# Preregistration for "Importance of Intent and Outcome in the Perception of Happiness"

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# 1. Study Information

## 1.1 Title

The Importance of Intent and Outcome in the Perception of Happiness

# 1.2 Authorship

Ellen Schmidt, University of Osnabrück, Department of Cognitive Science, 5<sup>th</sup> Bachelor Semester

## 1.3 Research Questions

Q1: In which way is the judgment of participants about the happiness of a storycharacter changed, based on the psychological states, intentions and actual outcomes of the lives of the character?

Q2: Further, how is the value of the characters actual life perceived?

## 1.4 Hypotheses

- H. A) If intention and actual outcome align, the character will be perceived as happier than when they do not align. (directional)
- H. B) In the evaluation of the actual life of the story character, the outcome has more influence on the value than the intent. (directional)

# 2. Sampling Plan

## 2.1 Registration prior to creation of data

As of the date of submission of this research plan for preregistration, the data which are going to be used have not yet been collected, created, or realized.

## 2.2 Explanation of existing data

Nevertheless, since this study will be in answer to another paper and study, their data have been seen and analyzed and influenced the decision for the hypotheses and their directions.

Further more a debug-data set was collected to test run the survey and in response to that, the experiment setup was adjusted slightly. This data is not going to be used in the following analysis.

## 2.3 Data collection procedures

Data will be collected through an online-survey. Results will be stored in and retrieved from a database via the internet.

Recruitment: Subjects will be recruited via mailing lists at the University of Osnabrück, as well as social media (Facebook) of the author. Participants will not be paid.

Inclusion/Exclusion: Anyone without sufficient understanding of the English language cannot take part in the study.

## 2.4 Sample size

The number of participants will be limited to the amount of people taking part in the survey over the course of two weeks, since it is expected that a longer time period combined with this way of recruiting would not result in a considerable larger number of participants.

## 3. Variables

## 3.1 Manipulated variables

Both the intent of the character and the outcome of the story are handled as unordered binary variables with the levels "good" or "bad". To convey this, the stories state a clear intention of the character wanting to harm or help his people in some form or another. The outcome will affect the whole population on an existential level.

### 3.2 Measured variables

After participants read the story, the amount of happiness ascribed to the character by the participant will be measured using a slider rating, which is divided, not visibly to the participant, in steps of 1 ranging from 0 to 100. It will be treated as a continuous variable in the analysis.

Also the participant's opinion about the value of the character's actual life, as well as the value of its perceived life will be measured in the same way as above.

#### 3.3 Indices

A generalized linear regression model will be used to record dependencies, using the two independent binary factors "intent" and "outcome" as explanatory variables.

# 4. Design Plan

## 4.1 Study type

This study will be conducted as an online survey as an html-website, where the participant will be exposed to four randomized stories, each exactly one instance of the four experimental conditions. It corresponds to a within-subject design.

## 4.2 Study design

Participants see a story about a fictitious character, their life-situation and recent events. Below the text, they are presented with the statement "X was happy." and can adjust a slider, ranging from "Completely Disagree" to "Completely Agree". Furthermore there are two statements about X having lead a good life, while only looking at the value of his actual and perceived life respectively. The sliders are identical to the first one. Only when the slider-button has been moved, a next-button appears and allows the participant to continue.

The stories are randomized.

#### 4.3 Randomization

Each story consists of three parts. Looking at one character the first part is always the same, describing the initial situation. The second part will be randomly assigned to either good or evil intent. The third part will contain the brief information that the character has died and the final outcome of his or her actions, which is unique to the intent chosen beforehand, i.e. the third part is different for good outcome/good intent

and good outcome/evil intent. So the story-combinations for one character branch out like a tree instead of a network. In total there are 16 vignettes.

As there are four different condition-sets and also four different characters, participants will have four trials, each with a random combination of a character and a condition-set.

# 5. Analysis Plan

#### 5.1 Statistical models

A generalized linear model will be used with the cross-interactions of intent and outcome as formula (e.g. happiness ~ intent \* outcome). Doing so for every response variable will lead to three sets of results eventually, where the coefficients will be looked at and explained according to relevance and significance.

explanatory variables: intent, outcome

<u>response variables:</u> happiness, value of actual life, value of perceived life For comparability and visualization the medians of each condition-subgroup will be calculated and presented side by side in a bar-diagramm.

#### 5.2 Inference criteria

One-tailed

 $\alpha = 0.05$ 

#### 5.3 Data exclusion

Since it takes some time to read the text and understand it, anyone needing less than 20 seconds per trial will be excluded.

## 5.4 Missing data

Missing data are going to be excluded.