



Spring 4-23-2014

IWU Researchers Hope Apps Teach Dogs New Tricks

Kim Hill

Illinois Wesleyan University

Follow this and additional works at: <https://digitalcommons.iwu.edu/news>

Recommended Citation

Hill, Kim, "IWU Researchers Hope Apps Teach Dogs New Tricks" (2014). *News and Events*. 2365.

<https://digitalcommons.iwu.edu/news/2365>

This Article is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This material has been accepted for inclusion by faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

IWU Researchers Hope Apps Teach Dogs New Tricks

April 23, 2014

BLOOMINGTON, Ill.— It's a scenario most dog owners know all too well: owner goes to work all day, dog gets bored, dog eats sofa, owner comes home to find house in shambles, dog is in trouble.

But what if owners had ways to mentally challenge their dogs? Illinois Wesleyan University Assistant Professor of **Psychology** Ellen Furlong and her students in the University's **Comparative Cognition Lab** are developing computer games they hope will help alleviate that boredom. The ultimate goal is to turn the games into apps for mobile devices like iPads.

Furlong and two of her students recently presented their research at a conference on animal cognition and enrichment techniques. The students, junior biology major Jeff Toraason '15 and junior psychology major Brenden Wall '15, were the only undergraduates presenting at the conference.

The impact of the cognitive research with dogs goes far beyond just keeping American sofas intact. Furlong said more than six million dogs are surrendered to shelters each year, with approximately 60 percent of those ultimately euthanized. Behavioral problems lead some owners to surrender their dogs, yet Furlong said many behavioral problems can be alleviated with sufficient exercise or stimulation.

"Some dogs just can't get physical exercise, whether because of their own limitations like age or health, or because the owners just aren't willing to provide it," said Furlong. "So, our possible solution is to provide dogs with mental exercise instead."

This semester Furlong and her students have focused on teaching dogs in local day cares to use computers. The process, Furlong said, uses the same techniques as teaching a dog to sit or stay.



Ellen Furlong (seated) and students (standing from left) Jeff Toraason, Brenden Wall and Valerie Mack with their four-legged friend Cleo in Illinois Wesleyan's Comparative Cognition Lab.



Brenden Wall (far left), Jeff Toraason and Ellen Furlong present their research at a recent conference on animal cognition.

"If the dog touches the touch-screen computer with his nose, he gets a treat," Furlong explained. "Then we begin shrinking a colored box on the screen, and if he touches the colored part, he gets a treat. It took my dog two sessions to understand the concept."

So far researchers have determined dogs can differentiate between amounts of food on a plate (four pieces of kibble vs. eight pieces, for example), but Furlong and her students want to further explore distinctions between breeds. If so, Furlong and her students hope such findings would enable a dog owner to customize the app's setting for his or her dog.

This insight into animal behavior has created new understanding for Toraason, who plans to attend veterinary school after graduating from Illinois Wesleyan. "In biology we are looking at the mechanisms and physical aspects, and we're not really looking at the animal's thinking in

relation to its behavior,” said Toraason, a native of Glenview, Ill. “It’s been really helpful for me to have another point of view from a psychological aspect.”

Wall said participants at the conference made good suggestions for next steps in their research. “It was pretty incredible to speak with people with doctorates during the conference breaks,” said Wall. “I’ve learned so much from working in the lab that animal cognition work is something I am considering after graduation.”

*Contact: **Kim Hill**, (309) 556-3960*