

"naming emotions" is another useful self-regulation & mindfulness strategy

all web links are given in the www.stressedtozest.com august '11 blog post of this handout

I was intrigued by a recent research paper – "*Subjective responses to emotional stimuli during labeling, reappraisal, and distraction*" – from the highly productive Professor Matthew Lieberman. His UCLA social cognitive neuroscience lab's website has downloadable full text copies of his publications. The "affect labeling" paper's abstract reads "*Although multiple neuroimaging studies suggest that affect labeling (i.e., putting feelings into words) can dampen affect-related responses in the amygdala, the consequences of affect labeling have not been examined in other channels of emotional responding. We conducted four studies examining the effect of affect labeling on self-reported emotional experience. In study one, self-reported distress was lower during affect labeling, compared to passive watching, of negative emotional pictures. Studies two and three added reappraisal and distraction conditions, respectively. Affect labeling showed similar effects on self-reported distress as both of these intentional emotion regulation strategies. In each of the first three studies, however, participant predictions about the effects of affect labeling suggest that unlike reappraisal and distraction, people do not believe affect labeling to be an effective emotion regulation strategy. Even after having the experience of affect labels leading to lower distress, participants still predicted that affect labeling would increase distress in the future. Thus, affect labeling is best described as an incidental emotion regulation process. Finally, study four employed positive emotional pictures and here, affect labeling was associated with diminished self-reported pleasure, relative to passive watching. This suggests that affect labeling tends to dampen affective responses in general, rather than specifically alleviating negative affect.*"

The brain pathways that link naming emotions to less intense emotional reactions have also been identified – see "*Putting feelings into words: affect labeling disrupts amygdala activity in response to affective stimuli*" with its comment "*Putting feelings into words (affect labeling) has long been thought to help manage negative emotional experiences ... affect labeling, relative to other forms of encoding, diminished the response of the amygdala and other limbic regions to negative emotional images. Additionally, affect labeling produced increased activity in a single brain region, right ventrolateral prefrontal cortex (RVLPFC). Finally, RVLPFC and amygdala activity during affect labeling were inversely correlated, a relationship that was mediated by activity in medial prefrontal cortex (MPFC). These results suggest that affect labeling may diminish emotional reactivity along a pathway from RVLPFC to MPFC to the amygdala.*"

These observations on the "cooling" effects of affect labeling fit well with findings from Oxford – the blog post "*Emily Holmes & imagery*" describes the very different results obtained through "verbal distancing & perspective gaining" as against "emotional imagery immersion & experiencing". It probably spills over too into mechanisms underlying benefits obtainable through Pennebaker's expressive writing. It even dovetails with the "*cool, cognitive "know" system and ... hot, emotional "go" system*" described in Walter Mischel & colleagues' paper "*A hot/cool-system analysis of delay of gratification: dynamics of willpower*" which comments "*The cool system is cognitive, emotionally neutral, contemplative, flexible, integrated, coherent, spatiotemporal, slow, episodic, and strategic. It is the seat of self-regulation and self-control. The hot system is the basis of emotionality, fears as well as passions – impulsive and reflexive.*" Duckworth & Kern link the bottom-up impulse generating process to the personality trait of extraversion-linked sensation seeking (and to neuroticism-linked urgency). The top down control processes – for example, planning & perseverance – they link more with the personality trait of conscientiousness. These findings can inform the well-known "bus driver" metaphor, with "naming" disrupting "emotion passengers" as an additional component to explore.

There is a wealth of research highlighting how developing a more effective cool, strategic, self-control system is associated with so many benefits for physical health, educational achievement, good self-care behaviours, job success and fulfilling relationships – see, for example, the post "*Self-control, conscientiousness, grit ... whatever word you use, it's sure important to have it*". Very interestingly, part of this process appears to involve learning to identify & label emotions better. See for example IZARD & colleagues' paper "*Emotion knowledge as a predictor of social behavior and academic competence in children at risk*", or their demonstration in "*Modeling emotional, cognitive, & behavioral predictors of peer acceptance*" **[Cont.]**

that social skills based on emotion knowledge lead to children achieving more acceptance & better relationships with their peers (a finding one can easily see paralleled amongst adults). And happily we can improve in these abilities, with emotion knowledge, emotion regulation, and emotion expression all benefiting from greater understanding and training – see *"Accelerating the development of emotion competence in Head Start children: effects on adaptive and maladaptive behavior"* and in adults *"Increasing emotional intelligence: (How) is it possible?"* with the more recent and exciting *"Increasing emotional competence improves psychological and physical well-being, social relationships, and employability"*.

