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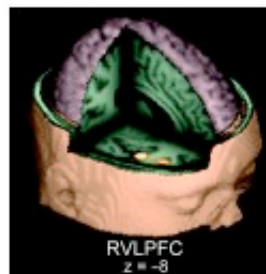
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June 21, 2007

## Labelling emotions reduces their impact:

has found that naming emotions reduces the intensity of emotion processing in the brain, possibly outlining a brain network responsible for the old saying 'a problem shared is a problem halved'.

A team led by psychologist [Dr Matthew Lieberman](#) brain-scanned participants while they looked at pictures of faces that had different emotional expressions.



Earlier studies have found that naming an emotion seems to reduce its impact but this study went to particular lengths to make sure it was actually naming the emotion that helped, rather than just naming something, or identifying the emotion in other ways.

Participants were also scanned while having to name a face with a proper name, like Jane or Peter, or while matching the face to one with a similar emotional expression. This last task involved identifying the emotion but not naming it.

It turned out that when naming an emotion, and not for the other tasks, activity in a frontal lobe area called the the right ventrolateral prefrontal cortex ([right VLPFC](#)) significantly increased while activity in the [amygdala](#) decreased.

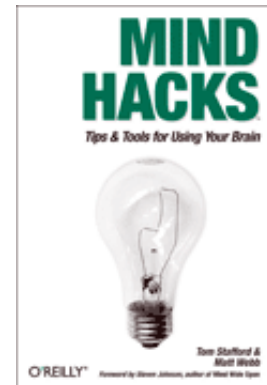
The amygdala is known to be heavily involved in processing emotions and seems to be regulated, at least in part, by the VLPFC.

These findings are consistent with this idea. The VLPFC increases its activity to dampen down the emotions triggered by the amygdala.

However, it's not clear whether this happens equally for both positive and negative emotions, as 80% of the faces in the study had expressions of anger or fear, while only 20% displayed happiness or surprise, so this data only really tells us about unpleasant feelings.

We know that observing emotion in others makes us more likely to feel the same

Neuroscience and psychology tricks to find out what's going on inside your brain.



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thing ourselves, but it's not the same as experiencing an emotion 'first-hand', so we need to be a bit careful in assuming that this study fully represents the more everyday experience of talking about our emotions.

This experiment gives us a good understanding of the brain circuit involved reducing emotional impact via naming, but it doesn't tell us much about why this occurs.

This is one of the major drawbacks of neuroimaging studies. They often just redescribe an effect in terms of brain activity.

Of course, this is essential knowledge, but we need to do more than just have several types of description and it is why the results from brain scanning studies need to be integrated with behavioural, experimental, clinical and subjective reports to be fully informative.

[Link](#) to write-up from *APA Monitor*.

[Link](#) to write-up from *Scientific American*.

[Link](#) to abstract of scientific study.

—[Vaughan](#).

Posted at June 21, 2007 10:00 AM

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