft of an Introduction section—literature review, my edited copy, and her final draft, here I present the work of another student, Rebecca. I present sections of her research paper in the same way as I would assign them in my research methods class—first the Introduction section; then the Method, Results, and Discussion sections; then a combined assignment including the title page, abstract, references, and tables (which I call TPART—these details are covered in Chapter 7); and then the completed final draft (also presented in Chapter 7). To actively demonstrate this process for you, I present Rebecca's original draft of each assignment and my marked-up copy. Note that I have purposely kept these examples real—this is a real paper,

and these are my real edits. I have not presented a perfect paper to you but a very good paper completed by a very good student. My editing marks do not identify all the possible errors in the draft, and your instructor will certainly find mistakes that I did not. The final draft that you see is not perfect, but for the assignment and in context, I deemed it distinguished work. I appreciate both Izzy and Rebecca for generously sharing their work for your benefit.

SET THE TONE: INTRODUCTION AND SAMPLE

In the previous chapter, I presented a sample Introduction section, including the literature review; however, the Introduction section is important enough that some points bear repeating. When you begin writing your Introduction, you will realize how different scientific writing is from other types of writing. Scientific writing is not as personal as a narrative, short story, or poem; rather, it is detached and objective. Even though you may be describing your personal research, you should not be personal in your writing. One of the best ways to understand this “tone” of writing is by reading examples from psychological journals. Note that better-written journal articles are easier to read; if you cannot understand the gist of an article after reading it, then I would argue that the article wasn’t well written. Good science involves communication of new knowledge, and poorly written research papers and articles fail to communicate clearly.

As depicted in Chapter 5, the shape of a manuscript resembles that of an hourglass (a common analogy; see Bem, 2004). Start your Introduction broadly and become more and more narrow until you finish with specific hypotheses and predictions about the research to be conducted. How many references should be cited in your Introduction section? There is no definitive answer unless your instructor indicates this to you as part of the assignment. The literature review of a research paper is not meant to be exhaustive. The goal instead is to report on the classic, seminal work in the field and provide a current update on the present knowledge (Calderon & Austin, 2006). Using examples to help illustrate important or complicated material is an excellent way to communicate to the reader and demonstrate your thorough understanding of the concepts being presented (Bem, 2004).

A sample first draft of Rebecca’s Introduction section appears in Figure 6.1. My edited version appears in Figure 6.2. (As noted earlier, the complete, final draft appears in Chapter 7.) Note that the word “Introduction” does not appear at the top of the page—instead, APA format requires that the title from page 1 be repeated at the beginning of the Introduction section.

FIGURE 6.1. Sample Introduction Section of a Research Paper, Rough Draft (continues)**Filter Bubbles: How Social Media Contributes to Social Division**

Americans are further apart ideologically now than at any other point in the past twenty years (Pew Research Center, 2017a) and filter bubbles may be to blame (Pariser, 2011). Pew Research Center reported 32% of U.S. citizens had both liberal and conservative views on social issues compared to 49% in 1994 (2017a). With social media at the forefront of personal broadcasting, polarizing social opinions can be viewed online. Out of the U.S. adults who use the internet, 79% use Facebook (Pew Research Center, 2016). With social media being so prevalent in society, there could be a correlation between social media and the increase in political division. The theory of the filter bubble could explain how social media and political division impact one another (Pariser, 2011). In 2011, Eli Pariser explained how filter bubbles are created by algorithms that personalize what people see online; meaning that two people could search the same thing and receive differing results. This could lead to each person developing a personalized filter bubble that keeps new or different information out (Pariser, 2011). Eli Pariser also expressed that filter bubbles are present on social media sites with user filtration options being available — unfollowing, unfriending, blocking.

Researchers found that social media is used more often as social surveillance instead of communication and interaction (Hall, 2016). Social surveillance means that less time is spent commenting and messaging, more time is spent scrolling and viewing what people have posted (Hall, 2016). It is not uncommon for social media users to obtain news on social media sites (Pew Research Center, 2017b). After a survey study, researchers found that 74.8% of survey respondents experienced political disagreement on social media (Yang, Barnidge, & Rojas, 2016). There is evidence that neither social media engagement level nor political disagreement are significantly related to social media users filtering out disagreement from the respective platform (Yang, et al., 2016). There is a strong overlap in social networks for online and offline

FIGURE 6.1. Sample Introduction Section of a Research Paper, Rough Draft (continued)

relationships (Sutcliffe, Binder, & Dunbar, 2018), suggesting that people could be equally selective about who they interact with offline and online.

Researchers have found that enjoyment is what drives social media users to continue using social media sites, social media users are likely to spend more time on social media if they enjoy the content (Li, Li, Gan, Liu, Tan, & Deng, 2018). Zilberstein states that there is little significant evidence that technology weakens social bonds and keeps new ideas from people (2015). Trends occur throughout history with and without social media, proposing that technology performs as a medium for expressing ideas already present in society (Zilberstein, 2015). However, users constructing an online experience filled with only information that is familiar could lead to intellectual isolation (Pariser, 2011).

Does the presence of personalized filter bubbles on social media aid in social division? The purpose of my study is to determine if social media users create filter bubbles that promote intellectual isolation and social division.

A survey was administered to a section of Introduction to Psychology students at Boise State University. I examined whether or not social media users filter out people and information they disagree with by hiding, unfollowing, unfriending, and blocking. Then, I determined if those who filter more often have more polarizing opinions on social issues.

I hypothesize that social media users create highly selective filter bubbles. I hypothesize that the more selective an individual is with social media filtration, the more polarizing their opinions will be on social issues.

Note. From course research paper by Rebecca Cuthbertson, 2018. Copyright 2018 by Rebecca Cuthbertson. Adapted with permission.

