

# Research on The Impact of Past Behaviour Normality on Regret\*

The replication of two major experiments

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To be written after we finished the Discussion section

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\*Code and data are available at: [https://github.com/iJustinn/Impact\\_of\\_Past\\_Behavior\\_Normality\\_on\\_Regret.git](https://github.com/iJustinn/Impact_of_Past_Behavior_Normality_on_Regret.git)

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## 1 Introduction

Regret, defined as an emotional response to the memory of past decisions or actions that one wishes had been different, significantly impacts our daily lives (APA 2018). This paper delves into the factors that influence the intensity of regret, with a specific focus on social norms and past behaviors. Understanding these elements is essential for a clearer grasp of the decision-making process and the emotions that result from it.

We categorize social norms into two main types: descriptive norms, which concern beliefs about common behaviors within a group, and injunctive norms, which relate to beliefs about what behaviors are approved or disapproved by others (UNICEF 2021). Our research involves two experiments aimed at assessing the effect of these norms on regret. The first experiment looks into the role of these norms in the context of deciding whether or not to pick up a hitchhiker, while the second addresses the consequences of selecting an unconventional driving route.

The findings from these experiments reveal that unusual or unexpected events tend to provoke stronger feelings of regret than routine behaviors. However, the influence of both injunctive and descriptive social norms on the level of regret was found to be less significant. These results highlight how deviations from usual behavior, particularly when in conflict with social norms, can intensify feelings of regret. This insight is crucial for a better understanding of the cognitive processes involved in evaluating decisions and the emotional aftermath.

The organization of this paper is methodical and clear. We start with an overview of the theoretical framework concerning social norms and their connection to regret in the introduction. The methodology and findings from our experiments are detailed in the subsequent data section. The discussion section then addresses the implications of our results, outlines the limitations of the study, and suggests directions for future research.

## 2 Data

Data used in this paper was cleaned and processed with the programming language R (R Core Team 2022). Also with support of additional packages in R: `tidyverse` (Wickham et al. 2019), `ggplot2` (Wickham 2016), `janitor` (Firke 2023), `dplyr` (Wickham et al. 2023), `readr`

Table 1: Result of experiment 1

Group	Regret	Injunctive	Descriptive	Negative.Effect
Mr.Jones(exception)	315(92.1%)	326(95.3%)	32(9.4%)	317(92.7%)
Mr.Smith(routine)	27(7.9%)	16(4.7%)	310(90.6%)	25(7.3%)

(Wickham, Hester, and Bryan 2023), `knitr` (Xie 2014), ‘kableExtra’ (Zhu 2021), ‘reshape2’ (Wickham 2007).

## 2.1 Source

The data used in this paper was a replication of experimental data presented in the Kutscher and Feldman (2019) paper.

