More-less asymmetry replication

<u>Study 5 (Hoorens & Bruckmuller, 2015)</u>

Participants.   Participants were 172 Amazon Mechanical Turk workers (106 males), aged 19 to 72 (M = 31.5, SD = 11.33) . Sample size was pre-determined to be roughly 2.5 times larger than the original study to ensure an 80% power of our replication (see Simonsohn, 2015).

Materials

The authors provided us with the original stimuli. The original study employed 20 comparative statements that were translated from Dutch to English by a native Dutch speaker and proofread by a native English speaker. Because of differences between the two languages, some statements had to be slightly adjusted (e.g., "mannen zijn egoistischer" was translated to "men are more egoistic"). Of these 20 statements, 5 were about typically positive female traits, 5 about typically negative female traits, 5 about positive male traits, and 5 about negative male traits.

Procedure

The study used a 2 (Framing: "more than" vs. "less than") × 2 (Stereotype-Consistency: consistent vs inconsistent) × 2 (Desirability: desirable vs undesirable) design. Framing and consistency was manipulated between-subjects while desirability was varied within. Participants were randomly assigned to one of the four conditions and asked to indicate how much they agreed with each of the 20 statements on a scale of 1 (*fully disagree*) to 7 (*fully agree*).

Results and Discussion.

The main finding of the original study was a main-effect of more-than framing when comparing the average agreement with all 20 statements across conditions. We replicate the main effect of framing with a larger effect size. Participants agreed more with the "more than" statements (M = 3.67, SD = 1.27) than the "less than" statements (M = 2.85, SD = 1.03; $F(1, 168)$ = 25.82, $p < .001$, η^2_p = 0.133). Just like the original study, we also found an expected main-effect of consistency with participants agreeing more with stereotype-consistent statements (M = 3.89, SD = 1.29; $F(1, 168)$ = 45.75, $p < .001$, η^2_p = 0.214) as compared to inconsistent statements (M = 2.76, SD = 0.89). Unlike the original study, we also found a significant interaction-effect, $F(1, 168)$ = 5.58, p = 0.02, η^2_p = 0.032, such that the effect of more-than vs. less-than statements was larger in the consistent conditions as compared to the inconsistent conditions (see Figure 1).

We also didn't find an interaction effect between framing and desirability, $F(1,170)$ = 0.013, p = 0.91, η^2_p = 0.000. For the desirable items, people still agree more with more-than statements (M = 3.60, SD = 1.20) as compared to less-than statements (M = 2.77, SD = 1.02). For the undesirable items, people also agree more with more-than statements (M = 3.74, SD = 1.38) as compared to less-than statements (M = 2.92, SD = 1.09).

Figure 1: Scale-means for the original study on the left and the replication on the right.