FIGURE 6.2. Sample Introduction Section of a Research Paper, With Instructor Edits (continues)

Filter Bubbles: How Social Media Contributes to Social Division

Americans are further apart ideologically now than at any other point in the past twenty years (Pew Research Center, 2017a) and filter bubbles may be to blame (Pariser, 2011). Pew Research Center (2017a) reported that 32% of U.S. citizens had both liberal and conservative views on social issues compared to 49% in 1994 (2017a). With social media at the forefront of personal broadcasting, polarizing social opinions can be viewed online. Out of the U.S. adults who use the internet, 79% use Facebook (Pew Research Center, 2016). With social media being so prevalent in society, there could be a correlation relationship between social media and the increase in political division. The theory of the filter bubble could explain how social media and political division impact one another (Pariser, 2011). In 2011, Eli Pariser explained how filter bubbles are created by algorithms that personalize what people see online, meaning that two people could search the same thing and receive differing results. This could lead to each person developing a personalized filter bubble that keeps new or different information out (Pariser, 2011). Eli Pariser also expressed that filter bubbles are present on social media sites with user filtration options being available—unfollowing, unfriending, blocking.

Researchers found that social media is used more often as social surveillance instead of communication and interaction (Hall, 2016). Social surveillance means that less time is spent commenting and messaging, more time is spent scrolling and viewing what people have posted (Hall, 2016). It is not uncommon for social media users to obtain news on social media sites (Pew Research Center, 2017b). After a survey study, researchers found that 74.8% of survey respondents experienced political disagreement on social media (Yang, et al., Barnidge, & Rojas, 2016). There is evidence that neither social media engagement level nor political disagreement are significantly related to social media users filtering out disagreement from the respective platform (Yang, et al., 2016). There is a strong overlap in social networks for online and offline relationships (Sutcliffe, Binder, & Dunbar et al., 2018), suggesting that people could be equally selective about who they interact with offline and online. Researchers have found that enjoyment is what drives social media users to continue using social media sites, social media users are likely to spend more time on social media if they enjoy the content (Li, Li, Gan, Liu, Tan, & Deng et al.,

Comment: In the top margin, the page number is missing; it should be flush with the right margin.

Comment: Capitalization rules for technology terms have been updated in the seventh edition of the *Publication Manual* (see p. 162, Section 6.11) and "internet" is now lowercase, so original is correct.

Comment: Avoid using the word "thing" – it's too vague.

Comment: Do not use first names.

Comment: This is a well-written opening section.

Comment: Per the seventh edition of the *Publication Manual*, when citing a work with three or more authors, include only the first author name followed by "et al." in every citation (see p. 266, section 8.17).

FIGURE 6.2. Sample Introduction Section of a Research Paper, With Instructor Edits (continued)

2018). Zilberstein (2015) states that there is little significant evidence that technology weakens social bonds and keeps new ideas from people (2015). Trends occur throughout history with and without social media, proposing that technology performs as a medium for expressing ideas already present in society (Zilberstein, 2015). However, users constructing an online experience filled with only information that is familiar could lead to intellectual isolation (Pariser, 2011).

Does the presence of personalized filter bubbles on social media aid in social division? The purpose of my study is to determine if social media users create filter bubbles that promote intellectual isolation and social division.

An online survey was administered to a section of introductory psychology students at a large Western Boise State University. I examined whether or not social media users filter out people and information they disagree with by hiding, unfollowing, unfriending, and blocking. Then, I determined if those who filter more often have more polarizing opinions on social issues.

I hypothesize that social media users create highly selective filter bubbles. I hypothesize that the more selective an individual is with social media filtration, the more polarizing their opinions will be on social issues.

Comment: With two citations in a row from the same source, you only need to provide the second citation.

Comment: You've provided many citations in this paragraph, but now, try to tie them all together here at the end of the paragraph. What is the overall meaning? Why did you select these citations, to make what point?

Comment: It really would have been much better to describe the gap/hole in the research, and why it is necessary for your research to resolve the conflict and fill the gap.

Comment: Overall, this is very well-written. There are just some spots where there should have been more (the gap/hole/conflict to be resolved).

Note. From course research paper by Rebecca Cuthbertson, 2018. Copyright 2018 by Rebecca Cuthbertson. Adapted with permission.

TOTAL TRANSPARENCY: METHOD SECTION AND SAMPLE

The Method section tells the reader exactly how the study was conducted. You describe your participants, materials, and procedure in three separate subsections of the Method section. Although the Method section may appear to be dry reading, it is important. The Method section provides a blueprint for other researchers, especially if they want to replicate (repeat) your study. In psychology and other sciences, we don't keep secrets. We tell the world exactly how we conducted our study, down to the nitty-gritty details. Your study should be an open book, and your Method section should provide enough detail that if another researcher wanted to replicate your study, they would be able to do so. This open, objective feature—the transparency of one's method—is an important component of science not only because it allows researchers to build on one another's work, but also because this method builds trust. Revealing all the details means that the researcher has nothing to hide. This invites replication and is a characteristic of good science.

Participants

Tell the reader who participated in your study. In this section, you need to report (a) who took part in the study, (b) how many participants there were, (c) how the participants were selected, and (d) any pertinent demographic characteristics. Typically, demographic variables include sex (gender), age, and race or ethnicity. (Note: If you are reporting the mean [average] age, remember that you must also report its corresponding standard deviation. In APA format, every measure of central tendency must be accompanied by a measure of variability.) Report here any demographic variables that are related to the hypotheses you are testing. For example, if you were conducting a study on political attitudes about some aspect of governmental functioning, it might be an important demographic to report the breakdown of Republican, Democrat, and Independent participants.

