

# Supplementary materials for: Is the warm glow actually warm? An experimental investigation into the nature and determinants of warm glow feelings

Robin T. Bianchi · Florian Cova · Emma Tieffenbach

## Supplement 1. Full questionnaire for Study 1

### 1.1 Introduction

Thank you for agreeing to participate in this study. We are researchers interested in understanding emotions, how they differ from each other and their relationship to altruistic behaviour.

**Procedure:** In this study, you will be asked to describe a moment of your life when you acted generously. After that, you will be asked to answer several series of question about (i) what you experienced in this moment. Emotions you can be asked about include (but are not limited to): Anger, Contempt, Disgust, Fear, Joy, Pride, Sadness, Surprise, Admiration, Amusement, Awe, Being Moved, Compassion, Elevation, Gratitude, Indignation or Moral Outrage.

This is a rather long study. Your participation might take between 15 and 20 minutes.

**Compensation:** Your participation in this research will be paid GBP 2.00.

**Data protection:** The data collected (demographic information such as age and gender, answers to questions) will be anonymised, meaning that all personal data that would allow someone to identify you will be deleted within one week of your participation. As a consequence, we won't be able to delete your data after this date, if ever you request us to do so. Anonymised data will be stored on the institutional computer of Pr. Florian Cova, the access to which is protected by a password. Their conservation is not limited in time. The use of these anonymised data might include inclusion in future research, or sharing with other researchers.

Participants' Prolific Academic's ID will be collected during this study and will appear in our datafile, as collecting them is necessary to ensure that we do not pay people who did not in fact participate. However, this information will be deleted after participants' are paid (within two weeks from participation).

Data from participants who leave the study before the end will be neither stored, nor used. You are free to leave the study at any moment, but understand that this means we won't pay you as we won't be able to use the data you provided.

**Information about research results:** If you want to be informed of the results of our studies, please send an email to: [florian.cova@gmail.com](mailto:florian.cova@gmail.com), starting from May 1st 2022. Note that no information will be provided about individual results, and that only general results will be communicated.

**Research supervision:** This research is supervised by Prof. Florian Cova, Swiss Center for Affective Sciences, Campus Biotech, 9 Chemin des Mines, CH - 1202 Geneva ([Florian.Cova@unige.ch](mailto:Florian.Cova@unige.ch))

Contact person: For information about this research, please contact Dr. Florian Cova, Swiss Center for Affective Sciences, Campus Biotech, 9 Chemin des Mines, CH - 1202 Geneva (Florian.Cova@unige.ch)

## 1.2 Questions

### 1.2.1 Consent

On the basis of the information you just received, and provided that your anonymity will be respected:

Do you authorise us to use your answers for scientific purposes, including the publication of our results in scientific journals and volumes?

- YES (1)
- NO (2)

Do you authorise us to use your answers for teaching purposes?

- YES (1)
- NO (2)

### 1.2.3 Identification

ID Thank you for your participation. If you come from Mechanical Turk or Prolific Academic, please enter your Worker ID here: \_\_\_\_\_

### 1.2.4 Instructions

Instructions Please, take a few minutes and try to remember an episode of your life when you acted generously and made a donation to help someone you did not know or had very little chance to get to know.

This includes the following situations:

\*A time when you gave money to a charity, a non-profit organization, a non-profit association, or a private or public institution (it comprehends donations to website, YouTube channel, online fund, etc.). For instance, religious foundations, NGO, wildlife parks or funds, a monument or public institution such as an opera, a theatre, or else an association for animals' protection, or that militates for certain rights, etc.

\*A time when you gave money to people who were not friends or part of families (for example, someone asking for money in the street).

Q1a: Take a few minutes to remember a particular time in your life when you acted in the above described way. Then describe in a few lines the situation you just remembered.

Please describe only ONE situation. Possible situations include the following situations:

\*A time when you gave money to a charity, a non-profit organization, a non-profit association, or a private or public institution (it comprehends donations to website, YouTube channel, online fund, etc.). For instance, religious foundations, NGO, wildlife parks or funds, a monument or public institution such as an opera, a theatre, or else an association for animals' protection, or that militates for certain rights, etc.

\*A time when you gave money to people who were not friends or part of families (for example, someone asking for money in the street).

(Please, take care not to provide any information that would betray our identity or another person's identity).

Please, answer this question seriously. All the rest of the questionnaire depends on it. If you don't, your work will be rejected.

Also, take care to write in PROPER ENGLISH. Answers that we cannot decipher won't be taken into consideration.

---

---

---

---

---

### 1.2.5 Details

To which of the following categories the situation you just remembered belonged to?

- Gift to someone asking you for money (1)
- Gift to a charity/non-profit organisation/non-profit association (2)
- Gift to a public or private institution (university, monument, school, church, mosque, etc.) (3)
- Gift to a website (or a YouTube channel) (4)
- Gift to an online fund (someone requesting help personally online through a fund) (5)
- Others, please indicate it here: (6) \_\_\_\_\_

When did this episode take place?

- During the last 12 months (1)
- From one to 3 years ago (2)
- From 3 to 5 years ago (3)
- Between 5 and 10 years ago (4)
- More than 10 years ago (5)

### 1.2.6 Basic Dimensions

Now, focus on what you experienced and what thoughts went through your mind directly after the moment you made your donation.

### 1.2.7 Description

Describe in a few lines the feelings and emotions you experienced directly after making your donation.

---

---

---

---

---

### 1.2.8 Emotion labels

Enter five separate words that would describe the emotions you experienced directly after making your donation.

---

### 1.2.9 Pleasure

To what extent your state of mind directly after your generous action was pleasant?

- 3: very unpleasant (2)
- 2 (3)
- 1 (4)
- 0: neither pleasant nor unpleasant (5)
- 1 (6)
- 2 (7)
- 3: very pleasant (8)

### 1.2.10 Anticipation

Anticipation Before giving, were you already enjoying the thought of helping someone else?

- 0: Not at all (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5: A lot (6)

### 1.2.11 Affects

**Affects Emotions - Immediately after your donation, to which extent did you experience or feel**

	<b>0: not at all (1)</b>	<b>1 (2)</b>	<b>2 (3)</b>	<b>3 (4)</b>	<b>4 (5)</b>	<b>5 (11)</b>	<b>6: very strongly (12)</b>
Anxiety (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compassion (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contentment (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contempt (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Excitement (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Embarrassed (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exhilaration (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiasm (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fascination (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fear (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of injustice (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of elevation (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of awe (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grateful (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilt (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Happiness (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hate (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indignation (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspiration (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joy (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Love (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pride (25)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relief (26)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sadness (27)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thankful (28)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thrilled (29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Touched (30)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uplifted (31)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curious (32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Serenity (33)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lucky (41)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tenderness (42)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sympathy (43)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling of inner satisfaction (45)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A self-esteem boost (46)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An alleviation from guilt (47)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A warm glow (48)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comfort (49)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Indicate whether you experienced any of the following sensations or feelings in the remembered situation, and if so, to what extent:**

	<b>0: not at all (2)</b>	<b>1 (3)</b>	<b>2 (4)</b>	<b>3 (5)</b>	<b>4 (6)</b>	<b>5 (9)</b>	<b>6: very strongly (10)</b>
Chills (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blushing (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Choked up (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goosebumps (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm feelings in the chest (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm feelings in the body (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt cold (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I gasped (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased heart rate (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lump in the throat (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moist eyes (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muscles relaxed (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muscles tensed (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Refreshed, energised or exhilarated (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Swollen chest (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm feeling in the heart (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wanting to smile (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wanting to laugh (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt energetic (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1.2.12 Cognitive feelings and sentiments

**To which extent did you experience the following feeling or have the following thought in the situation you remembered? (0 = not at all; 6 = very strongly)**

	0: not at all (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (8)	6: very strongly (9)
I felt like I was a part of something bigger than myself (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt a sense of oneness with others (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt a close bond with others (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt a close bond with humanity (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt a sense of communion with all living things (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like my life was meaningful (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like my life was meaningless (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt my sense of self become somehow smaller (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt optimistic about humanity (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt part of some greater entity (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt powerful (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like what I did mattered (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I was making a difference (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt useless (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt useful (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt committed to a cause (25)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I finally knew my place in the great scheme of life (26)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like my daily concerns and issues weren't that important after all (27)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

I had the feeling I did what needed to be done (28)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I helped someone in need (29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I did contribute to the common good (30)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I overcame my egoistic inclinations (31)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I did the right thing (32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I was lucky not to be the one in need (33)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I did something good (34)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I did what society expected of me (35)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I was relieved of a burden (36)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I was at peace with myself (37)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I was obeying God's will (38)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt a sense of purpose (39)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt a sense of belonging (40)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I was a part of a greater whole (41)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought human nature was not that bad after all (43)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

### 1.2.13 Self-appraisal

**To what extent the following sentences describe how you felt about yourself immediately after your gift? (0 = not at all; 6 = completely):**

