Design for a „Conformity to descriptive norms" experiment

Background

Peoples' norms, values and attitudes are greatly shaped by their social environment. We tend to form groups based on our common beliefs. People whose norms, values or beliefs we share are referred to as one's ingroup while people with other belief systems are viewed as one's outgroup. In this experiment we will investigate whether people are more likely to align their decisions with their social ingroup than favour the opposite decision which one's social outgroup prefers with a higher rate than one's social ingroup.

The descriptive norm effect describes the phenomenon that people tend to behave similarly to other people simply because of knowing that others would behave the same way. Previous research by Pryor, Perfors, and Howe (Pryor et al., 2019) has shown that people tend to conform to descriptive norms of those with opposing political or social beliefs when they seem to represent the majority of the people rather than agreeing with their social ingroup.

Works by Hogg, Turner, and Davidson (Hogg et al., 1990) have explored self-categorization theory which states that people will actively disagree with the beliefs of their outgroup in order to distance themselves from their outgroup. Self-categorization theory and the descriptive norm effect are somewhat contrasting as people can either actively set themselves apart from their outgroup (self-categorization theory) or conform to the descriptive norm as predicted by the descriptive norm effect.

To further investigate this topic, this study will replicate the experiment that was conducted in 2019 by Pryor et al.

Hypotheses

In this experiment we are going to address the following hypotheses:

1. People will actively disagree with the beliefs of their outgroup. Therefore mean choices of action conforming to the ingroup descriptive norm will be higher in the both norms shown condition compared to when only the ingroup norm is shown. (self-categorization theory)

2. People tend to conform to the overall descriptive norm. Therefore mean choices of action conforming to the ingroup descriptive norm will be equal or lower in the both norms shown condition compared to when only the ingroup norm is shown. (alternative hypothesis in this context)

Design

In the main trial participants are presented a moral dilemma on which they are requested to act. Accompanied by the moral dilemma, every subject will receive one or two sentences, depending on the experimental condition, showing the descriptive norm of their in- and outgroup. Since different participants have different experimental conditions, this experiment follows a 2 x 2 between-subject design. The first independent variable is the *ingroup descriptive norm* which has two levels as subject will be either shown "etwa 60% der Teilnehmer, die mit Ihnen in Hinsicht auf [social / political issue] übereinstimmen, entschieden, nichts zu tun und den Dieb laufen zu lassen" (*English: approximately 60% of participants who agreed with you about [social / political issue] chose to do nothing and leave the robber alone*) or "etwa 60% der Teilnehmer, die mit Ihnen in Hinsicht auf [social / political issue] übereinstimmen, entschieden, die Polizei anzurufen und den Dieb zu melden" (*English: approximately 60% of participants who agreed with you about [social / political issue] chose to call the police and report the robber*). The second independent variable is *both norms shown* where the levels are whether only the courses of action of the ingroup will be displayed or also those of one's outgroup.

Therefore there will be four possible experimental conditions: either the subject is shown only the descriptive norm of their ingroup with varying courses of action (reporting or leaving the robber alone) or the subject is shown the descriptive norm of their ingroup and their outgroup where the courses of action alternated among ingroup and outgroup as well.

The dependent variable we will observe is the action the participant chooses to take in the situation of the moral dilemma.

Materials:

The experiment will be conducted in German as the research takes place in Germany. Therefore, all materials and instructions are in German. Nevertheless, in this documentation we also provide the English translation of our materials which are written in italics.

(1) Social / political issues :

Klimapolitik // *climate policy*

Migrationspolitik // *migration policy*

Feminismus // *feminism*

Legalisierung von Cannabis // *legalisation of cannabis*

Rentenalter // *pension age*

Fleischkonsum // *meat consumption*

Bildung // *education*

Abtreibung // *abortion*

(2) Statements on social / political issues:

These statements will be used to identify the participant with their ingroup.

Klimapolitik: "Zum Erreichen des 1,5°C Ziels müssen strengere Maßnahmen ergriffen werden."

Migrationspolitik: "In Deutschland muss es eine Migrationsobergrenze geben."

Feminismus: "Eine Frauenquote in allen Institutionen ist essentiell für Gleichberechtigung."

Legalisierung von Cannabis: "Cannabis sollte für Erwachsene frei zugänglich sein."

Rentenalter: "Das Rentenalter sollte angehoben werden."

Fleischkonsum: "Auf Fleisch muss gänzlich verzichtet werden."

Bildung: "G8 sollte in ganz Deutschland eingeführt werden."

Abtreibung: "Jede Frau sollte die Möglichkeit haben, ihr Kind bis zum 3. Schwangerschaftsmonat abzutreiben."

