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**Companion Animals and Work-Related Psychological Health  
among Rural Anglican Parochial Clergy in England**

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**ABSTRACT**

This study examines the theory that companion animals may contribute positively to work-related psychological health among rural Anglican parochial clergy serving in England, and thus protect against burnout. Data provided by 621 clergy serving in rural ministry (25% female and 75% male) found that 31% shared their home with at least one cat and 35% with at least one dog. Participants completed the Francis Burnout Inventory and the short form of the Eysenck Personality Questionnaire Revised. After controlling for personal factors (age and sex) and personality factors, neither cats nor dogs were significantly associated with individual differences in scores on the burnout inventory.

**Keywords:** rural ministry; companion animals; burnout; personality; emotional exhaustion; satisfaction in ministry

**Introduction**

There are well-established literatures exploring and documenting the correlates of companion animals on a number of aspects of human flourishing, including social correlates, health-related correlates, and psychological correlates. Early studies exploring the *social* benefits of companion animals included work by Youmans and Yarrow (1971) who reported that healthy older men apparently survived best if they had a variety of interesting and complex activities to occupy their time and suggested that companion animals could provide such activities. Arkow (1977) reported on the benefits in general of companion animals, and Brikel (1979), Feldmann (1977), Levinson (1972), and Ryder (1973) reported that feelings of responsibility, and feelings of being needed, were enhanced by companion animals. Feldman (1977) suggested that companion animals helped to keep owner in touch with reality. In his review of the 'social significance of pet ownership', Mugford (1980) suggested that companion animals may provide a link with the natural world characteristic of life in former close-knit rural communities, as well as providing for the interactional needs of people. According to Mugford, companion animals add to people's self-esteem, provide companionship, become objects of attachment and love, provide emotional security, can be seen as child substitutes, and can be of benefit in educating the young in basic biology and in teaching a sympathy for the natural world.

Early studies exploring *health-related* benefits of companion animals included work reported by Gunby (1978) who noted that a significantly higher proportion of people with companion animals survived heart attacks, a difference that could not be explained by the severity of the heart condition. Friedmann et al. (1980) observed that significantly more people with companion animals were alive a year after being discharged from a coronary care unit. Siegel (1990) found that companion animals, particularly dogs, could reduce the demand for a doctor among the elderly. Allen, Blascovich, and Mendes (2002) documented

the beneficial effect of companion animals on cardiovascular reactivity to psychological and physical stress.

Early studies exploring *psychological* benefits of companion animals included work in which companion animals were found to be associated with fewer episodes of depression (Francis, Turner, & Johnson, 1985), to enable people to enjoy life more (Mugford & M'Comisky, 1975), and generally to encourage higher levels of satisfaction and greater happiness (Connell & Lago, 1984). Corson and Corson (1978) found that providing companion animals to hospitalized geriatric patients reduced their loneliness, hopelessness, and social isolation. Kidd and Feldmann (1981) also found that companion animals may be psychologically advantageous to the elderly. Castelli, Hart, and Zasloff (2001) found that cats were more effective than dogs in enhancing wellbeing among men with AIDS.

Ongoing research has generally strengthened the conclusion that companion animals tend to promote human flourishing across various age groups and constituencies. For example, Hughes et al. (2020) conducted a systemic review of studies concerned with the effect of companion animals on the physical and mental health of adults aged sixty and over. Of the 70 studies reviewed, 52 found positive contributions exerted by companion animals on mental or physical health. In terms of mental health companion animals improved indices of quality of life and attenuated symptoms of depression, anxiety, and cognitive impairment. In terms of physical health, companion animals were associated with increases in physical activity, and improvement in blood pressure.

Purewal et al. (2017) conducted a systematic review of studies concerned with the effect of companion animals on child and adolescent development. The 22 studies reviewed reported evidence for an association between companion animals and a wide range of emotional health benefits, including better self-esteem and lower levels of loneliness, although the effects on anxiety and depression were inconclusive. Studies also reported

evidence for an association between companion animals and cognitive benefits, including perspective taking and intellectual development; and for an association between companion animals and social competencies, including social networks, social interaction, and social play.

