

Evolution & Behaviour

The healthy happiness behind dog ownership

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This Break was edited by Max Caine, *Editor-in-chief* - TheScienceBreaker

ABSTRACT

For centuries, domesticated dogs have been called man's best friend with several social and health benefits being attributed to their ownership. Notwithstanding, the relationship between dog ownership and the risk of heart disease remains poorly understood.



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Dogs have been called man's best friend for several centuries and it is not uncommon to read about the stereotype benefits on health and well-being attributed to their companionship. Their presence in a home has been associated with longevity, less loneliness, better adaptation to living in large cities, increased physical activity, lower obesity levels and even faster recovery after experiencing a heart attack.

Although heart-benefits of dog ownership are widely accepted, a position statement by the [American Heart Association](#) (the largest scientific body that governs the standards related to appropriate

scientific cardiovascular healthcare), suggested that more research needed to be conducted in this area as the level of evidence was not sufficient to confirm a definite benefit of dog ownership on heart health.

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Using this background, we tested the theory that dog ownership is protective against new-onset heart disease, death from heart disease and any cause of death using a nationwide study. We followed up participants over a twelve year period. This was possible to study in Sweden because information on every resident is collected in centralized administrative registers that can be used for

research. The registers contain information such as age, area of residence, income, health outcomes and dog ownership.

Additionally, we extended this investigation in a smaller population taken from a register that contains information about Swedish born twins. The twin register contains additional lifestyle information such as smoking status, presence of other illnesses, disability and self-reported exercise levels that was not available in the total population registers. This was done to lessen doubts as to the results obtained in the overall population.

In the total population that comprised more than 3 million adults aged between 40-80 years, we found dog ownership was associated with a lower risk of dying from heart disease and from other combined causes of death. We also found that for people who lived alone, having a dog was associated with a lower risk of getting new-onset heart disease, a lower risk of death from heart disease and a lower risk of death from any combined cause. These beneficial effects were more pronounced where ownership was of

breeds such as the terriers, retrievers, scent hounds and pointing dogs – dogs all initially bred for hunting.

In investigating if our results remained the same when using the smaller twin population, we found that addition of the lifestyle factors maintained similar results to those of the national register; they suffered from the comparatively small population size used.

Whilst our results are exciting and add weight to available information, we could not determine if there was a difference between the types of people who decide to own dogs and thus cannot say if there are already underlying differences in the lifestyle choices between owners and non-owners.

1. Levine GN, Allen K, Braun LT, et al. Pet ownership and cardiovascular risk: a scientific statement from the American Heart Association. *Circulation* 2013;127(23):2353-63. doi: 10.1161/CIR.0b013e31829201e1