

REFERENCE

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Economic Consequences of Partnership with Service Dogs

Ed Eames, Ph.D. and Toni Eames, M.S.

An interesting, widely-heralded article appeared in a seemingly unlikely outlet given the article's distinctly "non-medical model" message. "The Value of Service Dogs for People with Severe Ambulatory Disabilities: A Randomized Control Trial" by Allen and Blascovich appeared in the *Journal of the American Medical Association (JAMA)* of April 3, 1996. It instantly became national news, picked up by the Associated Press, CNN and other TV networks, and magazines ranging from *Journal of Nursing* to *Off Lead*, a dog training publication.

The article concludes that partnership with service dogs saves more than \$60,000 per dog over a reported "average eight year working life." It claims the saving results from decreased expenditure for personal assistant services for individuals whose disability-related needs are met by canine assistants.

As advocates, we welcome re-affirmation of the efficacy and effectiveness of assistance dogs, recognizing JAMA as a strategic citation for our cause. But as social scientists and practitioners, we must postpone relying on these results, awaiting satisfactory answers to important methodological and procedural questions that follow.

Preliminary Rumblings

We initially read with interest about Dr. Allen's study in 1994 in a *Delta Society* publication. Our deeper curiosity was piqued at the 1995 conference of Assistance Dogs International (ADI), an organization of 30-plus hearing, service and guide dog training programs. Corey Hudson, CEO of Canine Companions for Independence (CCI - the oldest and one of the largest U.S. training programs), asked which attendees had participated in the study. All reported no information about the research although delight at hearing the results which they saw as ammunition in their continual struggle for a share of limited private (insurance) and public (state vocational rehabilitation) resources.

Later, we read Dr. Allen's pre-publication paper where she identified CCI as provider of the dogs reporting that \$4,000/team had been given to the training program. The paper claimed 48 teams were trained and successfully placed meaning \$192,000 allegedly was given to CCI. However, CCI received no money for any such project.

In subsequent conversations with CCI staff and a letter to Corey Hudson, Dr. Allen said she had assumed "Canine Companions for Independence" was a generic term for service dogs. One wonders about the expertise of someone who has studied service dogs for years yet does not realize CCI is one out of many programs training canine assistants.

The Study

The JAMA article reports that 48 individuals with severe physical disabilities were selected for the study from Pennsylvania, Connecticut, New York, and Massachusetts. They were then divided into two groups of 24 - experimental (E) and waiting list control (C). They were remarkably well-matched on age, gender, race, "severity" (actually, cause) of disability, and marital status. Each group had 12 men and 12 women. In both groups, for each gender, mean age was 25 years (standard deviations, 1.2-1.5). Race was perfectly matched within gender groups; fully 30 percent overall were African-American. Causes of disability were identically distributed within gender: among men: spinal cord injury, muscular dystrophy (MD), multiple sclerosis (MS), and traumatic brain injury had Ns of 7, 1, 2, 2 in both the E and C groups. Among women, those causes were identical in the E and C groups (Ns=4,1,6,1). Only marital status differed slightly between E and C groups within gender (differences of 1 or 2).

All 48 participants completed a battery of questionnaires at the outset, including the number of hours of paid and unpaid personal assistance. One month later, the first 24 were teamed and trained with service dogs. Six months later all 48 individuals completed re-surveys. One year after the initial group received dogs, the other 24 were teamed, and all 48 were re-surveyed. Two more survey rounds occurred during the next, final year.

Key Finding: Allen and Blascovich's analysis concluded that a service dog could save over \$60,000 net, after calculating costs of training and maintaining the dog, by reducing costs for personal assistance over a canine's eight-year working life.

Methodological Questions

Although the study approximates an experimental design, serious

methodological questions remain. How large was the subject pool for selecting 48 subjects? How did the researchers persuade subjects to participate in all data collection rounds? How did all subjects maintain adequate health to do so? How were all subjects able, cognitively and physically, to complete the extensive self-administered questionnaires. What accommodations were provided?

Does the projection over a dog's working life take into account increased needs over time due to rapidly degenerative disabling conditions, e.g., MD and MS? Indeed, the projected savings seem based on untenable assumptions about disease-progression and the working life of dogs.

How were reliability and validity of the estimated hours of personal assistant care, so crucial to predicting cost savings, tested?

Where Did the Dogs Come From?

Wondering how 48 dogs and team training could have been provided in a one year period, we contacted every known service dog training program in the northeast and all national organizations of such programs. All reported they had not participated in Allen and Blascovich's study.

