



Press release

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Power posing does not affect hormones or financial risk taking

Despite widespread media coverage of an earlier study showing that “power poses” influence hormones and risk taking, a new study using a much larger sample finds no such relationships.

The study was led by Dr. Eva Ranehill of the Department of Economics at University of Zürich, with coauthors from the University of Zürich, Stockholm School of Economics, and Dartmouth College. They re-examine the findings of a highly publicized study, published in *Psychological Science* in 2010, which showed that having people hold “powerful” positions for brief periods of time could affect hormones and financial risk taking. This original study received considerable media attention, including one of the most widely viewed TED talks on YouTube and a recent article in the New York Times.

Power posing makes people say that they feel more confident, but has no other effects

The researchers find power posing to have no effects on the hormones testosterone, cortisol, or any of the actual behavior of people in the experiment. Power posing did, however, have an impact on self-reported feelings of power, as in the original study. As Dr. Ranehill notes, “This suggests that the main influence of power posing is to make people report that they *feel* more confident, but we find no evidence that this translates into their behavior or affects their physiology.”

In the study, 102 men and 98 women, mainly students in Zurich, were randomly assigned to pose in either “high-power” or “low-power” poses. The participants then performed a financial risk-taking task, in which participants chose between fixed amounts of money and risky gambles, as in the previous study. Specifically, all of the participants were given six choices between a safe and risky option, in Swiss Francs (CHF). The risky option was a 50-50 gamble with outcomes CHF 10 or CHF 0. The safe options varied from CHF 2 to CHF 7. Financial risk taking was measured as the share of risky choices chosen. To measure the effect of body positions on hormonal levels, two saliva samples were taken from each participant for analysis at a laboratory. The first sample was collected before participants performed either the high- or the low-power pose. The second saliva sample was taken at the end of the study, after the behavioral tasks.

One study is never enough

“Our study is far more conclusive than the original study, because we have a lot more data,” says Roberto Weber, Professor at University of Zurich, and a co-author on the new paper. “Our study comprises a sample of 200 men and women, and we find no effect of power posing on hormones or behavior. The larger sample size in our study makes it much less likely that we find results that arise by chance. Ours is also the only published study, to our knowledge, that attempts to replicate the effect of power posing on hormones.” Dr. Anna Dreber, another coauthor from the Stockholm School of Economics, adds that, “This illustrates the importance of replicating published research findings. While a single study may raise some interesting questions, we need replications in order to answer these questions.”

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References

Eva Ranehill, Anna Dreber, Magnus Johannesson, Susanne Leiberg, Sunhae Sul, Roberto A. Weber.
Assessing the Robustness of Power Posing: No Effect on Hormones and Risk Tolerance in a Large
Sample of Men and Women. *Psychological Science*, March, 2015.

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