

## **Cannibals avoid eating their own family**

Cannibals avoid eating blood relatives. A new study by Marlies Oostland and Michael Brecht from the Humboldt University of Berlin and Princeton University, published today in *Frontiers of Psychology*, shows kin-avoidance in human cannibals.

The authors document vomiting and spitting out in human cannibals, a behavior that might be triggered by internally generated disgust against kin-ingestion.

Cannibalistic homicide is an exceedingly rare crime in modern societies. Despite this, the researchers were able to generate a unique data set of information about 121 cannibals with approximately 631 victims, operating worldwide since 1900. The data set includes notorious cannibals such as Karl Denke, Jeffrey Dahmer, Andrei Chikatilo and Issei Sagawa, but also more obscure cases of cannibalism. They then compared the information about the cannibals with information about non-cannibalistic homicides, based on data from the FBI.

The researchers found that cannibalistic homicides are a distinct category of homicides with a unique pattern of murder methods, offenders, and victims. Cannibalistic offenders typically killed physically (stabbing, strangulating, beating) rather than by guns. Cannibalistic offenders were mostly older males targeting younger females, and their cannibalistic crimes were often sex-related. Furthermore, they killed more strangers and fewer intimates than conventional offenders. Human cannibals, as other cannibalistic species, killed and ate conspecifics, occasionally vomited and only rarely ate kin. Interestingly, cannibalistic offenders who killed their blood relatives had more severe mental problems than non-kin-cannibals.

The authors suggest that kin-avoidance and spitting out of conspecifics might be triggered by internally generated disgust against kin-ingestion. Oostland says: "It is remarkable that even in arguably the most severe criminals of our society – cannibals, who first kill for lust and then eat for lust – we still see a biological mechanism in place to protect kin." Brecht concludes: "Cannibals behave in weird ways: they kill to devour, but then they vomit. Remarkably, this is not unlike the behavior of cannibalistic fish or tadpoles, and points to anti-kin-ingestion mechanisms evolved from kin-selection many hundred millions of years ago."

### **Original publication:**

'Kin-avoidance in cannibalistic homicide'  
Marlies Oostland & Michael Brecht

**Humboldt-Universität zu Berlin**  
Abteilung Kommunikation, Marketing  
und Veranstaltungsmanagement  
Referat Medien und Kommunikation

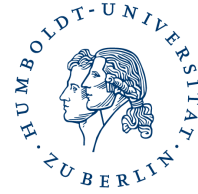
Unter den Linden 6  
10099 Berlin  
Tel.: +49 30 2093-2946  
Fax: +49 30 2093-2107  
[www.hu-berlin.de](http://www.hu-berlin.de)

### **Pressesprecher**

Hans-Christoph Keller  
Tel.: +49 30 2093-2946  
[pr@hu-berlin.de](mailto:pr@hu-berlin.de)

### **Expertendatenbank**

<https://hu.berlin/expertendatenbank>



Frontiers of Psychology (2020)

<https://www.frontiersin.org/articles/10.3389/fpsyg.2020.02161>

doi: 10.3389/fpsyg.2020.02161

See also:

[www.cannibalismresearch.org](http://www.cannibalismresearch.org)

This website includes the full data set collected for this study.

**Contact information:**

Michael Brecht  
Bernstein Center for Computational Neuroscience  
Humboldt University of Berlin, Germany  
[michael.brecht@bccn-berlin.de](mailto:michael.brecht@bccn-berlin.de)  
Phone: +49-30 2093-6770

Marlies Oostland  
Princeton Neuroscience Institute  
Princeton University, NJ, USA  
[marlies.oostland@princeton.edu](mailto:marlies.oostland@princeton.edu)  
Phone: +1-609-665-6590