Catastrophic worry and systematic processing: Exploring an information processing account of perseveration

Suzanne Dash & Graham C L Davey
School of Psychology, University of Sussex, Brighton, United Kingdom

University of Sussex

Study 1: Background

Negative mood increases catastrophic worry (Johnson & Davey, 1997) and systematic processing (e.g. Ambady & Gray, 2002)

The appraisals associated with negative mood may increase cognitive variables known to increase an individual's sufficiency threshold (level of effort required to attain a sufficient degree of confidence that processing goals have been met) and consequently increase an individual's tendency to use systematic processing strategies.

We hypothesised that participants exposed to a negative mood induction (vs.. Neutral or Cognitive Priming) would score higher on measures of systematic processing facilitators (accountability, responsibility, need for cognition, desire for control, and a composite measure)

Method

Mood Induction (Negative, Neutral or cognitive priming) → Manipulation checks and VAS questionnaire

Results

The mood inductions were successful; the Negative Mood group was significantly sadder ($F(2, 55) = 10.86$, $p < .001$, *partial* $\eta^2 = .28$) and less happy ($F(2, 55) = 5.28$, $p = .008$, *partial* $\eta^2 = .16$) than the Neutral and Cognitive Priming groups.

The Negative Mood group scored significantly higher on the measures of accountability ($F(2, 55) = 5.98$, $p = .004$, *partial* $\eta^2 = .18$), responsibility ($F(2, 57) = 7.80$, $p = .001$, *partial* $\eta^2 = .29$), and a composite measure of the systematic processing facilitators ($F(2, 55) = 6.91$, $p = .003$, *partial* $\eta^2 = .20$)

Figure 1: Mean scores on VAS measures from study 1(error bars represent standard deviations)

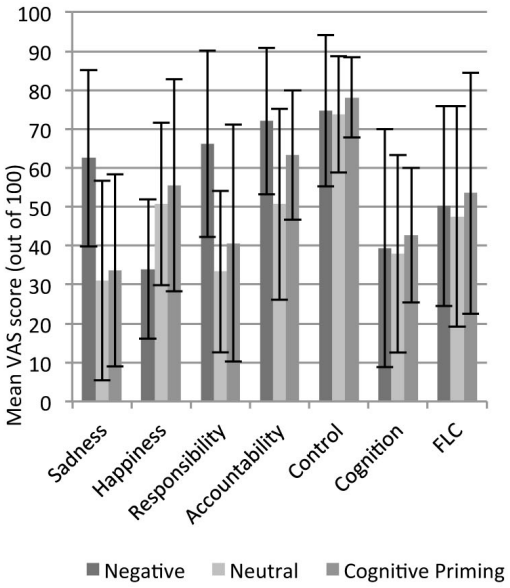
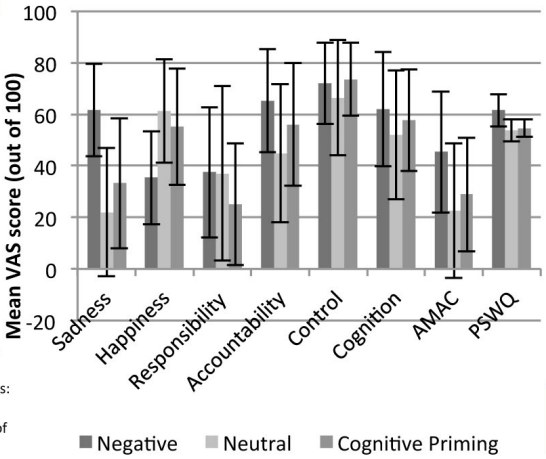


Figure 2: Mean scores on VAS measures from study 2 (error bars represent standard deviations)



Study 2: Background

Study 2 extended the design in order to assess the effect of experimental mood manipulations on worry. We hypothesised that the negative mood induction group would score higher on the measure of worry, as well as the systematic processing facilitators.

Method

Mood Induction (Negative, Neutral or cognitive priming) → Manipulation checks and VAS questionnaire → Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger & Borkovec, 1990)

Results

The mood inductions were successful; the Negative group was significantly sadder ($F(2, 83) = 23.98$, $p < .001$, *partial* $\eta^2 = .37$) and less happy ($F(2, 83) = 13.18$, $p < .001$, *partial* $\eta^2 = .24$).

The Negative group scored significantly higher on accountability ($F(2, 83) = 4.10$, $p = .02$, *partial* $\eta^2 = .12$), a composite measure of the systematic processing facilitators ($F(2, 79) = 3.68$, $p = .030$), and 'As Many As Can' deployment ($F(2, 83) = 7.13$, $p = .001$, *partial* $\eta^2 = .15$). The Negative group scored significantly higher on the PSWQ ($F(2, 81) = 3.60$, $p = .032$, *partial* $\eta^2 = .08$). The relationship between Negative Mood and higher PSWQ scores was fully mediated by the composite systematic processing facilitators score.

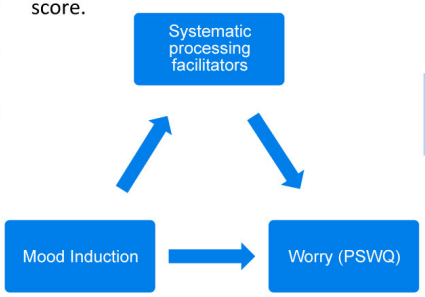
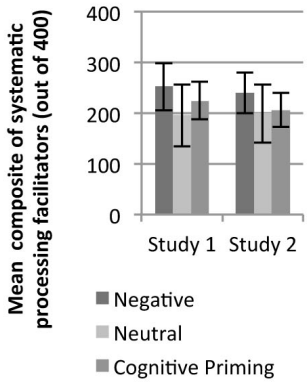


Figure 3: Mean scores on the composite measure of systematic processing facilitators (error bars represent standard deviations)



Conclusions

The findings are consistent with the view that negative mood results in perseverative worrying by facilitating factors known to increase deployment of systematic processing.

References

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Correspondence should be addressed to Suzanne Dash, s.dash@sussex.ac.uk

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