

How To Decide If You Want to Conduct a Replication Study

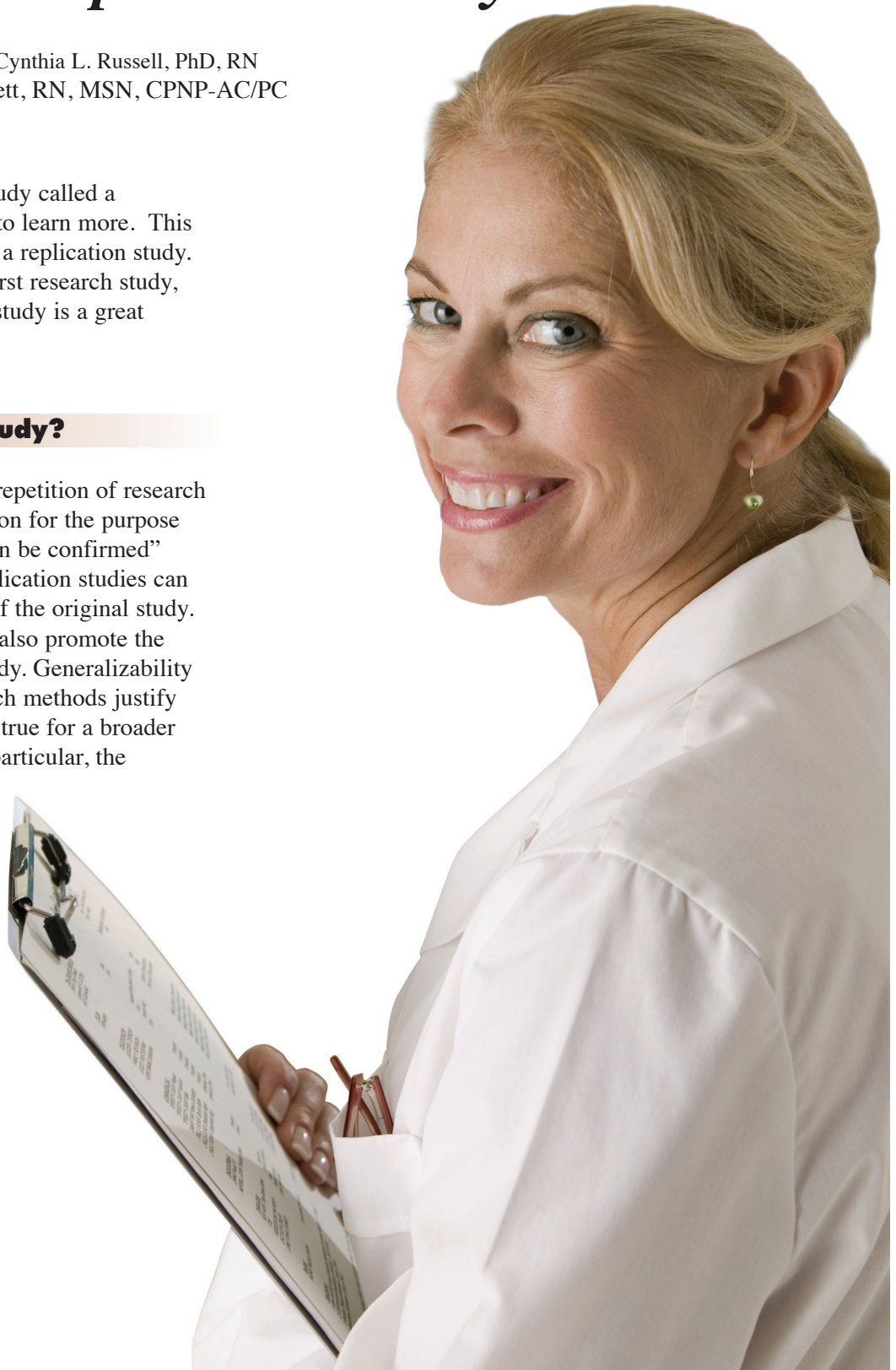


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You have heard about a type of study called a “replication study” and you want to learn more. This brochure provides an overview of a replication study. If you are conducting your very first research study, deciding to conduct a replication study is a great approach!

What is a replication study?

A replication study is “deliberate repetition of research procedures in a second investigation for the purpose of determining if earlier results can be confirmed” (Polit & Beck, 2008, p. 764). Replication studies can help confirm or dispute findings of the original study. Results of a replication study can also promote the generalizability of the original study. Generalizability is “the degree to which the research methods justify the inference that the findings are true for a broader group than study participants; in particular, the inference that the findings can be generalized from the sample to the population” (p. 754). In other words, you can conduct a replication study to see if the findings from the original article are applicable, or generalizable. Results of the replication study can also allow unsupported findings to be dropped from practice. These findings can be particularly helpful when making decisions about using evidence in nursing practice.



When should you consider doing a replication study?

You should consider a replication study when:

- the original research question is still significant, particularly to your practice, and has the potential to contribute to nursing's body of knowledge
- the original research was conducted on a small sample and/or at a single center
- replicating the study can confirm or refute the original findings
- you have expertise in the subject area and have resources to conduct the study with the same rigor as the original study (Connelly, 1986)
- the original study was conducted in another cultural setting
- the original study that was conducted in another era (e.g. assessment of symptom experiences in the cyclosporine era versus today)
- to validate an instrument which was developed and psychometrically tested in another population (e.g. testing of an adherence assessment tool for transplant recipients, which was originally developed for HIV patients)

What types of replication studies are there?

There are 3 types of replication studies that you can consider conducting (Polit & Beck, 2008):

1. **identical replication** study. This is when you duplicate the original study exactly. You use the same sample, the same measurement tools, and the same analyses.
2. **virtual replication** study, is when you try to duplicate the original study as closely as possible, but not identically.
3. **systematic extension** replication which is when you try to test the implications of the study in your setting.



What are the limitations of a replication study?

The greatest limitation of replication studies is when you try to conduct a systematic extension study. Testing the implications of the study in your setting can be very difficult because variables other than those under study could influence the study outcome(s).

Another limitation is that funding agencies may be more interested in funding original research. Original research is research that answers a new research question, and/or approaches the study in a new and innovative manner (Gould, 2002).

Conclusion

Conducting a replication study can be a very rewarding experience particularly if you are interested in discovering if findings from a study can be generalized to your practice setting. Using this approach is a great method if you are conducting your first research study. Knowing the strengths and limitations of conducting a replication study can help you be informed before deciding on whether this is the best option for you!

References

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