Measuring transparency and replicability in quantitative research

In a Strategic Management Journal article, Aguinis and Solarino (2019) established behaviorally-anchored rating scales (BARS) to assess the replicability of 52 qualitative research articles. The need for this installation arose because existing literature on replications "has focused mainly on quantitative research" (Aguinis and Soraino, 2019, 1292). Yet while researchers across fields have already conducted numerous empirical replications (e.g. Bergh, Sharp, Aguinis and Li, 2017; Duvendack et al., 2015; McCullough et al., 2006), we still miss a score measuring the replicability of quantitative research. This is of special necessity as the existing literature showed that research projects, but also individual effects, might be partially replicable and partially not replicable (e.g. Fillenbaum, Burchett, Lee and Blazer, 2003; Shelly and Goldstein, 1983; Lewis and Walsh, 1978). The Open Science Collaboration (2015) replicating 100 psychological studies also points towards this problem by testing the replicated effects against the original studies' null hypotheses and against the original studies' effects. Whereas they are only able to confirm 36.1% of the studies' tests against the null hypotheses, they were at the same time able to disconfirm only 52.6% of the effects stated in the studies. This highlights that replications do not always return clear success or failure results which calls for a more differentiated approach.

This master thesis should therefore review the criteria and scales employed in Aguinis and Solarino (2019). Afterwards, these scales should be transformed so that they allow the assessment of the replicability of quantitative research. The new scales should then be empirically tested by applying it to a small sample of impactful quantitative empirical papers.

The underlying research question for this master thesis is: *How to compose behaviorallyanchored rating scales (BARS) assessing the replicability of quantitative research articles?*