

## Belief in free will and regret (#7780)

Created: 01/11/2018 02:36 AM (PT)

Public: 02/04/2022 12:48 AM (PT)

### Author(s)

Adrien Fillon (Univ Paris Nanterre) - 33004428@parisnanterre.fr

Anthony Lantian (Univ Paris Nanterre) - anthony.lantian@parisnanterre.fr

Patrick Gosling (Univ Paris Nanterre) - gosling.patrick@wanadoo.fr

Ahogni N'gbala (Univ Paris Nanterre) - ahogni.n\_gbala@u-paris10.fr

### 1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

### 2) What's the main question being asked or hypothesis being tested in this study?

This research examines the role of perception of the free will of an agent in attribution of regret (to the same agent) within the framework of norm theory. More precisely, we predict that within an indeterministic universe, people will ascribe more regret, free will, and moral responsibility to the target who changed his habits (though an exceptional action leading to a negative outcome) than to the target who did not change (though a routine action leading to the same negative outcome), and crucially, we predict that within a determinist universe, the above-mentioned differences will be significantly reduced. In sum, we predict an interaction between the hypothetical universe and normality of the action.

### 3) Describe the key dependent variable(s) specifying how they will be measured.

There are three key dependent variables in our study:

1) A measure of regret will be assessed with the single item "Indicate to what extent Mr. Smith feels regret for what happened to him" rated on a 7-point scale (1 = not at all, 7 = very much so).

2) A measure of moral responsibility will be assessed with the single item "Indicate to what extent Mr. Smith could be held accountable for what happened to him" rated on a 7-point scale (1 = not at all, 7 = very much so).

3) A measure of attribution of free will (adapted from Clark et al., 2014) will be assessed with three items rated on a 7-point scale (1 = not at all, 7 = very much so). We will average these 3 items to create a unique score of attribution of free will, if the Cronbach's alpha is superior or equal to .70. If the Cronbach's alpha is strictly inferior to .70, we will only take the item "Indicate to what extent the fact that Mr. Smith takes this road is due to the exercise of his free will" as a measure of attribution of free will.

### 4) How many and which conditions will participants be assigned to?

There are four conditions (randomly assigned) based on crossing two factors of a mixed-design ANOVA: 2 (hypothetical universe: deterministic vs. indeterministic) × 2 (normality: exceptional action vs. routine action condition). The first factor is between-subject and the second one within-subject. To manipulate the hypothetical universe, we will use a description of a (deterministic or indeterministic) universe widely used in experimental philosophy (Nichols & Knobe, 2007). To manipulate the normality, we will use a vignette describing a man involved in a traffic accident, adapted from Kahneman and Miller (1986).

### 5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

We will run three different mixed-design ANOVA 2 (hypothetical universe: deterministic vs. indeterministic) × 2 (normality: exceptional action vs. routine action condition) on the three dependent variables included in our study (i.e., regret, moral responsibility, and free will). For the three DVs, we will not only examine the interaction effect, but also the main effects as well as the simple effects.

### 6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will check and exclude potential statistical outliers. Will be considered as outliers all the observations with a studentized deleted residual strictly greater than 4 (see McClelland, 2014) and/or Cook's distance greater than 1 (Field, 2012), for all statistical analyses needed.

### 7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

Our targeted sample sized for this study is 128 participants.

### 8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

As a comprehension check for the manipulation of hypothetical universe, we will run a t-test for two independent samples with hypothetical universe (deterministic vs. indeterministic) as the independent variable, and perception of peoples' free will as the dependent variable. Perception of peoples' free will, will be assessed with the single item "In the universe previously described, people have complete free will", this item is adapted from the FAD-Plus (Paulhus & Carey, 2011) and has been used by Seto and Hicks (2016) as a manipulation check. We expect a significant higher perception of peoples' free will in the indeterministic universe than in the deterministic universe. This manipulation check is simply to check that the manipulation worked as intended

(on average). Participants will not be excluded based on their answer to these questions.

In an exploratory phase, we will also test various models (e.g., mediations and moderation models) to see how our different measures can be connected to each other.