Materials (or Apparatus)

Describe all the materials used to conduct the study. Essentially, this is a listing of the equipment needed to conduct the study. Did you use a computer to present stimulus items on the screen? Did you video record participants and later analyze their behavior? Did you develop a survey and then administer it to participants? Were you involved in any pilot testing before working with actual participants? Describe the materials you used in enough detail that someone else would be able to recreate them, or find your sources and obtain them. If you developed original survey questions, include them in a table or appendix. If you used a specialized computer program, be sure to give the details so that someone else would be able to obtain and use a similar program. The term *apparatus* refers to the specialized equipment that a study may have required. Not every Method section will have an Apparatus section.

Procedure

This portion of your Method section describes how the study was completed from the first step to the last step. Provide enough information about the procedure so that another researcher could replicate the study. This might include the instructions given to participants if the instructions are an important part of the independent variable manipulation in your study. Describe how participants were assigned to groups or subgroups, addressing issues such as randomization or counterbalancing as appropriate. If you developed a new technique, describe it in enough detail that others could replicate it. Be sure to include any debriefing accounts if that was part of your research study.

In my research methods course, Rebecca developed a small set of survey questions that were added to a larger set from the entire class. Given that this is a survey study, the details are fairly straightforward. I present her first rough draft of the Method section in Figure 6.3 and my marked-up version in Figure 6.4.

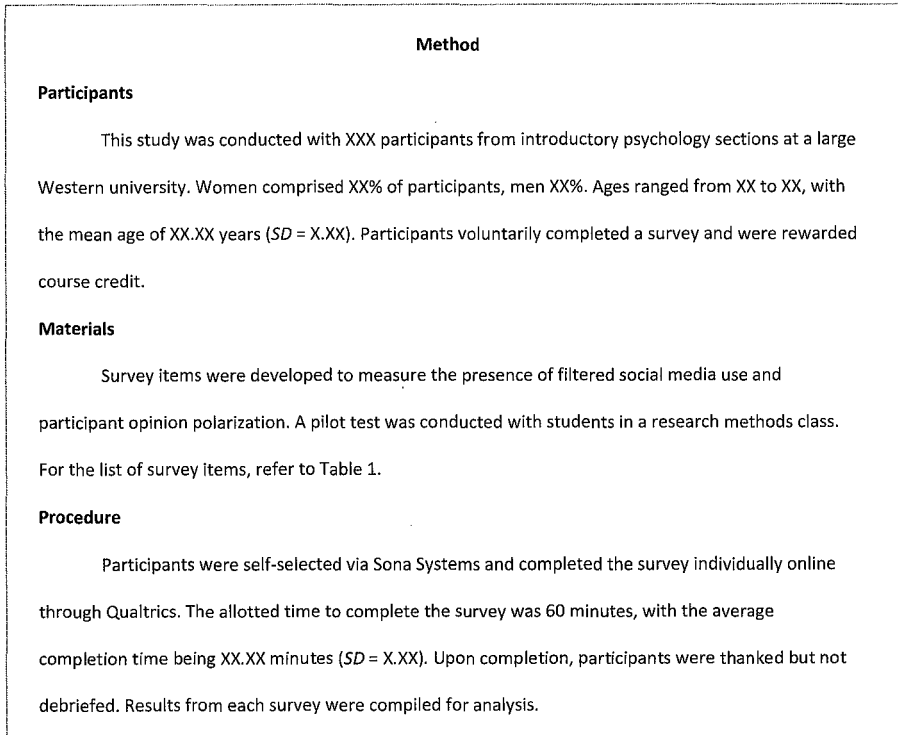
WHAT HAPPENED, BUT NOT WHY: RESULTS SECTION AND SAMPLE

The major purpose of the Results section is to report the findings of your research. If you are going to include a table or figure, it is usually referred to somewhere in the Results section. In my research methods course, every hypothesis mentioned at the end of the Introduction section must be specifically addressed in the Results section, regardless of whether the hypothesis was supported or not. Follow APA format for the reporting of descriptive and inferential statistics. For instance, in descriptive statistics, every time you report a mean you need to report its corresponding standard deviation, thus providing a measure of central tendency and a measure of variability, respectively. When using inferential statistics, you need to italicize the symbol representing the statistic (e.g., *r*, *t*, or *F*) and include a *p*-value statement toward the end of your sentence (be sure to check with your instructor to see if they want a measure of effect size included with your statistical results). Begin your Results section with the outcome that is most important to your research (Salovey, 2000). I tell my students to start with the “big bang” of the findings and report the most important finding first.

Bem (2004) suggested the following sequence for the presentation of information in the Results section:

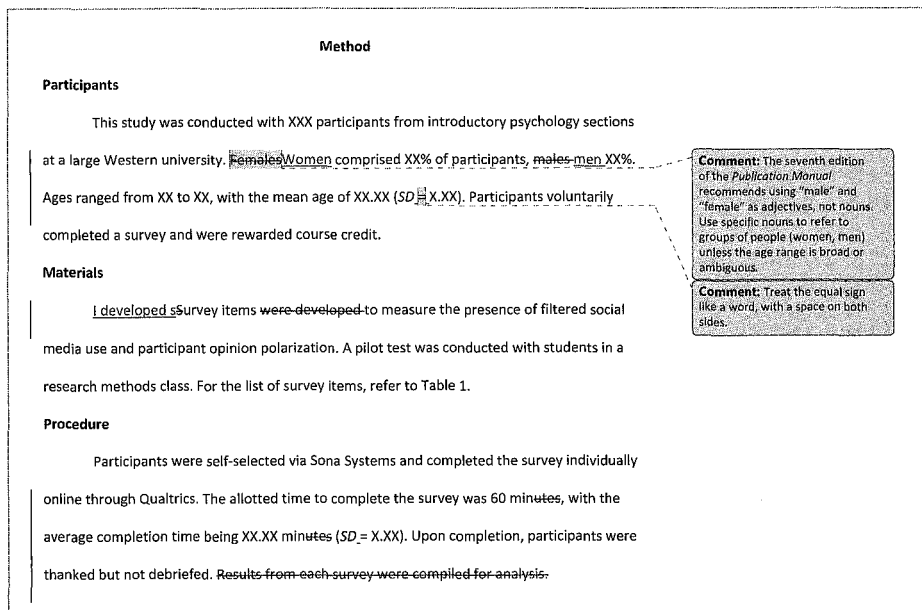
1. Verify that your study was successful in setting up the conditions needed to adequately test your hypothesis (i.e., that nothing major went wrong in the conduct of the study).
2. Describe your overall approach to data analysis, including the methodology used to obtain your dependent variable measurements.

