



Tense Times

In middle school, why do some students glide through while others struggle?

By **Lee Sherman**

Photography by **Kelly J. James**

Middle schools are roiling cauldrons of stress. As if acne, algebra, orthodontia and runaway hormones weren't tough enough, young teens also face intense pressure to be liked.

For sixth-graders in Benton County, broken friendships and hurtful rumors hold more dread than bad grades or angry parents, researchers at OSU have learned.

"Middle school is a scary place," says Jennifer Connor-Smith, a psychology professor who is leading a three-year study on adolescent coping strategies.

Her assessment is not just professional — it's also personal. She admits to having been an adolescent "stress case" herself. As an undersized child with an oversized intellect, Jennifer Connor had skipped second grade. The straight As she earned in math never eased the social discomfort she felt among her older, bigger classmates. The fear

that "nobody would like this short little pipsqueak" only got worse as she headed off to junior high in Littleton, Colorado.

The memory of that grinding anxiety has motivated her research, even as a doctoral candidate at the University of Vermont and as a post-doc at UCLA. Her current study, funded by the National Institute of Mental Health, delves into the causal links between personality type and coping strategies. How, she wondered, does temperament interact with various ways of



handling stress to predict outcomes for adolescents? Why do some kids glide through stressful situations emotionally unscathed, while others lash out aggressively — or sink into depression?

If social scientists could discover what kinds of strategies work best for which kinds of kids, Connor-Smith reasoned, school counselors and clinical psychologists could more effectively teach coping skills to children struggling with anxiety, depression or aggression, customizing the intervention for each child's unique makeup. Tailored therapies are certain to work better than generic ones, she says, to prevent the depression, drug use, school failure and violence that can derail the lives of troubled teens. Helping kids manage the often wrenching transition from



OSU psychology Assistant Professor Jennifer Connor-Smith (center), along with undergraduate researchers Janelle Quest and Kathryn Cellerini, is investigating the complex interaction of personality and stress management in adolescents.

Undergrads in the Lab

Undergraduate researchers Janelle Quest and Kathryn Cellerini have been working shoulder-to-shoulder with their professor Jennifer Connor-Smith to identify and isolate the factors that influence adolescent stress management.

As part of a cadre of research assistants in OSU's Department of Psychology, they are getting the kind of nuts-and-bolts experience in social science that typically comes along only for graduate students. They are helping to design questionnaires and "protocols" for observing and rating kids' behaviors, interviewing students and their parents, measuring physiological responses to stress in the laboratory, and collecting and analyzing data.

"Working in the lab has given me a chance to really understand what goes into developing the knowledge base in psychology," says Quest, who started college as an engineering major. "It's given me a whole new perspective on my education because I'm taking an active part in what I'm learning, compared to cramming for a midterm and then forgetting everything afterward."

Cellerini, who entered OSU in pre-med before switching to psychology, says her strong science background has been a big plus. "Genetics and chemistry are really helpful in psychology," she says.

This work has helped both young women solidify their career goals. Quest (who completed her degree requirements last spring) rounds out the 30 hours she spends in the psych lab each week with a graveyard shift at the Children's Farm Home, where she works as a treatment specialist for troubled youths. A Northwesterner born in Anchorage and raised in Eugene, Quest plans to counsel children and families after earning her Ph.D. in clinical psychology. "I want to make a difference," she says. "Working with younger kids is best — the earlier, the better."

Cellerini, an Oregonian from the rural community of Colton, also aspires to a doctorate in clinical psychology, with an emphasis in child development. "I feel that I'm at my best," she says, "when I'm working with kids."



“For boys, middle school is a little bit like *Lord of the Flies*.”

— Jennifer Connor-Smith
Assistant Professor,
Psychology

elementary to middle school can give them a big leg-up, socially, academically and emotionally.

To figure out how stress and personality interact, the researchers began by gathering data about “social stressors” (difficult interactions with peers) and “life stressors” (academic and domestic problems) from about 400 students at middle schools in Philomath and Corvallis, Oregon. The questionnaires also probed emotional, behavioral and coping issues. A 150-student subset of that group was then brought to the OSU psychology lab for individual testing. Connor-Smith has trained a cadre of undergraduate researchers (see sidebar) to administer a set of “standardized stressors”— for example, having the child solve a math problem aloud and give an impromptu soliloquy about friendship in front of a video camera. To measure the subject’s level of “involuntary stress reactivity,” the team

used electronic monitors and sensors to track heart rate, blood pressure, and skin moisture. Finally, each subject was videotaped during an eight-minute interaction with a parent.

Although the data are still being crunched, a couple of early findings have emerged. First, a child who tends to be anxious — one whose heart rate

and blood pressure spike in times of stress — needs to use different coping skills than a more easy-going child. “When your heart is pounding, your thoughts are racing, and you feel sick to your stomach, that’s not the time to try to reason through what you’re going to do,” Connor-Smith concludes. “That’s the time to pull back and get yourself together before you step forward to do some problem-solving.”

Behavior that typically is viewed as a failure to cope — disengagement, avoidance, denial — can actually benefit highly anxious people, she says, as long as they follow through with more active strategies after they calm down.

Second, the study suggests that coping skills are gender sensitive. Strategies that work well for girls, the researchers have found, can backfire for boys. A sixth-grade girl who seeks social support — who goes to her girlfriends and says, “I’m sad, Ashley hurt my feelings”— is likely to get nurturance and support. But a sixth-grade boy who says, “You hurt my feelings” risks getting teased and laughed at.

After watching kids talk about their problems on hours and hours of videotape, Connor-Smith saw two clear sets of rules. “The girls talk a lot about feelings and about their network of alliances — how

Ashley told Caitlin that Savannah was upset with Lindsay because Lindsay told Caitlin,” she reports. “You almost have to diagram it.” Adolescent boys, on the other hand — despite growing tolerance for “sensitive” males in the broader society — tend to keep their feelings to themselves. Thus, a sixth-grade boy who’s upset is unlikely to reveal his pain to his peers. And while he may shrug it off — “It didn’t bother me; I’m cool” — such bravado may mask unresolved feelings that can fester or erupt.

“For boys,” Connor-Smith observes wryly, “middle school is a little bit like *Lord of the Flies*.”

Her data also show that when parents model warmth and empathy, their kids handle stress better. Supporting the child’s autonomy is also critical. “Children do best when parents encourage them to think for themselves and to draw their own conclusions about what they should do next, rather than issuing edicts,” says Connor-Smith, adding, “Thank goodness my mom did this for me, or I may never have survived junior high.”

So far, the findings support the professor’s hypothesis that when it comes to stress management, “One size does not fit all.” Her hope is that the study can guide new approaches to coping-skills interventions and improve mental health for middle schoolers at this intensely vulnerable, enormously formative time in their lives. **terra**

To read about research in the Department of Psychology, see

oregonstate.edu/cia/psychology/