Exceptionality as a catalyst for regret: Investigating the effect of abnormal circumstances on perceived regret with insights on other factors*

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The dynamics of decision-making and subsequent experiences of regret are significant areas of inquiry in behavioural statistics. This paper examines the phenomenon where abnormal behaviour—actions which diverge from an individual's normative patterns—accentuate perceived regret from observers in hypothetical situations. We evaluate these circumstances through replication of three experiments by Kutscher and Feldman, utilising a sample of 342 participants across pre-registered experiments(2019). Our analysis investigates the exceptionality effect when participants are asked to evaluate whether a bad outcome caused by normal or exceptional behaviour is more upsetting. This study contextualises its findings within the broader literature, referencing other studies that examine the multifaceted factors which influence the depth of regret. Our results highlight the significant role that exceptional circumstances play when shaping individuals' perception of regret. We provide further perspective through external research which coincide with our results.

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^{*}Code and data are available at https://github.com/bestmustard/past-behaviour-normality/tree/main Replication items available at: https://doi.org/10.1080/02699931.2018.1504747

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1 Introduction

With the advent of the digital age, peoples' actions have never been so easily publicized, broadcasted, and scrutinized. In this era where seemingly trivial actions can lead to disastrous consequences, understanding how regret manifests and influences behaviour is more relevant than ever. Regret, a negative emotional response to personal decisions, is an important lens through which individuals assess past choices against hypothetical alternatives. This paper examines the intricacies of how past behaviour normality shapes the intensity of regret in thought experiments presented to observers.

Drawing upon the foundational work of Kahneman and Miller (1986) on norm theory, which posits that deviations from routine behaviour evoke stronger emotional responses when followed by negative scenarios, we aim to further explore this phenomenon through replication of data from Kutscher and Feldman's reproduction (2019). We examine peoples' responses to hypothetical scenarios in which two individuals suffer the same bad outcome, where it occurs to one individual in a location or situation which they would normally find themselves in, and another in an unexpected situation. Our goal is to replicate two of the three classic experiments examined in Kutscher and Miller's (1986) paper in order to arrive at a similar research claim- that past behaviour normality greatly influences the effect of regret, even in opposition to social norms. The results proved to be similar to the research claim, with the vast majority of participants believing the person in more "exceptional" circumstances to be more regretful. This data is valuable as a research point for behavioural psychology and statistics, as it falls directly in line with other opinions regarding decision-making in psychological literature. A (2021) study conducted by Matarazzo et al. titled "Regret and Other Emotions Related to Decision-Making: Antecedents, Appraisals, and Phenomenological Aspects" states that regret elicited by forced choice is always high, regardless of the outcome. In this investigation we will examine the results with the aid of visual diagrams and discuss the implication of these results From a societal perspective. This reproduction was created using the programming language R (R Core Team 2021), with the supplemental usage of the packages Rcpp(Eddelbuettel et al. 2024), jmv(Selker et al. 2023), jtools(Long 2022), MBESS(Kelley 2017), psych(William Revelle

2024), ggplot2(Wickham 2016), dplyr(Wickham et al. 2023), hmisc(Jr 2023), effsize(Torchiano 2020).

2 Data

2.1 Source

The paper used for replication is by Lucas Kutscher and Gilad Feldman and discusses the correlation between exceptional behaviour leading to negative outcomes and higher perceived regret (2018). Their paper is intended as a replication and extension of the three experiments originally conducted in (1986) by Kahneman and Miller. While they conducted two separate replication experiments each consisting of 342 participants, we find it sufficient to examine just the first one as the results from both concluded similar findings.

2.2 Methodology

As previously mentioned, this paper is replicating the 2018 paper by Kutscher and Feldman which is a replication in itself of the 1986 experiments conducted by Kahneman and Miller (Kutscher and Feldman 2019). In each of these papers three experiments were run, however for the purposes of this paper we will be examining two.