FIGURE 6.3. Sample Method Section of a Research Paper, Rough Draft



Note. From course research paper by Rebecca Cuthbertson, 2018. Copyright 2018 by Rebecca Cuthbertson. Adapted with permission.

FIGURE 6.4. Sample Method Section of a Research Paper, With Instructor Edits



Note. From course research paper by Rebecca Cuthbertson, 2018. Copyright 2018 by Rebecca Cuthbertson. Adapted with permission.

3. Provide a brief reminder of the main conceptual question or hypothesis, and a reminder about the basic tests performed and behaviors measured. Sometimes readers will read parts of a research paper (or journal article) out of order. The reminders save the readers from having to look for the context to interpret the section they are reading.
4. Answer your hypotheses as clearly and unequivocally as you can, first using words, then presenting your statistical evidence in numbers in APA format.
5. After addressing the major hypotheses of the study, address other findings or surprises that emerged. Use the same format: describe what happened clearly, in words, then numbers.
6. You may want to organize your Results section into logical subsections if that will help the reader follow the story. Be sure to use the proper APA Style headings as signposts, just as you did with the Participants, Materials, and Procedure subsections of the Method section.
7. As you move from paragraph to paragraph in the Results section, try to provide smooth transitions between paragraphs, emphasizing the logical flow of your hypothesis testing and the outcomes of your research.

Plonsky (2006) offered additional advice on what *not* to do in a Results section:

- Do not discuss the implications of the results in the Results section; that is saved for the Discussion section.
- Do not discuss the alpha level or the null hypothesis because most readers in the scientific community will already understand these assumptions.
- Do not organize subsections of your Results section by type of analysis (all the *t* tests in one paragraph, all the correlations in the next); instead, organize subsections by variable to be studied or hypothesis to be tested.
- Do not present the raw data collected unless that is part of your instructor's assignment.
- Do not use the word "proved" because in science the researcher never proves anything; they only disprove competing theories and hypotheses until one logical explanation is left—which, hopefully, is the working hypothesis. But that is not necessarily the case.

If you are wondering why Rebecca's descriptive statistics section is relatively short, it is because she was following the guidelines of her instructor. Figure 6.5 presents her rough draft; Figure 6.6 presents my marked-up copy.

FIGURE 6.5. Sample Results Section of a Research Paper, Rough Draft (continues)

