## Introduction

Using data from the Childhood Behavior Checklist (CBCL) we have developed a scale that can be used to identify children with OCD. In our earlier work (Nelson et al., 2003), we identified 11 of the 119 CBCL items as being consistent with the behaviors of childhood OCD. We then used factor analysis to test and derive an Obsessive Compulsive Scale (OCS). A single factor accounted for 40.0% of the variance and, after simplification of the solution, consisted of 8 items. We then compared CBCL weighted factor scores for a cohort of pediatric OCD patients who had been diagnosed as having DSM-IV OCD with scores from clinically ascertained and general population controls. We demonstrated that the OCS from the CBCL had moderate sensitivity and high specificity to detect clinical OCD, with positive predictive value (PPV) ranging between 70.5% - 83.3% and negative predictive value (NPV) ranging between 58.2% - 91.6%. In subsequent work, we have shown that a simple addition of the items placed into the analysis using a Receiver Operating Characteristic (ROC) curve analysis allowed for similar characteristics.

## Measures

<table>
<thead>
<tr>
<th>Item</th>
<th>Male</th>
<th>Female</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worry and Has to be Perfect</td>
<td>0.29</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>Strange behavior</td>
<td>0.29</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>Strang ideas</td>
<td>0.29</td>
<td>0.19</td>
<td>0.19</td>
</tr>
</tbody>
</table>

## Data Analyses

Latent class analysis was performed using Latent Gold. Participant response profiles on the 8 items were placed into the analysis separately for boys and girls.

## Results

Regardless of age group, sex, or sample, for the 1-class, 2-class and 3-class models, the models were significantly more likely than chance as measured by bootstrapping. As the number of classes increased from 1-class to 2-class and from 2-class to 3-class, the AIC and BIC either decreased appreciably or the increase was minimal. Thus, a 3-class model was considered the minimal acceptable model.

The classes are shown graphically in the next pane and seemed to represent a "No or Mild Symptoms" class, a "Worry and Has to be Perfect" class and a "Severe Symptoms" class in descending order of class membership for both boys and girls at all ages.

## Discussion

Latent class analysis identifies two subtypes within the OCS of the CBCL. These subtypes may be more heritable than OCD identified using the OCS alone, especially at later ages, offering another perspective of increased specificity for the genotyping of OCD, especially in samples which already have CBCL data on large populations.

## References: