

# 'Halfalogue': Overheard Cell-Phone Conversations Are Not Only Annoying but Reduce Our Attention

September 20, 2010

“Yeah, I’m on my way home.” “That’s funny.” “Uh-huh.” “What? No! I thought *you* were – ” “Oh, ok.” Listening to someone talk on a cell phone is very annoying. A new study published in *Psychological Science*, a journal of the Association for Psychological Science, finds out why: Hearing just one side of a conversation is much more distracting than hearing both sides and reduces our attention in other tasks.

Lauren Emberson, a psychology Ph.D. candidate at Cornell University, came up with the idea for the study when she was taking the bus as an undergraduate student at the University of British Columbia in Vancouver, Canada. “I was commuting for 45 minutes by bus every day and I really felt like I couldn’t do anything else when someone was on a cell phone,” she says. “I couldn’t read. I couldn’t even listen to my music. I was just so distracted, and I started to wonder about why that could be.”

For the experiment, Emberson recorded two pairs of female college roommates as they had a cell phone conversation. She recorded each conversation both as a dialogue, in which both women could be heard by a listener, and as a “halfalogue” in which only one side of the conversation could be heard, the same as overhearing a cell-phone conversation. She also recorded each woman recapping the conversation in a monologue. Then she played the recordings at volunteers as they did various tasks on the computer that require attention, such as tracking a moving dot using a computer mouse.

Sure enough, volunteers were much worse at the concentration tasks when they could only hear half of the conversation. Emberson thinks this is because our brains more or less ignore predictable things, while paying more attention to things that are unpredictable. When both sides of the conversation are audible, it flows predictably, but a cell phone conversation is quite unpredictable. Emberson conducted the study with Gary Lupyan of the University of Wisconsin-Madison, Michael Goldstein of Cornell University, and Michael Spivey of the University of California-Merced.

“It’s definitely changed my own etiquette,” says Emberson. “I’m a lot more sensitive about talking on the phone in public. It has a really profound effect on the cognition of the people around you, and it’s not because they’re eavesdropping or they’re bad people. Their cognitive mechanism basically means that they’re forced to listen.”