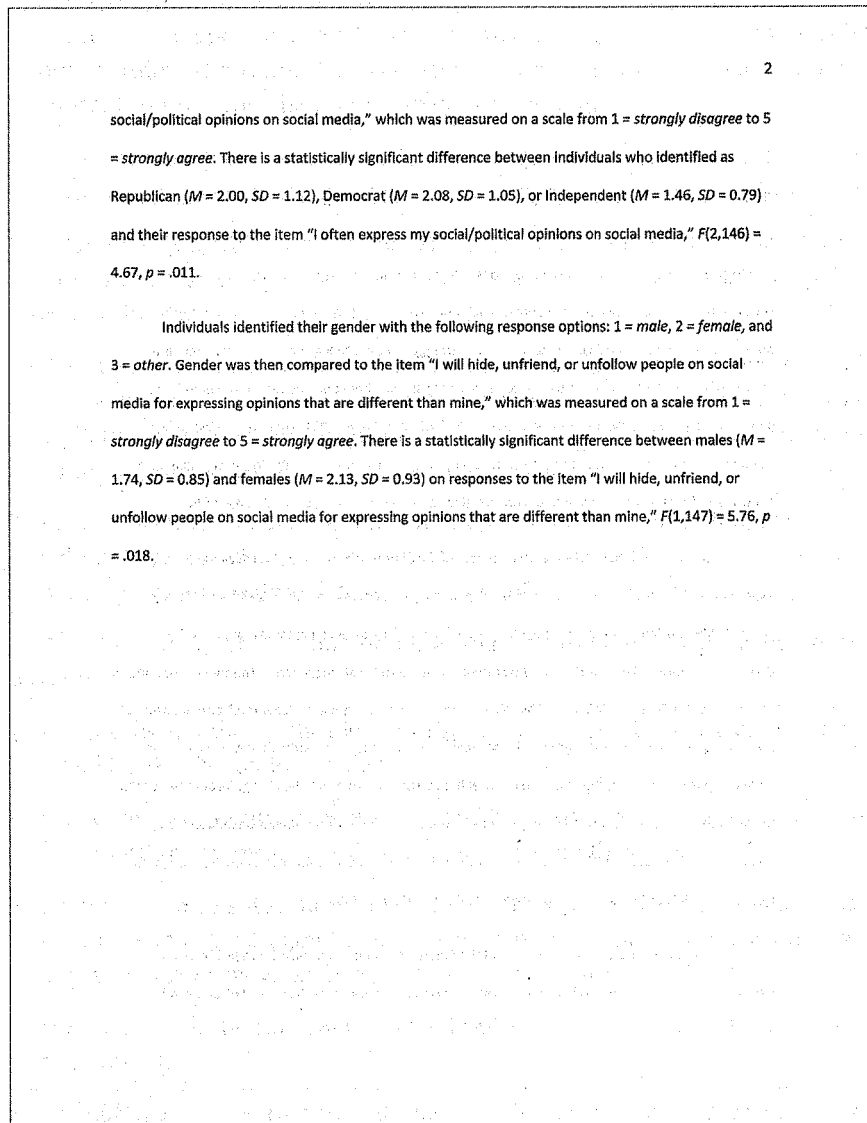
1

Results

I hypothesized that social media users create filter bubbles. The key question of interest will be "I will hide, unfriend, or unfollow people on social media for expressing opinions that are different than mine," which was measured on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. The hypothesis was tested by comparing the key question to the items "I often express my social/political opinions on social media" and "my opinions on controversial topics can change due to conversations on social media," both were measured on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. There is a statistically significant relationship between answers to the key item and answers to the item "I often express my social/political opinions on social media," $r(157) = .26, p = .001$. There is a statistically significant relationship between responses to the key item and responses to the item "my opinions on controversial topics can change due to conversations on social media," $r(157) = .22, p = .005$.

I hypothesized that individuals who hide, unfollow, or unfriend people on social media for expressing different opinions would have more polarizing responses to political questions. The key item is "I will hide, unfriend, or unfollow people on social media for expressing opinions that are different than mine," measured on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. The two political items are "politics should not be influenced by religion" and "marijuana should be legalized," both measured on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. To test the hypothesis, key item responses were compared to the responses on the political items. There is not a statistically significant relationship between responses to the key item and responses to the item "politics should not be influenced by religion," $r(157) = -.03, p = .678$. There is not a statistically significant relationship between the key item responses and "marijuana should be legalized," $r(157) = -.02, p = .795$.

The item "Politically, I identify as" had the following response options; 1 = *Republican*, 2 = *Democrat*, 3 = *Independent*. Political identification was then compared to the item "I often express my

FIGURE 6.5. Sample Results Section of a Research Paper, Rough Draft (continued)

Note. From course research paper by Rebecca Cuthbertson, 2018. Copyright 2018 by Rebecca Cuthbertson. Adapted with permission.

FIGURE 6.6. Sample Results Section of a Research Paper, With Instructor Edits (continues)

1

Results

I hypothesized that social media users create filter bubbles. The key question of interest will be "I will hide, unfriend, or unfollow people on social media for expressing opinions that are different than mine," which was measured on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. The hypothesis was tested by comparing the key question to the items "I often express my social/political opinions on social media" and "my opinions on controversial topics can change due to conversations on social media," both were measured on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. There is a statistically significant relationship between answers to the key item and answers to the item "I often express my social/political opinions on social media," $r(157) = .26, p = .001$. There is a statistically significant relationship between responses to the key item and responses to the item "my opinions on controversial topics can change due to conversations on social media," $r(157) = .22, p = .005$.

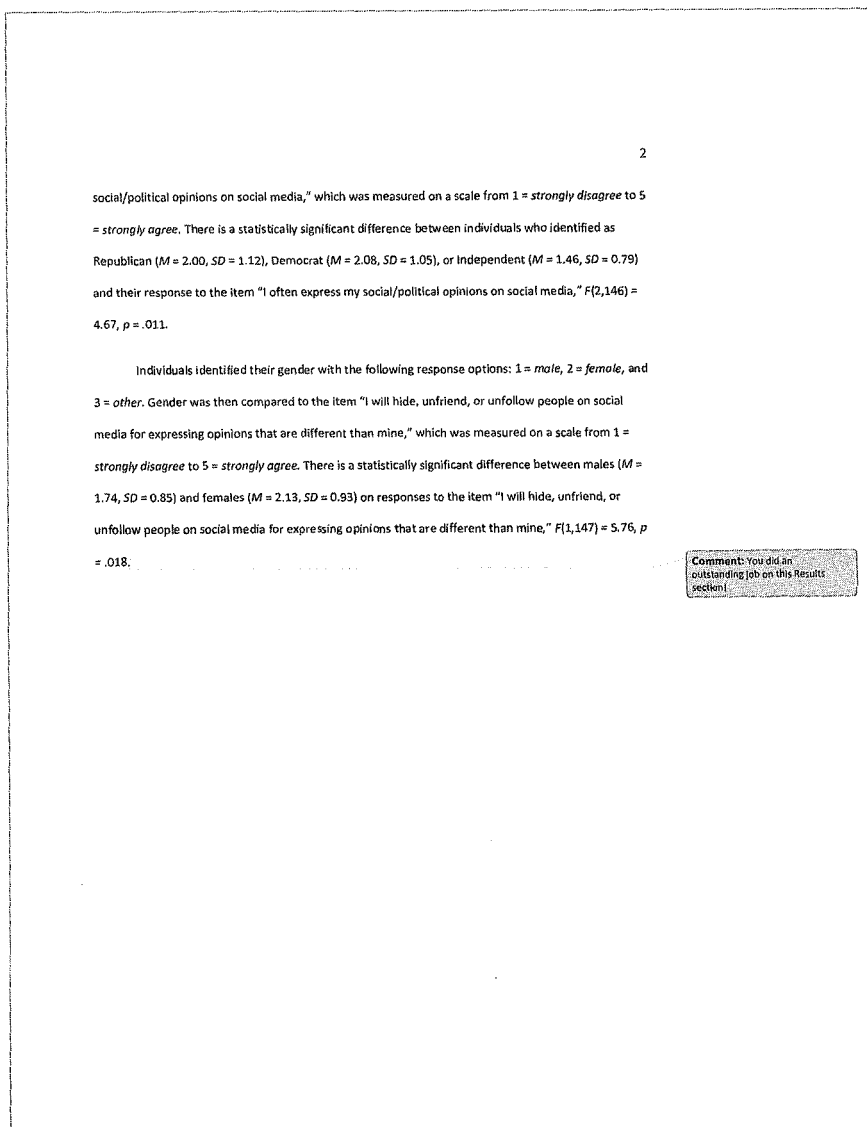
I hypothesized that individuals who hide, unfollow, or unfriend people on social media for expressing different opinions would have more polarizing responses to political questions. The key item is "I will hide, unfriend, or unfollow people on social media for expressing opinions that are different than mine," measured on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. The two political items are "politics should not be influenced by religion" and "marijuana should be legalized," both measured on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. To test the hypothesis, key item responses were compared to the responses on the political items. There is not a statistically significant relationship between responses to the key item and responses to the item "politics should not be influenced by religion," $r(157) = -.03, p = .678$. There is not a statistically significant relationship between the key item responses and "marijuana should be legalized," $r(157) = -.02, p = .795$.