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Climate policy: *"To achieve the 1,5° degree goal we need to have stricter restrictions."*

Migration policy: *"In Germany there must be an upper limit on migration."*

Feminism: *"A women's quota in every institution is essential for equality."*

Legalisation of Cannabis: *"Cannabis should be freely available for every adult."*

Pension age: *"The pension age should be increased.."*

Meat consumption: *"Meat must be avoided entirely."*

Education: *"G8 should be introduced in all schools in Germany." (G8 is a form of high school, students graduate after eight years of high school (after twelfth grade) instead of nine years.)*

Abortion: *"Every woman should have the right to get an abortion until the third month of her pregnancy."*

(3) 11-Point Likert Scale

Stimme gar nicht zu   ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪   Stimme voll zu

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Fully Disagree   ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪   Fully Agree

(4) Instruction on moral dilemma:

Wir führen dieses Experiment als Folgestudie einer bereits veröffentlichten Studie durch. Diese Studie beschäftigte sich mit der Frage wie sich Menschen in moralischen Dilemmata fühlen.

In der Studie wurde ein moralisches Dilemma vorgestellt, zu welchem den Teilnehmern zwei mögliche Handlungsschritte präsentiert wurden. Die Teilnehmer suchten sich den Handlungsschritt aus, den sie bevorzugten und sollten angeben wie sie sich mit dieser Entscheidung fühlten.

In diesem Experiment wird Ihnen nun auch ein moralisches Dilemma präsentiert. Sie müssen ebenfalls entscheiden wie Sie handeln würden und im Anschluss angeben wie gut oder schlecht Sie sich mit Ihrer Entscheidung fühlen würden.

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We are running this experiment as a follow-up study on a previously published study. This study looked at how people feel about moral dilemmas.

In the previous study, a moral dilemma was described that involved two possible courses of actions. Participants chose the action step they preferred and were asked to indicate how they would feel about that decision.

In this study, you will be presented with a scenario describing a moral dilemma. You will also choose which action you would take and then provide a rating of how good or bad you would feel about your choice.

(5) Moral dilemma

Stellen Sie sich vor, Sie hätten einen Mann dabei beobachtet, eine Bank auszurauben. Allerdings, beobachteten Sie ihn dann dabei, wie er etwas Unerwartetes mit dem Geld machte. Er spendete das gesamte Geld an ein heruntergekommenes Waisenhaus, wo es sehr gut gebraucht werden konnte. Sie müssen entscheiden, ob Sie die Polizei verständigen und den Dieb melden oder ob Sie die Sache auf sich beruhen lassen und den Dieb laufen lassen.

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Original:

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.

(6) Ingroup and outgroup descriptive norms

In der vorherigen Studie haben….

...etwa 60% der Teilnehmer, die mit Ihnen in Hinsicht auf [social / political issue] übereinstimmen, entschieden, nichts zu tun und den Dieb laufen zu lassen.

… etwa 60% der Teilnehmer, die mit Ihnen in Hinsicht auf [social / political issue] übereinstimmen, entschieden, die Polizei anzurufen und den Dieb zu melden.

…. etwa 85% der Teilnehmer, die Ihnen in Hinsicht auf [social / political issue] widersprechen, entschieden, nichts zu tun und den Dieb laufen zu lassen.

… etwa 85% der Teilnehmer, die Ihnen in Hinsicht auf [social / political issue] widersprechen, entschieden, die Polizei anzurufen und den Dieb zu melden.

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In the previous study...

… approximately 60% of participants who agreed with you about [social / political issue] chose to do nothing and leave the robber alone.

… approximately 60% of participants who agreed with you about [social / political issue] chose to call the police and report the robber.

… approximately 85% of participants who disagreed with you about [social / political issue] chose to do nothing and leave the robber alone.

… approximately 85% of participants who disagreed with you about [social / political issue] chose to call the police and report the robber.

(7) Statements about decision on dilemma:

Würden Sie:

Definitiv die Polizei anrufen und den Dieb melden.

Höchstwahrscheinlich die Polizei anrufen und den Dieb melden.

Vermutlich die Polizei anrufen und den Dieb melden.

Vermutlich nichts tun und den Dieb laufen lassen.

Höchstwahrscheinlich nichts tun und den Dieb laufen lassen.

Definitiv nichts tun und den Dieb laufen lassen.

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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.

(8) 7-Point Likert Scale

Wie fühlen Sie sich mit Ihrer Entscheidung?

Sehr schlecht (1) (2) (3) (4) (5) (6) (7) Sehr gut

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How do you feel about your decision?

Very bad (1) (2) (3) (4) (5) (6) (7) **Very good**

(9) Understanding check:

Wie zuvor erwähnt wird dieses Experiment in Folge einer anderen Studie durchgeführt. Mit den Informationen, die Sie über die vorherige Studie bekommen haben, welche Aussage trifft auf das vorherige Experiment zu?

