

Self-Monitoring

- How we use social cues to control the way others perceive us:

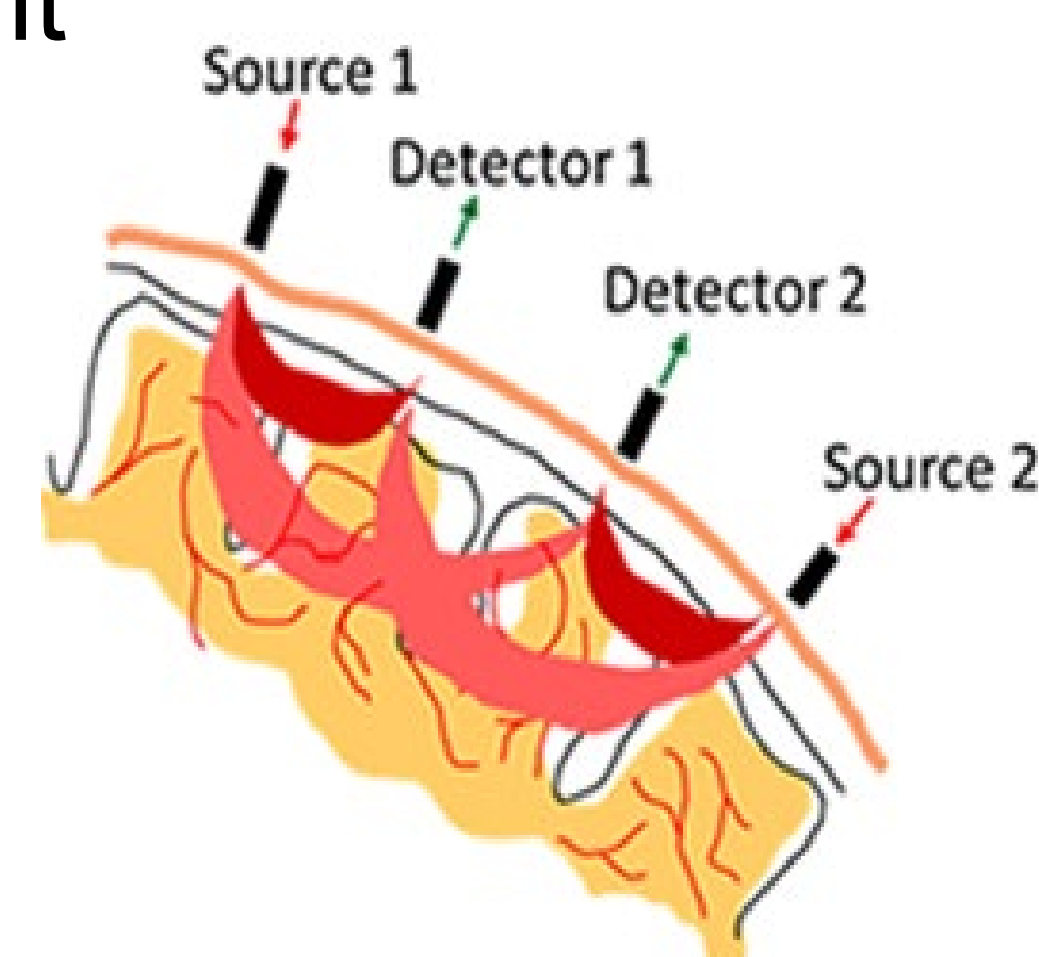
| High Self Monitors | Low Self Monitors |
|--|---|
| <ul style="list-style-type: none"> Desire social status Driven to fit in Easily regulate emotions | <ul style="list-style-type: none"> Desire self-congruence Driven by values Trouble regulating emotions |

Turnley & Bolino (2001), Leone (2006)