The item "Politically, I identify as" had the following response options; 1 = *Republican*, 2 = *Democrat*, 3 = *Independent*. Political identification was then compared to the item "I often express my

Formatted: Space After: 0 pt

Comment: No extra spaces after paragraphs (remove all)

Comment: Treat an equal sign like a word, and place a space on both sides of the sign.

FIGURE 6.6. Sample Results Section of a Research Paper, With Instructor Edits (continued)

Note. From course research paper by Rebecca Cuthbertson, 2018. Copyright 2018 by Rebecca Cuthbertson. Adapted with permission.

EXPLAIN AND QUESTION AGAIN: DISCUSSION SECTION AND SAMPLE

In the Discussion section, you finally get the chance to interpret all the results that were presented in the Results section. Here is where you have the opportunity to finish telling the story that you began in the Introduction section. What happened? What worked, and what did not work? What will the reader be able to conclude from your study? The Discussion section starts out very specific—what happened in the study—and gets broader with generalizations and conclusions. Essentially, the Discussion section is the bottom of the hourglass—it starts out narrow with answers to your specific hypotheses and then widens, ending with the implications of your study for future researchers.

As with the Introduction section, I provide my students with a rubric that outlines my expectations (especially in regard to grading). Be sure to ask your instructor before every writing assignment if there is a rubric you can review. Not every item included in the list of expectations will be its own paragraph in the resulting Discussion section, and some items may require more than one paragraph. Remember, after you've read more psychology journal articles and written more psychology research papers, you'll feel comfortable moving away from the template to your own style that complies with APA format. Not every Discussion section I have written includes the following six points, but this template is a good start.

- Begin your Discussion with the most important finding of the study—what I call the “big bang.” What happened? Did you find anything that was unexpected, unusual, fascinating, interesting, unique, or counterintuitive? The first paragraph of your Discussion section should have the “take-home” message—if the reader is to remember only one piece of information from this study, what is it? The major premise of your study should be described here—whether something turned out the way you expected or didn't turn out the way you expected.
- Briefly restate the hypotheses from the end of your Introduction section and discuss whether they were supported on the basis of the study's outcomes. Be specific (e.g., “Significant gender differences were found for the questions regarding X, X, and X. In all cases, men were more favorable toward these questions than women. This means that. . .”). Thus, all hypotheses, whether supported or not, are addressed somewhere in the Discussion section. Place your study in the context of the studies that have preceded yours. This means revisiting some of the literature you cited in the Introduction section and including it here.
- Did you fill that knowledge gap or hole that you identified early on? Although you may have answered one question, perhaps your study raised three new ones (this is typical in psychological research—it's called job security!). **If your study contradicts previous research, then you need to speculate about why that happened—for example, perhaps it was a different**

subject population or the methodologies were dramatically different. Cite studies in this part of the Discussion section to show that you see the how your particular research fits into the bigger picture.

- Now generalize a bit about the results of your study. Look beyond, to a broader context than just those tested. Here you get to speculate on the greater impact of your research, but be sure to label speculation as such. What do the results of your study mean? In other words, could the results of your study be useful in setting policies about human behavior? How might they be interpreted in a broader context beyond the sample you studied?
- Present the limitations of your study, but don't be too hard on yourself—no study has ever been conducted perfectly. In general, write the Discussion section as if everything was measured perfectly, but also present what went wrong—what do you wish you had done differently? Did you have enough participants to adequately test your hypotheses? What should be the next study? Make some suggestions regarding the direction of future research in this field. What do you suggest be done next?
- Conclude your Discussion section with a brief paragraph that (a) restates your take-home message (the big bang), (b) reiterates the importance of your study in filling an existing knowledge gap in the literature, and (c) emphasizes the general importance of your topic. This helps justify to the reader the worthiness of your work, and it provides a nice broad completion to the bottom of the hourglass. As Bem (2004) put it, "End with a bang, not a whimper" (p. 203).

Rebecca's first draft of her Discussion section is included in Figure 6.7; my editorial marks are presented in Figure 6.8.

The four sections presented in this chapter—Introduction, Method, Results, and Discussion—constitute the bulk of the research paper. However, there are still several important details to address before your paper is complete. Finishing those final details with style is the topic of the next chapter.

FIGURE 6.7. Sample Discussion Section of a Research Paper, Rough Draft (continues)

1

Discussion

The purpose of my study is to assess whether social media users contribute to the construction of filter bubbles on social media. Social media users who express their social and political opinions on social media are more likely to hide, unfriend, or unfollow users who have different political opinions. However, user filtration on social media does not have a significant relationship with polarizing political opinions.