2.2.1 Hitchhiker-scenario

The hitchiker scenario, known commonly from Kahneman and Miller (Kahneman and Miller 1986), consists of two protagonists:

- Mr. Jones who never takes hitchhikers in his car.
- Mr. Smith who frequently takes hitchhikers.

Each of them took a hitchhiker and got robbed.

Participants then have to answer simple comprehension questions such as "who got robbed?" To proceed to the next stage titled (Kutscher and Feldman 2019).

The next stage consisted of a few two-option questions where participants answered which of the two would feel more regretful, which behaviour between taking hitchhikers often and not is a descriptive norm (common in society), injunctive norm (likely to be criticized), and who had more negative feelings about the situation (Kutscher and Feldman 2019).

2.2.2 Car accident scenario

The car accident scenario was also introduced by Kahneman and Miller (Kahneman and Miller 1986) and also consists of two protagonists:

- Mr. Adams gets into an accident driving home from work on his usual route.
- Mr. White also gets into an accident driving down a route he takes for a change of scenery.

This is again followed by comprehension questions and then three measures:

Regret (who is more upset), randomness (rating the randomness of the accidents), and luck (which of the two is more lucky?) (Kutscher and Feldman 2019).

2.3 Features

Since this paper only examines the first replication group, the gender demographics consisted of 182 males, 156 females, and 4 unreported, with a mean age of 38.28 and a standard deviation of 11.55 (Kutscher and Feldman 2019).

3 Results

On basis of the study by Kutscher and Feldman (2019) and the study theirs was a replication of (Kutscher and Feldman 2019) we expected the perception of regret to strongly favour the exceptional side. Looking at Figure 1, it is visible that over 80% of participants perceived Jones (Exception) to have been both more negatively affected and regretful. Additionally, the graph shows some data regarding social norms. Smith (Routine) was seen as injunctive while Jones (Exception) was seen as socially descriptive. It may be possible to see a correlation between social conformity or descriptiveness and perceived negative impact.

4 Discussion

The results of our study suggest that exceptional circumstances significantly elevate perceived regret, which has implications for understanding social conformity. The substantial increase in regret for Jones in exceptional situations may be interpreted through the lens of normative social influence, where individuals conform to what they believe is the expectation of others to avoid social sanctions, as described in a study by Kim et al. (Kim, Kim, and Kim 2021). This influence is particularly relevant in the context of injunctive norms, as individuals perceive actions against these norms not only as deviations from their own standards but also as contraventions of societal expectations.

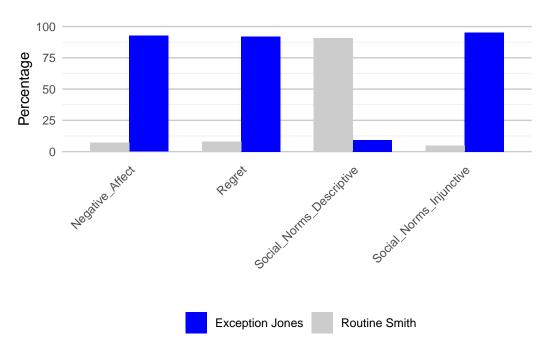


Figure 1: Figure 1: Proportions for perceived regret, injunctive social norms, descriptive social norms, and negative effect.

Furthermore, individuals who adhere to socially descriptive norms are more likely to experience heightened regret when engaging in actions that are viewed as abnormal. The rationale for this may stem from the internal conflict and cognitive dissonance experienced when one's actions do not align with common behaviors, thus intensifying the emotional response when outcomes are negative.

This study's findings indicate that the psychology of regret is closely intertwined with the constructs of social conformity and descriptive norms. The emotional impact of regret seems to have correlation to the awareness of having acted outside of what is typical or expected within a community. Therefore, being socially descriptive does not shield an individual from regret- rather, it may predispose them to greater emotional distress when their decisions lead to unforeseen negative consequences.

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