MOOD-AS-INPUT THEORY

A transdiagnostic model

Dr Frances Meeten
University of Sussex
f.m.meeten@sussex.ac.uk
• Professor Graham Davey
 University of Sussex

• Jason Chan
• Suzanne Dash
• Jack Hawksley
• Dr Benie MacDonald
• Dr Helen Startup
- Transdiagnostic approach

- Mood-as-input model as applied to perseveration in psychological disorders

- Data from a mood-as-input based intervention

- Future directions
The transdiagnostic approach

Transdiagnostic thought processes (Harvey, Watkins, Mansell, & Shafran, 2006)

• Positive and negative metacognitive beliefs
• Recurrent thinking

Transdiagnostic constructs

• A transdiagnostic examination of intolerance of uncertainty across anxiety and depressive disorders (Mahoney & McEvoy, 2012)

• Depressive rumination and co-morbidity: Evidence for brooding as a transdiagnostic process (Watkins, 2009)

• Rumination as a transdiagnostic factor in depression and anxiety (McLaughlin & Nolen-Hoeksema, 2011)

• Perfectionism as a transdiagnostic process: A clinical review (Egan, Wade, & Shafran, 2011)
**PERSEVERATION**

*Repetitive and persistent thought or behavior, which the individual finds difficult to control (Davey, 2006)*

- Depressive rumination (Nolen-Hoeksema, 1991; Watkins, 2008)
- Catastrophising (Davey & Levy 1998)
- Obsessions (Brown, Moras, Zinbarg & Barlow, 1993)
- Compulsions (Tallis & de Silva, 1992)
- Negative mood

*Negative mood*
What is mood-as-input?

• Model of task perseveration
  (Martin, Ward, Achee, & Wyer, 1993)
  Q: Why do people persevere at a task for longer than is useful?
  i.e. worrying, checking...

• Use mood to gauge if completed task goals
• Positive moods = Progression
• Negative mood = Lack of achievement

• Example: Negative and positive mood in different contexts
Mood-as-input and task perseveration
(Martin, Achee, Ward, & Wyer, 1993)

Prediction: The informative properties of mood will change with the context

![Graph showing the number of behaviours read for different goal types under positive and negative mood conditions.](image)
Stop Rules

• When we start an open-ended task we have ‘goals’

• ‘I must do this as well as I can’ (performance focused)
  OR

• ‘I will do this until I no longer feel like continuing’ (task focused)

• ‘As Many as Can’ (AMA) OR ‘Feel Like Continuing’ (FL)
AMA stop rules in psychopathology

• Why AMA?

• Individuals with common perseverative psychopathologies experience dispositional characteristics that are likely to give rise to the deployment of AMA stop rules

E.g.

☐ Inflated responsibility
☐ Intolerance of uncertainty
☐ Clinical perfectionism
☐ Poor problem solving confidence
☐ Metacognitive beliefs about the benefits of worrying, or checking etc.
Predictions from the MAI model

• Psychopathology-relevant tasks are often conducted under conditions of ‘as many as can’ stop rules and negative mood

• Mood-as-input as applied to the generation of perseverative disorders
Experimental work

- Open-ended laboratory-based perseverative tasks

- Catastrophic worry
- Perseverative checking
- Depressive rumination
Mood-as-input and perseverative worry

Startup & Davey (2001)

Open-ended catastrophising task

High vs. low worriers

‘As many as’ vs. ‘Feel like’

* p = < .05
Mood-as-input and perseverative checking

**MacDonald & Davey (2005):** Overall number of checks in an open-ended checking task when in a positive or negative mood using an AMA or FL stop rule

**p = < .001**
Mood-as-input and depressive rumination

Hawksley & Davey (2010): Number of rumination steps in an open-ended rumination task when in a positive or negative mood using an AMA or FL stop rule

* $p < .05$
Chan, Davey, & Brewin (under review): Number of rumination steps in an open-ended rumination task using an AMA or FL stop rule.

**p = < .001**
Summary of findings

• Mood interacts with stop rules to generate perseveration at a number of psychopathology relevant tasks

• Dispositional characteristics of those who experience anxious psychopathologies indicate a likelihood to adopt AMA stop rule use

• Transdiagnostic mechanism? Negative mood and stop rule interaction reliably demonstrates task perseveration

Want more?
Mood-as-input based intervention (Dash, Meeten, Davey, & Jones, in prep)

• Socialisation to the mood-as-input model as a method for reducing worry

• A brief 4-session experiment with high worriers (PSWQ > 62)

• Primary outcome measure: Penn State Worry Questionnaire

Predictions
1. Socialisation to the model would improve worry as compared to controls
2. Applying techniques based on mood-as-input theory would reduce worry
Mood-as-input sessions
• Session 1 and 2: Socialisation to the model (1) and relating model to personal worry topic (2)
• Session 3 and 4 : Specific components of the model looking at how mood and stop rules affect worry

Homework
• Lifting mood and changing decision rule homework sheet
• All groups completed a worry diary throughout the study
Primary outcome measure difference scores

Difference scores between Time 1 PSWQ scores and Time 6 PSWQ scores. Positive values indicate a decrease in PSWQ scores and negative values an increase in PSWQ scores.
Future directions

• Application to other areas of psychopathology
• A transdiagnostic mechanism of perseveration generation?
• Implications for treatment

• One size is never going to fit all
• Addressing common underlying mechanisms is a useful tool in a treatment package