I hypothesized that social media users create filter bubbles. In support of this hypothesis, a significant relationship was found between individuals who express political opinions on social media and their tendency to filter those who hold opposing views. This means that those who express their opinion on social media are more likely to hide, unfriend, and unfollow people who disagree or express opposing opinions. This aligns well with my hypothesis. A significant relationship was found between filtering out opposing views on social media and an individual's capacity to change their opinion due to conversations on social media. This means that individuals who reported filtering out opposing views on social media also reported that their opinions on controversial issues can change due to conversations on social media. This result seems counterintuitive. My assumption is that those who filter out opposing opinions are less likely to change their opinions on controversial topics. This unexpected result could be due to participants being reluctant to admit to having unyielding opinions. Another possibility is that individuals who reported using filtration methods encounter more political conversations on social media than individuals who do not use filtration. If an individual is exposed to more political conversation, they could be more likely to change their views while also being more prone to use filtration methods.

I hypothesized that individuals who hide, unfollow, or unfriend people on social media for expressing different opinions would have more polarizing political opinions. There was not a significant relationship between social media filtration and polarizing opinions. This means that the level of agreement an

FIGURE 6.7. Sample Discussion Section of a Research Paper, Rough Draft (continued)

2

individual has on social or political issues is not impacted by whether or not they filter out opposing viewpoints.

With the political divide widening (Pew Research Center, 2017a) and social media becoming more prevalent (Pew Research Center, 2016), some individuals have questioned whether there is a relationship between the two. Eli Pariser expressed that filter bubbles are present on social media sites with user filtration options being available — unfollowing, unfriending, blocking (2011). Researchers found that 74.8% of survey respondents experienced political disagreement on social media (Yang, Barnidge, & Rojas, 2016). Researchers have suggested that there is a strong overlap in social networks for online and offline relationships (Sutcliffe, Binder, & Dunbar, 2018). Research on filter bubbles is limited, there is little evidence that suggests social media users contribute to filter bubbles. In my study, a significant relationship was found between expressing political opinions on social media and filtering differing opinions. This aligns with the thoughts of Eli Pariser, social media users could be contributing to the construction of filter bubbles when confronted with differing beliefs online (2011). Future study items that would help clarify the presence and construction of filter bubbles include: how social media users decide who they are going to interact with online, how often individuals encounter political posts on social media, and how often individuals engage with people offline that have differing social or political views.

Social media users who express their social and political opinions are more likely to hide, unfriend, or unfollow users who have different political opinions. It is important to acknowledge this relationship and address how this could impact social division. Political division has been getting worse and filtering out opposing opinions online could be hindering the progression toward common ground. While I found a relationship between expressing opinions and social media filtration due to disagreement, there was an overwhelming amount of responses from individuals indicating they do not express their ideas online or use filtration methods. When asked "I often

FIGURE 6.7. Sample Discussion Section of a Research Paper, Rough Draft (continued)

3

reported either disagree or strongly disagree. When asked "I will hide, unfriend, or unfollow people on social media for expressing opinions that are different than mine," 70.9% of participants reported either disagree or strongly disagree. These responses were surprising, but do not indicate that these social media users are not in a filter bubble. I assumed that there is a high level of disagreement because these individuals do not feel the need to express their opinions or use filtration methods on social media. I speculate that these individuals do not feel the need to express their opinions or filter information because they are already surrounded by like-minded people on social media. I theorize that the foundation of filter bubbles may be formed offline, then transferred to an online medium and fine-tuned with social media filtration options. In future research, a more in-depth look at the development of social networks and their translation to an online medium could provide further understanding of filter bubbles, online interaction, and social division.

There were limitations on the number of survey items I was able to ask, there are also corrections I would make to existing survey items. First, I was only able to ask six questions. Under this constraint, the survey items should have been restricted to only questions pertaining to social media filtration – rather than involve polarizing opinions. If the survey items involving polarizing opinions were discarded, this would make room for more questions establishing social media use and filtration. In regard to the current survey items I would change, frequency scales – rather than agreement scales – would have been a better approach for measuring expression of political opinions, the use of social media filters, and whether conversations on social media can change political opinions.

Social media users who express their social and political opinions on social media are more likely to hide, unfriend, or unfollow users who have different political opinions. This aligns with the theory that social media users aid in the construction of filter bubbles. If further research on filter bubbles were to be conducted, counteracting social division could be possible and progressive conversations could happen.

FIGURE 6.8. Sample Discussion Section of a Research Paper, With Instructor Edits (continues)

1

Discussion

The purpose of my study is to assess whether social media users contribute to the construction of filter bubbles on social media. Social media users who express their social and political opinions on social media are more likely to hide, unfriend, or unfollow users who have different political opinions. However, user filtration on social media does not have a significant relationship with polarizing political opinions.

I hypothesized that social media users create filter bubbles. In support of this hypothesis, a significant relationship was found between individuals who express political opinions on social media and their tendency to filter those who hold opposing views. This means that those who express their opinion on social media are more likely to hide, unfriend, and unfollow people who disagree or express opposing opinions. This aligns well with my hypothesis. A significant relationship was found between filtering out opposing views on social media and an individual's capacity to change their opinion due to conversations on social media. This means that individuals who reported filtering out opposing views on social media also reported that their opinions on controversial issues can change due to conversations on social media. This result seems counterintuitive. My assumption is that those who filter out opposing opinions are less likely to change their opinions on controversial topics. This unexpected result could be due to participants being reluctant to admit to having unyielding opinions. Another possibility is that individuals who reported using filtration methods encounter more political conversations on social media than individuals who do not use filtration. If an individual is exposed to more political conversation, they could be more likely to change their views while also being more prone to use filtration methods.