- We used functional near-infrared spectroscopy (fNIRS) to determine whether individuals who vary in self-monitoring traits process emotional information differently in the prefrontal cortex, and to determine whether cortical activity changes when they attempt to control facial reactions to emotional stimuli.
- The orbitofrontal cortex (OFC) is a prefrontal region implicated in emotional processing and self-monitoring.

fNIRS

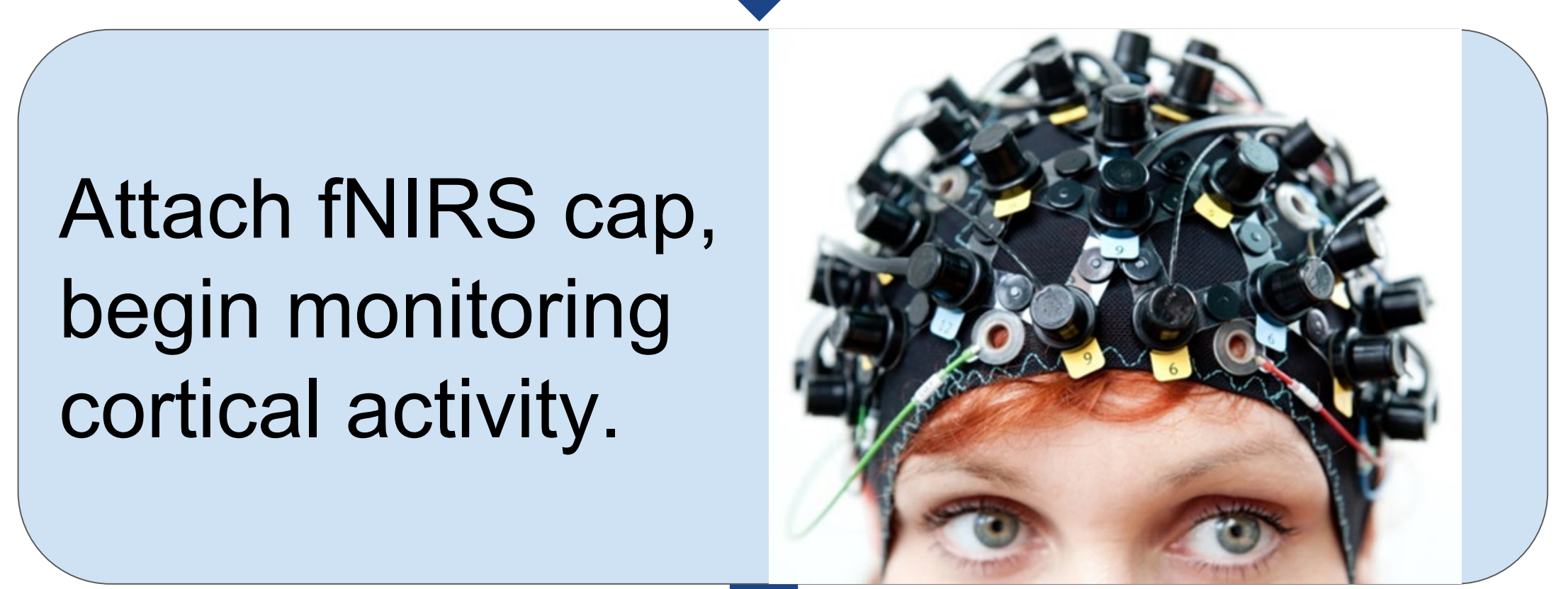
- Uses near-infrared light to non-invasively measure blood flow in the brain, a measure of cortical activity.