	0: not at all (10)	1 (11)	2 (12)	3 (13)	4 (14)	5 (15)	6: completely (16)
I felt generous (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt bad about not doing this more frequently (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I did what I was supposed to do (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I merely did what duty required (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I was a better person (49)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt good about contributing to the common good (50)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It felt good to be able to help (51)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was proud to do something good (52)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like it made me a better person (53)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It felt good to be generous (54)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was proud of me for doing this (55)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that doing this made me worthy (57)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt moral (58)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt confident about myself (59)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I had merit (60)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I had outgrown myself (61)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt closer to my ideals (62)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I lived up to my ideals (64)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt a boost of self-esteem (65)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt admirable (66)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I went beyond my selfish concerns (67)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt ethically or morally praiseworthy (68)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt it was easier to live with myself (69)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I was better than most people. (70)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt superior. (71)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



#### 1.2.14 Praiseworthiness

Do you think what you did is something worthy of praise? (0 = not at all; 6= very strongly)

- 0: not at all (1)
- 1 (23)
- 2 (24)
- 3 (25)
- 4 (26)
- 5 (27)
- 6: very strongly (28)

#### 1.2.15 Duty

Do you think of your act as a duty? (0=not at all; 6 very strongly)

- Non (23)
- 1 (60)
- 2 (61)
- 3 (62)
- 4 (63)
- 5 (64)
- 6: very strongly (65)

#### 1.2.16 Incline of others

Do you think telling others what you did could inspire them to do something similar? (0= not at all; 6 very strongly)

- 0: not at all (1)
- 1 (2)
- 2 (7)
- 3 (8)
- 4 (9)
- 5 (10)
- 6: very strongly (11)

#### 1.2.17 Pride

Does thinking about your generous action make you proud of yourself? (0 = not at all; 6 = very strongly)

- 0: not at all (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6: very strongly (7)

#### 1.2.18 Morality

Do you think of your action as morally good? (0 = not at all; 6 = totally)

- 0: not at all (1)
- 1 (2)

- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6: totally (7)

*1.2.19 Merit*

Do you think what you did is something worthy of merit? (0 = not at all; 6 = very strongly)

- 0: not at all (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6: very strongly (7)

*1.2.20 External observers*

Did the recipient of your donation know that you were the donator?

- YES (2)
- NO (4)

Apart from you, does someone else know that you made this donation?

- YES (1)
- NO (2)

*1.2.21 What other people think*

**Others Were other people to learn about your generous action, to what extent do you think they would think of you in the following ways? (0 = not at all; 6 = very strongly)**

	0: not at all (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (6)	6: very strongly (7)
They would think I am a good person (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am generous (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am a fool (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am losing my time and money (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I just want to show off (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think more people should act as I did (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am an	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

honorable person (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am an idealist (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am a moral person (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I deserve respect (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am dutiful (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am wrong to do this (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I could do better things with my money (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 1.2.22 Consequences and impact

Reflecting on what you did, how would you assess the impact of your donation on the person(s) you helped, or regarding the cause you helped?

- 0: Unfortunately, it had no impact at all (1)
- 1: It had a very minimal impact (2)
- 2: It had little impact (3)
- 3: It had a modest impact (4)
- 4: It had more than a modest impact (5)
- 5: It had a significant impact (6)
- 6: It really made a difference (7)

**Still reflecting on the outcome of your donation, to what extent the following sentences do apply to your case? (0 = not at all; 6 = totally)**

	0: not at all (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (6)	6: totally (7)
I did what I could to help (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did my best to help (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It really helped someone (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It really helped a cause (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was efficient (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was inefficient (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If more people acted like this, it would have a more significant impact (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could have done better/more (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 1.2.23 Impact

Since you made the donation you remembered, did you make a lot of donations of the same kind?

- No, never, and I don't intend to do it again (1)
- No, never, though I intend to do it at some time (2)
- Yes, once or twice (3)
- Yes, regularly (4)

**Scale For each of the following statements, indicate to which extent you agree with each of the following statements (1: strongly disagree, 5: strongly agree)**

	1: Strongly disagree (1)	2 (2)	3 (3)	4 (4)	5: Strongly agree (5)
Supporting other people makes me very happy (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not feel obligated to perform selfless acts towards others (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not have a great feeling of happiness when I have acted unselfishly (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel indebted to stand up for other people (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I was able to help other people, I always felt good afterwards (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not regard it as my duty to act selflessly (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helping people who are doing not well does not raise my own mood (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel a strong duty to help other people in every situation where it is possible for me (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a human being (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can shoot lasers with my eyes (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 1.2.24 Demographics

Age: (Please, only enter numbers, no words, e.g. 33):

---

Do you identify yourself as:

- A man (1)
- A women (2)
- Other (3) \_\_\_\_\_

What is your nationality?

---

*1.2.25 Education*

Are you a student?

- YES (1)
- NO (2)

*Display This Question:*

*If Are you a student? = YES*

To the best of your knowledge, what is the education level of your parent who has had the most education?

- Grade/elementary school (1)
- High school (2)
- College or university degree: in which field? (3) \_\_\_\_\_
- Graduate degree, Masters: in which field? (4) \_\_\_\_\_
- PhD: in which field? (5) \_\_\_\_\_

*1.2.26 Religion*

What is your current religious affiliation(s)? Please circle all that apply:

- None (1)
- Catholic (2)
- Evangelical (3)
- Protestant (other than evangelical) (4)
- Mormon (5)
- Orthodox (6)
- Other Christian (7)
- Jewish (8)
- Hindu (9)
- Buddhist (10)
- Shinto (11)
- Confucian (12)
- Daoist (13)
- Jain (14)
- Sikh (15)
- Muslim (16)
- Atheist or agnostic (17)
- Other: (18) \_\_\_\_\_

*1.2.26 Code*

Code You can now go back to Prolific Academic and enter the following completion code:

2566008F

- I have received my code. (1)

### 1.3 Types of donations for Study 1

The first author went through participants' descriptions of their donations a first time to identify salient and theoretically relevant categories in which these donations could be classified. There are several reasons why we chose to categorize donations as we did. One important motivation behind our distinctions was to distinguish (i) cases in which people directly hand over their gift to their recipient, (i.e. they are in direct contact with the person who benefits from the gift); and (ii) cases in which their gift involved a 'third party' like a charity, a non-profit organization, a university, and so on. The latter category is characterized by the fact that the gift was not directly handed over to the recipient (although charities sometimes provide pictures or news about the recipients that have benefited from the gift made). The first point (i) always involved a direct visual contact with the recipient. Hence people who paid for a stranger's bill at the restaurant, or who paid for the groceries of a stranger are categorized as belonging to (i).

The first category is labelled 'DIRECT DONATIONS TO PEOPLE'. It involves:

- Gifts of money to the homeless directly (by orally addressing the participant) asking for help or money,
- Gifts of money to the homeless indirectly asking for help or money (by holding a written sign),
- Gift of money to the homeless neither asking directly nor indirectly,
- Gift of money to people in need (that are thought of as needing help by the participants),
- Paying the bill of strangers at a restaurant,
- Directly buying and offering food to a stranger,
- Buying and offering goody bags (composed of 'essentials') to strangers,
- Paying for the groceries of a stranger,
- Buying groceries and directly giving it to strangers.

The second category is labelled 'DONATIONS TO CHARITIES'. it involves:

- Gift to non-profit association,
- Gift to charity,
- Gift to NGO/ non-profit organization,
- It also involves the gift of food or items that have been especially bought for the purpose of being gifted to a charity.

The third category is labelled 'DONATIONS TO INSTITUTIONS'. It involves:

- Gift to a religious foundation or institution (church, mosque, etc.),
- Gift to a college or university,
- Gift to public establishments (schools, parks, etc.),
- Gift to museum, arts, opera, ballet company, etc.,
- Gift to private institutions,
- Gift to a political campaign,
- Gift to a political party.

The fourth category is labelled ‘ONLINE DONATIONS TO PEOPLE’. It involves:

- Gift to a Go Fund Me,
- Gift to people raising funds online (to pay for a surgical operation/ a medication, etc.).

The fifth category is labelled ‘DONATIONS TO WEBSITE’. It involves:

- Gift to a YouTube channel
- Gift to Wikipedia

The sixth category is labelled ‘FUNDRAISING’. It involves:

- people raising funds for a cause or for a person.

To be clear, if the participants made their donation using Internet or through a website to a foundation or a charity, the gift is categorized as CHARITY. As long as the gift is not directly directed at a Website it is not categorized as WEBSITE. Moreover, the motivation behind introducing the category of ONLINE is that the gift is personal, in the sense that it is not directed at a charity, a group or association, but directly at an individual (or his family and friends), but it is not direct in the sense that the money is not handed over personally to the recipient (as it is the case for DIRECT).

