Beliefs, not just psychosis, can spur violence

Researchers suggest a new forensic term to classify non-psychotic behavior that leads to criminal acts of violence—such as the mass murder committed by Anders Breivik.

“When these types of tragedies occur, we question the reason behind them,” says Tahir Rahman, an assistant professor of psychiatry at the University of Missouri School of Medicine and lead author of the study. “Sometimes people think that violent actions must be the byproduct of psychotic mental illness, but this is not always the case.

“Our study of the Breivik case was meant to explain how extreme beliefs can be mistaken for psychosis, and to suggest a new legal term that clearly defines this behavior.”

Psychotic or not?

Breivik, a Norwegian terrorist, killed 77 people in a 2011 car bombing in Oslo and a mass shooting at a youth camp on the island of Utøya in Norway. Claiming to be a “Knights Templar” and a “savior of Christianity,” Breivik stated that the purpose of the attacks was to save Europe from multiculturalism.

Two teams of court-appointed forensic psychiatrists later examined Breivik. The first psychiatric team diagnosed him with paranoid schizophrenia. However, after widespread criticism, a second team concluded that Breivik was not psychotic and diagnosed him with narcissistic personality disorder. Breivik was sentenced to 21 years in prison.

“Breivik believed that killing innocent people was justifiable, which seems irrational and psychotic,” says Rahman, who also conducts forensic psychiatric examinations but was not involved with the Breivik case. “However, some people without psychotic mental illness feel so strongly about their beliefs that they take extreme actions. Current clinical guides, such as the Diagnostic and Statistical Manual of Mental Disorders, offer vague descriptions of alternative reasons a person may commit such crimes. Our suggested term for criminally violent behavior when psychosis can be ruled out is ‘extreme overvalued belief.’”
Rahman defines “extreme overvalued belief” as a belief that is shared by others and often relished, amplified, and defended by the accused. The individual has an intense emotional commitment to the belief and may act violently as a result of that belief. Although the individual may suffer from other forms of mental illness, the belief and the actions associated with it are not the result of insanity.

“In courts of law, there are not clearly defined, standard methods of diagnosing insanity for legal purposes,” Rahman says. “This new term will help forensic psychiatrists properly identify the motive for the defendant’s criminal behavior when sanity is questioned.”

Amplification of beliefs

Rahman says that more research on extreme overvalued beliefs is needed to understand how they develop. Identifying those at risk will give mental health professionals an opportunity to intervene before violent behavior occurs.

“Certain psychological factors may make people more vulnerable to developing dominating and amplified beliefs,” Rahman says. “However, amplification of beliefs about issues such as immigration, religion, abortion or politics, also may occur through the internet, group dynamics or obedience to charismatic authority figures.

“We already warn our youth about the dangers of alcohol, drugs, teen pregnancy, and smoking. We need to add the risk of developing extreme overvalued beliefs to that list as we work toward reducing the violence often associated with them.”

The study appears in the Journal of the American Academy of Psychiatry and the Law. The University of Missouri School of Medicine and psychiatry department supported this work. The researchers have no conflicts of interest to declare related to this study.

MU research shows extreme belief could lead to acts of violence
COLUMBIA - MU School of Medicine research revealed that factors other than mental illness could lead to criminal acts of violence. After analyzing the case of Norwegian terrorist Anders Breivik, MU Assistant Professor of Clinical Psychiatry Tahir Rahman and his two colleagues found out Breivik had no psychological illness, and his team came up a new concept of "extreme overvalued belief."

Rahman defines “extreme overvalued belief” as "a belief that is shared by others and often relished, amplified and defended by the accused. The individual has an intense emotional commitment to the belief and may act violently as a result of that belief. Although the individual may suffer from other forms of mental illness, the belief and the actions associated with it are not the result of insanity."

"I think it's important for the legal system to understand the difference between cases where insanity is raised as defense and where personality disorders happening in a person who actually does understand right from wrong for instance, but still committing act which appears to be psychotic," Rahman said.

Breivik killed 77 people in a 2011 car bombing in Oslo and a mass shooting at a youth camp on the island of Utøya in Norway. Breivik stated that the purpose of the attacks was to save Europe from multiculturalism. Breivik was sentenced to 21 years in prison.

