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**BACKGROUND**

Only about 30% of ‘well-established’ findings in Psychology appear to be replicable. This result and earlier findings that suggest that a substantial fraction of psychological researchers use ‘questionable research practices’ (QRPs) has resulted in a crisis in experimental Psychology. Where ‘replication’ was generally seen as less ‘creative’ and less ‘informative’, the crisis has upgraded the status of replication studies. Rather than running a single replication study, many efforts in Psychology are under way to run a number of *identical* replications more or less simultaneously. These joint projects do assess the replication rate of the original and challenged finding. In some sense a considerable fraction of the findings in experimental psychology and especially in social psychology and neuropsychology might now be labeled as ‘controversial’.

Could large scale replication efforts like those that are currently becoming popular in Psychology also be used to settle the dispute around the findings in the more traditional controversial fields like parapsychology?

**PREVENTING QRP’s**

When setting up a large scale replication project one of the QRP’s that is prevented is selective publication of only successful studies. However other QRP’s can only be prevented by checking the final data against the pre-registration. And furthermore these data should be stored out of write control of the experimenters. So far the replication projects in psychology are preregistered but no measures have been taken to guarantee data integrity.

**Real time Remote data storage**

We developed a ‘shell’ around the core psi task. The core psi task can be anything but the source code should be available. The shell intercepts any local output statement and adds a statement to store the same data at a remote site. Only the shell has the right to write other users can only read those data. The remote site also keeps track of the number of formal sessions. The remotely stored data are available for outsiders to ensure that the data used for analysis haven’t been tampered with.



**LARGE SCALE REPLICATION projects (LSRP)**

Recent estimates of effect size for unselected subjects are between 0.06 and 0.10. This implies that hundreds of such subjects are required for a power of 80% to get a p<0.05 result. In large scale replication projects it will be difficult to involve main stream labs if the number of subjects exceeds ~100.

**Selection of Subjects & Experimenters**

Therefore we need to select subjects according to criteria that have been found to be predictive for larger effect sizes such as being ‘creative’. It has been claimed that some Experimenters appear to elicit stronger effects. So we also need criteria to select Experimenters.

At the University of Groningen we have started a major effort to find predictors for subject and experimenter success.

**Phases in the Large Scale Replications**

The first LSRP will basically test the procedures, there will be no formal preregistration and only about 6 psi-friendly labs. In a second phase there will be a formal pre-registration and a publication. In the final LSR we will invite main stream labs and skeptical supervisors and run the LSR with formal preregistration.

**THEORETICAL BACKGROUND**

A number of ‘physical’ theories for the paranormal, like *Consciousness Induced Restoration of Time Symmetry* (CIRTS), the *Model of Pragmatic Information* (MPI) and the *Generalized Quantum Theory* (GQT), predict that robust anomalous signaling like signaling from a future even to the past, is impossible. If the planned LSRPs do result in a replication rate as predicted by power analysis we have refuted these theories.

Apart from the Groningen effort, a LSRP initiated by Harald Walach is underway using as the core task the correlation matrix paradigm which is claimed to be replicable even within MPI and GQT. So if the Groningen LSRPs fail and the correlation matrix method does succeed this may be a strong support for those theories.

**MORE INFORMATION**: http://heymansgroup.nl