## 2.2 Method

### 2.2.1 Experiment #1

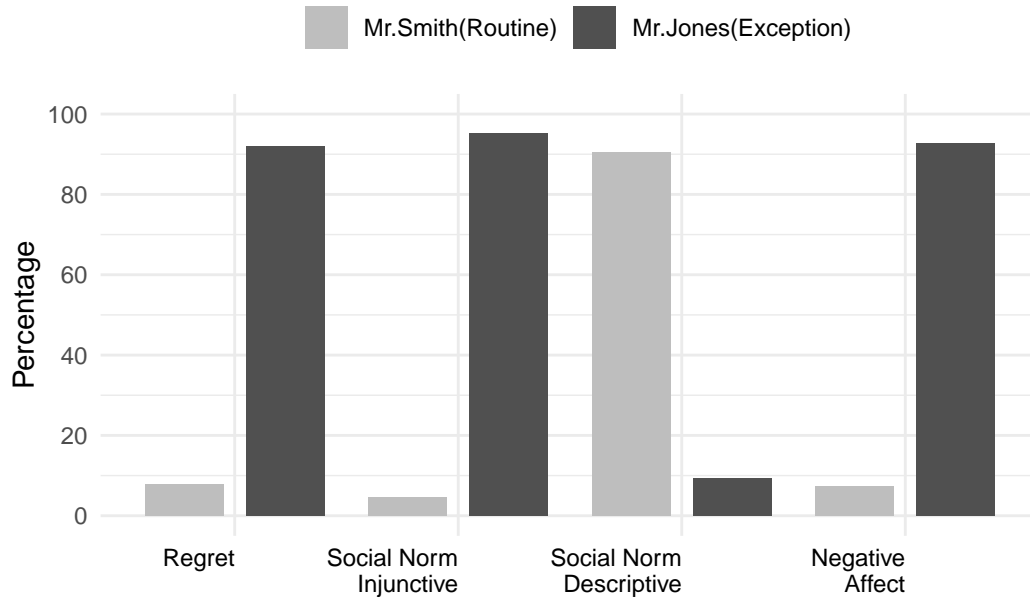


Figure 1: Bar plot of experiment 1

Table 2: Result of experiment 2

Group	Regret	Luck
Mr.Adams(routine)	64(18.8%)	112(32.9%)
Mr.White(exception)	276(81.2%)	228(67.1%)

### 2.2.2 Experiment #2

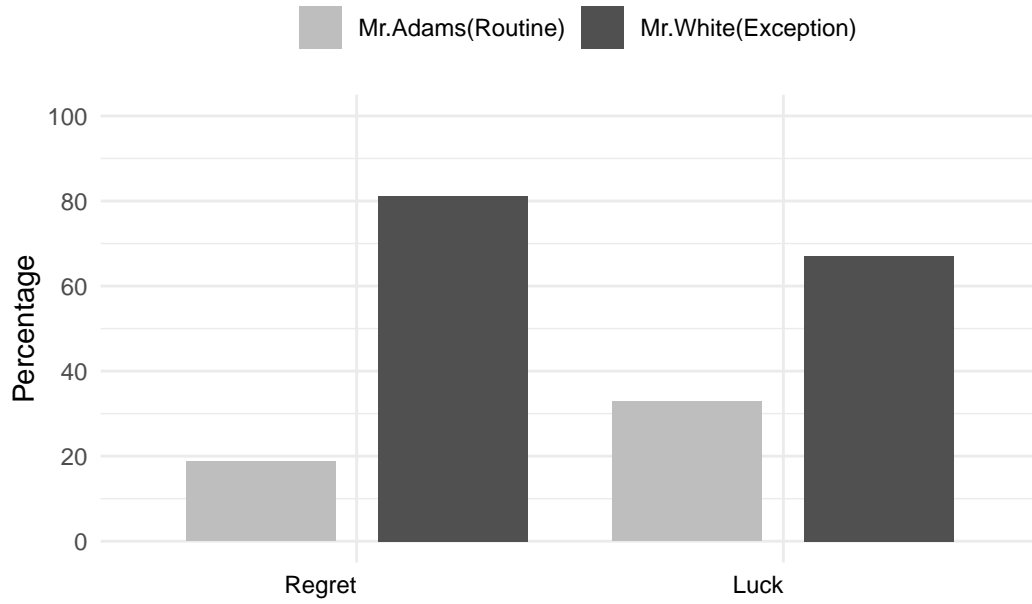


Figure 2: Bar plot of experiment 2

## **2.3 Attibutes**

### **2.3.1 Experiment #1**

### **2.3.2 Experiment #2**

## **3 Results**

### **3.1 Experiment #1**

### **3.2 Experiment #2**

## **4 Discussion**

### **4.1 First discussion point**

### **4.2 Second discussion point**

### **4.3 Third discussion point**

### **4.4 Weaknesses and next steps**

## **Appendix**

### **A Additional data details**

### **B Model details**

#### **B.1 Posterior predictive check**

#### **B.2 Diagnostics**

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