"When the big mass shooting happens, the first thing we all jump to crazy, psychotic, delusional, and that's not the case," Rahman said.

Rahman said no one is immune from developing extreme beliefs, and those extreme beliefs could include politics, religion, the environment, or abortion.

"They can take on many different forms, but the belief is not something that is psychotic or delusional. It's actually more of a product of an amplified belief system," Rahman said.

One opponent of abortion said she would still show respect to those people who make their own choices and committing violent actions is not the way to handling people who make their own choices.

"It's certainly not taking action of any kind against those who are making their choices for their own lives. We do have choices, I will never harm anyone who has gone into Planned Parenthood or abortion clinic," the opponent said.

A coordinator of Korean Catholic group in Columbia, Eun Sook Kim, said she completely disagrees with those violent belief-based actions, and those people who have "extreme overvalued belief" might misunderstand their beliefs.

"Every religion has the same point - love. Love is not kill each other or hurting each other," Kim said.
Rahman also said the first step to prevent this is making people aware of the concept of "extreme overvalued belief."

"We tell people to be careful about drinking and driving, we tell people to be careful about teen pregnancy and drug use and HIV prevention. In a similar way, I think that people need to know that extreme beliefs can develop in almost any society and any culture," Rahman said.

MISSOURIAN

MU CAFNR Dean Tom Payne to retire in December

ALLISON COLBURN, 10 hrs ago

COLUMBIA — Tom Payne, dean of the MU College of Agriculture, Food and Natural Resources and vice chancellor for agriculture, announced Tuesday in a letter addressed to the "CAFNR family" that he will retire at the end of December.

Payne, 74, said in the letter he is retiring to spend time with his family. Payne said he had been planning to retire last winter but waited until after things settled down from the events on the MU campus last fall.

"I had planned to step down this past December but was encouraged by some to hang in through the turbulent times and transitions," Payne said.

Payne has served as vice chancellor for agriculture and dean of CAFNR since Jan. 1, 1999. Before he came to MU, Payne worked at various universities since 1973. He held a similar position to his post at MU at the Ohio State University for five years and taught entomology — the study of insects — for 18 years at Texas A&M. Payne received his PhD in entomology in 1969 from the University of California, Riverside.

"Being with CAFNR and MU has been, and is, wonderful," Payne said in his letter. "I am very, very proud of our College."
MU conference highlights challenges of emerging animal-to-human diseases

ANNA MAPLES, 11 hrs ago

COLUMBIA — Zika is not an outlier.

It's one of more than 800 zoonoses that make up almost 60 percent of infectious agents in humans. They cause diseases such as Ebola and AIDS, and they're not going away any time soon.

“The statistics are clear: The majority of human infectious diseases are zoonotic. Some very important diseases that bother the medical community today are zoonotic,” said Patrick Pithua, an associate professor of epidemiology at MU. “It's important because most of our own infectious diseases that affect us are zoonotic."

Almost 100 scientists in fields like ecology, microbiology and medicine met Monday and Tuesday to discuss the challenges of emerging zoonotic diseases like Zika at the Interdisciplinary Zoonoses Research Symposium at MU.

What is a zoonosis?

A zoonosis is any disease that can be transmitted from animals to humans via a pathogen, including viruses, parasites and bacteria, and can be spread through a number of means, from contact with wildlife to consumption of contaminated meat. Zoonoses account for nearly 75 percent of human diseases, Pithua said.

He cited HIV, which is also zoonotic, as one of the most serious human diseases that had an origin in animals.
When the origins of HIV, the virus that causes AIDS, were discovered in the ‘90s, the study of emerging infectious diseases began to grow rapidly, said Dr. Tony Goldberg, a professor of epidemiology at the University of Wisconsin-Madison School of Veterinary Medicine.

“This phrase was not even on the radar in the 1980s, and it really skyrocketed in this decade between the early 1990s and the mid-2000s,” Goldberg said. “This was the decade where we discovered the remarkable story of the origins of AIDS: the fact that the HIV viruses originated from the central African chimpanzees. I think this ignited the world interest in ecology and the emergence of infectious disease.”

Although diseases harmful to humans often originate in animals, the blame for their spread shouldn’t be placed on wildlife alone, Pithua said.