Initially, we attempted to distinguish between gift to people asking for help, and gift to people saw as being in need (but not asking). However, some cases were hard to classify as belonging to either of these categories, and participants’ description did not allow to clearly draw a distinction between these two. For this reason, they are all reunited under the label DIRECT.

Once all authors agreed on the list of categories, the first author went through participants’ descriptions of their donation a second time to categorize them one by one.

#### 1.4 Effect of anonymity for Study 1

Only 29 donations were completely anonymous. There was no significant difference in positive affect between anonymous ( $M = 2.59, SD = 1.24$ ) and non-anonymous ( $M = 2.90, SD = 1.11$ ):  $t(33.81) = 1.29, p = .21$ .

#### 1.5 Analysis of open-ended answers for Study 1

We asked participants to give five words describing the emotions they experienced directly after making their donation. Using the ATLAS.ti, Version 23.2.0 (4305) software, we computed the number of occurrences of each word. The more frequent words and their number of occurrences are described in Table S1.

**Table S1. Most frequent words given by participants to describe their emotions, together with their total number of occurrences.**

1.2.8 Emotion lables.docx		
	Absolute	Within the table
Happy Gr=157	157	12.19%
Proud Gr=69	69	5.36%
Grateful Gr=65	65	5.05%



---

Hopeful	46	3.57%
Gr=46		
Satisfied	46	3.57%
Gr=46		
Sad	43	3.34%
Gr=43		
Content	35	2.72%
Gr=35		
Joyful	33	2.56%
Gr=33		
Relieved	29	2.25%
Gr=29		
Helpful	28	2.17%
Gr=28		
Generous	28	2.17%
Gr=28		
Good	25	1.94%
Gr=25		
Thankful	25	1.94%
Gr=25		
Fulfilled	25	1.94%
Gr=25		
Empathetic	24	1.86%
Gr=24		
Excited	24	1.86%
Gr=24		
Pleased	21	1.63%
Gr=21		
Warm	17	1.32%
Gr=17		
Compassionate	15	1.16%
Gr=15		
Accomplished	14	1.09%
Gr=14		
Kind	14	1.09%
Gr=14		
Peaceful	14	1.09%
Gr=14		
Blessed	12	0.93%
Gr=12		
Glad	12	0.93%
Gr=12		
Sympathetic	11	0.85%
Gr=11		
Concerned	11	0.85%
Gr=11		
Thoughtful	11	0.85%
Gr=11		
Guilty	10	0.78%
Gr=10		
Pleasant	10	0.78%
Gr=10		

---

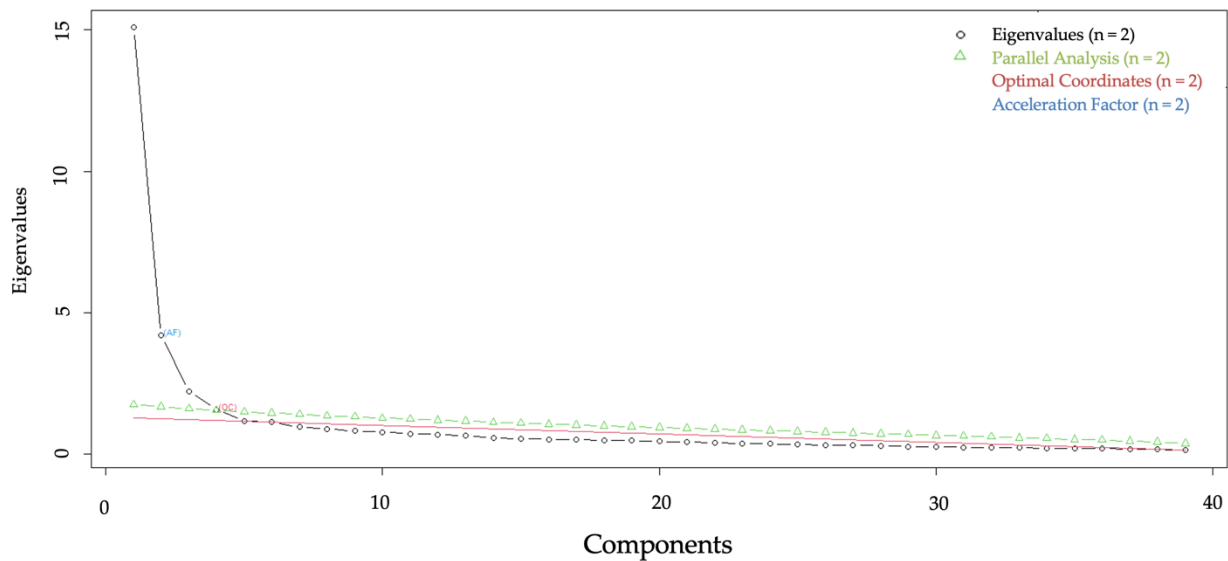
---

Humble Gr=10	10	0.78%
Giving Gr=9	9	0.70%
Worried Gr=9	9	0.70%
Angry Gr=9	9	0.70%
Calm Gr=9	9	0.70%
Useful Gr=8	8	0.62%
Loving Gr=8	8	0.62%
Regretful Gr=8	8	0.62%
Sorrowful Gr=7	7	0.54%
Nervous Gr=7	7	0.54%
Nice Gr=7	7	0.54%
Anxious Gr=6	6	0.47%
Curious Gr=6	6	0.47%
Appreciated Gr=6	6	0.47%
Confused Gr=5	5	0.39%
Positive Gr=5	5	0.39%
Doubtful Gr=5	5	0.39%
Charitable Gr=5	5	0.39%
Pityful Gr=5	5	0.39%
Selfless Gr=5	5	0.39%
Emotional Gr=5	5	0.39%

---

### 1.6 Exploratory factor analyses for Study 1

We ran an exploratory factor analysis with Promax rotation on the 39 emotion labels. Observation of the Scree plot, Parallel analysis, and Optimal coordinates suggested four factors, while observation of Eigenvalues suggested six factors (see Figure S1).

**Figure S1. Scree plot and non-graphical solutions to scree test for emotional labels (Study 1).**


However, on a six-factor analysis, factor ML2 did not make any theoretical sense, and most of the items loading on it showed cross-loadings. Factor ML4 made conceptual sense (it brought together “grateful”, “thankful”, and “lucky”) but was limited to three items (see Table S2a and Table S2b).

**Table S2a. Factor loadings for the six-factor solution to emotion labels (Study 1). Factor loadings > .30 are highlighted in bold.**

	ML1	ML5	ML6	ML3	ML4	ML2
Affects_Anxiety	-0.02167507	-0.01516931	0.08438974	<b>0.65467821</b>	-0.11179772	-0.07128486
Affects_Compassion	0.29619745	<b>0.56988252</b>	-0.17669122	0.06123253	0.03496517	0.05081966
Affects_Contentment	<b>0.66313294</b>	0.00657293	0.0435676	-0.07043401	-0.01469795	0.06740335
Affects_Contempt	-0.12186973	0.01512508	<b>0.42935642</b>	0.04631537	0.091489	0.15557505
Affects_Excitement	<b>0.59679964</b>	-0.04566411	<b>0.50878499</b>	0.05750869	-0.00152458	-0.03721459
Affects_Embarrassed	0.07746563	-0.271179	0.12323841	<b>0.54842704</b>	0.01249353	0.10044132
Affects_Exhilaration	<b>0.42799377</b>	-0.02309926	<b>0.5303213</b>	0.0050338	0.02921778	0.1098587
Affects_Enthusiasm	<b>0.67153841</b>	-0.12601778	0.38181298	-0.05266868	0.02095898	0.09469735
Affects_Fascination	0.02958827	-0.01501757	<b>0.67985414</b>	-0.08915916	-0.03361491	<b>0.51766056</b>
Affects_Fear	-0.09232971	-0.02148005	0.20180105	<b>0.62712514</b>	-0.02626454	-0.04649771
Affects_Injustice	0.09295503	0.25783511	-0.2008364	<b>0.72633579</b>	-0.00654465	-0.03777096
Affects_Elevation	<b>0.58588288</b>	0.05597005	0.23231488	-0.03903909	-0.08847195	0.21287248
Affects_Awe	0.21466643	0.21888939	<b>0.53996238</b>	-0.05286209	-0.00401533	0.04875552
Affects_Grateful	0.06241767	-0.10727644	0.06642732	0.01792988	<b>0.95795855</b>	-0.11483116
Affects_Guilt	0.02766083	-0.00445374	-0.16667329	<b>0.690625</b>	0.04738963	0.06194537
Affects_Happiness	<b>0.98474163</b>	0.07227433	-0.04192213	0.06137954	0.09597247	<b>-0.41754249</b>
Affects_Hate	-0.10093861	-0.11859558	0.19789202	<b>0.45785548</b>	-0.01567792	-0.01935329
Affects_Indignation	0.0370223	0.0732126	<b>0.40221484</b>	0.22029712	0.03931546	0.03109366
Affects_Inspiration	0.2296465	<b>0.35375885</b>	<b>0.40299521</b>	-0.07575734	0.10428913	0.01227095
Affects_Joy	<b>0.96060634</b>	-0.01707317	0.1058307	0.06448313	0.09639012	<b>-0.40446416</b>
Affects_Love	0.20628029	<b>0.55377317</b>	<b>0.3391466</b>	0.05781911	0.02524548	-0.13742924
Affects_Moved	0.10530247	<b>0.65651622</b>	0.24814072	-0.00862177	-0.01329442	0.10799934
Affects_Pride	<b>0.7126935</b>	-0.17778807	0.09191448	-0.01993835	0.04517235	0.02296336
Affects_Relief	0.22617712	0.04001563	0.19844508	0.11806721	0.08354932	0.23487742
Affects_Sadness	<b>-0.31860189</b>	<b>0.37612627</b>	-0.24305796	<b>0.56580098</b>	0.10195697	0.05001187
Affects_Thankful	0.06054712	0.04318857	-0.02073335	-0.04221438	<b>0.82799727</b>	-0.02337463
Affects_Thrilled	<b>0.45254121</b>	-0.01011132	<b>0.53115492</b>	-0.08050132	-0.02827822	0.11368571
Affects_Touched	-0.04149449	<b>0.73318948</b>	0.34027154	-0.11036434	0.03104258	0.01896267

