

# Tackling the replication crisis: Student theses should be collaborative replication studies

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We are in state of crisis. Currently, society is facing *crises* in three domains of the general public, (i) the environment and climate, (ii) health, and (iii) finance. In science, we are up against the *replication crisis* (Ioannidis, 2005; Open Science Collaboration, 2015). Most studies in linguistics and psychology cannot be replicated for a multitude of reasons (see Sönning and Werner, 2021 for an overview). This questions a cornerstone of science: reproducibility. Without replication, we can't know if general claims that are based on studies are any longer true.

Besides the fact that replications are often not possible due to a lack of open data, code or underpowered studies, there is a related issue. Replications are not done simply because they are seen to lack novelty which disqualifies them for publication. This must change. Inspired by Quintana (2021), we propose that one way to foster fruitful and large-scale replication is by having students conduct cumulative replication studies for their bachelor's and master's theses. This would pose a new win-win situation for our field, linguistics, as well as students who are often overstrung by their final theses for reasons such as lack of financial resources, small sample sizes, and the 'need' for unrealistically unique research proposals.

We want to echo Quintana (2021)'s idea in the forum of young linguists at StuTS because we consider it to be *the most appropriate venue* for at least three reasons. First, young researchers are the promising generation that can bring change in how our discipline works and moves forward because they are not constrained by the existing structures as much as senior researchers (Sönning & Werner, 2021). Second, students are the ones who will have to write their final theses with replications so it's crucial to hear them out and involve them in building the new system. Third, StuTS gathers a network of students from several dozen institutions which could act as multipliers for other institutions.

In line with these three reasons, our talk follows a threefold structure. First, we outline the current replication crisis and show ways to overcome the crisis. Second, we focus on replications in student theses and discuss existing models as well as new ideas for achieving student-led replication studies. Third, we open the stage for StuTS participants and start a network of committed young researchers who are willing to tackle the replication crisis through collaboration.

In sum, our goal is to achieve better and more reliable scientific advances and generalizations, by thinking about solutions to the urging replication crisis. By means of educating fellow young researchers, we aim to form a collaborative network that tackles issues that are related to the replication crisis.

## References

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