1) What's the main question being asked or hypothesis being tested in this study?

With this study we aim to replicate the findings by Wadhwa & Zhang (2015). The “rounded price effect” predicts that rounded prices facilitate feeling-based decisions and thus products in an emotional context are more likely to be purchased when presented with rounded prices (e.g. $80.00). The same is true for non-rounded prices (e.g. $81.43) and cognitive decisions. Wadhwa & Zhang (2015) predict that a sense of “feeling right” arises when the product price and the decision context fit well (rounded price/feeling-based decision vs. non-rounded price/cognitive decision). Thus the initial reactions toward a product should be intensified, e.g. the likelihood of the product purchase.

Two hypotheses will be tested in our study: (1) The relationship between roundedness of the price and the purchase likelihood is moderated through the context (feeling vs. cognition). (2) The relationship between the fit of roundedness and decision context and purchase likelihood is mediated through a sense of “feeling right”.

These hypotheses are in line with Study 5 from Wadhwa & Zhang (2015).


2) Describe the key dependent variable(s) specifying how they will be measured.

The likelihood of purchase (How likely are respondents to purchase the described product?) and the purchase satisfaction (How is the anticipated satisfaction of the respondents with the purchase decision?) will be measured using Wadhwa & Zhang’s (2015) proposed items. The product (digital camera binoculars) and its description have been adapted from the article.

The mediator variable “Feeling right” (How “right”/“wrong” feel the respondents while evaluating the product?) will be adapted from Cesario & Higgins (2008), and the control variable Perceived ease of information processing (How easy is the product description understood and processed by the respondents?) is adapted from Lee et al. (2010).

All items are translated to German by the authors of the study.

As demographic variables age, gender, education, occupation (including, if applicable, major studying field) were included in the study. These are meant to describe the sample and not earmarked as covariates.


3) How many and which conditions will participants be assigned to?

The study has a 2 (Price: round vs. non-round) x 2 (Priming: Feeling vs. Cognition) design. Participants will be randomly assigned to one of the four conditions.

In line with the method of Wadhwa & Zhang (2015), the priming will be done by questions proposed by Hsee & Rottenstreich (2004). As digital binoculars are not very popular in Germany, a pre-test was performed to test if such a product is recognized. As alternative a camera that directly prints pictures was tested. Both products will be presented with a rounded price (80.00 €) or a nonrounded price (81.43 €).


4) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

The rounded price effect will be analyzed using Two-way ANOVAs and moderated mediation analysis (Muller, Judd & Yzerbyt, 2005) in the same way as Wadhwa & Zhang (2015) did.

The replication success will be analyzed using standard (frequentist) statistics (vote counting based on p-values and effect sizes, confidence intervals and Uri Simonsohn’s “Small Telescope” approach).


5) Any secondary analyses?
For comparison of different approaches, these analyses are appended by Bayesian approaches (Bayes Factor with JZS prior, Bayes Factor for equality of effect sizes and the Bayes Factor for Replication Success; see Verhagen & Wagenmakers, 2014).

In a precursor study, the digital camera binoculars were not seen as very desirable (using a student sample). Therefore, we also included another product (an instant camera), using the items described above (likelihood of purchase, anticipated purchase satisfaction, sense of feeling right and perceived ease of information processing)


6) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

A minimum of 250 observations is to be collected to achieve approximately 90% power at a significance level of 0.05 and with an effect size of $\eta_p^2 = 0.0403$ (see Wadhwa & Zhang, 2015). Desired is a sample size of 600, which is nearly twice the N of the original study as recommended for replication attempts. Sampling will be stopped after two months or when 600 participants are recruited, whichever comes first.

7) Anything else you would like to pre-register? (e.g., data exclusions, variables collected for exploratory purposes, unusual analyses planned?)

Data will be checked for plausibility. Participants who guessed the study's purpose will be excluded from the analyses (as was in the case with 1 participant in Wadhwa & Zhang, 2016). Participants who answer implausibly fast or slow, will be marked and we present analyses including and excluding those participants. The plausible interval is defined as $[Q_{0.5} - (3 \times (Q_{0.5} - Q_{0.25})); Q_{0.5} + (3 \times (Q_{0.75} - Q_{0.5}))].$

8) Have any data been collected for this study already?

No, no data have been collected for this study yet.