Brooks et al. (2018) undertook a systematic review of studies concerned with the support derived from companion animals by people living with mental health problems. The 17 studies included in the review provided mixed findings. Quantitative studies demonstrated positive, negative, and neutral impact. Qualitative studies pointed to ways in which companion animals contributed to managing mental health conditions, particularly in times of crisis. The negative aspects of companion animals included practical and emotional burden of caring for them, and the detrimental impact of the death of companion animals on sustained wellbeing.

Carr et al. (2020) drew data from the Health and Retirement study to examine the impact of companion animals on the effect of spousal loss (through death or divorce) in later life. The presence of a companion animal was associated with significantly lower increases in depressive symptoms and significantly lower increases in reported loneliness.

In terms of physical health benefits recent studies have indicated that dog owners spend more time outdoors engaging in exercise like walking (Christian et al., 2013). In turn such activity is associated with better physical health parameters like lower body mass index (Curl, Bibbo, & Johnson, 2017). Dog owners have also been found to have better cardiovascular health markers like lower resting heart rate, lower blood pressure, lower cholesterol, and a lower risk of death from cardiovascular problems (Kramer, Mehmood, & Suen, 2019). Large-scale national surveys in Australia and Germany have shown that individuals living with companion animals for at least five years recorded significantly fewer visits to doctors than those without companion animals (Headey et al., 2002).

In terms of coping with stress, Janssens et al. (2021) explored the effect of companion animals as buffers against the impact of stress on positive and negative affect. A total of 159 dog and cat owners responded to a series of randomly scheduled questionnaires on their smartphones. On each occasion they recorded whether their companion animal was present, the extent of their interaction with the companion animal, stressful activities and events, and their scores on the Positive and Negative Affect Schedule (PANAS; Crawford & Henry, 2004). Their data demonstrated that the presence of a companion animal buffered against the negative consequences of stress on positive affect.

Most recently many studies have reported the contribution of companion animals to coping mechanisms during Covid-19, including work reported by Bennetts et al. (2022a, 2022b), Lima, Mateus, and Silva (2022), Mueller et al. (2022), Olivia and Johnston (2021), and Wells et al. (2022).

### ***Companion animals and the clergy***

Research exploring the connection between companion animals and work-related psychological wellbeing was introduced to clergy studies by Francis, Turton, and Loudon (2007). In this study data were provided by a sample of 1,482 Catholic parochial clergy who completed a modified form of the Maslach Burnout Inventory (Maslach & Jackson, 1986) and the short-form Eysenck Personality Questionnaire Revised (Eysenck, Eysenck, & Barrett, 1989), together with a question about the presence of companion animals, differentiating between cats and dogs. The results indicated that, contrary to expectation, no benefit accrued from the presence of a cat, while the presence of a dog was associated with statistically significant (but very small) increases in two aspects of professional burnout: higher scores on the scale of emotional exhaustion and higher scores on the scale of depersonalisation.

The study reported by Francis, Turton, and Loudon (2007) left unanswered the question whether these findings were peculiar to the experience of Catholic parochial clergy

or whether Catholic parochial clergy shared this experience in common with other groups of clergy. An opportunity is offered to address this question in relation to Anglican parochial clergy serving in rural areas by the reanalysis of data collected by Christine Brewster and previously employed by Brewster (2012), Brewster, Francis, and Robbins (2011), and Francis, Laycock, and Brewster (2015).

## **Method**

### ***Procedure***

As part of a larger study concerned with assessing stress among Anglican clergy (Brewster, 2012), a detailed questionnaire was sent to clergy serving in rural ministry, excluding those who were working in team ministries. A response rate of 47% generated 722 completed questionnaires. The present analyses are based on a subset of 621 respondents to the survey who were responsible for at least three rural churches and who provided full data on the measures used.

