Latent Class Analysis of Electronic Media Use in Adolescents: Gender Differences and Associations with Internalizing Symptoms

Anna Vannucci¹ and Christine McCauley Ohannessian¹,²

¹Center for Behavioral Health, Connecticut Children’s Medical Center; ²University of Connecticut School of Medicine

BACKGROUND

- Electronic media is central to the lives of adolescents, but the impact of electronic media use on their internalizing symptoms has yielded mixed results.
- Prior research has examined forms of electronic media use (e.g., television viewing, texting, video game playing) in isolation of each other, despite the fact that adolescents likely use many forms of electronic media to varying degrees.
- The nature of the typologies of electronic media use and their relationship to internalizing problems is unknown.
- Adolescent girls and boys differ in their use of electronic media, but it remains unclear as to whether there are differential associations between patterns of electronic media use and internalizing symptoms across gender.

OBJECTIVES

1. To determine whether subgroups based on adolescents’ patterns of electronic media use differ by gender.
2. To examine the associations between electronic media use subgroups and internalizing symptoms in girls and boys.

METHODS

Participants: 1,003 10th and 11th grade students recruited from suburban public schools in the Mid-Atlantic region of the U.S. (54% girls; 58% non-Hispanic White; Age: M = 16.1, SD = 0.8 yrs)

Procedure: Self-report questionnaires were administered during one class period in the spring of 2007.

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To obtain a copy of this poster, please visit adolescentadjustmentproject.org.

RESULTS

Table 1. Electronic media use subgroup comparisons in internalizing symptoms among adolescent girls.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive Symptoms</td>
<td>Center for Epidemiological Studies Depression Scale for Children (CES-DC)</td>
<td>Total score</td>
</tr>
<tr>
<td>Anxiety Symptoms</td>
<td>Screen for Child Anxiety Related Disorders (SCARED); assessed anxiety disorder symptoms in the past three months.</td>
<td>Generalized anxiety disorder (GAD); Panic disorder (PD); Social anxiety disorder (SAD); Separation anxiety disorder (SEP); Significant school avoidance (SSA)</td>
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For both girls and boys, BIC and aBIC were lowest for a 2-class solution, whereas the aBIC was lowest for a 4-class solution. The LMR-LRT indicated that a 3-class solution was preferred to a 2-class solution (ps < .01), whereas a 4-class solution did not provide a superior fit to a 3-class solution (ps > .05). For the 3-class solution, the entropy was highest (.77-.80) and the average posterior probabilities suggested good-to-excellent classification accuracy (.75-.95).

CONCLUSIONS

- Adolescent girls and boys can be meaningfully subtyped based on their electronic media use patterns.
- One subgroup in girls was characterized by social-entertainment device use, whereas one subgroup in boys was distinguished by video game and computer use.
- Electronic media use subgroups may be differentially associated with depressive and anxiety symptoms in adolescent girls and boys.
- Future research should examine these associations prospectively and investigate potential mechanisms.