In the JAMA article and in a letter in "Partners' Forum," Allen and Blascovich claimed the dogs were puppy raised and trained over 18-24 months by trainers from various sources. "Many were moonlighting from jobs involving dog training, others were retired individuals with limited dog training experience and still others were people with disabilities with service dogs who wanted to help others get them." (Partners' Forum, 1996).

Apparently all 48 matches were successful throughout early and team training and two years of data collection since no failure was reported. That outcome is phenomenal considering that programs that breed their own stock, carefully control puppy raising and team matching, and generally strive to increase the success rate of dogs selected for training, achieve only 50% success. Allen and Blascovich's answers to questions such as the following would be enlightening for the service dog industry. Moreover, they have major implications for estimating economic costs vs. savings.

What breeds were used? At what age were puppies placed in puppy raising homes? Were they puppy tested? If so, at what age and under what circumstances? What supervision did puppy raisers receive during socialization? What were puppies expected to learn before formal training? At what age did service dog training begin and how long did it last? How were trainers selected and what training techniques did they employ? How

long was team training and how was it carried out? Who evaluated each team's performance and how? What follow-up service was provided for new teams? What dollar costs were associated with the features just reviewed?
Where Did the Research Funds Come From?

Clearly, such research involved major expenditure of funds beyond the \$192,000 noted above. Costs would include the researchers' time, contacting subjects, data processing, and analysis, etc.

We phoned Dr. Allen's academic base, State University of NY-Buffalo, whose research grants officer stated that all grants, whether from public or private sources must go through his office and that no grant had done so for this research project. Dr. Allen asserts the funder wants to remain anonymous. This is problematic. Codes of Ethics of many professional societies, e.g., American Anthropological Association, require revealing funding sources to help readers evaluate potential biasing influences on the researcher.

Confidentiality vs. Secrecy: Guarding the confidentiality of respondents is an ethical obligation that all scientists assume. However, extending the mantle of confidentiality to funders and agents employed by the researcher goes beyond this tenet and cloaks the entire research enterprise in an aura of secrecy. The scientific enterprise is based on openness and information-sharing that permits replicating or at least verifying a study to test its validity. For this study, those elements of the scientific enterprise appear to be lacking.

The Peer Review Process

JAMA, a scientific journal, utilizes peer review. In this case, "peer" must include an expert with in-depth knowledge of the service dog movement along with someone expert in disability and rehabilitation research as well as basic research design and economic analysis. Where would a physician-editor obtain such a mix of expertise? The answer is he probably could not, thus accounting for otherwise surprising lapses in appropriate information. Is it possible that less stringent criteria than usual for JAMA were applied regarding details the authors should report because the realm of study (i.e. use of service dogs) is one the reviewers knew little or nothing about?

Conclusion

The service dog industry is struggling to improve selection and training of dogs as well as matching trained dogs with disabled applicants and maintaining working teams after graduation. In view of those challenges, the

apparently random selection and training of dogs by inexperienced trainers, that resulted in a 100% success rate, is inconceivable.

For us as researchers, academic and applied, it is essential to evaluate research studies carefully before publicizing their results. For service dog training programs to approach insurance companies and for rehabilitation agencies to sponsor team training bearing results of a flawed study can only diminish public trust in the entire assistance dog movement.

We conclude that the economics of partnering service dogs with people with disabilities is a topic still sorely in need of carefully constructed and documented study.

REFERENCES

Allen, Karen and Blascovich, Jim, "The Value of Service Dogs for People with Severe Ambulatory Disabilities: A Randomized Control Trial," *JAMA*, 275:13, April 3, 1996, 1001-1006.

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Response to Eames & Eames

Karen Allen, Ph.D.

Preliminary Ruminations

To begin, I would like to clarify that the "pre-publication" paper to which Eames & Eames refer was actually a draft of a manuscript that I shared with a staff member at CCI after having several cordial conversations with him. On that draft was the standard message scholars use when exchanging such preliminary information: DO NOT QUOTE OR DUPLICATE WITHOUT PERMISSION FROM AUTHOR. I am sure that Dr. Ed Eames, as a researcher and scholar, knows this and I assume that he did not have any part in copying and widely disseminating the draft version of the paper. Regarding my naive status about who trains and places service dogs, I must point out that I have never studied service dogs. I have studied the psychological and social effects of such dogs on people. I never have had any contact with people who trained the dogs in the study I conducted with Dr. Blascovich and I have no knowledge about methods of training. In fact,