### ***Measures***

*Work-related psychological health* was assessed by the two 11-item scales reported by Francis, Kaldor, Robbins, and Castle (2005): the Scale of Emotional Exhaustion in Ministry (SEEM) and the Satisfaction in Ministry Scale (SIMS). Participants were invited to rate each of the 22 items on a five-point scale: agree strongly (5), agree (4), not certain (3), disagree (2), and disagree strongly (1). Example items from SEEM include: 'I feel drained in fulfilling my functions here', and 'I am less patient with people here than I used to be'. Example items from SIMS include: 'I feel very positive about my ministry here', and 'I am really glad that I entered the ministry'. The 11 items from the SEEM and the 11 items from the SIMS were presented alternately and prefaced by the single description: 'The following questions are about how you feel working in your present congregation'. Scale properties have been reported elsewhere in a study of over 6,000 clergy drawn from a range of denominations in

Australia, New Zealand and England (Francis, Kaldor, Robbins and Castle, 2005), in which both scales showed high internal consistency reliability.

*Psychological factors* were assessed by the short form of the Eysenck Personality Questionnaire Revised developed by Eysenck, Eysenck, & Barrett (1985). This instrument proposes three 12-item measures of extraversion, neuroticism, and psychoticism, together with a 12-item lie scale. Participants were invited to rate each of the 48 items on a two-point scale: no (0) and yes (1). Example items from the extraversion scale include: 'Are you a talkative person?' and 'Can you easily get some life into a rather dull party?' Example items from the neuroticism scale include: 'Does your mood often go up and down?' and 'Are you a worrier?' Example items from the psychoticism scale include: 'Do you prefer to go your own way rather than act by the rules?' and 'Do you enjoy co-operating with others?' Example items from the lie scale include: 'Have you ever blamed someone for doing something you knew was really your fault?' and 'Have you ever taken advantage of someone?'

*Personal factors* were assessed by questions concerning biological sex, chronological age, and marital status.

*Companion animals.* The presence of companion animals within the home was assessed by a check list that distinguished between cats and dogs.

### ***Participants***

The sample of 621 Anglican clergy comprised 25% clergywomen and 75% clergymen; 4% were in their thirties, 22% were in their forties, 43% were in their fifties, and 31% were aged sixty or over; 8% were single; 31% shared their home with at least one cat, and 35% with at least one dog.

### **Results and discussion**

- insert table 1 about here -



The first step in data analysis examined the psychometric properties of the two measures employed in the study: the two scales of the Francis Burnout Inventory and the three scales of the short form of the Eysenck Personality Questionnaire Revised. The data presented in table 1 demonstrate good internal consistency reliability for the Scale of Emotional Exhaustion in Ministry (SEEM), the Satisfaction in Ministry Scale (SIMS), the Extraversion Scale and the Neuroticism Scale, with alpha coefficients (Cronbach, 1951) in excess of .80. The Psychoticism Scale performed less satisfactorily ( $\alpha = .61$ ), but in line with the acknowledged problems in operationalising this dimension of personality (Francis, Philipchalk, & Brown, 1991).

- insert table 2 about here -

The second step in data analysis examined the bivariate correlations between scores recorded on SEEM and SIMS and each of the predictor variables: personal factors (sex and age), psychological factors (extraversion, neuroticism, and psychoticism), and companion animals (cats and dogs). The data presented in table 2 demonstrate that, when considered separately, personal factors and psychological factors play an important part in shaping individual differences in both emotional exhaustion in ministry and satisfaction in ministry. High levels of emotional exhaustion in ministry are associated with lower extraversion scores, higher neuroticism scores, higher psychoticism scores, and younger clergy. These findings are consistent with the general patterns reported in other studies (see Francis, 2018, for a review). The bivariate correlations also suggest that, although there is no association between dogs in the household and either emotional exhaustion in ministry or satisfaction in ministry, cats in the household are associated with slightly lower levels of emotional exhaustion in ministry and slightly higher levels of satisfaction in ministry. The effect of cats in the household is significant only at the five percent level of probability and deserves more rigorous testing within regression models.