Method

Snyder Self-monitoring Scale
True / False questions assess self-monitoring traits

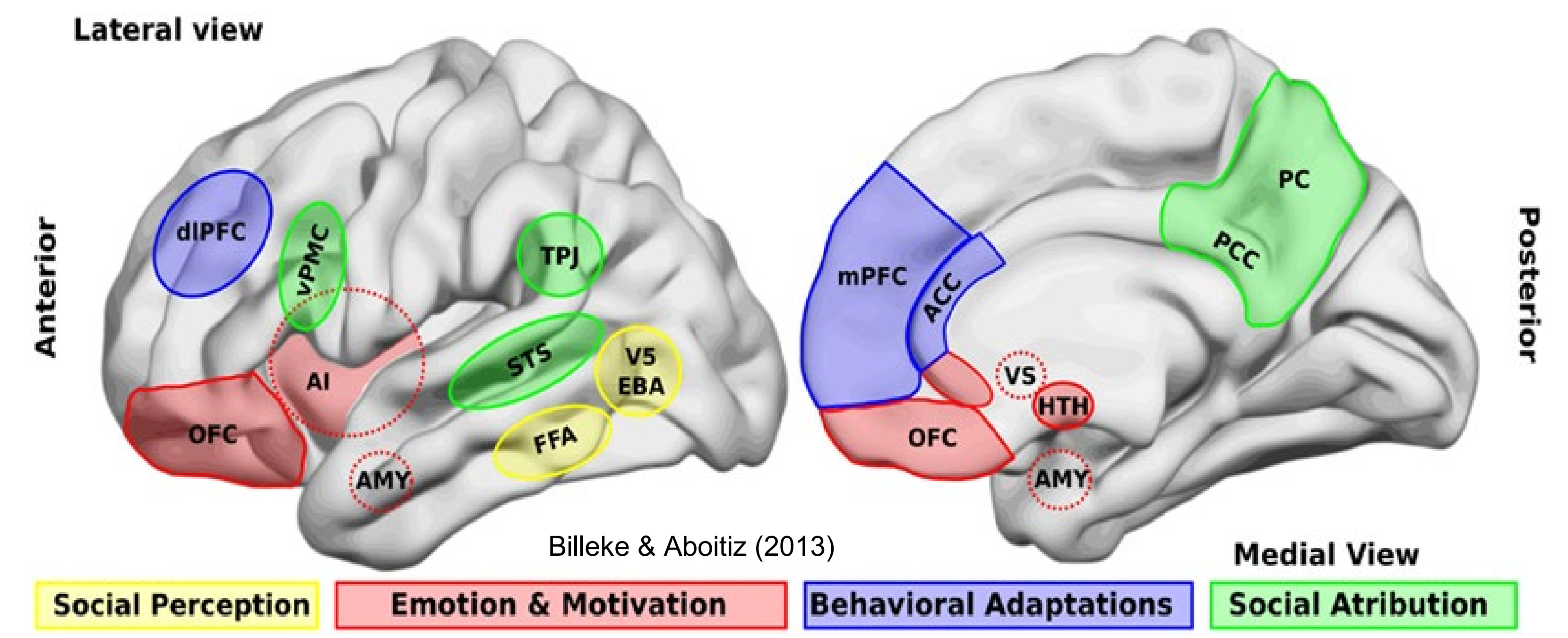
- "I find it hard to imitate the behavior of others."
- "I'm not always the person I appear to be." Snyder (1974)



