## Replication of Halevy & Halali 2015 "Selfish third parties act as peacemakers by transforming conflicts and promoting cooperation" PNAS 112(22) 6937-6942. https://www.pnas.org/content/112/22/6937

The original paper includes several studies. We randomly chose study 6. In this between-subject experiment, participants are asked to recall and describe in writing a conflict between two friends. One treatment group is asked to recall a situation where they consciously chose to intervene, and the other group a situation where they consciously chose to not intervene. Participants are then asked to assess the perceived costs and benefits of intervening. Participants asked to recall and less costly than participants asked to recall and describe a situation where they did intervene perceived intervention to be both more beneficial and less costly than participants asked to recall and describe a situation in where they did not intervene. We focus on the comparison about the perceived benefits of the intervention between the two groups.

**Hypothesis to replicate and bet on:** Intervening in a conflict between two friends is seen as more beneficial if individuals are asked to recall and describe a situation where they did intervene compared to when they are asked to recall and describe a situation where they did not intervene. The authors test the above hypothesis in an independent samples *t*-test (t(196) = 6.34, p = 0.000000001549); p. 6940. This test was randomly picked among the main tests in experiment 6.

**Criteria for replication:** The criteria for replication are an effect in the same direction as the original study and a p-value < 0.05 in a two-sided independent samples t-test.

**Power analysis:** The original study had 198 participants. The standardized effect size (Cohen's d) was d = 0.901. To have 90% power to detect 67% of the original effect size, a sample size of n = 117 is required. Since we require the replication sample size to be at least as large as in the original study, the replication experiment will use a sample size of n = 198 and the power will thus be >90% to detect 67% of the original effect size.

**Sample:** As in the original study, we will restrict our HITs to US participants, participants with a HIT approval rate of 98% or above, and participants who are fully employed at the time they take the survey. We will also check all IP addresses via <u>https://www.ipqualityscore.com/;</u> and we will remove any participants where one or more of the following is true: fraud score  $\geq$  85; TOR = True; VPN = True; Bot = True; abuse velocity = high. The replication sample size is the sample size after any exclusions of participants.

**Materials:** We will code the experiment ourselves in Qualtrics. We will use the same questions as in the original study – these questions have been kindly provided by the original authors.

**Procedure:** We will closely follow the procedure of the original experiment. The following summary of the experimental procedure is therefore largely based on the description of the experiment in the article (p. 6940) and the section "Materials and Methods" (p. 6942).

Participants will first be shown a Captcha, and will thereafter provide informed consent. After this we will include an attention check that participants will need to pass to continue to the study. This attention check is in addition to any other potential attention check(s) used in the original study. Participants will be randomly assigned to either recall and describe in writing a time they witnessed a conflict between two friends and consciously chose to intervene or recall and describe in writing a time they witnessed a conflict between two friends and consciously chose not to intervene. Participants will thereafter rate three perceived costs of intervening in the conflict (e.g., "I was afraid to lose one or both of my friends") and three perceived benefits of intervening in the conflict with three questions on seven-point scales: "Intervening in the conflict was beneficial to me", "Intervening in the conflict would have increased my status in the eyes of others" and "Intervening in the conflict would have improved my relationships with other people". The perceived benefits variable is created by taking the mean for the three perceived benefits questions.

**Analysis:** The analysis will be performed as in the original article. That is, we will compare the average of the perceived benefits of the intervention in the group asked to recall and describe a situation where they did intervene to the perceived benefits in the group asked to recall and describe a situation where they did not intervene using an independent samples t-test.

**Subject payment:** We are standardizing payments across all replications so that studies have a certain show-up fee depending on the expected length of the study, with an hourly wage from the show-up fee of \$8 and a minimum payment of \$1 (for studies with incentive payment we use the same incentive payment as in the original study; and this payment is paid in addition to the show-up fee). If we have problems recruiting, we will increase the show-up fee.