“The emergence of disease is majorly influenced by human actions,” Pithua said. “We are doing a lot of things that bring us closer to the sources of zoonotic disease. If human settlements knock down forests and disperse monkeys, the monkeys will get in close contact with them.”

Pithua also said that human actions that encourage the spread of zoonotic diseases often also come from noble causes, such as irrigation.

“You’re creating water systems,” Pithua said. “Mosquitoes breed in those water systems and then begin to transmit disease, but irrigation is not a bad thing.”

The recent decline of the U.S. bat population due to White Nose Syndrome could also lead to a larger mosquito population and eventually play into the spread of the Zika virus, said Dr. Sharon Deem, a veterinarian at the Saint Louis Zoo and director of the Zoo’s Institute for Conservation Medicine.

“We hear Zika all the time in the news. One thing I haven’t heard anything about is the relationship of Zika and White Nose Syndrome,” Deem said. “If you lose 6 million to 7 million bats, what does that mean for pest control, for mosquito control?”

In 2013, Goldberg was the subject of a viral story about a nose tick that he picked up in Kibale National Park in southern Uganda. The tick usually lodges itself in the nose of chimpanzees but made its home in
his nose instead, Goldberg said during his presentation on unusual pathways that diseases take to the human body.

"Chimps love to groom each other, and if you are a tick out in the open on a chimp, you are dead meat," Goldberg said. "You need a place to hide." "The nostril is not a bad one, if you can get there."

Goldberg has become a supporter of the discovery and disruption of unusual disease pathways.

"There may be pathways that are common to multiple pathogens," Goldberg said. "There may be pathways that don’t actually have pathogens traversing them right now that may in the future."

Understanding the combinations of cultural and natural practices that lead to transmission of disease from animals to humans, and vice versa, should help stop the spread, he said.

One of the pathways Goldberg has been working to disrupt spreads hookworm, which is picked up by stepping on an infectious larva that then burrows into the host’s bloodstream.

"We know the solution to hookworm infection, and that is to wear shoes," Goldberg said. "They cannot penetrate shoes, and yet shoes are a rare commodity in many parts of the world."

The project, which was funded by the Bill and Melinda Gates Foundation in collaboration with the shoe company TOMS, aimed to create a shoe that could easily advertise itself as protecting from hookworm.

"We came up with a zany idea for what we call the Holoflop, where on this space we put a hologram that depicts the health benefits of wearing shoes entirely in pictures," Goldberg said. "This is accessible information to populations with low literacy rates."

Despite the discovery of new ways to fight infectious diseases every year, Pithua said zoonoses will be a concern for scientists for the foreseeable future.

"Diseases are going to continue to emerge," he said. "This year we are dealing with Zika. Next year it might be a completely different disease, but I’ll bet you it’s going to come from an animal."
Meatless burger that bleeds beet juice sells out in an hour at its Whole Foods debut

It was the steak dinners, Ethan Brown says, that changed his life. He had embarked on a career in the clean energy industry, a path befitting an environmentalist out to save the world. But the incongruity he perceived among his colleagues, who would lament environmental problems while eating beef, pushed Brown — a vegetarian since the age of 18 — in a different direction.

"We would go to conferences and sit there wringing our hands over all these [energy] issues, and then we'd go to dinner and people would order huge steaks," Brown told Popular Science in 2013.

Brown left the energy industry and founded a startup called Beyond Meat in 2009, building on the work of University of Missouri food scientist Fu-hung Hsieh, a pioneer in "high moisture extrusion of fibrous meat analog" — making fake meat taste more like flesh, in other words. Beyond Meat achieved early hype with its Beyond Chicken strips, designed to obliterate memories of limp tofu dogs or crumbly veggie burgers. Observing the strips shred into ligament-like strands at Beyond Meat's factory in Columbia, Mo., Food Network star and author Alton Brown remarked at Wired in 2013, "It's more like meat than anything I've ever seen that wasn't meat."

Beyond Meat bills its latest creation, the Beyond Burger, as the most meat-like non-meat feat yet. It has been on sale for a single day — Monday, in a Whole Foods in Boulder, Colo. — and is already being compared to, as The New York Times puts it, the "holy grail" of ersatz animal protein: A plant burger upon which a human carnivore would happily snack.

