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Researchers call for study participants to come and play games

In the Brain in Action lab at the University of Lethbridge, researchers like Dr. Claudia Gonzalez study how the brain processes and integrates sensory and motor information. Now, they want people like you to join them and take part in a fun and engaging study.



Daniela Aguilar Ramirez, a PhD student studying under Gonzalez, is researching sex differences in spatial cognition, or how we navigate the environment and locate objects. Males generally outperform females in spatial tasks, like those requiring mental object rotation. However, females are generally better at some tasks, such as object location.

"Our goal is to understand the functional correlates of cognitive processes," says Aguilar Ramirez. "We're particularly interested in how spatial information is processed in the brain and whether these processes differ between females and males. By investigating these sex-related patterns in spatial cognition, we aim to inform targeted interventions that could enhance cognitive performance or mitigate age-related cognitive decline."

Typically, the tasks that measure these responses are paper-based — a format that isn't engaging for some participants. Aguilar Ramirez and Gonzalez want to change that. They have designed a research study where participants challenge their spatial abilities while having fun playing board games.

"We are trying to bring tasks that are real-world scenarios into the lab to measure these cognitive functions in a way that's more engaging than traditional lab tests," says Gonzalez. "One way to have interest from the public is to make it as real and as fun as we can. We've been examining how these cognitive functions develop and decline over time, and whether these patterns differ between females and males."

Using games like Spot It and Q-bitz, the researchers can obtain important information while participants play fun games. The researchers want to validate the use of these games in a lab setting this summer, so they are inviting anyone interested to come to the lab and play games for an hour.

Participants of any age and background are welcome. The sessions, which take about an hour, will be available all summer. Send an email to thebraininaction@gmail.com to schedule a time.

Read online.

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