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## Cognitive Distraction by Background Conversations: A Personal Affair?

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## **ABSTRACT**

Background conversations are ubiquitous within the office setting. Overhearing a task-irrelevant conversation, whether between coworkers (dialogue) or over the telephone (halfalogue), is known to have adverse consequences on cognition. While discussions can relate to professional but also personal topics, subjective ratings suggested that conversational content can enhance the involuntary need-to-listen to the discussion, especially with a conversation of intriguing content, such as gossips and personal matters. Yet it is not clear whether the nature of conversational content can modulate the distractive power of background conversation. The present study sought to determine whether personal and work-related, background conversations differ in their potency to distract cognitive performance and whether such distraction is differentially amenable to cognitive control. Hence 240 participants performed an office-related task in quiet or in the presence of dialogue and halfalogue to-be-ignored speech. For half the participants, task-irrelevant conversations engaged two friends chatting together, whereas for the other half, they involved a discussion between an employee and a client. To examine the role of cognitive control, the level of task engagement was manipulated between subjects by presenting the task-relevant material in an easy-to-read (low-engagement) or difficult-to-read font (high-engagement). The presence of irrelevant speech disrupted performance, but such disruption was neither affected by the type nor the content of the conversation. Font disfluency also failed to modulate distraction. Such findings suggest that personal conversations are not more distractive than work-related discussions. The apparent insensitivity to cognitive control suggests that this form of auditory distraction may rely on a 'voluntary' need-to-listen.

Keywords: Auditory Distraction, Background Noise, Conversational Content, Cognitive Control, Halfalogue