A Beyond Burger patty contains 20 grams of vegetable protein, mostly from peas, while lacking gluten and soy. If you prick a Beyond Burger, does it bleed? Yes, the company says, though its blood is pulverized beet juice. Beyond Meat took a completionist approach to its hamburger doppelganger: The Beyond Burger had to look, smell and feel like meat.

This was no easy task. Animal meat is not a uniform product, but plants, on the other hand, don't come marbled with fat or sprout gristly connective tissues. (Even lab-grown beef patties, a different beast from Beyond Meat's burger, have struggled to mirror the heterogeneous chow you'd buy from a butcher.) It was up to researchers like Stanford University structural biologist Joseph D. Puglisi, a scientific adviser to Beyond Meat, to devise a way to deposit plant fat in layers. "We were able to get fat distributed throughout a patty — but in meat, fat is distributed in sheets," he told The New York Times.
Beyond Meat's ability to replicate meaty layers out of plant matter is among the company's greatest trade secrets — what puts it in a different category, perhaps, than the long line of faux meats that have come before. Biz Stone, one of Twitter's founders and a Beyond Meat backer, described the company's fake chicken to Fast Company as having a meaty mouth feel. "It feels fatty and muscly and like it's not good for you when you're chewing it," Stone said in 2012. "For a long-time vegan, it's a little bit freaky."

(How closely a bite of the fake chicken, au naturel, mimics the real bird is a matter of debate; when tucked in a wrap, however, the game seems to change. The New York Times' Mark Bittman wrote in 2012 that Beyond Meat's Brown fooled the food columnist "badly" in a taste test.)

This may seem like a lot of noise over mashed peas, unless you care about what Brown described in an interview with Business Insider last year as his four horsemen: animal welfare, climate change, human health and natural resources. Livestock — thanks to factors like cow burps — are a significant contributor of the greenhouse gas methane. Because crops take up about half as much space as livestock, a recent study in the journal Nature Communications concluded that a global vegetarian diet would be the most feasible way to feed 2050's estimated population without expanding today's farmland.

Livestock farms have direct detrimental impacts on human health as well. Due to widespread antibiotic use in livestock, the Centers for Disease Control estimates that 20 percent of antibiotic resistant infections originate from food. The demand for meat produced cheaply and quickly, too, may lead to poor working conditions; as one worker in the poultry industry told Oxfam America, the individual allegedly had to wear diapers on the job because bathroom breaks were verboten.

Brown says his goal with the Beyond Burger is nothing less than redefining meat to include plant protein, urging Whole Foods to sell the vegetable patties alongside their flesh-and-blood equivalents. On Facebook, some vegetarians expressed discomfort about the Beyond Burgers's close proximity to what one commenter described as "little cellophaned packets of death." The company defended its power play for the meat aisle, as it wrote on Facebook, as "the opening shot in our bid to transform the meat case into the protein case."

If such a complete transformation is the goal, the company will need to send in reinforcement burgers — the first batch sold out in an hour, according to Beyond Meat's Twitter feed.

The burgers cost $5.99 for a pack of two patties. Beyond Meat says it plans to expand to Denver and Washington, D.C., soon, and beyond Colorado over the summer.
The investigation into Missouri softball coach Ehren Earleywine is no longer strictly an athletic department matter.

The university’s Title IX Office is also part of the investigation, which remains ongoing, two people with knowledge of the situation told The Star. That office handles complaints regarding sex-based discrimination.

Christian Basi, the associate director for the MU News Bureau, said the university is barred by privacy guidelines from discussing Title IX cases and could not confirm the investigation.

Mizzou athletic director Mack Rhoades, who appeared Monday night at the Junior Service League of Independence, did not acknowledge that MU’s Title IX Office was investigating Earleywine but said he sympathized with those frustrated by the length of the two-month investigation.

“Right now, the piece of the investigation is out of our hands, and we can’t provide a timeline,” Rhoades told The Star on Monday. “Like everybody, we’re hoping sooner rather than later.

“We understand that it’s hard for everybody. It’s hard for, first and foremost, our student-athletes, it’s hard for Coach Earleywine, our assistant coaches, the athletic department, our fans, the public — but it is ongoing.”

The investigation centers on complaints that Earleywine has verbally abused players, using profanity and sexist and disrespectful language on numerous occasions.

