**XP-Lab Replication Study**

Deadlines:

31.07.21 Preregistration report

31.08.21 Final Paper

Preregistration report

material you submit at this stage is also evaluated towards your **final grade**

* preregistration report itself
* experiment (must be fully functional, provide a link, not code!)
* document 'experimental design'
* analysis scripts that implement your preregistered analysis based on the 3-5 participants from your 'pilot'

Final Paper

* the experimental code and all materials
* a link to a fully functional, running version of the experiment in the central README.md
* your final statistical analysis files
* the possibly revised 'experimental design'
* the possibly revised preregistration report

Follow this sequence of working steps:

|  |  |  |
| --- | --- | --- |
| **Bis wann** | **Was** | **Wer** |
| 01.07. | read paper | alle |
| 04.07. | read additional resources | Nele, Felix |
| 05.07. | reconstruct from the paper the experimental design to be replicated as closely as possible  Create and organize github repo & Themen Quellen | Juri, Eva, Nele, Felix  Juri |
| 07.07. | write an 'experimental design' document, similar to what we saw for the 'mental rotation' example | Nele, Eva |
| 07.07. | obtain feedback from us on the 'experimental design' document | egal |
| 12.07. | implement your experiment in \_magpie | Juri, Felix |
| 12.07. | test the experiment for yourselves + feedback from tutors/lecturer | Juri, Felix |
| 14.07. | collect data from some 3-5 participants in a 'pilot' study | alle |
| 19.07. | use this data to write the analysis scripts (and to further test the experiment, e.g., whether instructions are clear enough, ...) | Nele, Juri |
| 24.07. | write the preregistration report | Eva, Felix |
| 24.07. | feedback on preregistration report | egal |
| 31.07. | evaluated submission preregistration report | egal |

**Überblick Zeitplanung:**

Eva: 12.07 A&C, 26.07 CC, Kanada ab 30.07, 04.08 Diff Psycho, Ausland ab 20-22.08

Nele: 14.07. Arabisch, 04.08. Diff Psycho, Ausland ab 20.08

Juri: 12.07. CC, 15.07. ML, 22.07. KR & R, 29.07. GL, Urlaub ab 01.08.

Felix: Experimentalpraktikum 26.07. - 30.07, 04.08 Diff Psycho, Wales im August

**Ideen/Offene Fragen:**

F: Können wir die Studie einfach auf Deutsch machen? (FAQ)

F: Sind die 60% für ingroup und 85% für outgroup irgendwo gerechtfertigt worden? → Wird in der Diskussion thematisiert.

F: Wer definiert was die allgemeine descriptive norm ist? Sollen die 85% outgroup die allgemeine norm sein? (60% der nicht veganer würden den Raub melden, 85% der Veganer würden den Raub melden. Es gibt viel mehr nicht veganer deswegen sind 60% von 75 millionen weit aus mehr als 85% von 5 millionen (sehr hoch angesetzt wahrscheinlich eher 2)

F: Wieso nutzt man eine 6-point (oder 11-point) Likert scale, kann man nicht auch ne andere Skala nehmen?

F: Das kann doch nen Effekt haben und sollte ausgewertet werden: “When both the ingroup and outgroup descriptive norms were shown, we randomly varied their ordering. This was done only to control for potential order effects and so was ignored when analysing the data.“

F: “For example, in the current paper, the descriptive norms

were experimentally varied such that they had no pre-existing association with either the

ingroup or outgroup” Stimmt das wirklich, wenn ingroup/outgroup über gun control definiert ist und die Entscheidungssituation ein Raub ist?

F: “The and variables effectively act as switches, determining INGROUP AGREE OUTGROUP DISAGREE whether the self-categorization model assumes the participant will be affected by the ingroup and outgroup descriptive norms respectively.“ → Bedeutet dass dass es hier 3 Ebenen gibt 1. Ingroup agree 2. Outgroup disagree 3. Ingroup agree und Outgroup disagree → wahrscheinlich nur 1 und 2 oder?

N: Defining ingroup/ outgroup: alle die 0 angegeben haben werden excluded, sollten nicht auch alle die -2 - 2 angegeben haben, ausgeschlossen werden (nicht stark genug einer Gruppe zugehörig)

F: the extent to which they agree with two statements → komisch formuliert für 2 Möglichkeiten, übersehe ich was? (Was soll das jetzt bedeuten? → One additional piece of data that the self-categorization model can make use of is whether the participants reported identifying with the ingroup and reported not identifying with the outgroup.)

N: S. 6 → ingroup agree ist automatisch outgroup disagree oder nicht?

F: Given that the presentation of the outgroup descriptive norm was independent of the direction of either norm, we had no clear, theoretical reason to predict a strong systematic effect in either direction due to merely presenting an outgroup descriptive norm, independent of that descriptive norm’s direction. → Was bedeutet dieser Satz genau? Beim ersten Lesen dachte ich jetzt, dass es sein kann dass Teilnehmer die gleichen deskriptiven normen gesehen haben 60% deiner ingroup report the robber und 85 % der outgroup (auch) report the robber. Aber das kann doch nicht sein, oder?

