

Mother-daughter research team studies severe-weather phobia

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No one likes severe weather, but for some just the thought of a thunderstorm, tornado, hurricane or blizzard can severely affect their lives. When blood pressures spike, individuals obsessively monitor weather forecasts and they can't leave the house, the weather can go from simple concern to the level of phobia. A mother-daughter professor team has teamed up to write a journal article exploring the phenomena of severe-weather phobia.

Karen Multon, professor of counseling [psychology](#) in the Department of Psychology & Research in Education at the University of Kansas, and her daughter, Jill Coleman, associate professor of geography at Ball State University, co-authored the study with Kaylee Newby and Cynthia Taylor, KU doctoral students in counseling psychology. Newby and Taylor approached their faculty mentor about addressing phobias for a research project. Multon advised them to narrow it down to a more specific topic and knew her daughter had done research in weather and negative effects it can have on people. As it turns out, there was very little [empirical research](#) on weather [phobia](#).

"There's a paucity of research on the topic, specifically on [severe-weather](#) phobia," Multon said. "The term has only been out there since 1996, and ours was the first study to take a look at how it might affect a large section of the general population."

The study was published in the *Bulletin of the American Meteorological Society*, and the authors presented it at the American Psychological

Association convention in August.

The researchers surveyed nearly 300 adults in the United States, asking about what types of severe weather they have experienced, where they live and what sort of symptoms they experience when dealing with severe weather. Not surprisingly, where individuals lived was closely linked to the sort of weather they might fear, with Midwesterners most concerned about tornadoes, thunderstorms and heavy snow, while people in the South and on the East Coast were much more concerned about hurricanes and those in the West worried about wildfires. More than 100 of the respondents reported they frequently closely monitor television, Internet or radio when they suspect severe weather, but many others said they frequently or always experience more serious problems such as the inability to eat or sleep, anxiety, changing of schedule, panic and feelings of helplessness.

An overwhelming majority of respondents, 85 percent, reported having at least some degree of severe-weather fear, while 46 percent reported having some degree. About 10 percent rated their fear levels "extreme" or "quite a bit."

Interestingly, the level of education participants had was related to their level of phobia, but education did not help ward off fear. In fact, the higher level of learning subjects pursued, such as taking classes on meteorology or atmospheric science, the more likely they were to have weather-related anxiety.

"We thought originally if you had more information it might help allay phobias. But that wasn't the case, and one thing we can surmise is that if people gather more information, they have a greater understanding of weather events and can be driven to anxiety," Coleman said. "We definitely intend to look into this more."

Multon said there is also the possibility that people who are prone to severe-weather phobia are more likely to seek out such courses than those who are not. She agreed the study is the first in an ongoing line of research. The mother-daughter researchers plan to further analyze their findings and expand them to look at climate change and related anxieties and phobias. Coleman is a climatologist who specializes in biometeorology, or how weather can negatively affect both physical and mental health. Multon, a counseling psychologist, will look at treatment, and said the interdisciplinary approach is beneficial.

"In my part as a psychologist I'm interested in treatment, so I'll begin working on a treatment plan for people who suffer from these phobias," Multon said. "I think the future of research is interdisciplinary, and I've learned a great deal about my daughter's work, and she had a mother who is a psychologist, so she has been aware of the subject since a very early age. It has helped having different areas of expertise looking at these questions."

Multon and Coleman have worked together professionally before, writing encyclopedia entries on statistical analyses, but this was their first joint journal article. Coleman is no stranger to her mother's work, however, and helped her with data entry on Multon's doctoral dissertation while only in the eighth grade. With Newby and Taylor, they presented their research at the American Psychological Association national conference in August. As luck would have it, they presented the research the same day "Into the Storm," a movie about a town being devastated by an unprecedented slew of [tornadoes](#), premiered in theaters.

Provided by University of Kansas

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