Affects_Uplifted	<b>0.70249068</b>	0.15544301	0.12244897	-0.09992388	0.02494642	-0.13481383
Affects_Curious	-0.18974253	0.09357731	<b>0.40055824</b>	0.02256109	-0.08760601	<b>0.50421605</b>
Affects_Serenity	<b>0.33675018</b>	0.23190511	<b>0.30121659</b>	-0.18294047	0.01432525	0.11932208
Affects_Lucky	-0.01013286	0.10533888	0.06526124	0.0568454	<b>0.49734973</b>	0.21241419
Affects_Tenderness	0.14098879	<b>0.8075539</b>	0.09616549	0.15705808	-0.1680954	-0.03364114
Affects_Sympathy	-0.2336478	<b>0.59488515</b>	0.05424257	0.17451374	0.02706606	<b>0.32104592</b>
Affects_Satisfaction	<b>0.92098528</b>	-0.05536682	-0.05254279	-0.07240842	-0.01202026	-0.06535361
Affects_Esteem	<b>0.75168068</b>	0.04450241	0.09634486	0.09277771	-0.08837867	0.02582248
Affects_Alleviation	<b>0.43113892</b>	-0.09996085	-0.07633841	<b>0.31841787</b>	-0.03383425	0.09820351
Affects_WarmGlow	<b>0.6991027</b>	0.26412349	0.03859904	-0.02948838	-0.12183378	-0.05363996
Affects_Comfort	<b>0.52700814</b>	0.20745456	0.21463631	-0.06139762	0.04691676	-0.04785356

**Table S2b. Proportion of variance explained by each factor in the six-factor solution to emotion labels (Study 1).**

	ML1	ML5	ML6	ML3	ML4	ML2
SS loadings	8.64	3.96	3.96	3.06	2.04	0.89
Proportion Var.	0.22	0.10	0.10	0.08	0.05	0.02
Cumulative Var.	0.22	0.32	0.42	0.50	0.56	0.58
Proportion Explained	0.38	0.18	0.18	0.14	0.09	0.04
Cumulative Proportion	0.38	0.56	0.73	0.87	0.96	1.00

On the contrary, the factors captured by the four-factors analysis were coherent with previous studies (see Tables S3a, S3b and S3c).

**Table S3a. Factor loadings for the four-factor solution to emotion labels (Study 1). Factor loadings > .30 are highlighted in bold.**

	ML1	ML4	ML3	ML2
Affects_Anxiety	-0.16205594	-0.11402143	0.12408769	<b>0.5627654</b>
Affects_Compassion	0.27974724	<b>0.6438528</b>	-0.17931806	0.10250465
Affects_Contentment	<b>0.69393495</b>	0.02382145	0.02504461	-0.02339116
Affects_Contempt	-0.07910157	0.07990283	<b>0.4155106</b>	0.07379123
Affects_Excitement	<b>0.48065928</b>	-0.04654221	<b>0.55244189</b>	-0.01255264
Affects_Embarrassed	0.10353341	-0.28113647	0.11040936	<b>0.57209713</b>
Affects_Exhilaration	<b>0.41605767</b>	0.00139165	<b>0.53943459</b>	0.00976507
Affects_Enthusiasm	<b>0.68665884</b>	-0.09561628	0.37421421	-0.02578251
Affects_Fascination	0.24927001	0.01548887	<b>0.56670477</b>	0.09115915
Affects_Fear	-0.21123878	-0.06775608	0.23852572	<b>0.54077991</b>
Affects_Injustice	-0.0059955	0.26001915	-0.17854577	<b>0.69484238</b>
Affects_Elevation	<b>0.64821834</b>	0.03314376	0.20071428	0.04670909
Affects_Awe	0.12443152	0.23369711	<b>0.57110369</b>	-0.09830522
Affects_Grateful	0.18828713	<b>0.46815521</b>	0.10240148	0.03906128
Affects_Guilt	0.03550678	0.020922	-0.17621076	<b>0.72257451</b>
Affects_Happiness	<b>0.69231443</b>	0.13598276	0.08125771	-0.12455272
Affects_Hate	-0.16333456	-0.16427229	0.21878955	<b>0.40251282</b>
Affects_Indignation	-0.02668953	0.0876488	<b>0.42976945</b>	0.17972049
Affects_Inspiration	0.15231201	<b>0.44457625</b>	<b>0.43636479</b>	-0.11206508
Affects_Joy	<b>0.66740782</b>	0.03966481	0.22623547	-0.13151283
Affects_Love	0.00017371	<b>0.57647412</b>	<b>0.41666494</b>	-0.06329372
Affects_Moved	0.0505356	<b>0.69191143</b>	0.25904344	0.00022292
Affects_Pride	<b>0.73848087</b>	-0.13457054	0.0797954	0.0113812
Affects_Relief	<b>0.33460417</b>	0.12727487	0.15201337	0.22107138
Affects_Sadness	<b>-0.32339432</b>	<b>0.45540071</b>	-0.24795746	<b>0.59214689</b>
Affects_Thankful	0.21467189	<b>0.55040966</b>	0.00448756	0.02665432
Affects_Thrilled	<b>0.43286447</b>	-0.01296852	<b>0.53651279</b>	-0.07748356

Affects_Touched	-0.15821524	<b>0.78875996</b>	0.38158867	-0.15805378
Affects_Uplifted	<b>0.58283307</b>	0.18679793	0.16944897	-0.16501704
Affects_Curious	0.02982896	0.09032619	0.28733314	0.20982505
Affects_Serenity	<b>0.34944489</b>	0.273893	0.29436995	-0.14877055
Affects_Lucky	0.18971836	<b>0.45061113</b>	0.02141491	0.19448705
Affects_Tenderness	-0.03729537	<b>0.72138627</b>	0.14866785	0.08763825
Affects_Sympathy	-0.12178875	<b>0.66269298</b>	0.00148059	<b>0.30434085</b>
Affects_Satisfaction	<b>0.8896637</b>	-0.04646458	-0.04189603	-0.07047963
Affects_Esteem	<b>0.70882675</b>	0.00852075	0.10430278	0.1005496
Affects_Alleviation	<b>0.47888167</b>	-0.11616902	-0.10211007	<b>0.3789909</b>
Affects_WarmGlow	<b>0.59971097</b>	0.20728646	0.06717239	-0.05924642
Affects_Comfort	<b>0.44587304</b>	0.25478974	0.24795605	-0.09796768

**Table S3b. Proportion of variance explained by each factor in the four-factor solution to emotion labels (Study 1).**

	<b>ML1</b>	<b>ML4</b>	<b>ML3</b>	<b>ML2</b>
SS loadings	8.03	5.28	4.57	3.17
Proportion Var.	0.21	0.14	0.12	0.08
Cumulative Var.	0.21	0.34	0.46	0.54
Proportion Explained	0.38	0.25	0.22	0.15
Cumulative Proportion	0.38	0.63	0.85	1.00

**Table S3c. Interfactor correlations and bootstrapped confidence intervals for the four-factor solution to emotion labels (Study 1).**

	<b>ML2</b>	<b>ML3</b>	<b>ML4</b>
ML1	-.26 [-.56, .75]	.45 [-.54, .85]	.63 [.13, .95]
ML2	-	.10 [-.34, .43]	.02 [-.30, .62]
ML3	-	-	.34 [-.26, .62]

We thus opted for the four-factor structure: the first factor captured joyful states, the second captured tender states, the third captured epistemic states, and the fourth captured a mixture of negative states. For each factor, we excluded items with loadings equal or inferior to 0.3, or that loaded to comparable extent on different factors at the same time. The list of items removed through purification is shown in Table S4.