1. Die Teilnehmer entschieden sich für ihre bevorzugte Handlung. *(correct)*
2. Wegen eines Computerfehlers wurden die Teilnehmer nicht gleichmäßig aufgeteilt um sich vorzustellen, die verschiedenen Handlung auszuführen. *(incorrect)*
3. Es wurden während des Experiments keine Daten gespeichert. *(incorrect)*
4. Die Teilnehmer absolvierten das Experiment mit geschlossenen Augen. *(incorrect)*

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As mentioned earlier, this experiment is being carried out as a follow up to another study. With the information you received about the previous study, which statement applies to the previous experiment?

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

(10) Identity check:

The following items represent the ingroup and outgroup names for each social / political issue. In respect to the previously presented statements, the items are listed as follows :

ingroup // outgroup

Bitte wählen Sie nun aus, inwiefern Sie den folgenden Aussagen zustimmen.

"Ich identifiziere mich mit [ingroup]."

"Ich identifiziere mich mit [outgroup]."

Klimaaktivisten // Klimakrisenleugnern

Migrationsgegnern // Migrationsbefürwortenden

Feministen // Nicht-Feministen

Legalisierungsbefürwortenden // Legalisierungsgegnern

Befürwortenden zur Anhebung des Rentenalters// Befürwortenden zur Beibehaltung des Rentenalters

Veganern und Vegetariern // Omnivoren

G8-Befürwortenden // G9-Befürwortenden

Pro-Choice-Befürwortenden // Pro-Life-Befürwortenden

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Please choose to what extent you agree with the following statements.

"I identify with [ingroup]."

"I identify with [outgroup]."

Climate Activists // Deniers of the Climate Crisis

Anti-Migration Advocates // Pro-Migration Advocates

Feminists // Non-Feminists

Pro-Legalisation Advocates // Anti-Legalisation Advocates

Pension-Age-Increase Advocates // Pension-Age-Remain Advocates

Vegans and Vegetarians // Omnivores

G8 Advocates // G9 Advocates

Pro-Choice Advocates // Pro-Life Advocates

Procedure:

The experiment consists of 5 parts:

I.   Introduction and short questionnaire on gender and age

II.   Social / political issues

III.   Moral dilemma (main trial)

IV.   Control trial

V.   Identity check (main trial)

(I) The experiment starts with a short introduction and general survey regarding age/gender etc.

(II) This is followed by a set of eight socially critical topics (1) from which the participant has to select one. Following that, a statement is presented to the participants for example if they have selected the topic meat consumption they will be presented with the statement "Auf Fleisch muss gänzlich verzichtet werden" (*English*: "*Meat must be avoided entirely*"). In order to carry out a preliminary classification of ingroup and outgroup members, the participants are shown an 11-Point Likert Scale (3) from Fully Disagree to Fully Agree ((-5) to 5) to what extent they agree or disagree with the statement.

(III) The next step is to inform the participant that this experiment is being conducted as a follow-up study to a previous paper (4), explaining that the original paper is concerned with the actions taken in situations of a moral dilemma and the emotions associated with these actions. Afterwards, the participants are presented with a moral dilemma (5) describing a situation where they witnessed a robbery and are now asked to act on this observation, as well as a statement on the ingroup descriptive norm (6) below the moral dilemma, such as 60% of the participants who agree with them on [social/political issue] would report the robber or 60% of the participants who agree with them on [social/political issue] would leave the robber alone. 50% of the participants will only be shown the descriptive norm of their ingroup while the other half will also see a statement on the outgroup descriptive norm claiming that 85% of the participants who disagree with them on the chosen political and social issue chose to report the robber or leave them alone. The ingroup and outgroup descriptive norms are always different from one another and therefore if both norms are shown, both possible courses of action are covered (report or leave alone). Participants are now presented with a rating of the dilemma in which they have to decide on a six-point scale (7) whether they would tend to definitely report the robber or definitely leave the robber alone.
Then they will be asked how they feel about their decision (8) to support the backstory of the previous research.

(IV) In order to ensure that all participants have followed the instructions carefully, an understanding check (9) follows, which is intended to prevent participants from making random decisions when selecting the previous questions.

(V) Last but not least, Postmes, Haslam, and Jan's single-item social identification measure (Postmes et al., 2013) is used (10). This includes an assignment of whether the test person identifies with the relevant ingroup and separates himself/herself from the relevant outgroup.

References

Hogg, M.A., Turner, J. C., & Davidson, B. (1990). Polarized norms and social frames of reference: A test of the Self-Categorization Theory of group polarization. *Basic and Applied Social Psychology*, 11(1), p. 77–100.

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Pryor, C., Perfors, A., & Howe, P. D. L. (2019). Conformity to the descriptive norms of people with opposing political or social beliefs. Retrieved on July 30, 2021, from https://doi.org/10.1371/journal.pone.0219464