The present study demonstrated sex differences in the relationship between coping styles and frontal EEG asymmetry in response to emotional challenges:

1. Higher approach-related coping was linked to relatively greater left frontal EEG activity in men.
2. Higher withdrawal-related coping was linked to relatively less left frontal EEG activity in women.

A growing body of research has shown that relatively less right frontal EEG activity may be a marker of risk for depression (e.g., Allen et al., 2004; Henriques & Davidson, 1991; Stewart et al., 2010).

Given this literature, results of the present study suggest that degree of depression risk is linked to the degree of:

2. Withdrawal-related coping styles in women.

Results held across all facial expressions made during the emotional challenge task regardless of the valence (positive or negative) or motivational direction (approach, withdrawal) associated with the facial expression. Thus, frontal EEG asymmetry may be indexing a generalized trait-like capability to respond to emotional events (Coan, Allen, & McKnight, 2006).

Findings suggest that depression prevention and treatment could focus on increasing the use of approach coping in men and reducing the use of withdrawal coping in women in response to emotional stressors.

Reference


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