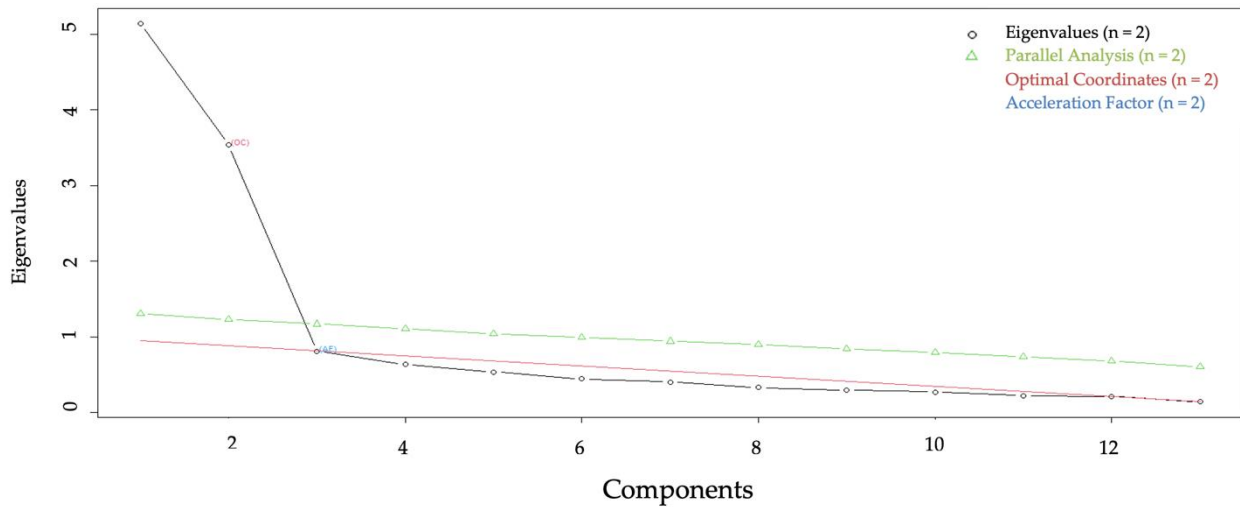
**Table S4. Final item selection for the four-factor solution to emotion labels (Study 1).**

<b>Factors:</b>	<b>ML1</b>	<b>ML4</b>	<b>ML3</b>	<b>ML2</b>
Items	Contentment; Enthusiasm; Elevation; Happiness; Joy; Pride; Relief;	Compassion; Grateful; Moved; Thankful; Touched; Lucky; Tenderness;	Exhilaration; Thrilled Fascination; Awe	Anxiety; Embarrassed; Fear; Injustice; Guilt; Hate; Sadness

	Uplifted; Serenity; Satisfaction; Esteem; Warm glow; Comfort	Sympathy		
Removed Items	Excitement; Exhilaration; Thrilled	Inspiration; Love; Sadness	Enthusiasm; Excitement; Touched; Love; Inspiration; Contempt; Indignation	Alleviation
Reasons for exclusion	Excitement and exhilaration both charge more on another factor. Same for Thrilled.	Inspiration charges almost equivalently on a second factor; and love too. Sadness charges more on the last factor.	Love, touched, inspiration and Enthusiasm charge significantly more on other factors. Inspiration charges equally on another factor. Excitement charges also almost equally on another factor.  We removed "Contempt" because it is incoherent with the other item, as contempt involves feelings of disregard or disrespect towards something. It is especially incoherent with awe which involves feelings of respect and thrilled which involved a feeling of happiness.  We also removed 'indignation' which seems unrelated conceptually to the feelings of awe involved in this factor.	Alleviation charges on another factor.
Alpha	0.95	0.89	0.86	0.80
Mean (SD)	3.39 (1.52)	3.88 (1.40)	2.17 (1.64)	0.98 (1.02)
Median	3.62	4.13	2.00	0.71

### 1.7 Others' attitudes

We ran an exploratory factor analysis with Promax rotation on the 13 items about others' attitudes. Observation of the Scree plot, Parallel analysis, Optimal and observation of Eigenvalues converged on a two-factor structure (see Figure S5 and Tables S10a and S10b). Intercorrelation between both factors was 0.01 [-0.10, 0.13].

**Figure S5. Scree plot and non-graphical solutions to scree test for others' attitudes (Study 1).**

**Table S10a. Factor loadings for the two-factor solution to others' attitudes (Study 1). Factor loadings > .30 are highlighted in bold. (n = 2)**

	ML1	ML2
Others_GoodPerson	<b>0.90903863</b>	-0.09754622
Others_Generous	<b>0.84749602</b>	-0.01294957
Others_Fool	-0.08497007	<b>0.84101612</b>
Others_LoosingTimeMoney	-0.09079801	<b>0.87966833</b>
Others_ShowOff	0.00357073	<b>0.47977069</b>
Others_ShouldActAsIDid	<b>0.76537736</b>	-0.17501986
Others_Idealist	<b>0.43915854</b>	<b>0.43610234</b>
Others_Honorable	<b>0.82594931</b>	-0.02933813
Others_Moral	<b>0.8814424</b>	-0.04753412
Others_Respect	<b>0.78141581</b>	0.06830314
Others_Dutiful	<b>0.60395846</b>	0.08084762
Others_Wrong	-0.10009708	<b>0.75682386</b>
Others_CouldDoBetterThings	0.01487793	<b>0.80597516</b>

**Table S10b. Proportion of variance explained by each factor in the two-factor solution to others' attitudes (Study 1).**

	ML1	ML2
SS_loadings	4.78	3.18
Proportion_Var	0.37	0.24
Cumulative_Var	0.37	0.61
Proportion_Explained	0.60	0.40
Cumulative_Proportion	0.60	1.00

1.8 Predictors of positive affects when only keeping participants who reported events dating from less than three years back (Study 1)

Because participants' memories can become less reliable as time goes by, we reanalyzed the link between our different constructs and positive affects while keeping only participants who reported an event dating from less than three years back ( $N = 200$ ). Results are reported in Table S11a and S11b (Study 1).

**Table S11a. After excluding participants who reported an event dating from more than three years back: Mean and standard deviations for affective states (HEDONIC, SOCIAL, EPISTEMIC, NEGATIVE) and cognitive appraisals (Oneness, Agent, Action, Negative). Rightmost columns indicate Pearson correlations ( $r$ ) between each category and pleasure and gratification scores.**

	<i>M (SD)</i>	<i>r with Pleasantness</i>	<i>r with Gratification</i>
HEDONIC	3.42 (1.51)	.72***	.70***
SOCIAL	3.95 (1.38)	.51***	.53***
EPISTEMIC	2.19 (1.67)	.50***	.49***
NEGATIVE	0.99 (1.02)	-.44***	-.29***
<i>Cold</i>	0.95 (1.06)	.11	.15*
<i>Warm</i>	2.47 (1.53)	.59***	.52***
Oneness	3.08 (1.61)	.52***	.53***
Agent	2.78 (1.42)	.55***	.53***
Outcome	4.47 (1.27)	.58***	.61***
Negative	1.74 (1.10)	.15*	.13

Note. \* =  $p < 0.05$ , \*\* =  $p < 0.01$ , \*\*\* =  $p < 0.001$ .

**Table S11b. After excluding participants who reported an event dating from more than three years back: Multiple regression analysis with positive affects as dependent variable and positive emotion categories (HEDONIC, SOCIAL, EPISTEMIC) as predictors (Study 1).**

	<i>r</i>	<i>B</i>	$\beta$	<i>SE</i>	<i>t</i>	<i>p</i>
<b>(a) With positive emotion categories as predictors (<math>R^2 = 0.60</math>)</b>						
(Intercept)	-	0.79	-	0.14	5.68	< .001***
HEDONIC	.77***	0.64	0.87	0.05	12.63	< .001***
SOCIAL	.54***	0.04	0.05	0.04	0.95	.350
EPISTEMIC	.53***	-0.12	-0.18	0.04	-2.77	.006**



**(b) With cognitive appraisals categories as predictors ( $R^2 = 0.60$ )**

(Intercept)	-	0.75	-	0.22	3.63	< .001***
ONENESS	.57***	0.10	0.07	0.07	1.58	.115
OUTCOME	.64***	0.37	0.50	0.07	5.30	< .001***
AGENT	.59***	0.16	0.22	0.07	2.32	.021*
NEGATIVE	.15*	-0.18	-0.18	0.06	-3.14	.002**

Note. \* =  $p < 0.05$ , \*\* =  $p < 0.01$ , \*\*\* =  $p < 0.001$ .

*1.9 Warm glow and expectations about others' judgments (Study 1)*

The positive affects experienced by participants correlated significantly with positive expectations ( $r = 0.44, p < .001$ ) and negative expectations about others' judgments ( $r = -0.14, p = .025$ ).