**Issue Statements**

* Gun control: “Adults should have the right to carry a concealed handgun”
* Feminism: “Feminism is important and beneficial to modern society”
* Donald Trump: “Donald Trump being president is good for the United States at this time”
* Immigration and Dreamers: "Dreamers (undocumented immigrants who came to the US as children) should be allowed to stay in the United States"
* Transgender rights: “Transgender people should be allowed to use the bathrooms of the gender they identify as"
* Drug legalization: "Possession of drugs should be legalized"
* Colin Kaepernick kneeling during the national anthem: “"Colin Kaepernick was wrong to kneel during the national anthem"
* Buying and wearing fur: "Buying and wearing fur is wrong"
* Taxing religious organization: "Religious organizations should be taxed"

**Themen**

* Feminismus: "Feminismus ist wichtig und nützlich für eine moderne Gesellschaft"
* Flüchtlingspolitik:
* Transgender-Rechte: "Transgender-Menschen sollten die Toiletten des Geschlechts benutzen dürfen, als das sie sich identifizieren" -- Gendern in der Sprache?
* Legalisierung von Drogen: "Der Besitz von Drogen sollte legalisiert werden"
* Kaufen und Tragen von Pelz: "Kaufen und Tragen von Pelz ist falsch"
* Religiöse Organisation besteuern: "Religiöse Organisationen sollten besteuert werden"
* Tempolimit Autobahn?
* Fleischkonsum?

**S1 Example Transcript**

The following is an example transcript of the instructions in Experiment 1 that could have been presented to a participant that indicated they cared strongly about gun control.

**Instructions**

We are following up on a previously published paper that looked at how people feel about moral dilemmas.

In the previous paper, a moral dilemma was described that involved two possible courses of actions. Participants chose which action they preferred and had to rate how they would feel about performing that action.

In this study, you will be presented with a scenario describing a moral dilemma. You will choose which action you would take and then provide a rating of how good or bad you imagine you would feel after taking that action.

**Experimental trial**

Imagine you have witnessed a man rob a bank. However, you then saw him do something unexpected with the money. He donated it all to a run-down orphanage that would benefit greatly from the money. You must decide whether to call the police and report the robber or

do nothing and leave the robber alone.

**In the previous study:**

* approximately 60% of participants who agreed with you about gun restrictions chose to call the police and report the robber.
* approximately 85% of participants who disagreed with you about gun restrictions chose to do nothing and leave the robber alone.

**Would you:**

* Definitely call the police and report the robber
* Very likely call the police and report the robber
* Probably call the police and report the robber
* Probably do nothing and leave the robber alone
* Very likely do nothing and leave the robber alone
* Definitely do nothing and leave the robber alone

**Rating choice**

You chose to call the police and report the robber. If you did call the police and report the robber, how would you expect to feel:

* Very good
* Moderately good
* Slightly good
* Neither good or bad
* Slightly bad
* Moderately bad
* Very bad

**Understanding check**

We were following up on a previous study in this task. Given what we described in the instructions, which of the following is true about the previous study?

* Participants chose which action they preferred (correct)
* Due to a computer error, participants were not allocated equally to imagine performing the different actions (incorrect)
* No data was saved during the experiment. (incorrect)
* The participants completed the experiment with their eyes closed. (incorrect)

**Identity Check**

Please rate how much you agree or disagree with the following statements:

* I identify with Pro-Gun Enthusiasts
* I identify with Anti-Gun Advocates

**Deutsch: S1 Example Transcript**

**Instructions**

In dieser Befragung knüpfen an eine zuvor veröffentlichte Studie an, in der untersucht wurde, wie Menschen sich in moralischen Dilemmata fühlen. In der vorherigen Studie wurde ein moralisches Dilemma beschrieben, das zwei mögliche Handlungsoptionen beinhaltete.

Die Teilnehmer wählten aus, welche Handlung sie bevorzugten und mussten bewerten, wie sie sich bei der Ausführung dieser Handlung fühlen würden.

In dieser Studie wird Ihnen ein Szenario präsentiert, dass ein moralisches Dilemma beschreibt. Sie werden wählen, welche Handlung Sie durchführen würden und dann eine Bewertung abgeben, wie gut oder schlecht Sie sich nach der Durchführung dieser Handlung fühlen würden.

**Experimental trial**

Stellen Sie sich vor, Sie wurden Zeuge, wie ein Mann eine Bank ausraubte. Doch dann sahen Sie, wie er etwas Unerwartetes mit dem Geld tat. Er spendete alles an ein heruntergekommenes Waisenhaus, das von dem Geld sehr profitieren würde. Sie müssen entscheiden, ob Sie die Polizei rufen und den Räuber anzeigen oder

nichts zu tun und den Räuber in Ruhe zu lassen.

**In der vorherigen Studie:**

* Etwa 60 % der Teilnehmer, die Ihnen in Bezug auf Feminismus zustimmen, entschieden sich, die Polizei zu rufen und den Räuber zu melden.
* approximately 85% of participants who disagreed with you about gun restrictions chose to do nothing and leave the robber alone.

