Girls are two to three times more likely than boys to develop depression during preadolescence and adolescence\(^1\), and they are at an increased risk for anxiety disorders across their lifetimes.\(^2\)

The gender gap in anxiety emerges early in development, around age 6, followed by increased rates of depression that begins in girls by ages 12 to 13.\(^3\) Various biopsychosocial factors have been proposed to explain girls’ preponderance of anxiety and depression: girls’ use of ruminative coping styles,\(^4\) girls’ tendencies toward empathy and compliance,\(^5\) early pubertal timing,\(^6\) relational aggression observed among female peers,\(^7\) and body image concerns.\(^8\)

Despite these areas of inquiry, little has been studied about how girls’ self-esteem in various domains of functioning (e.g., academics, athletics, appearance, behavioral conduct, and peer relationships) is related to anxiety and depressive symptoms during the middle school years. Moreover, research has not examined what these relationships look like in a single-sex school setting where girls’ and teachers’ frames of reference and contexts may differ in comparison to coeducational settings.
Girls feel especially good about their academic abilities when they are strong mathematics students.
RESEARCH OBJECTIVES
The goals for this study were to assess middle school girls’ feelings of anxiety, worry, and sadness to determine if, and to what degree, these feelings are related to:

1. Girls’ self-esteem in different areas of functioning: academics, athletics, appearance, behavioral conduct, and peer relationships
2. Teachers’ ratings of girls’ competencies in different areas of functioning
3. Girls’ performance on archival scholastic data
4. The quantity and quality of girls’ peer networks

PARTICIPANTS
The study sample was comprised of girls in the 5th, 6th, 7th, and 8th grades during the 2007-2008 school year at Laurel School in Shaker Heights, Ohio. Approximately 58% of the middle school girls participated in the study for a final sample size of 91 girls. Fourteen teachers also agreed to participate in the study.

STUDY DESIGN
The study was a cross-sectional design utilizing survey data gathered from girls, teachers, and parents. Girls completed surveys during a single non-academic period. Parents and teachers returned surveys by mail. Archival scholastic scores were collected by the investigators.

KEY FINDINGS
- On average, girls reported nonclinical levels of depressive and anxiety symptoms. Their rates were similar to what has been reported in other normal samples.
- Girls’ self-esteem regarding appearance and peer relationships was more predictive of anxiety symptoms than any other domain of functioning.
- Girls who highly valued their appearance reported higher levels of anxiety symptoms.
- Girls with higher self-esteem in their peer relationships and girls who reported having closer, supportive friendships had lower levels of anxiety symptoms.
- Friendship network size and popularity were not significantly correlated with level of anxiety symptoms.
- Girls high in anxiety symptoms underestimated their scholastic achievement.
- Girls’ scholastic self-esteem was more strongly related to their quantitative scholastic scale scores than verbal scholastic scale scores. In other words, girls feel especially good about their academic abilities when they are strong mathematics students.
- Teachers’ ratings of girls’ competence in all domains mapped on to girls’ self-perception of their competence in those domains (e.g., if a girl said she felt that she was really good at making friends, teachers observed this to be true).
- Girls with higher levels of depressive symptoms were observed by teachers to exhibit more conduct problems.
- In comparison to girls reporting subclinical levels of depression, girls reporting subclinical levels of anxiety were rated by teachers as highly competent in their conduct and scholastic achievement. This suggests that anxious girls may be difficult to detect in a school-based setting.

IMPLICATIONS FOR INTERVENTIONS
Given this study’s findings, interventions aimed at improving girls’ self-esteem regarding peer relationships and appearance may help to buffer against emotional difficulties. Workshops or educational series that teach girls assertive communication skills, relationship building, and conflict resolution strategies may help to improve their interpersonal confidence. In addition, media literacy courses that teach girls to be active, critical consumers of appearance-related media may help to address poor body image and improve self-esteem.¹⁰
MOOD AND SELF-ESTEEM IN MIDDLE SCHOOL GIRLS


