

Topic in Action 1
Metacognition
Part 3 of 4

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Worry and rumination in the general population



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Examples of worry and rumination



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What are worry and rumination?

What are worry and rumination?

?

Worry: “a chain of thoughts and images, negatively affect-laden and relatively uncontrollable”

- Borkovec

Worry = Key feature of Generalised Anxiety Disorder

Rumination: “the process of thinking perseveratively about one’s feelings and problems rather than in terms of the specific content of thoughts”

- Nolen-Hoeksema

Rumination = Key feature of Depression

Borkovec et al (1983), Nolen-Hoeksema, Wisco & Lyubomirsky (2008)

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Worry and rumination (1)

Similarities and differences

Similarities

- Both forms of “repetitive negative thinking”
- Both generalised, abstract, verbal thoughts
- Both difficult to control
- Both seen as forms of “mental problem-solving”, related to unresolved / ongoing concerns

Differences

- Worry: future-oriented, not so self-focused
- Rumination: past-oriented, focus on the self

Borkovec et al (1983), Watkins, Moulds & Mackintosh (2008)

Worry and rumination (2)

What keeps worry and rumination going?

Maintained by cognitive processes

- Top down attentional control
- Bottom-up habitual information processing biases
 - *e.g.: attention bias & interpretation bias*

Attentional control, worry and rumination

Worry and rumination

Attentional control



Use to ignore distracting info



Shift attention

Distracting, negative thought

Needs to be ignored

Using attentional control

Miyake et al (2000)

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Attentional control and worry

Anxiety is associated with less available attentional control

But does this relate to worry?

High worriers vs. non-worriers

Dual Task to measure Attentional Control

Findings: Attentional control is taken up by worrying

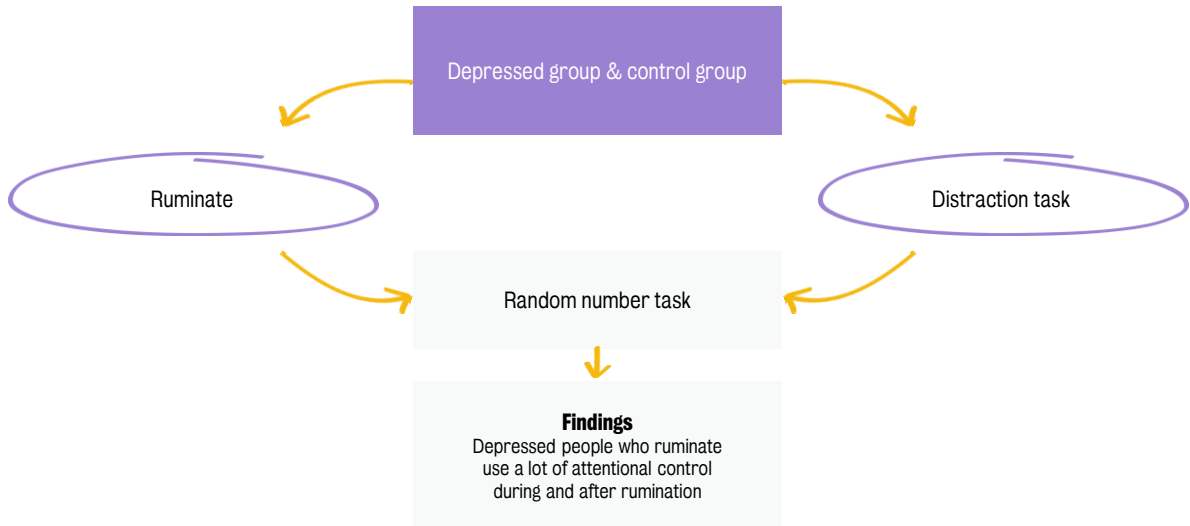
Derryberry & Reed (2002), Eysenck & Calvo (1992), Rapee (1993), Hirsch, Hayes & Matthews (2009)

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Attentional control and rumination



Watkins & Brown (2002)

Interpretation bias

Bottom-up processes

Interpretation bias

How we interpret things has impact on our mood

Example:



"The company you work for have been making some redundancies recently. When you think about your current job and level of ability, you know that your position in the company is...secure/ not secure."

