

# Clemson researcher: Humanizing computer aids affects trust, dependence

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Computerized aids that include person-like characteristics can influence trust and dependence among adults, according to a Clemson University researcher.

A recently published study by Clemson University psychology associate professor Richard Pak examined how decision-making would be affected by a human-like aid. The study focused on adults' trust, dependence, and performance while using a computerized decision-making aid for persons with diabetes.

The study is one of the first to examine how the design of decision-support [aids](#) on consumer devices can influence the level of trust that users place in that system and how much they use it. The design and look of an aid are important elements for designers because of the potential dangers associated when users trust unreliable decision aids or lack trust for reliable aids simply because of their appearance.

"Just as trust is an important factor in how humans deal with other humans, it also can determine how users interact with computerized systems," Pak said. "Trust can be influenced by the aid's reliability and level of computerization as well as the user's experience and age."

Many people interact with computerized decision aids or automation on a daily basis, whether they're using [smart phones](#), digital cameras or global positioning systems. When automation is only reliable sometimes, a person's level of trust becomes an important factor that determines

how often the aid will be used.

"Figuring out how trust is affected by the design of computerized aids is important because we want people to trust and use only reliable aids," said Pak.

Pak's research findings have revealed that the inclusion of an image of a person can significantly alter perceptions of a computerized aid when there is no difference in the aid's reliability or presentation of information.

"Humanlike computer aids provide a reduced decision-making [reaction time](#) for adults," said Pak. "A plausible explanation is that the increase in trust led to an increased dependence on the aid, which led to faster performance."

Pak's future research will examine the specific aspects of the aid that affect [trust](#) in different age groups and gender. He also is studying the affects of the aids on users when faced with decisions that have either a high consequence, such as making health decisions, or a low consequence, such as deciding what type of computer to buy.

Pak's study was published Tuesday in the journal *Ergonomics*. The journal article was co-authored by Clemson researchers Nicole Fink, Margaux Price, Brock Bass and Lindsay Sturre.

Provided by Clemson University

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