**Würden Sie:**

* Definitely call the police and report the robber
* Very likely call the police and report the robber
* Probably call the police and report the robber
* Probably do nothing and leave the robber alone
* Very likely do nothing and leave the robber alone
* Definitely do nothing and leave the robber alone

**Bewertungsauswahl**

Sie haben sich entschieden, XY. Wenn Sie XY würden, wie würden Sie sich dann fühlen?

* Sehr gut
* Mäßig gut
* Geringfügig gut
* Weder gut noch schlecht
* Geringfügig schlecht
* Mäßig schlecht
* Sehr schlecht

**Verständnisprüfung**

Wir haben bei dieser Aufgabe an eine frühere Studie angeknüpft. Welche der folgenden Aussagen über die frühere Studie trifft zu, wenn man bedenkt, was wir in den Anweisungen beschrieben haben?

* Die Teilnehmer wählten, welche Aktion sie bevorzugten (richtig)
* Aufgrund eines Computerfehlers wurden die Teilnehmern nicht gleichmäßig zugeteilt. (sich die Ausführung der verschiedenen Aktionen vorzustellen) (falsch)
* Während des Experiments wurden keine Daten gespeichert. (falsch)
* Die Teilnehmer führten das Experiment mit geschlossenen Augen durch. (falsch)

**Identitätsprüfung**

Bitte bewerten Sie, wie sehr Sie den folgenden Aussagen zustimmen oder nicht zustimmen:

* Ich identifiziere mich mit Feminismus-Befürwortern
* Ich identifiziere mich mit Feminismus-Gegnern

**additional resources**

**Even arbitrary norms influence moral decision-making**

→ Here, we show that people conform to social norms, even when they understand that the norms in question are arbitrary and do not reflect the actual preferences of other people

→ Moreover, we demonstrate that the degree to which participants conform to an arbitrary norm is determined by the degree to which they self-identify with the group that exhibits the norm

**A panacea for improving citizen behaviors? Introduction to the symposium on the use of social norms in public administration** ([Link to paper](https://www.journal-bpa.org/index.php/jbpa/article/view/119))

→ Recent years have seen a growth in the use of social norm messages by local and national governments across the world. These messages have primarily been used to induce desired behaviors among the non-compliant minority by pointing to the compliance of the majority

→ descriptive vs. injunctive norms

Following Cialdini et al. (1991), descriptive norms are those that “characterise the

perception of what most people do” (p. 203), and injunctive norms are those that “characterise the perception of what most people approve or disapprove

[of]” (p. 203).

descriptive norm: “nine out of ten people pay their tax on time” → wahrgenommene tatsächliche Verhalten anderer

injunctive norm :“nine out of ten people think that people should pay their tax on time” → wahrgenommene normative Erwartung, was man tun *sollte*

Die Studie hat einen Fokus auf folgende Gebiete gelegt: “fields of health, taxation, charitable giving, energy, environment (with a focus on recycling), voter turnout, and a few other single studies in areas such as licensing and consumer purchasing.“ → Hier geht es vor allem um die Frage, ob Institutionen (z.B.: die Stadt Osnabrück) social norms nutzen sollte um gewünschtes Verhalten zu fördern (sowas wie Mülltrennung oder Energie sparen).

Fazit: administrators should in general expect modest changes in behavior from this tool even if social norms appear to have an effect in most sectors of activities.

**Self-categorization theory** ([Link to paper](https://www.researchgate.net/publication/293162479_Self-categorization_theory))

SCT is a theory of the nature of the self that recognizes that perceivers are both individuals and group member, explains how and when people will define themselves as individual and group entities and its implications, and examines the impact of this variability in self-perception ('I' to 'we') for understandings of mind and behaviour.

self-categorization theory (SCT) vs. social identity theory (SIT)

Thinking about SCT in this way the phenomena of interest is to understand, explain and predict how people come to think, feel and act as a psychological group and, importantly, the circumstances when this will occur and its consequences.

Currently, social psychologists at the Australian National University are involved in a

joint project with the local Department of Education concerned with applying core SCT

ideas to improving school outcomes such as numeracy and literacy, attendance,

challenging behaviour and staff and student wellbeing (Bizumic et al., 2009; Reynolds et

al., 2007). Based on the arguments outlined above, as people come to define

themselves as group members they should be more willing to internalize the norms and

values of the group, act in line with these norms and be influenced by those that are

most representative of the group.

**Design:**

2x2 between subject

|  |  |
| --- | --- |
| both norms shown = 0 | ingroup descriptive norm = -1 |
| both norms shown = 1 | ingroup descriptive norm = 1 |

→ The **dependent variable** was participants’ responses on the Likert

scale rating the certainty with which they would act a certain way.

* When both the ingroup and outgroup descriptive norms were shown, we **randomly varied their ordering**.

**Model comparison:**

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→ we can represent both the presence and direction of the outgroup descriptive norm based on the interaction between the two independent variables (I × B).