Same info, different interpretations

Negative interpretation

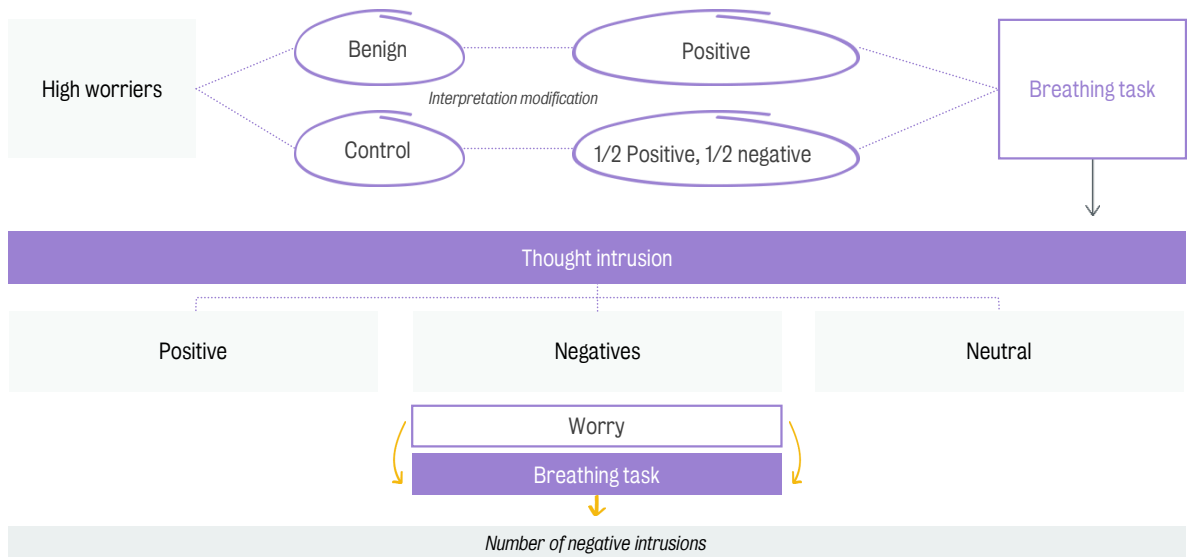
Generalised anxiety & depression

Cognitive bias modification

Does interpretation have a role in maintaining rumination?

Grey & Matthews (2000), Matthews & Mackintosh (2000)

Interpretation bias and worry

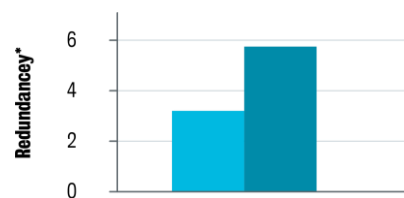
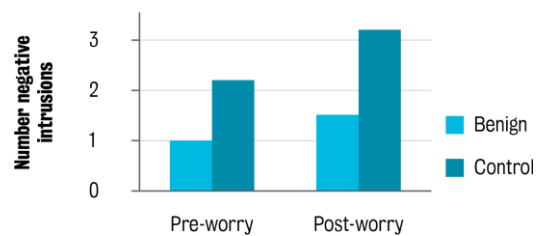


Worry: Hirsch et al. (2009) conclusions

Implications:

Attentional control is taken up by worry

Negative interpretations play a role in the uncontrollability of worry



* < redundancy means > random performance, indicating > attentional control

Hirsch, Hayes & Matthews (2009)

Interpretation bias and rumination

Non-ruminators: Train to increase number of negative interpretations

Findings

- You can increase the number of negative interpretations by training
- Person see themselves as engaging in more rumination

Implications

- Suggests causal role for negative interpretations in state rumination

Hertel et al (2014)

Conclusions about processes that may maintain rumination and worry

Same processes maintain worry and rumination

- Interpretation biases may drive worry & rumination
- Attentional control taken up by Worry & rumination

All of this lead worriers to keep focus on negative thoughts