Executive Function Correlates of Symptoms of Specific Anxiety Disorders and Major Depression
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Introduction
Research assistants, who received 40 hours of training on the administration of study measures, administered the D-KEFS subtests and the SCID modules to all participants.

Methods - Procedure
Participants also completed the computerized version of the WCST.

Results

Table 1. Hierarchical Multiple Regression Analyses Predicting Symptoms of Major Depressive Disorder and Generalized Anxiety Disorder from Executive Function Measures

<table>
<thead>
<tr>
<th>DV Measures</th>
<th>Major Depressive Disorder Symptom Count</th>
<th>Generalized Anxiety Disorder Symptom Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors</td>
<td>r</td>
<td>b</td>
</tr>
<tr>
<td>Inhibition</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Working Memory</td>
<td>-0.25</td>
<td>-0.25</td>
</tr>
<tr>
<td>MDD</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Social Phobia</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Panic</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Methods - Measures

Executive functions (EF) are higher order cognitive processes that assist with the regulation of emotion, planning, organization, and goal directed behavior. 1

EF have been classified into three inter-related processes: attention shifting, updating/monitoring information in working memory, and inhibition.1

Past research has suggested that individuals with depression perform worse on EF tasks than non-clinical control groups.2

Despite strong ties between anxiety and depression, less systematic attention has been given to the role of EF in anxiety disorders.3

Despite ties between anxiety and depression, less systematic attention has been given to the role of EF in anxiety disorders. For example, research generally has not utilized an empirically supported EF framework to study EF and anxiety; however, the little research that has utilized an empirically supported EF framework has provided mixed findings.4

This relative void in the literature is important in light of the strong relationship between some anxiety disorders (e.g., Generalized Anxiety Disorder; GAD) and Major Depressive Disorder (MDD),5 which may share a common cognitive vulnerability (e.g., EF).6

The goal of the present study is to explore the associations between symptoms of specific anxiety disorders, depression, and EF.

Method - Participants

84 postpartum women recruited to participate in a longitudinal study which may share a common cognitive vulnerability (e.g., EF).6

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Most participants self-identified as Caucasian (70.2%), Hispanic/Latino (13.1%) or African American (10.7%).7

Participants were compensated with $60 for this portion of a larger study.

Method - Measures

EF Inhibition: Delis-Kaplan Executive Function System (D-KEFS)8

Color-Word Interference Test - Inhibition time, Inhibition switching time, Total errors on switching conditions

EF Monitoring/Updating Information in Working Memory: (D-KEFS)9

Verbal Fluency Test - Letter Fluency, Category Fluency, Category Switch Accuracy

EF Attention Shifting: Computerized version of the Wisconsin Card Sorting Test (WCST)10

Attention shifting - Preservative Errors, Preservative Responses, Preservative Switch Accuracy

Depression and anxiety symptoms: Structured Clinical Interview for DSM-IV (SCID)11

Depression and anxiety modules: Depression and anxiety symptom count

Covariates: Age, Education, and Income-to-needs

References