Coping Power

UA students in psychology and anthropology research classes are a vital component of a groundbreaking program that is building emotional intelligence in children around the globe.

By Olivia Gridr | Photos by Jeff Hansen, Erin Reilly, Miranda Barrett and Allie Newman

Since the late 1990s, hundreds of University of Alabama students have been involved in a program that has helped more than 1,000 elementary-school children recognize and manage their strong emotions, and now UA students are paving the way as the initiative expands to middle schools and pre-kindergarten programs serving low-income families.

"Students play a very beneficial role in our ability to carry out these projects and then test their effects," says Caroline Boxmeyer, associate professor in the department of psychiatry and behavioral medicine. "Some students actually carve out their own research questions. When they get exposed to the intervention and the population we serve, they're able to come up with new and interesting questions that help push our ideas forward."

Extensively documented effects of the standard Coping Power program, which targets children with moderate levels of aggression or difficult behavior in school, include improved school behavior and academic performance, prevention of delinquency and substance abuse, increased parent/child interaction and other positive impacts on parenting. UA faculty have travelled across the United States and the world to countries including Greece, The Netherlands, Italy, Sweden, Canada and Portugal to help child-behavior experts implement the Coping Power program.

Elements of the intervention include helping children to become better aware of their feelings, such as sadness, fear and especially anger; recognize their emotional triggers; practice various techniques for handling strong feelings and calming themselves (after being exposed to emotion-rousing stimuli); learn to see others’ perspectives; exercise social problem solving; resist peer pressure; and choose friends wisely.

"A really critical part of the program is problem solving," Boxmeyer says. "So when you find yourself in a difficult situation, you are thinking about how different scenarios could play out and making the best choice."

Role playing is a key method for building these skills, says John Lochman, professor of psychology and director of the Center for Prevention of Youth Behavior Problems. "We’ll have the kids practice handling strong feelings and difficult situations with puppets, in a group or one on one," he says. "They’ll practice noticing how they feel, and what kind of strategies the puppets can use to stay calm. Then, we graduate to live role play. We want to move toward things more realistic, so the next time they find themselves in a real-life situation that triggers anger, they can handle it. It’s similar to exposure therapy for anxiety, but for managing anger."

Interventionists also assist children in setting short- and long-term personal, professional, social goals and monitoring progress toward those goals.

Typically, at least 30 UA undergraduate students and five to six graduate students are working with the Coping Power program at any given time. Graduate students each devote 20 hours per week to the program through graduate research assistantships, and undergraduate students dedicate three to nine hours per week while earning credit through PSY 451 Supervised Undergraduate Research or ANT 451 Undergraduate Research.

Boxmeyer says Coping Power gives UA students, many of whom plan to become psychologists, anthropologists or physicians, research experience and exposure to mental-health intervention approaches that will assist them in their careers. The program also shows them something that is often overlooked: "the synergism of how intervention research works — how you can provide a service and collaborate with community entities like schools in the content of a research project," she adds. "It’s research, but research that will have a direct, beneficial impact in the community."

Lisa Veling, a junior majoring in economics and biology who plans to become a physician, says she is excited to be part of the project. "I think the implications of this research are huge," she says. "Teaching kids coping mechanisms at a young age could definitely help those children in the future and may protect them and prevent possible harm. I really hope that this study can benefit as many people as possible."

Lochman co-created Coping Power in the early 1990s while he was at Duke University. During the past decade, he and other researchers have been testing different adaptations and formats of the program.

In the 2014-15 academic year, approximately 60 UA undergraduate students and seven graduate students
worked with the Preschool Power PATH program, which involves 500 children and their families at Head Start centers in seven West Alabama counties. The federal Head Start project provides early-childhood-education and parent-involvement services to low-income families.

Power PATH covers similar topics as standard Coping Power curriculum, but in developmentally appropriate ways, says Boxmeyer, a principal investigator on the study along with Ansley Tullos Gilpin, assistant professor of psychology, and Jason DeCaro, associate professor of anthropology. It differs from elementary programming in that it’s universal; all children in the preschool classrooms are exposed to the intervention curriculum. The program also includes curriculum for parents.

Power PATH gives preschoolers a vocabulary for expressing emotion and educates teachers in creating a supportive classroom environment in which all feelings are OK. The program also teaches social skills such as sharing and positively interacting with peers.

The "turtle technique" is used to help kids recognize when they’re getting upset and calm themselves down. Children are taught to hug themselves, go into their “shells,” then state their emotions out loud. “By helping children stop and notice how they’re feeling, that can kind of shift them from the reactive part of the brain to the logical part that can help them calm down and plan what to do next,” Boxmeyer says.

Parents learn how to support and use the same strategies at home and how to handle their own stress and develop and maintain positive parent/child relationships.

Student teams, each led by a graduate student, travel to Head Start facilities to conduct cognitive, behavioral and stress-reactive assessments with the preschoolers. They perform tests before children enter the program and repeat them when the kids complete kindergarten, first and second grade.

Graduate students also implement the parent segment of the program. Undergraduates provide childcare during the parent meetings, record classroom video observations and communicate with Head Start center directors and teachers about data collection.

