

## A brain's failure to appreciate others may permit human atrocities

## December 14 2011

A father in Louisiana bludgeoned and beheaded his disabled 7-year-old son last August because he no longer wanted to care for the boy.

For most people, such a heinous act is unconscionable.

But it may be that a person can become callous enough to commit human atrocities because of a failure in the <u>part of the brain</u> that's critical for social interaction. A new study by researchers at Duke University and Princeton University suggests this function may disengage when people encounter others they consider disgusting, thus "dehumanizing" their victims by failing to acknowledge they have thoughts and feelings.

This shortcoming also may help explain how <u>propaganda</u> depicting Tutsi in Rwanda as <u>cockroaches</u> and Hitler's classification of Jews in Nazi Germany as vermin contributed to torture and <u>genocide</u>, the study said.

"When we encounter a person, we usually infer something about their minds. Sometimes, we fail to do this, opening up the possibility that we do not perceive the person as fully human," said lead author Lasana Harris, an assistant professor in Duke University's Department of Psychology & Neuroscience and Center for Cognitive Neuroscience. Harris co-authored the study with Susan Fiske, a professor of psychology at Princeton University.

Social neuroscience has shown through MRI studies that people normally activate a network in the brain related to <u>social cognition</u> -- thoughts,



feelings, empathy, for example -- when viewing pictures of others or thinking about their thoughts. But when participants in this study were asked to consider images of people they considered drug addicts, homeless people, and others they deemed low on the social ladder, parts of this network failed to engage.

What's especially striking, the researchers said, is that people will easily ascribe social cognition -- a belief in an internal life such as emotions -- to animals and cars, but will avoid making eye contact with the homeless panhandler in the subway.

"We need to think about other people's experience," Fiske said. "It's what makes them fully human to us."

The duo's previous research suggested that a lack of social cognition can be linked to not acknowledging the mind of other people when imagining a day in their life, and rating them differently on traits that we think differentiate humans from everything else.

This latest study expands on that earlier work to show that these traits correlate with activation in brain regions beyond the social cognition network. These areas include those brain areas involved in disgust, attention and cognitive control.

The result is what the researchers call "dehumanized perception," or failing to consider someone else's mind. Such a lack of empathy toward others can also help explain why some members of society are sometimes dehumanized, they said.

For this latest study, 119 undergraduates from Princeton completed judgment and decision-making surveys as they viewed images of people. The researchers sought to examine the students' responses to common emotions triggered by images such as:



- a female college student and male American firefighter (pride)
- a business woman and rich man (envy)
- an elderly man and disabled woman (pity)
- a female homeless person and male drug addict (disgust)

After imagining a day in the life of the people in the images, participants next rated the same person on various dimensions. They rated characteristics including the warmth, competence, similarity, familiarity, responsibility of the person for his/her situation, control of the person over their situation, intelligence, complex emotionality, self-awareness, ups-and-downs in life, and typical humanity. Participants then went into the MRI scanner and simply looked at pictures of people.

The study found that the neural network involved in <u>social interaction</u> failed to respond to images of drug addicts, the homeless, immigrants and poor people, replicating earlier results.

"These results suggest multiple roots to dehumanization," Harris said.
"This suggests that dehumanization is a complex phenomenon, and future research is necessary to more accurately specify this complexity."

The sample's mean age was 20, with 62 female participants. The ethnic composition of the Princeton students who participated in the study was 68 white, 19 Asian, 12 of mixed descent, and 6 black, with the remainder not reporting.

**More information:** The study, "Dehumanized Perception: A Psychological Means to Facilitate Atrocities, Torture, and Genocide?" appears in a recent issue of the *Journal of Psychology*: DOI:10.1027/2151-2604/a000065



## Provided by Duke University

Citation: A brain's failure to appreciate others may permit human atrocities (2011, December 14) retrieved 20 March 2024 from <a href="https://medicalxpress.com/news/2011-12-brain-failure-human-atrocities.html">https://medicalxpress.com/news/2011-12-brain-failure-human-atrocities.html</a>

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