- insert table 3 about here -

The third step in data analysis now tests the effects of companion animals (in model 3), after taking into account the effects of personal factors (in model 1) and psychological factors (in model 2). The data presented in table 3 (SEEM) and in table 4 (SIMS) comprises two main features. The more important of these two features concerns assessing the significance of the increase in the variance explained by the third model. In neither case has adding companion animals into the model accounted for a significant increase in the variance explained. The second feature concerns the significance of the beta weights. In this case the impact of cats on satisfaction in ministry has dropped into insignificance, while the impact of cats on emotional exhaustion just reaches the five percent level of probability. The prudent conclusion from these data is that neither cats nor dogs exercise a significant impact on the work-related psychological wellbeing or burnout experienced by rural Anglican parochial clergy.

## **Conclusion**

While the broader literatures on the effects of companion animals generally report positive associations with psychological wellbeing, an earlier study by Francis, Turton, and Loudon (2007) found that among a sample of 1,482 Catholic parochial clergy, while no psychological benefit accrued from having a cat in the household, having a dog in the household was associated with statistically significant (but very small) increases in two aspects of professional burnout as conceptualised and assessed by the Maslach Burnout Inventory (emotional exhaustion and depersonalisation). The question left unanswered by this earlier study was whether these findings were peculiar to the experience of Catholic parochial clergy or whether Catholic parochial clergy shared this experience in common with other groups of clergy.

The present study was designed to address this unanswered question by undertaking secondary analysis of data collected by Christine Brewster and previously employed by Brewster (2012), Brewster, Francis, and Robbins (2011), and Francis, Laycock, and Brewster (2015). These data comprised 621 Anglican clergy (25% female and 75% male) who were serving in rural ministry. Among these clergy, 31% shared their home with at least one cat and 35% with at least one dog. The major conclusion from these analyses is that neither cats nor dogs were significantly associated with scores on the two scales of the Francis Burnout Inventory, after controlling for personal factors (age and sex) and psychological factors (extraversion, neuroticism, and psychoticism). Comparing these findings with the earlier findings of Francis, Turton, and Loudon (2007) raises two further questions. Why should dogs have a negative impact on the psychological health of Catholic priests but not of Anglican clergy? Why should companion animals (in the form of cats and dogs) fail to be reflected in better psychological health among both Catholic priests and Anglican clergy?

Research in this field is still limited to just two independent studies (one among Catholic priests and one among Anglican clergy). Further studies are needed among other samples of Catholic priests, among other samples of Anglican clergy, and among other groups of clergy to test the generalisability of these findings.

### **Disclosure statement**

No potential conflict of interest was reported by the authors.

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## References

- Allen, K., Blascovich, J., & Mendes, W. B. (2002). Cardiovascular reactivity and the presence of pets, friends and spouses: The truth about cats and dogs. *Psychosomatic Medicine*, 64(5), 727-739. doi.org/10.1097/00006842-200209000-00005
- Arkow, P. (1977). *Pet therapy: A study of the use of companion animals in selected therapies*. Colorado Springs, CO: American Humane Society.
- Bennetts, S. K., Crawford, S. B., Howell, T. J., Ignacia, B., Burgemeister, F., Burke, K., & Nicholson, J. M. (2022a). Companionship and worries in uncertain times: Australian parents' experiences of children and pets during Covid-19. *Anthrozoös*, 35(6), 833-846. doi.org/10.1080/08927936.2022.2051931
- Bennetts, S. K., Crawford, S. B., Howell, T. J., Burgemeister, F., Chamberlain, C., Burke, K., & Nicholson, J. M. (2022b). Parent and child mental health during Covid-19 in Australia: The role of pet attachment. *PLoS One*, 17(7), e0271687, 1-17. doi.org/10.1371/journal.pone.0271687
- Brewster, C. E. (2012). The fate of the rural Anglican clergy: Caring for more churches and experiencing higher levels of stress. In F.-V. Anthony & H.-G. Ziebertz (Eds.), *Religious identity and national heritage: Inspired-theological perspectives* (pp. 149-169). Leiden: Brill. doi.org/10.1163/9789004228788\_009
- Brewster, C. E., Francis, L. J., & Robbins, M. (2011). Maintaining a public ministry in rural England: Work-related psychological health and psychological type among Anglican clergy serving in multi-church benefices. In H-G. Ziebertz, & L. J. Francis (Eds.) *The public significance of religion*. (pp. 241-265). Leiden: Brill. doi.org/10.1163/ej.9789004207066.i-495.90

