



Dogs are commonly used in animal-assisted therapies.



CAN ANIMALS AID THERAPY?

Is animal-assisted therapy the cat's meow or a red herring?

By Scott O. Lilienfeld and Hal Arkowitz

IN 1857 BRITISH NOVELIST GEORGE Eliot wrote, “Animals are such agreeable friends. They ask no questions and they pass no criticism.” So it is no surprise that scholars have long been intrigued by the possibility that animals possess largely untapped therapeutic powers. But are animals good for our psychological and physical health, either as pets or as “therapists”?

Most Americans are animal lovers; about 65 percent of U.S. households contain one or more pets, according to the American Pet Products Association. Several, but not all, studies suggest that those of us who own pets tend to be somewhat happier than those of us who do not. In addition, research by Erika Friedmann and her colleagues at the University of Maryland School of Nursing shows that pet ownership predicts one-year survival rates among victims of heart attacks.

Though interesting and potentially important, studies such as these are difficult to interpret because pet owners may differ in unmeasured ways from people who do not own pets. For example, pet owners may be better adjusted psychologically and have fewer cardiac risk factors (they may eat healthier diets and experience lower levels of hostility) than non-pet owners.

EASING STRESS?

TO UNRAVEL the potential influences of pets on well-being, researchers must conduct experiments that randomly assign some people, but not others, to receive a pet, either in the laboratory or in their home. Studies by psychologists Karen Allen, then at the University at Buffalo, and James Blascovich of the University of California, Santa Barbara, and their colleagues demonstrate that the presence of a favorite pet during a stressful task—such as

performing difficult mental arithmetic—largely prevents spikes in participants’ blood pressure. In contrast, the presence of a friend does not. Moreover, Allen’s work shows that stressed-out, hypertensive stockbrokers who were randomly assigned to adopt either a pet dog or cat ended up with lower blood pressure than those who were not. These studies suggest that the presence of pets may lower our blood pressure and stress levels, although they do not tell us the reasons for this effect. They also do not inform us whether we would observe similar effects with other preferred stimuli, such as a good luck charm or a favorite doll.

Few would contest the claim that pets can give us comfort, especially in times of strain or loneliness. A far more controversial question concerns the effectiveness of animal-assisted therapy (AAT), defined as the use of an animal as either a

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WEB SITES ADVANCE STRONG CLAIMS REGARDING EFFECTIVENESS. DO THE DATA SUPPORT THESE ASSERTIONS?

treatment by itself or an addition to an existing treatment, such as psychotherapy. The animals used in various forms of AAT are a veritable menagerie: horses, dogs, cats, rabbits, birds, fish, guinea pigs and, perhaps best known of all, dolphins. In turn, the psychological problems for which AATs are used include schizophrenia, clinical depression, anxiety disorders, eating disorders, attention deficit hyperactivity disorder, autism and a host of developmental disabilities.

Popularized largely by Yeshiva University psychologist Boris Levinson in the 1960s, AATs appear to be surprisingly common: a 1973 survey by Oklahoma State University psychologist Susan S. Rice and her colleagues revealed that 21 percent of therapists in the psychotherapy division of the American Psychological Association incorporated animals into their treatment in some fashion. Whether this percentage has changed since then is unknown.

LEISURE VS. THERAPY

DO ANIMAL-ASSISTED THERAPIES WORK? To make some inroads into this question, we need to distinguish between two uses of animals: recreation and psychotherapy. Some uses of animals are purely recreational: their goal is to allow their human companions to have fun. There is scant dispute that interacting with friendly animals can “work” for such purposes because such activities often make people feel happier temporarily. To prove that AATs work, however, researchers must show that animals produce enduring effects on people’s psychological health, not merely short-term changes in mood, such as pleasure, relaxation or excitement.

Probably the most extensively researched AAT is dolphin-assisted therapy (DAT), which is most commonly used for children with autism or other developmental disabilities. DAT is practiced not only in the U.S.—primarily in Florida and Hawaii—but also in Mexico, Israel, Russia, Japan, China and the Bahamas, among other countries. Typically during DAT sessions children interact with a captive dolphin in the water while performing rudimentary manual tasks, such as placing rings on a peg. In many cases, the dolphin presumably serves as a “reinforcer” for appropriate child behaviors. DAT Web sites advance strong claims regarding this treatment’s effectiveness; one in Turkey asserts that “this field of medicine has

shown extraordinary results of the therapy and breakthroughs in outcomes” as compared with conventional treatments, including medication and therapy (see www.antalyadolphinarium.com). Do the data support these assertions?

Psychologist Lori Marino, then at Emory University, and one of us (Lilienfeld) examined the research findings regarding DAT in two reviews, one published in 1998 and the second in 2007. We found the evidence lacking for DAT’s effectiveness. In many cases, researchers demonstrated only that children who received DAT displayed improvements on some psychological measures as compared with children who did not. Yet such results do not exclude the possibility that these changes would have occurred with the mere passage of time. In still other cases, researchers did not rule out the possibility that reported improvements were merely short-term mood effects rather than lasting changes in symptoms. Finally, no researcher adequately excluded the possibility that the observed effects could have been produced by any animal or, for that matter, by any highly pleasurable stimulus. The research literature for other AATs appears to be no more definitive.

HIDDEN COSTS

WHY SHOULD WE CARE about whether AATs work? After all, if children seem to enjoy them and parents are willing to pay for them, why worry? There are at least

three reasons. First, AATs can produce what economists term “opportunity costs”—the time, money and effort expended in seeking out ineffective treatments. Because of such costs, parents and children may forfeit the chance to seek out effective treatments. In the case of DAT, opportunity costs are far from trivial because treatments frequently cost \$3,000 to \$5,000, not including the price of travel and lodging. Second, at least some AATs may be physically hazardous. For example, in DAT it is not legally required that dolphins be screened for infectious diseases. Moreover, there have been multiple reports of children injured by dolphins in DAT sessions. Third, some AATs result in largely unappreciated costs to the animals themselves. For example, removing dolphins from the wild for transfer to DAT facilities not only separates them from their families but also often results in the death of many dolphins within each pod.

So, to the bottom line: Are animals good for our psychological and physical health? Undoubtedly, many animals can be valued companions and provide social support; they can also make us feel better in the short term. It is possible that pets can be of particular help to people with depression or to children who have been severely neglected—for whom loneliness and lack of social support are often common problems.

Still, further research will be needed to investigate this possibility. Moreover, whether animals—including dolphins—produce long-term changes in the core symptoms of other psychological conditions, such as autism, developmental disabilities or anxiety disorders, is another matter altogether. To this question, we must reserve the verdict sometimes delivered in Scottish courts: “unproven.” ■

Scott O. Lilienfeld is a psychology professor at Emory University. **Hal Arkowitz** is a psychology professor at the University of Arizona. The authors thank Lori Marino for her generous help with this article.

MORE TO EXPLORE

Dolphin-Assisted Therapy: More Flawed Data and More Flawed Conclusions. L. Marino and S. O. Lilienfeld in *Anthrozoös*, Vol. 20, No. 3, pages 239–249; September 2007.

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