

## EXTRA STEP: Research Limitations

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**Do you know someone that thinks they are simply perfect and has no mistakes? (Well, I know a few and some even become presidents of extremely important countries).**

Well, as chocking and disappointing as it may seem to some people: **no one is perfect!** Some are too tall, some too short, some enjoy country music (nothing personal), some add water to their fine whiskey (honestly, why?) and some do not drink coffee.

**The conclusion is: we all have some negative things! And research is no different!**

And what is considered a limitation of a study?

**A limitation is any aspect that hinders a study and its findings.**

**Does it mean that if my study has limitations it is useless? NO!!!!!!!!!!!!!!**

Very often researchers (students or well-established researchers) have concerns about describing clearly the limitations of their studies. Why? Because there is sometimes a misconception that if your research limitations are too clear, readers will undermine the relevance of your work. For example, some might be afraid others will think:

***“Why are these findings relevant if there are so many limitations to the study?”***

All right, let us make first somethings clear here:

- 1. EVERY STUDY HAS LIMITATIONS.**
- 2. Clarifying the limitations of a study allows the reader to understand better under which conditions the results should be interpreted.**
- 3. Clear descriptions of limitations of a study also shows that the researcher has a holistic understanding of his/her study. And this is something very positive!**

**In other words, describing clearly the limitations of your study should only strengthen your work!**

## Examples of Research Limitations

Ok, so you got it so far that no one is perfect, that some weird people become presidents and that research limitations should be included in your work.

I guess the next question would be: **which limitations should I mention?**

Look, it is extremely difficult to describe all possible types of research limitations. It will vary greatly depending on the type and nature of the study.

However, here are some examples:

### 1. Sample size

- a. *Often studies wish to understand a specific topic (e.g. Brazilian consumers' perceptions towards a product) but only conducts a study with 50 participants. Considering that the Brazilian population has around 200 million people, can we generalize the results based on only 50 respondents? Clearly NOT! So consider your sample size in relation to the population of your study.*

### 2. Sample profile

- a. *For example, many academic studies have used student sampling. There are many advantages for it, such as easy access and low costs for data collection. Nonetheless, using purely student sampling is also extremely limiting if the population of the study is comprised of people with varies profiles.*

### 3. Method

- a. *Very often, a method is accurate for a research aim, but it also includes many limitations. For example: Imagine you wish to understand consumers' use of toilet paper (weird topic, isn't it?) and the researcher uses in-depth interviews, as the study has an exploratory nature. Would you, as a respondent, feel comfortable to describe your use of toilet paper to a stranger? Probably not! Thus, your answers might be highly biased according to what is expected from him/her or to what is socially acceptable. So your answers might not exactly resemble the truth, due to the method.*

### 4. Data collection process

- a. *In the example above, the presence of the researcher influenced the responses, right? But would it be different if the interview had been done over the phone? Perhaps yes. Why? Because the topic is sensitive and private (Literally! 😊). So the point is: the way in which you collect data can represent a strong limitation. Some researchers collect data in busy areas such train stations where there are many distractions and respondents are on a rush. Is this a limitation? Certainly! Thus, you*

*must reflect to see if the way in which you collected your data represents a limitation.*

#### **5. Equipment**

- a. *Imagine you are developing a study involving virtual reality (VR). You can use many different VR devices, ranging from very expensive ones (that have an extraordinary immersion experience) to cheaper ones (that will provide an immersive experience, but not as real). In other words, the type of device used influenced the study results. So if you use an equipment (e.g. devices, products, etc.) you have to consider if the type used represents a limitation or a strength of your work.*

#### **6. Time**

- a. *Often students have a deadline to turn in their work. Other academics have conference or journal deadlines. Would we do a better work if we have more time? Of course! Do we have unlimited time to do research and collect data? NO! For this reason, "time" is a very common limitation for many studies.*

#### **7. Timing of study**

- a. *Are you investigating a phenomenon long after it happened? Did you collect your data on a period that was not exactly suitable for respondents for some specific reason? All of these are examples of how timing might represent a strong limitation for studies.*

#### **8. Financial resources**

- a. *Money is always a problem (at least for me. If it is not for you, we should be friends! 😊). Sometimes we need it to purchase the necessary equipment for a study, to hire people for data collection, to purchase a specific statistical software or to simply reward participants with products or giveaways for having participated in the study. When financial resources are scarce, all of these possibilities are compromised. Consequently, such limitations might be reflected on the results of the study.*

#### **9. Access to literature**

- a. *In the majority of cases, studies start when researchers identify gaps in the literature and tries to address them. However, the identification or understanding that there is a gap depends on the researchers' level of access to the existing literature. What may seem as a research gap might be a huge misconception simply because the person did not have access to a larger range of scientific literature. Thus, access to literature can also be a limitation.*

#### **10. Age of data**

- a. *If your study is based on secondary data, pay extra care to the age of the data. Making current assumptions based on old data represents a strong limitation.*

## Where Should Research Limitations be Included in Thesis?

Once you are done thinking and considering the limitations of your work, a simple question may arise: **Where in my thesis should I include such limitations?**

Please note: there is no specific format to this and it may vary from supervisor to supervisor, and sometimes certain universities may have their own guidelines. But **USUALLY**, the limitations are the **VERY LAST** section of your thesis, and they appear after the **MANAGERIAL RECOMMENDATIONS**.

And why? Because as mentioned above, the limitations may be due to any section of your work. For example:

- *Access to literature (literature review or theoretical background)*
- *Method and data collection process (methodology)*
- *Statistical software (analysis)*

For this reason, it doesn't really make much sense to have it in any other section of your work but the very **END**.

Got it? Great! Now go ahead and be honest with the limitations of your work! Reviewers will be positively impressed!

## Final Thoughts

**Please note:** All the suggestions here are personal, according to my own supervision style. Feel absolutely free to discuss them with your supervisor or other academics. Each one tends to have their own style and expectations.

**Hope these tips have been useful for you and wish you all the best!**