“We were careful to understand whether this was heat-of-the-moment stuff, whether this was more recent rather than years past. We took all of that into consideration,” Rhoades said. “That’s probably as much as I can say right now.”

Rhoades’ department confirmed May 7 that it was investigating Earleywine after receiving complaints “from both inside and outside” the softball program. Earlier that day, Mizzou’s softball team called a protest before the penultimate game of the regular season against South Carolina.
An email from current members of the softball team regarding Earleywine’s treatment of the team during a road-heavy, early-season portion of the schedule was among the initial complaints that triggered the investigation.

Additional complaints surfaced, a source told The Star, and Rhoades said his department couldn’t simply ignore them.

“That’s in fairness to Coach Earleywine and in fairness to the people that brought complaints to us,” Rhoades said. “We take it serious, and we understand it impacts lives. We’re not just going to gloss over and not look into it.

“Somebody asked, ‘What’s the agenda?’ The only agenda here is the truth. At the end of the day, that’s all we’re after — again, for the best of Coach Earleywine and for our softball program.”

Asked whether a decision has been made about Earleywine’s future, Rhoades said: “No, not at all. I’m not sure that you can until you receive all the answers, facts, etc.”

Rhoades disagreed with the characterization by the softball team’s unity council that interviews conducted with players during the investigation were “interrogations” designed to intimidate and manipulate.

“We’ve certainly heard the opposite of that as well from some student-athletes,” he said, declining to offer specifics.

Rhoades told The Star on Monday that he met with Earleywine last spring after a rude email exchange with Missouri State coach Holly Hesse came to light, encouraging him to comport himself differently.

“We didn’t put him on any type of formal contract,” Rhoades said. “We just talked about the future and what the expectations would be in how he represented the university and our softball program. Ehren was respectful, and he understood, so I felt like, moving forward, we were certainly on the same page.”

Earleywine, who is a native of Jefferson City and calls being Missouri’s head coach his dream job, said before the Tigers’ NCAA regional in Columbia he had reevaluated his coaching style. But it may be too late to save his job.

The Tigers are 453-152 in Earleywine’s 10 seasons, including an NCAA regional appearance each season. They have won eight regional titles under Earleywine.

Rhoades did not attend Saturday’s regional final, a 9-0 victory against Nebraska, because it conflicted with a high school graduation party for his youngest daughter. But Rhoades said he was glad Earleywine called for an end to the protest May 13 in a text message sent to several media outlets, including The Star.

“He was addressing a select few, and I was happy that he did that, certainly,” Rhoades said.
Earleywine called for his players to refocus on softball one day after the unity council — identified as senior shortstop Sami Fagan, junior left fielder Natalie Fleming, sophomore infielder Paige Bange, freshman infielder Jolie Duffner and freshman first baseman Rylee Pierce — renewed its protest of the university investigation and released a letter it sent to Rhoades.

The letter was dated April 7, which is shortly after the investigation commenced, including mandatory interviews with each softball player by members of Missouri’s administration.

No. 15 seed Missouri, 42-14, breezed through regional play last weekend, winning all three of its games by run-rule shutouts. The Tigers play at No. 2 seed Michigan, 49-5, in a best-of-three super regional Saturday and Sunday in Ann Arbor, Mich.

Mizzou plays Michigan at 2 p.m. Saturday, with the game carried by ESPN. The second game is slated for 11 a.m. Sunday on ESPN, and the third game, if needed, will be played at 2 p.m. Sunday on ESPNU.

The Wolverines beat the Tigers 13-0 in five innings March 3 in the Judi Garman Tournament in Fullerton, Calif.

University of Missouri System launches diversity audit

COLUMBIA, Mo. (AP) — The University of Missouri System has announced that it will conduct an audit of diversity and inclusion policies and procedures.

The Columbia Daily Tribune (http://bit.ly/1TKvJ57) reports that system Interim President Michael Middleton announced Monday the launch of a system-wide audit of diversity and inclusion policies, practices and procedures.

A news release from the university says the audit will include focus groups and interviews with students, faculty, staff and leadership members. Separate focus groups with students and faculty will be conducted in the fall.
The audit, which is one of several initiatives to address diversity and inclusion throughout the university system, is expected to be completed by the end of the calendar year.

New License Plate Scanner to Begin in Fall at MU