So affect labeling – emotion labeling – links with a series of important currently active research areas – emotion regulation, verbal processing/imagery immersion distinctions, expressive writing, self-control, and emotional intelligence. It overlaps too with mindfulness training – see *"Neural correlates of dispositional mindfulness during affect labeling."* This latter paper's abstract reads *"Mindfulness is a process whereby one is aware and receptive to present moment experiences. Although mindfulness-enhancing interventions reduce pathological mental and physical health symptoms across a wide variety of conditions and diseases, the mechanisms underlying these effects remain unknown. Converging evidence from the mindfulness and neuroscience literature suggests that labeling affect may be one mechanism for these effects."* And following testing a series of subjects, the authors concluded *"The present findings with a dispositional measure of mindfulness suggest one potential neurocognitive mechanism for understanding how mindfulness meditation interventions reduce negative affect & improve health outcomes, showing that mindfulness is associated with enhanced prefrontal cortical regulation of affect through labeling of negative affective stimuli."*

This research has a number of implications. It underlines the potential value of emotion labeling as a component of mindfulness training. For example, in his superb classic *"The experience of insight: a simple & direct guide to Buddhist meditation"* Joseph Goldstein discusses awareness of sensations, thoughts & feelings. He suggests *"Sit with a relaxed and calm mind, observing the flow of sensations, without aversion, without expectations ... whenever sensations in the body are predominant makes them objects of meditation. When they are no longer predominant return to the breath. The awareness should be rhythmic, not jumping or clutching at objects, just watching "rising-falling", "pain", "itching", "heat", "cold", "rising-falling." When you find yourself tensing because of pain, carefully examine the quality of unpleasantness, the quality of painfulness. Become mindful of that feeling and the mind will naturally come to a state of balance."* This is extended to the thinking process too, saying that sometimes *"It is helpful to make a mental note of "thinking, thinking" every time a thought arises"* and *"Some people may find it helpful to label the thinking process in a more precise way, to note different kinds of thoughts, whether "planning" or "imagining" or "remembering." This sharpens the focus of attention."* And *"The mental factor of feeling is particularly important in the development of insight. Feeling refers to the quality of pleasantness, or unpleasantness or neutrality which is present in every moment of consciousness ... When we become mindful of feelings we can begin to observe them with detachment and balance."* In a more recent interview he comments *"We experience such a wide range of emotions, sometimes within quite a short period of time: anger, excitement, sadness, grief, love, joy, compassion, jealousy, delight, interest, boredom. There are beautiful emotions and difficult ones – and for the most part, we are caught up in their intensity and the stories that give rise to them. We easily become lost in our own melodramas. It's illuminating to drop down a level and look at the energy of the emotion itself. What is sadness? What is anger? Seeing more deeply requires looking not at the emotion's "story," but at how the emotion manifests in our minds and bodies. It means taking an active interest in discovering the very nature of emotion. The America monk Ajahn Sumedho expressed this kind of interest and investigation very well. He suggested that in a moment of anger or happiness, we simply notice: "Anger is like this," "Happiness is like that." Approaching our emotional life in this way is quite different than drowning in the intensity of feelings or being caught on the rollercoaster of our ever-changing moods. To do this takes mindfulness, attention, and concentration. We need to take care, though, not to misunderstand this practice and end up suppressing emotions or pushing them aside. The meditative process is one of complete openness to feelings. From the meditative perspective, the question is, "How am I relating to this emotion?" Am I completely identified with it or is the mind spacious enough to feel the grief, the rage, the joy, the love without being overwhelmed?"* Mindfulness training involves regular practice in stepping back & observing the the flow of experience, with labeling as one tool that can help this process.