Power PATH could become a vital component of the federal Head Start program. Research shows Head Start benefits children while they attend, but improvements often fade when the home environment is not enhanced as well. If Power PATH is shown to have long-lasting effects in the classroom because parents and children continue practicing its strategies at home, it could be expanded nationally.

Parent meetings focus on three intervention aspects, says Cameron Powe, who leads sessions and is enrolled in UA’s clinical psychology graduate program. The first facet is introducing parents to topics their children are learning in the classroom. Kids give small performances about what they are learning and explain lessons to parents. The second is a relaxation component designed to help parents better cope with stress. The final piece makes up the bulk of the intervention, Powe says, and includes topics such as time management and stress-reduction strategies. "This experience has been truly amazing," Powe says. "I love being able to work with these parents, and I especially love to be able see the excitement in their eyes when their children learn something new in their classroom and can’t wait to tell them.”

Powe’s role in the program aligns perfectly with her primary research interest: learning how parenting behaviors can affect kids’ actions. "This project has allowed me to see how introducing novel ways of dealing with stressors changes parenting behavior, which in turn can impact children’s behaviors," she says. "Ultimately, I’m learning how to interact with parents in a group setting, which is especially important for my field."

There are two branches to the children’s portion of the project: cognitive and physiological. Cognitive assessments UA students conduct include multiple game-like tests that measure executive functioning and self-regulatory skills.

Physiological assessments measure kids’ physical responses to stress. Sarah Morrow, an anthropology doctoral student on the bio-cultural medical track, oversees the physiological tests.

Students use electrocardiograms, skin conductance tests, saliva samples and blood pressure readings to understand how children respond to different situations. “For example, we throw in a picture book with the children, asking them to tell us what they see in each picture,” Morrow says. “This is a low-stress, open-ended task that lets a child respond while knowing that we want their opinion, not a single correct answer. Then we have a short interview. Here, the child understands that there are specific answers to questions such as ‘When is your birthday?’ or ‘How many brothers and sisters do you have?’ This is a little more stressful. We can compare their physiological responses to these two social interactions and begin to understand how they respond to stress.”

Administering and explaining these tests, many of which appear to belong in a doctor’s office, to sometimes-frightened 4-year-olds can be challenging, says Steven Beall, a junior biology major/psychology minor who plans to become a primary-care doctor, perhaps a pediatrician. “However, this fear can be alleviated when you take the time to really engage the children and show them that the blood pressure cuff is ‘giving their arm a hug’ or when you bond over having the same favorite superhero,” he says.

Beall, who worked in both the cognitive and physiological branches of the program over two semesters, says Coping Power has increased his patience and empathy and given him invaluable skills that will help with doctor-patient relationships once he becomes a physician. He says the work could help him get into medical school as well. “Many applicants have research experience, but very few have ever simultaneously ran an EKG and skin conductance test while reading ‘If You Give a Mouse a Muffin’ in silly voices,” Beall says. “It is a very unique opportunity.”

He also has been affected on a personal level. “This experience has been very humbling and motivating,” Beall says. “Despite disadvantages the children may face, they are some of the happiest and most eager people I have ever met. I have been touched by the number of drawings and stickers I have been given by preschoolers who are always eager to make a new friend and learn new things.”

Jacquelyn Myrick, a junior psychology major/biology minor who hopes to become a pediatrician, says Coping Power includes everything she was looking for in an undergraduate research project and more. Over two semesters, she administered cognitive assessments and oversaw electrocardiograms and skin-conductance tests.

“Participating in the study requires me to travel to rural counties of Alabama,” she says. “I learned how to monitor data collection in order to get the clearest, most consistent recordings. I also enjoyed the positive impact of stress-reduction intervention even among preschool children.”

“This project has confirmed my desire to work with children and has also opened me to the idea of working in rural communities.”

UA students also are helping launch middle-school and Internet-hybrid versions of the Coping Power program.

As with the preschool initiative, the middle-school curriculum covers the same topics as the standard Coping Power curriculum, but is adapted to the kids’ age range.

The middle-school program takes place at 20 schools in Alabama and Virginia. In Alabama, schools are in Tuscaloosa, Shelby and Jefferson counties, and UA students work at all of them. At any given time, 15 to 30 undergraduate students and at least five graduate students are involved in the program.

Researchers are testing the Internet-hybrid version of the program at eight elementary schools in Tuscaloosa. Children and parents view curriculum online before meeting with an interventionist to discuss and personally process the material. Ten UA undergraduates and three to four graduate students are part of this program each semester.

Boxmeyer says if the middle-school and Internet-hybrid programs, which are still in early research phases, prove effective, UA faculty will work to expand them across the nation and world the way they continue sharing the standard Coping Power curriculum and hope to spread the preschool program.

For more information about Coping Power programs or service-learning courses, contact: John Lochman, professor of psychology, at 205-348-7678 or jlochman@uga.edu; Caroline Boorsey, associate professor, College of Community Health Sciences, at 205-348-1325 or box- meyer@ccc.ua.edu; Ansley Tullos Gilpin, assistant professor of psychology, at 205-348-9903 or aggilpin@ua.edu; or Jason DeCaro, associate professor of anthropology, at jason.decaro@ua.edu or 205-348-9061.