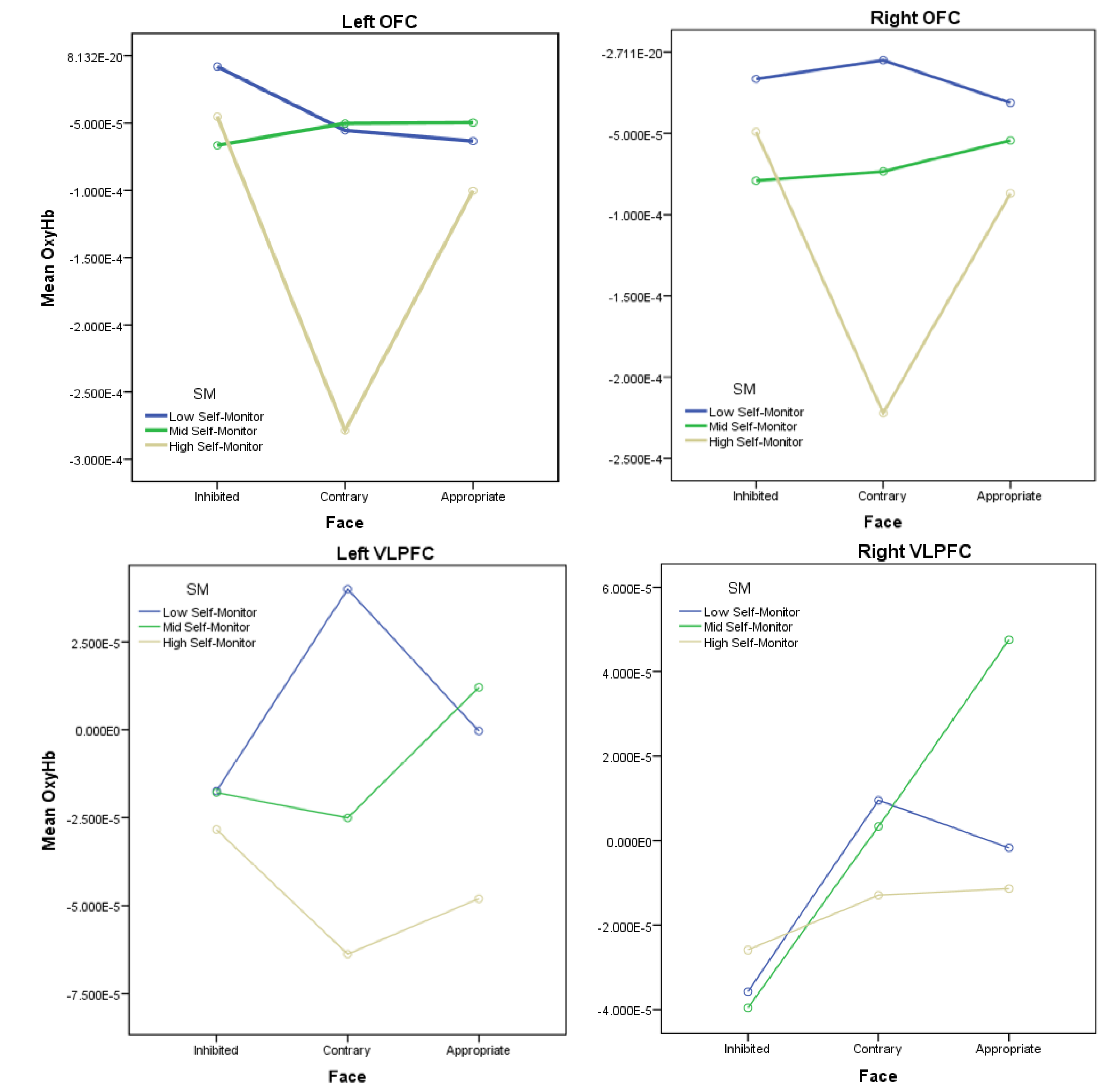
View images from the International Affective Picture System (IAPS)

Positive Neutral Negative

- Inhibit facial expressions
- Produce expression congruent with emotion elicited
- Produce expression contrary to emotion elicited

