

# Stress Goes to the Dogs

By BRUCE BOWER

Dogs do more than shed on the rug, bark at prowlers and provide reliable companionship. Sometimes the presence of a canine comrade acts as a natural sedative for its human master, lowering blood pressure and other bodily responses to stress while fostering improved performance on a difficult task, according to results from a new study of women and their dogs.

Having a human friend close at hand while attempting the same task heightens the body's stress reactions and undermines performance, assert psychologists Karen M. Allen and James J. Blascovich, both of the State University of New York at Buffalo.

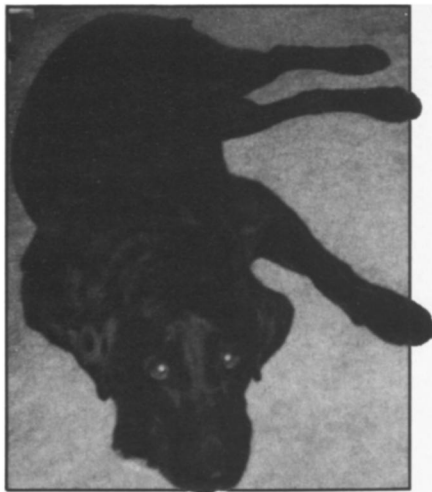
Dogs take a bite out of stress because they provide unconditional support without scrutinizing their owner's sometimes frantic attempts to meet a challenge, Allen and Blascovich argue. A two-legged friend, harboring the human propensity to evaluate the success or failure of others, tends to stoke anxiety and embarrassment in the same situation.

The new findings — reported in the October *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* — add to other indications that pets often help to buffer their owners from stress and illness. For example, in a 1980 study of 96 people with heart disease released after treatment at a coronary-care unit, psychiatrist Erika Friedmann of the University of Pennsylvania in Philadelphia and her co-workers identified a higher survival rate one year after hospital discharge among pet owners, even after accounting for individual differences in the extent of heart damage and other medical problems. In fact, having a pet at home proved a stronger predictor of survival than having a spouse or extensive family support, Friedmann's team found.

In another investigation, 345 elderly pet owners cited proportionately fewer physician visits over one year than did 593 same-aged counterparts with no pets, psychologist Judith M. Siegel of the University of California, Los Angeles, reported in the June 1990 *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY*. Pet owners told Siegel that their animals offered substantial comfort in times of stress. However, only dog owners showed no tendency to visit physicians more often following stressful experiences, such as the death of a close friend or spouse.

"Dogs, more than other pets, provided their owners with companionship and an object of attachment," Siegel concludes.

Other studies have charted blood pres-



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sure and heart rate drops among adults and children in the presence of their pets or an obviously friendly dog.

Allen and Blascovich probed the calming influence of canines among 45 women faced with a standard psychology-lab challenge — performing mental arithmetic. All the women owned dogs and described themselves as dog lovers. In an initial laboratory session, the psychologists measured blood pressure, pulse rate and electrical skin conductance as each participant sat with a female researcher and rapidly counted backwards from a four-digit number by threes for two minutes. After a break, they repeated the exercise, counting backwards from a new number by sevens. The mental arithmetic produced consistent jumps in the physical measures of stress.

Two weeks later, a more difficult arithmetic challenge — counting backwards by 13s and 17s — took place at each participant's home. The experimenters randomly assigned women to perform the tasks in the company of only the researcher or with the addition of either their dog or their closest female friend.

With Fido at foot, physical stress markers during mental calculations showed little change from their levels during a pre-test rest period the same day. With only an experimenter sitting nearby, stress measures displayed moderate increases, and the presence of a female friend dramatically boosted the same measures.

In addition, participants accompanied by a friend performed mental arithmetic much more rapidly but less accurately than women in the other two groups and suffered a marked drop in accuracy from the previous laboratory session.

The women apparently perceived their dogs as less threatening than friends or

## Researchers sniff out the calming effects of canines

the experimenter, the Buffalo psychologists suggest. By providing support without evaluating their masters' attempts at mental number-crunching, the dogs thus appear to help keep physical stress reactions on a short leash.

Some evidence suggests that touching and stroking pets reduces a person's heart rate and blood pressure, but participants in the Buffalo study did not touch their dogs during the experiment.

The stress-buffering power of pets may partly explain their longstanding appeal to humans, Blascovich proposes. However, Blascovich — who has no pets and says he finds them more troublesome than pleasurable — notes that pets probably offer no stress protection to people who are indifferent to or uncomfortable around animals.

In addition, people faced with a challenging task — not to mention a personal crisis — may benefit from the presence of a human friend. Yet in the laboratory, researchers often find such effects only after taking great care to prevent the evaluation of study participants by their friends.

For example, in 1990, psychologist Thomas W. Kamarck of the University of Pittsburgh and his colleagues noted drops in blood pressure and heart rate among women doing mental arithmetic while sitting near a friend, compared with the same women's stress responses while performing the task alone. In Kamarck's study, however, the friends wore headsets that prevented their hearing participants' responses and completed a questionnaire that distracted their attention during the trials. The researchers instructed friends to encourage volunteers silently with periodic touches on the wrist.

Some pet lovers suspect no human can offer calming benefits comparable to those of their beloved animals. One such woman in the Buffalo study phoned Karen Allen several months after the experiment and asked if the researchers could repeat the procedure, this time comparing her husband with her dog. Allen hopes to conduct such a study, and as a confirmed dog lover, she predicts a good many husbands will end up in the doghouse. □