

# Experienced and Anticipated Emotion in Deontic Reasoning

**Nick Perham** ([perhamnr@cardiff.ac.uk](mailto:perhamnr@cardiff.ac.uk))

School of Psychology, Cardiff University,  
Cardiff, South Glamorgan. CF10 3AT. UK

**Mike Oaksford** ([m.oaksford@bbk.ac.uk](mailto:m.oaksford@bbk.ac.uk))

School of Psychology, Birkbeck, University of London,  
Malet Street, London. WC1E 7HX. UK

## Introduction

Anxiety impairs reasoning and decision-making when information is consciously integrated but not when it is processed automatically (Darke, 1988). Threat-laden deontic selection task performance reveals that normal individuals' (not measured for any emotion) decisions are influenced by the anticipation of regret following that decision (Perham & Oaksford, 2005): significantly fewer high, compared to low threat, cards were selected. This anticipation was independent of the locality of the threat: it was identical whether the threat was consciously integrated (P card: threat on face side) or was automatically processed (Not-Q card: threat on reverse side). Comparing with Perham and Oaksford's findings, it is hypothesized that anxiety should disrupt anticipated regret when the threat is consciously processed (P card) but not when it is processed automatically (Not-Q card).

## Method

### Participants

Eighty undergraduate students from Cardiff University participated in exchange for course credit.

### Materials

State anxiety was measured using the state version of the SSAI (Spielberger, Gorsuch & Lushene., 1970). The deontic selection tasks were from Perham and Oaksford (2005).

### Design

A 2 (threat: high or low)  $\times$  4 (card: P, Not-P, Q or Not-Q) mixed design was employed, with threat as the between-factor and card as the within-factor.

### Procedure

State anxiety was measured before and after the anxiety mood induction. During the induction participants articulated events associated with a series of 24 visually-presented physically-threatening words. Participants then received three high, or low, threat deontic selection tasks.

## Results

A mixed Analysis of Variance on the card responses revealed no significant main effect of threat, a significant main effect of card,  $F(1, 3) = 29.96$ ,  $MSE = 24.22$ ,  $p < .001$ , and no significant interaction, see Figure 1. However, as

anticipated regret was predicted on two specific cards, P and Not-Q, one-tailed Bonferroni simple effects comparisons were carried out. There was no significant effect of threat on the P card, but, consistent with anticipated regret, there was a close to significant effect of threat on the Not-Q card,  $F(1, 308) = 3.71$ ,  $MSE = .86$ ,  $p = .06$ , with participants in the high threat condition selecting the card less than those in the low threat condition.

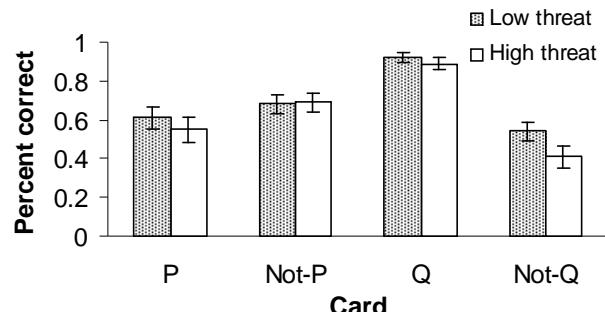


Figure 1. Card selection by threat condition

## Discussion

The current study suggests that experienced emotion, in this case anxiety, disrupts the anticipated regret of a high, compared to low, threatening outcome when the threat is consciously processed (P card). However, when it is automatically processed (Not-Q card) anticipated regret is intact and consistent with normals' performance (Perham & Oaksford, 2005). These findings suggest an intricate relationship between experienced and anticipated emotions that may be mediated by the degree to which threatening information is consciously processed and integrated.

## References

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