Postural Characteristics Associated with Emotions

Gross, Crane & Fredrickson (2012) studied postural characteristics of walking associated with emotions of neutral, sadness, anger, joy and contentment. Functional magnetic resonance images have linked body movements with areas in the brain that process emotions (Gross et al., 2012). Effort-Shape analysis showed sad walking was characterized by a contracted torso shape (trunk flexion, "closed-off" and more kyphotic), contracted limb shape (less limbic motion), with slow movements and a lowered cervically flexed head posture (Gross et al., 2012). The amplitude in joint motions were reduced for pelvic rotation, hip flexion, and shoulder flexion (Gross et al., 2012). The gait velocity was slower for sadness than the other emotions.

Effort-Shape analysis showed that joyful walking was characterized by more expansive/open limbic movements (unrestricted normal motion of arms and pelvic rotation during ambulation) and more erect posture--neutral cervical spine, neutral or slightly extended thoracic spine (trunk upright) (Gross et al., 2012). The gait velocity for joy was similar to anger and both were greater than the other observed emotions.

When I have a bad day, simply taking a walk/jog and stretching out helps me feel a lot better by opening up my chest, releasing my levator scapulae and upper trapezius, and lengthening my spine. I also regain focus and perspective.

Reference

Gross, M., Crane, E. A., & Fredrickson, B. L. (2012). <u>Effort-Shape and kinematic assessment of bodily expression of emotion during gait</u>. *Human Movement Science*, *31*202-221.