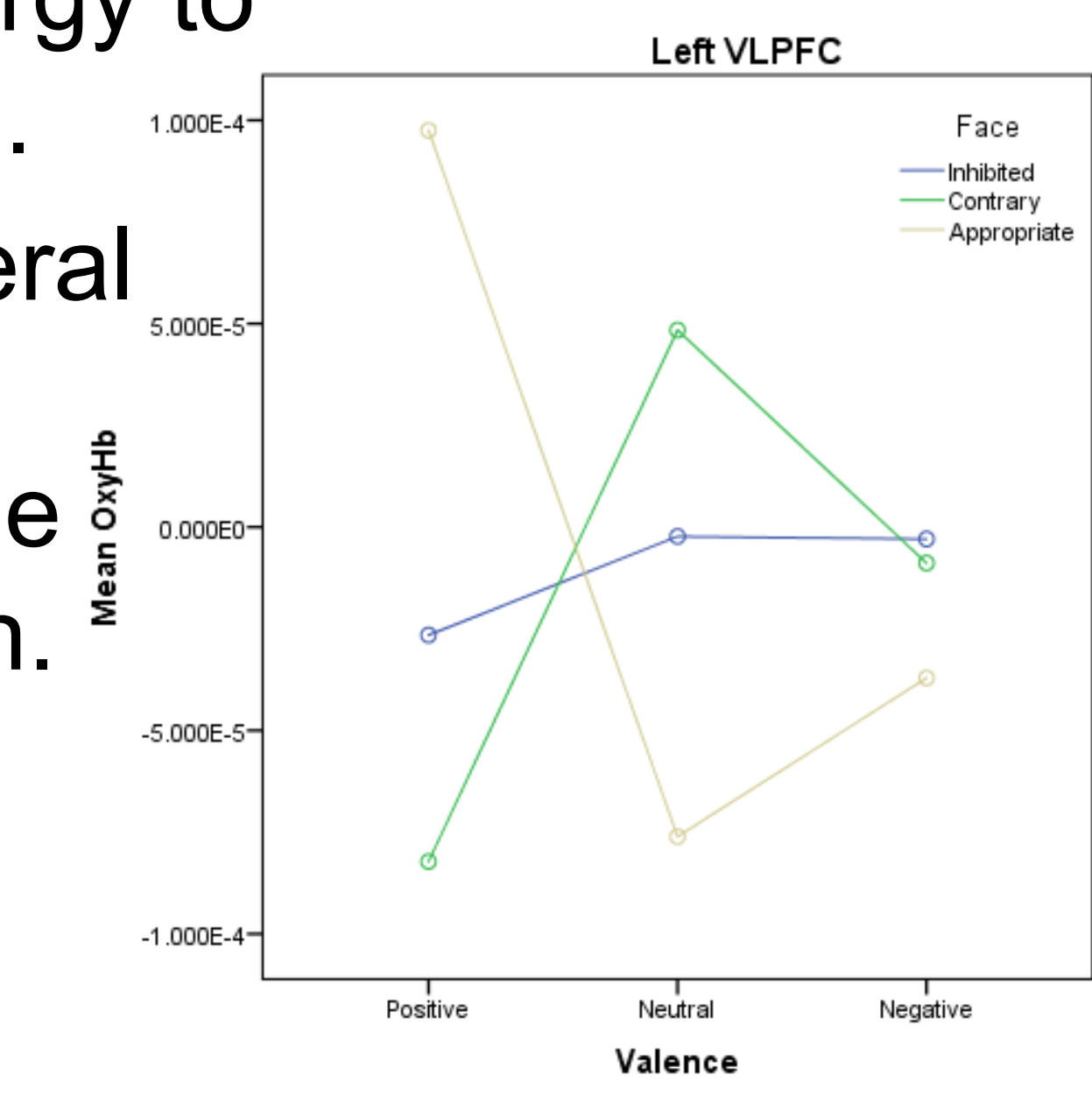


Results



In the Orbitofrontal Cortex (OFC) of both hemispheres, mid and low self-monitors had minimal variation in the self-monitoring conditions, but high self-monitors showed much less activation when asked to perform a self-monitoring task. The same trend was not seen in other prefrontal regions such as the ventrolateral prefrontal cortex (VLPFC).

- Trend: High self-monitors have less cortical activity in orbitofrontal cortex when making an expression contrary to emotion elicited.
- High self-monitors may be better at emotional regulation, requiring less energy to perform self-monitoring tasks.
- In dorsolateral and ventrolateral prefrontal cortices, we notice an association between image valence and facial expression.



Future Directions

- Collect more data.
- Explore association between imagery valence and self-monitoring task.