Mental health promoting effects of canine companions: The Hordaland Health Study

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Background/aim

Companion animals play a significant role in health promotion in many cultures, having value in stress reduction, as co-therapists, as assistants to people with limitations, and as pets. They may help people overcome loneliness, sadness and depression. Not all human/animal contact is positive, however. A pet living in a household with several people may be perceived with different degrees of meaningfulness. There is evidence, for example, that the mere presence of a dog does not confer benefits, while a dog with which there is a positive relationship may be beneficial. Thus, both in human-human and human-animal social networks, positive, neutral and negative influences on health are plausible and have been demonstrated in many studies. However, the joint effect of humans and animals in social networks is rarely studied. This study probed these issues further, posing the research question: how does one's relationship to a dog in the household relate to levels of psychological distress, taking into account the effects of social ties with people?

Methods

790 community-dwelling Norwegian women and men ages 40-44 with a dog in their households responded to a survey with scales measuring symptoms of loneliness, anxiety and depression. They provided information on social network (household composition; social engagement), perceived availability of confidant and of practical social support, social stress from relationships, and they completed the DOG scale (the dog eases my contact with other people; dog ownership has a positive impact on my mental health; the dog gives me an increased sense of security; the dog increases my physical activity).

Results

Depressive symptoms (DS) were significantly associated with the DOG, while anxiety and loneliness were not. A linear regression model was constructed predicting DS, and with all the social ties variables, including the DOG, as predictors. The model's fit was estimated with the R² statistic, which was 0.15 (standard error = 2.7), and with the F statistic, which was 11.5 (df 7, 405; p < 0.0001). Four of the 7 independent variables added significantly to the predictive utility of the model. These were, in order of predictive utility (standardized regression coefficients): chronic social stress ($^2 = 0.30$, p < 0.000), social contact outside the home ($^2 = 0.16$, p < 0.001), having enough good friends ($^2 = 0.15$, p < 0.002), and the DOG ($^2 = 0.10$, p < 0.026). Further analyses showed that two of the four DOG items (mental health and physical activity) were the significant predictive factors. Gender of the respondent was not a significant factor.

Conclusions

The DOG scale was a significant predictor of DS. Respondents reporting greater mental and physical health benefits had lower DS scores. Results confirm that perceived positive functions of a dog are protective against DS, in concert with the literature showing that the mere presence of a dog is not in itself protective. Thus, the effect is not a social network effect, but a perceived social support effect, conceptually similar to perceptions of the availability of a human confidant and of practical support.