*1.10 Positive affects, emotions, and later behavior (Study 1)*

To find out whether experiencing pleasure after giving motivates people to give again later, we numerically coded participants' answer to the question about their later behavior (0 = "No, never, and I don't intend to do it again", 3 = "Yes, regularly"). Participants' answers significantly correlated with the positive affects they experienced:  $r = .20, p = .001$ . This result held even when keeping only participants who reported an event less than three-years old:  $r = .16, p = .027$ .

To investigate which type of emotions predicted later behavior, we ran a multiple regression analysis with participants' answers about their later behavior as dependent variable and the HEDONIC, SOCIAL and EPISTEMIC categories as predictors. Results are presented in Table S10.

**Table S12a. Multiple regression analysis with later behavior as dependent variable and positive emotion categories (HEDONIC, SOCIAL, EPISTEMIC) as predictors (Study 1).**

	B	SE	t	p
(Intercept)	1.20	0.15	8.15	< .001***
HEDONIC	0.06	0.05	1.101	.272
SOCIAL	0.10	0.05	2.18	.030*
EPISTEMIC	-0.03	0.05	-0.67	.507

Note.  $R^2 = 0.05$ .

We then ran a similar analysis, but only keeping participants who reported an event less than three years old. Results are presented in Table S12b.

**Table S12b. Multiple regression analysis with later behavior as dependent variable and positive emotion categories (HEDONIC, SOCIAL, EPISTEMIC) as predictors (Study 1 with only participants who reported an event less than three years old).**

	<b>B</b>	<b>SE</b>	<b>t</b>	<b>p</b>
(Intercept)	1.42	0.18	8.08	< .001***
HEDONIC	0.07	0.06	1.13	.259
SOCIAL	0.04	0.06	0.75	.457
EPISTEMIC	-0.03	0.05	-0.67	.507

*Note.* \* =  $p < 0.05$ , \*\* =  $p < 0.01$ , \*\*\* =  $p < 0.001$ .

### *1.11 Criterion validity of the 3PMS (Study 1)*

Positive affects experienced by participants correlated significantly with the Pleasure ( $\alpha = .67, r = .50, p < .001$ ) but not the Pressure ( $\alpha = .65, r = .04, p = .49$ ) subscale of the Pleasure and Pressure-based Prosocial Motivation Scale.

## **Supplementary 2. Study 2**

### *2.1 Full questionnaire for study 2*

Block: Consentement\_Formulaire (3 Questions)

Standard: ID (1 Question)

Standard: Donation (2 Questions)

Branch: New Branch

If

If In case you are one of the winners, what do you want to do with your 1GBP bonus? I want to keep it for myself Is Not Selected

EmbeddedData

DECISION = DONATE

BlockRandomizer: 1 - Evenly Present Elements

Group: DW

EmbeddedData

OUTCOME = WIN

Block: Donated\_Win (1 Question)

Group: DL

EmbeddedData

OUTCOME = LOSS

Block: Donated\_Loss (1 Question)

Branch: New Branch

If

If In case you are one of the winners, what do you want to do with your 1GBP bonus? I want to keep it for myself Is Selected

EmbeddedData

DECISION = KEEP

BlockRandomizer: 1 - Evenly Present Elements

Group: KW

EmbeddedData

OUTCOME = WIN

Block: Kept\_Win (1 Question)

Group: KL

EmbeddedData

<b>OUTCOME = LOSS</b>
<b>Block: Kept_Loss (1 Question)</b>
<b>Standard: BasicDimensions (6 Questions)</b> <b>Standard: Affects (1 Question)</b> <b>Standard: Physio (1 Question)</b> <b>Standard: Cognitive: feelings and sentiments (1 Question)</b>
<b>BlockRandomizer: 0 - Evenly Present Elements</b>
<b>Standard: WhatOtherPeopleThink (1 Question)</b> <b>Standard: Other_Participants (1 Question)</b>
<b>BlockRandomizer: 0 - Evenly Present Elements</b>
<b>Standard: Demographics (10 Questions)</b> <b>Standard: Code (1 Question)</b> <b>Standard: Debrief (1 Question)</b>

## 2.2 Consent

**Consent Description:** Thank you for agreeing to participate in this study. We are researchers interested in understanding which emotions people experience when they make altruistic and non-altruistic decisions.

**Procedure:** In this study, you will be asked to make a decision. After that, you will be informed about the impact of your decision and asked to answer several series of question about your current emotional state. Emotions you can be asked about include (but are not limited to): Anger, Contempt, Disgust, Fear, Joy, Pride, Sadness, Surprise, Admiration, Amusement, Awe, Being Moved, Compassion, Elevation, Gratitude, Indignation or Moral Outrage. This is a rather long study. Your participation might take around 10 minutes.  
**Compensation:** Your participation in this research will be paid GBP 1.80.

**Data protection:** The data collected (demographic information such as age and gender, answers to questions) will be anonymised, meaning that all personal data that would allow someone to identify you will be deleted within one week of your participation. As a consequence, we won't be able to delete your data after this date, if ever you request us to do so. Anonymised data will be stored on the institutional computer of Pr. Florian Cova, the access to which is protected by a password. Their conservation is not limited in time. The use of these anonymised data might include inclusion in future research, or sharing with other researchers.

Participants' Prolific Academic's ID will be collected during this study and will appear in our datafile, as collecting them is necessary to ensure that we do not pay people who did not in fact participate. However, this information will be deleted after participants' are paid (within two weeks from participation).

Data from participants who leave the study before the end will be neither stored, nor used. You are free to leave the study at any moment, but understand that this means we won't pay you as we won't be able to use the data you provided.

**Information about research results:** If you want to be informed of the results of our studies, please send a email to: [florian.cova@gmail.com](mailto:florian.cova@gmail.com), starting from September 1st 2023. Note that no

information will be provided about individual results, and that only general results will be communicated.

Research supervision: This research is supervised by Prof. Florian Cova, Swiss Center for Affective Sciences, Campus Biotech, 9 Chemin des Mines, CH - 1202 Geneva (Florian.Cova@unige.ch)

Contact person: For information about this research, please contact Dr. Florian Cova, Swiss Center for Affective Sciences, Campus Biotech, 9 Chemin des Mines, CH - 1202 Geneva (Florian.Cova@unige.ch)

### 2.2.2 Consent Q1

On the basis of the information you just received, and provided that your anonymity will be respected:

Do you authorise us to use your answers for scientific purposes, including the publication of our results in scientific journals and volumes?

- YES (1)
- NO (2)

### 2.2.3 Consent Q2

Do you authorise us to use your answers for teaching purposes?

- YES (1)
- NO (2)

## 2.3 Identification

ID Thank you for your participation. If you come from Mechanical Turk or Prolific Academic, please enter your Worker ID here:

---

## 2.4 Donation

Donation Instruction: We will draw a certain number of participants at random to receive a bonus payment of 1 GBP. In case you are one of the lucky winners of this bonus prize, you can choose to directly give this bonus to charities. Below, you will find a list of foundations we can transfer the winners' bonus to. Please, indicate to which foundation you would want to transfer your bonus in case you are selected as the winner, or whether you want to keep this bonus for yourself.

Please, carefully read the description of each charity. We might ask you questions about them later.

(This is not a trick. Proofs of past money transfer to foundations can be found at <https://osf.io/mfc54/>)

### 2.4.1 Donation question

Donation In case you are one of the winners, what do you want to do with your 1GBP bonus?

- I want to give it to AMERICARES, a health-focused relief and development organization that responds to people affected by poverty or disaster. Their emergency & sustainable

programs provide millions of people around the world access to medicine, medical supplies and health programs. (1)

- I want to give it to THE CENTER FOR THE HOMELESS, a charity that focuses on providing not just lifesaving, but life-changing services to each of our guests. Their innovative service model offers homeless families and individuals an on-site structured, step-by-step process to achieve and maintain self-sufficiency. (2)
- I want to give it to FOOD FOR THE POOR, a relief agency specialized in providing donated goods to the needy in South & Central America. They work to uplift poor children, families and communities in need by providing basic essentials, and Opportunities for long-term development. (3)
- I want to keep it for myself (4)

#### *2.4.2 Donation win*

DW Text: Congratulations! You are one of the participants drawn at random to receive the 1 GBP bonus. The bonus will be transferred to the charity you selected.

#### *2.4.3 Donation loss*

DL Text: Sorry! You are not among the participants drawn at random to receive the 1 GBP bonus. The bonus will not be transferred to the charity you selected.

#### *2.4.4 Kept win*

KW Text: Congratulations! You are one of the participants drawn at random to receive the 1 GBP bonus. You will receive the bonus a few days after finishing the study.

#### *2.4.5 Kept loss*

KL Text: Sorry! You are not among the participants drawn at random to receive the 1 GBP bonus.

### *2.5 Basic Dimensions*

Instructions Now, focus on your current emotional state and how you currently feel about the decision you took (giving or keeping your potential bonus).

#### *2.5.1 Description a*

Describe in a few lines how you feel about your decision.

