Replication of Mummolo, 2018
"Militarization fails to enhance police safety or reduce crime but may harm police reputation"
PNAS 115(37), 9181-9186.
https://www.pnas.org/content/115/37/9181

The original paper includes several studies but only one on MTurk. In this between-subject experiment, participants read a mock news article concerning an unnamed police chief seeking a budget increase in an imaginary city. While the text is constant, participants are randomized to view different accompanying images in how militarized the police appear (control w. traditional police, low militarization w. assault rifles, low militarization w. riot gear, high militarization w. armored vehicles). We focus on the comparison between the high militarization condition and the control with traditional police condition. The highly militarized image increases the perceived level of crime in the city and decreases support for police funding. We focus on the support for police funding result.

Hypothesis to replicate and bet on: When participants in a mock news article with an unnamed police chief seeking a budget increase are exposed to an image of high militarization, support for police funding in the United States falls compared to when they view an image with traditional police. The treatment effect was estimated via an OLS regression with robust "HC1" standard errors, where the police funding outcome was regressed on an intercept and indicators for all treatment conditions with the control condition excluded as the baseline. The outcome was measured on a 5-point scale but rescaled to range between 0 and 1. The effect estimate was –0.036902 ($p = 0.0204$). This particular result was chosen because it was a key result of this experiment.

Criteria for replication: The criteria for replication is an effect in the same direction as the original study and a p-value < 0.05 in an ordinary least squares regression.

Power analysis: The original study has 784 participants, and the standardized effect size (Cohen's d) was $d = 0.166$. To have 90% power to detect 67% of the original effect size, a sample size of $n = 3440$ is required

Sample: The original paper mentions no restrictions on who could participate, but given the nature of the study, we will restrict participation to US participants. We will make sure that participants can only participate once from the same account in this specific study, and we will only recruit participants with a HIT approval rate of 95% or above. We will also check all IP addresses via https://www.ipqualityscore.com/; and we will remove any participants where one or more of the following is true: fraud score >= 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 use the same material as in the original study, kindly provided by the original author.

Procedure: We will closely follow the procedure of the original experiment. We will only replicate the control and the high militarization treatment. In the original study several other treatments were included which we will not replicate. Excluding these treatments does not affect the relevant data collection. The following summary of the experimental procedure is

therefore largely based on the description of the experiment in the article (p. 9184) and the Supporting Information (pp. 5–7).

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 asked to read a mock news article concerning an unnamed police chief seeking a budget increase. The text will be the same for both conditions, while the accompanying image will be randomly varied across participants. The control image will feature five male, traditionally uniformed officers (e.g., blue uniforms, brimmed caps, and standard side arms). The “high” militarization condition will feature five male officers with body armor and assault rifles, and an armored vehicle.

In each case, the caption beneath the photo will read, ‘Above: Five city police officers stand guard during a local protest.’ All images will be tightly cropped to ensure that any differences in responses are due to the appearance of police officers and not the surrounding area in which they are deployed. Following the article, respondents will be asked to answer questions measuring perceived crime levels, support for police spending, and confidence in police. To help ensure receipt of the treatment, the article will appear on the screen for 30 seconds before participants are allowed to advance in the survey.

The main outcome measure (support for police funding in the United States) will be measured with the following question: “Please indicate whether you would like to see more or less government spending on the police and law enforcement in the United States." Participants will be asked to choose between five options (Spend much less; Spend less; Spend the same as now; Spend more; Spend much more).

Participants will then answer some demographic questions and they will be debriefed at the end of the survey.

Analysis: The analysis code was kindly provided by the original authors. The analysis will be performed as in the original paper. In particular, we will estimate the treatment effect using OLS with robust “HC1” standard errors. The model will regress the police funding outcome on an intercept and an indicator for the treatment condition with the control condition excluded as the baseline.

Subject payments: 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.