I hypothesized that individuals who hide, unfollow, or unfriend people on social media for expressing different opinions would have more polarizing political opinions. There was not a significant relationship between social media filtration and polarizing opinions. This means that the level of agreement an individual has on social or political issues is not impacted by whether or not they filter out opposing viewpoints.

With the political divide widening (Pew Research Center, 2017a) and social media becoming more prevalent (Pew Research Center, 2016), some

Comment: Good

FIGURE 6.8. Sample Discussion Section of a Research Paper, With Instructor Edits (continued)

2

Individuals have questioned whether there is a relationship between the two. ~~El~~ Pariser (2011) expressed that filter bubbles are present on social media sites with user filtration options being available — unfollowing, unfriending, blocking (2011). Researchers found that 74.8% of survey respondents experienced political disagreement on social media (Yang, Barnidge, & Rojas et al., 2016).

Researchers have suggested that there is a strong overlap in social networks for online and offline relationships (Sutcliffe, Binder, & Dunbar et al., 2018).

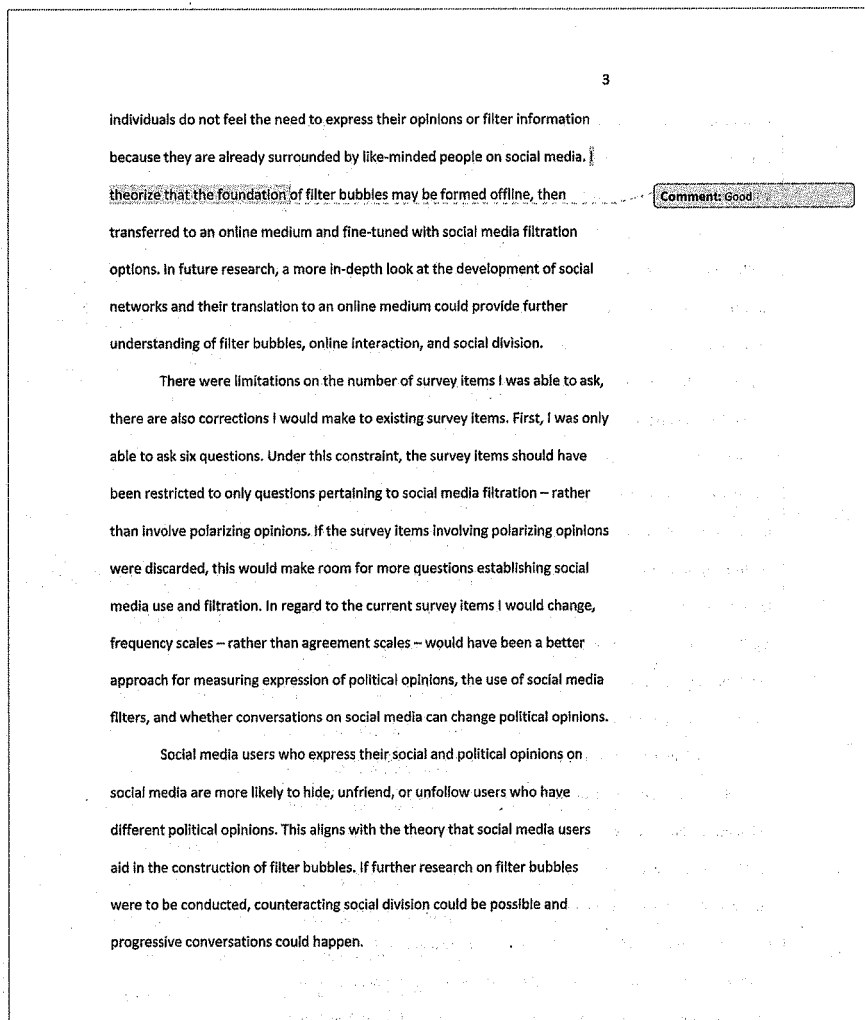
Research on filter bubbles is limited, there is little evidence that suggests social media users contribute to filter bubbles. In my study, a significant relationship was found between expressing political opinions on social media and filtering differing opinions. This aligns with the thoughts of ~~El~~ Pariser (2011), social media users could be contributing to the construction of filter bubbles when confronted with differing beliefs online (2011). Future study items that would help clarify the presence and construction of filter bubbles include: how social media users decide who they are going to interact with online, how often individuals encounter political posts on social media, and how often individuals engage with people offline that have differing social or political views.

Social media users who express their social and political opinions are more likely to hide, unfriend, or unfollow users who have different political opinions. It is important to acknowledge this relationship and address how this could impact social division. Political division has been getting worse and filtering out opposing opinions online could be hindering the progression toward common ground. While ~~Although~~ I found a relationship between expressing opinions and social media filtration due to disagreement, there was an overwhelming amount of responses from individuals indicating they do not express their ideas online or use filtration methods. When asked “I often express my social/political opinion on social media,” 76.3% of participants reported either disagree or strongly disagree. When asked “I will hide, unfriend, or unfollow people on social media for expressing opinions that are different than mine,” 70.9% of participants reported either disagree or strongly disagree. These responses were surprising, but do not indicate that these social media users are not in a filter bubble. I assume that there is a high level of disagreement because these individuals do not feel the need to express their opinions or use filtration methods on social media. I speculate that these

Comment: Since you cited these authors originally in your introduction, do not repeat all three author names here, but just use (Yang et al., 2016). The same applies for Sutcliffe on the next line.

Comment: Do not use first names.

Comment: APA Style per seventh edition is to include the year immediately after the author name in a narrative citation.

FIGURE 6.8. Sample Discussion Section of a Research Paper, With Instructor Edits (continued)

Note. From course research paper by Rebecca Cuthbertson, 2018. Copyright 2018 by Rebecca Cuthbertson. Adapted with permission.