---

---

---

---

---

#### *2.5.2 Description b*

Enter five separate words that would describe your emotions and how you feel about your decision.

---

### 2.5.3 Pleasure

To which extent is your current state-of-mind pleasant?

- 3: very unpleasant (2)
- 2 (3)
- 1 (4)
- 0: neither pleasant nor unpleasant (5)
- 1 (6)
- 2 (7)
- 3: very pleasant (8)

### 2.5.4 Gratification

To which extent do you feel gratified?

- 0: It did not bring me any feelings of gratification (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5: I felt an immediate and strong gratification (6)

### 2.5.5 Anticipation

Before making your decision, did you think about the way it would make you feel to help someone else?

- 0: Not at all (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5: A lot (6)

### 2.5.6 Affects

**To which extent do you currently feel the following emotions:**

	0: not at all (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (11)	6: very strongly (12)
Anxiety (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compassion (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contentment (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contempt (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Excitement (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Embarrassment (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exhilaration (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiasm (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fascination (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fear (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of injustice (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of elevation (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of awe (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gratitude (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilt (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Happiness (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hate (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indignation (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspiration (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joy (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Love (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of being moved (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pride (25)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relief (26)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sadness (27)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of being thankful (28)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thrills (29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of being touched (30)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of being uplifted (31)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curiosity (32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Serenity (33)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of being lucky (41)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tenderness (42)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sympathy (43)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling of inner satisfaction (45)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A self-esteem boost (46)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An alleviation from guilt (47)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A warm glow (48)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comfort (49)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Select Answer '2' (50)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Select Answer '5' (51)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 2.5.7 Physio

**Indicate Whether you are currently experiencing any of the following sensations or feelings, and if so, to what extent:**

	0: not at all (2)	1 (3)	2 (4)	3 (5)	4 (6)	5 (9)	6: very strongly (10)
Chills (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blushing (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Choked up (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goosebumps (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm feelings in the chest (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm feelings in the body (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt cold (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I gasped (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased heart rate (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lump in the throat (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moist eyes (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muscles relaxed (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muscles tensed (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Refreshed, energised or exhilarated (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Swollen chest (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm feeling in the heart (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wanting to smile (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wanting to laugh (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

I felt energetic (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

---

2.5.8 Cognitive: feelings and sentiments

**To which extent did the following or have the following thought after making your decision? (0 = not at all; 6 = very strongly)**

	0: not at all (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (8)	6: very strongly (9)
I felt like I helped someone in need (29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I did the right thing (32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt good about contributing to the common good (41)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I was part of a greater whole (34)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt bad about not doing this more frequently (39)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I did something good (43)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I was part of something bigger than myself (44)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt a sense of purpose (45)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like it made me a better person (46)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

---

I felt closer to my ideals (47)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was proud of me for doing this (48)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like my daily concerns and issues weren't that important after all (49)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt my sense of self become somehow smaller (50)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

### 2.5.9 What other people think

**Were other people to learn about your decision, to what extent do you think they would think of you in the following ways? (0 = not at all; 6 = very strongly)**

---

	0: not at all (1)	1 (2)	2 (3)	3 (4)	4 (5)	5 (6)	6: very strongly (7)
They would think I am a good person (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am generous (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am a fool (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I am losing my time and money (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
They would think I just	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

want to  
show off (5)

They would think more people should act as I did (6)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

They would think I am an honorable person (7)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

They would think I am an idealist (8)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

They would think I am a moral person (9)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

They would think I deserve respect (10)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

They would think I am dutiful (11)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

They would think I am wrong to do this (12)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

They would think I could do better things with my money (13)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

### 2.5.10 Other participants

Expectations In your opinion, which of these percentage approximate best the amount of participants in this study who made the choice to give their 1 GBP bonus to charity?

- Between 0 and 25% (1)
- Between 25 and 50% (2)
- Between 50 and 75% (3)
- Between 75 and 100% (5)

### 2.5.11 Demographics

*Age.* Age: (Please, only enter numbers, no words, e.g. 33):

---

*Gender.* Do you identify yourself as:

- A man (1)
- A women (2)
- Other (3) \_\_\_\_\_

*Nationality.* What is your nationality?

---

*Education and profession.* Are you a student?

- YES (1)
- NO (2)

*Display This Question:*

*If Are you a student? = YES*

To the best of your knowledge, what is the education level of your parent who has had the most education?

- Grade/elementary school (1)
- High school (2)
- College or university degree: in which field? (3)  
\_\_\_\_\_
- Graduate degree, Masters: in which field? (4)  
\_\_\_\_\_
- PhD: in which field? (5) \_\_\_\_\_

*Display This Question:*

*If Are you a student? = NO*

What is your profession?

\_\_\_\_\_

What is your education level?

- Grade/elementary school (1)
- High school (2)
- College or university degree: in which field? (3)

\_\_\_\_\_

- Graduate degree, Masters: in which field? (4)

\_\_\_\_\_

- PhD: in which field? (5) \_\_\_\_\_

*Religion.* What is your current religious affiliation(s)? Please circle all that apply:

- None (1)
- Catholic (2)
- Evangelical (3)
- Protestant (other than evangelical) (4)
- Mormon (5)
- Orthodox (6)
- Other Christian (7)
- Jewish (8)
- Hindu (9)
- Buddhist (10)
- Shinto (11)
- Confucian (12)
- Daoist (13)
- Jain (14)
- Sikh (15)
- Muslim (16)
- Atheist or agnostic (17)
- Other: (18) \_\_\_\_\_

How often do you engage in religious activities?

- Daily (1)
- Weekly (2)
- Monthly (3)
- A few times a year (4)
- Never (5)

*Political alignment.* What is your general political attitude?

- Very liberal (1)
- Moderate liberal (2)
- Lean liberal (3)
- Neither liberal nor conservative (4)
- Lean conservative (5)
- Moderate conservative (6)
- Very conservative (7)

#### 2.5.12 Code

Code You can now go back to Prolific Academic and enter the following completion code:  
523D184D

- I have received my code. (1)

#### 2.5.13 Debrief

Debrief Thank you for participating in this study. As indicated earlier, our goal was to understand what emotions are triggered by altruistic actions. It is often said that people "feel good" when they engage in altruistic behaviour (e.g. giving money), but the exact nature of this feeling has been largely left unexplored. Thus, in this study, we gave you the opportunity to give part of a potential reward to foundations, then to describe how you felt on the moment. We will compare the feelings of those who decided to give to the feelings of those who decided not to give.

We were also interested in whether the consequences of the decision affected feelings. This is why some of you received the reward and others did not. For participants who decided to donate money to foundations, we will compare feelings between those whose donation was actually sent of those who were not drawn at random to receive the donation.

For information about this research, please contact Dr. Florian Cova, Swiss Center for Affective Sciences, Campus Biotech, 9 Chemin des Mines, CH - 1202 Geneva (Florian.Cova@unige.ch)

#### 2.6 Analysis of open-ended answers for Study 2

We asked participants to give five words describing the emotions they experienced directly after making their donation. Using the ATLAS.ti, Version 23.2.0 (4305) software, we computed

the number of occurrences of each word. The more frequent words and their number of occurrences depending on participants' decision (DONATE vs. KEEP) and lottery's outcome (WIN vs. LOSE) are described in Table S13.



**Table S13. Most frequent words given by participants to describe their emotions, together with their total number of occurrences, in function on participants' decision (DONATE vs. KEEP) and lottery's outcome (WIN vs. LOSE).**

	Donate Loss Gr = 112			Donate Win Gr = 116			Keep Loss Gr = 126			Keep Win Gr = 129			Total	
	Ab- solute	Within Condition	Within Table	Ab- solute	Within Condition	Within Table	Ab- solute	Within Condition	Within Table	Ab- solute	Within Condition	Within table	Ab- solute	Within Table
Happy Gr = 201	43	7.88%	1.82%	71	12.52%	3.01%	27	4.35%	1.15%	60	9.62%	2.55%	201	8.53%
Content GR = 136	31	5.68%	1.32%	31	5.47%	1.32%	33	5.32%	1.40%	41	6.57%	1.74%	136	5.77%
Good Gr = 97	30	5.49%	1.27%	32	5.64%	1.36%	16	2.58%	0.68%	19	3.04%	0.81%	97	4.12%
Satisfied Gr = 73	8	1.47%	0.34%	30	5.29%	1.27%	14	2.26%	0.59%	21	3.37%	0.89%	73	3.10%
Calm Gr = 67	16	2.93%	0.68%	8	1.41%	0.34%	22	3.55%	0.93%	21	3.37%	0.89%	67	2.84%
Fine Gr = 61	12	2.20%	0.51%	4	0.71%	0.17%	31	5.00%	1.32%	14	2.24%	0.59%	61	2.59%
Sad Gr = 50	16	2.93%	0.68%	5	0.88%	0.21%	19	3.06%	0.81%	10	1.60%	0.42%	50	2.12%
Neutral Gr = 43	9	1.65%	0.38%	3	0.53%	0.13%	20	3.23%	0.85%	11	1.76%	0.47%	43	1.82%
Okay Gr =43	6	1.10%	0.25%	4	0.71%	0.17%	21	3.39%	0.89%	12	1.92%	0.51%	43	1.82%
Excited Gr = 38	8	1.47%	0.34%	10	1.76%	0.42%	2	0.32%	0.08%	18	2.88%	0.76%	38	1.61%
Pleased Gr = 36	7	1.28%	0.30%	15	2.65%	0.64%	1	0.16%	0.04%	13	2.08%	0.55%	36	1.53%
Hopeful Gr = 36	14	2.56%	0.59%	15	2.65%	0.64%	3	0.48%	0.13%	4	0.64%	0.17%	36	1.53%
Proud Gr = 35	11	2.01%	0.47%	20	3.53%	0.85%	2	0.32%	0.08%	2	0.32%	0.08%	35	1.48%
Helpful Gr = 33	16	2.93%	0.68%	16	2.82%	0.68%	0	0.00%	0.00%	1	0.16%	0.04%	33	1.40%
Peaceful Gr = 33	9	1.65%	0.38%	5	0.88%	0.21%	10	1.61%	0.42%	9	1.44%	0.38%	33	1.40%
Grateful Gr = 32	8	1.47%	0.34%	18	3.17%	0.76%	1	0.16%	0.04%	5	0.80%	0.21%	32	1.36%
Guilty Gr = 32	2	0.37%	0.08%	2	0.35%	0.08%	7	1.13%	0.30%	21	3.37%	0.89%	32	1.36%
Disappointed Gr = 26	13	2.38%	0.55%	0	0.00%	0.00%	11	1.77%	0.47%	2	0.32%	0.08%	26	1.10%
Relaxed Gr = 25	3	0.55%	0.13%	3	0.53%	0.13%	6	0.97%	0.25%	13	2.08%	0.55%	25	1.06%
Joyful Gr = 25	7	1.28%	0.30%	9	1.59%	0.38%	3	0.48%	0.13%	6	0.96%	0.25%	25	1.06%
Confident Gr = 24	5	0.92%	0.21%	0	0.00%	0.00	8	1.29%	0.34%	11	1.76%	0.47%	24	1.02%
Annoyed Gr = 22	4	0.73%	0.17%	2	0.35%	0.08%	13	2.10%	0.55%	3	0.48%	0.13	23	0.93%
Positive Gr = 20	5	0.92%	0.21%	10	1.76%	0.42%	3	0.48%	0.13%	2	0.32%	0.08%	20	0.85%
Normal Gr = 20	4	0.73%	0.17%	1	0.18%	0.04%	11	1.77%	0.47%	4	0.64%	0.17%	20	0.85%
Relieved Gr =19	6	1.10%	0.25%	4	0.71%	0.17%	3	0.48%	0.13%	6	0.96%	0.25%	19	0.81%
Pleasant Gr = 19	3	0.55%	0.13%	4	0.71%	0.17	7	1.13%	0.30%	5	0.80%	0.21%	19	0.81%
Glad Gr = 19	2	0.37%	0.08%	8	1.41%	0.34%	2	0.32%	0.08%	7	1.12%	0.30%	19	0.81%
Caring Gr = 19	14	2.56%	0.59%	3	0.53%	0.13%	2	0.32%	0.08%	0	0.00%	0.00%	19	0.81%

### 2.7 Impact of expectations about others' attitudes (Study 2)

In Study 1, we found that items assessing participants' expectations about others' attitudes loaded on two different factors: positive expectations and negative expectations. To compose the same two factors in Study 2, we used an Exploratory Factor Analysis while specifying two factors. Results are presented in Table S14.

**Table S14. Factor loadings for the two-factor solution to others' attitudes (Study 2). Only factor loadings > .30 are displayed. Items that loaded on both factors were excluded from further analyses.**

	ML1	ML2
Others_GoodPerson	0.920	
Others_Generous	0.840	
Others_Fool		0.822
Others_LoosingTimeMoney		0.662
Others_ShowOff	0.319	0.477
Others_ShouldActAsIDid	0.850	
Others_Idealist	0.909	
Others_Honorable	0.592	
Others_Moral	0.930	
Others_Respect	0.826	
Others_Dutiful	0.759	
Others_Wrong	-0.393	0.712
Others_CouldDoBetterThings		0.679

Based on these results, we aggregated participants' expectations about the judgments of others in two categories: positive expectations ( $\alpha = .95$ ) and negative expectations ( $\alpha = .75$ ). Positive affects of participants who gave correlated significantly with positive expectations ( $r = 0.50, p < .001$ ), but not with negative expectations ( $r = -0.09, p = .191$ ).

### 2.8 Decisions and expectations about others' behavior (Study 2)

Table S15 presents participants' expectations about the percentage of participants who decided to donate in function of their own decision. A Chi-square test revealed significant differences:  $\chi^2(3) = 50.33, p < .001$ . Participants who gave their bonus were more likely to expect others to give their bonus.

**Table S15. Participants' expectations about others' behavior (% of participants they expect to give their bonus) in function of their own decisions. Number in each cell indicates the number of participants.**

	0-25%	25-50%	50-75%	75-100%
Gave bonus	17	84	111	17
Kept bonus	63	124	64	6

### 2.9 Positive affects, emotions, and later behavior (Study 2)

We used a logistic regression to investigate the relationship between participants' decision (dichotomous variable, 0 = Donate, 1 = Keep) and the degree to which participants thought about the way it would make them feel to help someone else (continuous variable, on a scale from 0 to 5). The results indicate a significant relationship:  $B = -0.40$ ,  $SE = 0.06$ ,  $z = -6.59$ ,  $p < .001$ . The more participants anticipated, the more they were likely to donate.

Because most economists who consider warm glow feeling as an explanation of altruistic behavior consider that warm glow feelings motivate participants by being anticipated as an emotional reward, we excluded all participants who gave a 0 answer to the anticipation question ( $N = 86$ ) and ran a multiple logistic regression with participants' decisions and the three categories of positive emotions (HEDONIC, SOCIAL and EPISTEMIC) as predictors. Results are presented in Table S16.

**Table S16. Logistic regression with participants' decision (0 = Donate, 1 = Keep) as dependent variable and positive emotions categories (HEDONIC, SOCIAL, EPISTEMIC) as predictors (Study 2). Only participants who reported having anticipated how it would make them feel to help someone were included.**

	<b>B</b>	<b>SE</b>	<b>z</b>	<b>p</b>
(Intercept)	1.57	0.25	6.18	<.001***
HEDONIC	-0.03	0.17	-0.20	.842
SOCIAL	-0.73	0.15	-4.94	<.001***
EPISTEMIC	0.29	0.13	2.22	.027*

Note. AIC = 493.28, \* =  $p < 0.05$ , \*\* =  $p < 0.01$ , \*\*\* =  $p < 0.001$ .

#### **Conflict of interest statement**

The authors report no conflicts of interest.

#### **Ethical approval**

All studies were approved by University of Geneva's Committee for Ethical Research (CUREG) under project "Emotions and Philanthropy".

#### **Data availability statement**

All materials and data are publicly available at [osf.io/59ksd/](https://osf.io/59ksd/) (DOI 10.17605/OSF.IO/59KSD)

#### **Availability of data and material (data transparency)**

All materials, data, and analysis scripts are available on OSF: [osf.io/59ksd/](https://osf.io/59ksd/)

#### **Author contributions**

All authors contributed to the general idea behind this project, to study design, and to writing the manuscript. Robin Bianchi and Florian Cova contributed to data collection and data analysis.

#### **Authors**

Robin Timothée Bianchi

Institute of Philosophy, University of Neuchâtel  
robin.bianchi@unine.ch

Emma Tieffenbach  
Facoltà di Teologia di Lugano, Università della Svizzera italiana

Florian Cova  
Philosophy Department, Swiss Center for Affective Sciences & Geneva Centre for Philanthropy, University of Geneva

### **Acknowledgements**

The authors wish to thank Céline Schöpfer for her assistance with the analysis of qualitative data, and Angela Abatista for the creation of positive emotions categories. We are also grateful for the comments and suggestions provided by anonymous reviewers. Emma Tieffenbach's work on this manuscript was funded by an Anonymous Swiss Foundation, via the Geneva Center for Philanthropy, under "The Warm Glow Project, A Grant Proposal in the Ethics of Giving". Florian Cova's work on this project was supported by the Swiss National Science Foundation (Eccellenza Professorial Fellowship "Eudaimonic emotions and the (meta-philosophy of well-being) and by an Anonymous Swiss Foundation through the Geneva Centre for Philanthropy ("Beyond charity: the varieties of value-driven emotions in philanthropic behaviour").

### **Publishing Timeline**

Received 17 September 2022

Revised version received 20 July 2023

Accepted 27 July 2023

Published 30 September 2023