- Brikel, C. M. (1979). The therapeutic role of cat mascots with a hospital-based geriatric population: A staff survey. *The Gerontologist*, 19(4), 368-371.  
doi.org/10.1093/geront/19.4.368
- Brooks, H. L., Rushton, K., Lovell, K., Bee, P., Walker, L., Grant, L., & Rogers, A. (2018). The power of support from companion animals for people living with mental health problems: A systematic review and narrative synthesis of the evidence. *BMC Psychiatry*, 18: 31, 1-12. doi.org/10.1186/s12888-018-1613-2
- Carr, D. C., Taylor, M. G., Gee, N. R., & Sachs-Ericson, N. (2020). Psychological health benefits of companion animals following a social loss. *The Gerontologist*, 60(3), 428-438. doi.org/10.1093/geront/gnz109
- Castelli, P., Hart, L. A., & Zasloff, R. L. (2001). Companion cats and the social support systems of men with AIDS. *Psychological Reports*, 89(1), 177-187.  
doi.org/10.2466/pr0.2001.89.1.177
- Christian, H. E., Westgarth, C., Bauman, A., Richards, E. A., Rhodes, R. E., Evenson, K. R., Mayer, J. A., & Thorpe, R. J. (2013). Dog ownership and physical activity: A review of the evidence. *Journal of Physical Activity and Health*, 10(5), 750-759.  
doi.org/10.1123/jpah.10.5.750
- Connell, M. S., & Lago, D. J. (1984). Favourable attitudes towards pets and happiness among the elderly. In T. K. Anderson, B. L. Hart, & L. A. Hart (Eds.), *The pet connection* (pp. 241-250). Minneapolis, MN: University of Minnesota Press.
- Corson, S. A., & Corson, E. O. (1978). Pets as mediators at therapy in custodial institutions for the aged. In J. H. Masserman (Ed.), *Current psychiatric therapies* (Vol. 18, pp. 195-205). New York: Grune & Stratton.
- Crawford, J. R., & Henry, J. D. (2004). The Positive and Negative Affect Schedule (PANAS): Construct validity, measurements properties and normative data in a large

- non-clinical sample. *British Journal of Clinical Psychology*, 43, 245-265.  
doi.org/10.1348/0144665031752934
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. doi.org/10.1007/BF02310555
- Curl, A. L., Bibbo, J., & Johnson, R. A. (2017). Dog walking: The human animal bond and older adults' physical health. *The Gerontologist*, 57(5), 930-939.  
doi.org/10.1093/geront/gnw051
- Eysenck, S. B. G., Eysenck, H. J., & Barrett, P. (1985). A revised version of the psychoticism scale. *Personality and Individual Differences*, 6, 21-29. doi.org/10.1016/0191-8869(85)90026-1
- Feldmann, B. M. (1977). Why people own pets: Pet owner psychology and the delinquent owner. *Animal Regulation Studies*, 1, 87-94.
- Francis, G., Turner, J., & Johnson, S. (1985). Domestic animal visitation as therapy with adult home residents. *International Journal of Nursing Studies*, 22(3), 201-206.  
doi.org/10.1016/0020-7489(85)90003-3
- Francis, L. J. (2018). Healthy leadership: The science of clergy work-related psychological health. Edited collection. In R. Brouwer (Ed.), *The future of lived religious leadership* (pp. 116-134). Amsterdam: VU University Press.
- Francis, L. J., Kaldor, P., Robbins, M., & Castle, K. (2005). Happy but exhausted? Work-related psychological health among clergy. *Pastoral Sciences*, 24, 101-120.
- Francis, L. J., Laycock, P., & Brewster, C. E. (2015). The burdens of rural ministry: Identifying and exploring the correlates of five causes of stress among rural Anglican clergy serving in multi-parish benefices. *Research in the Social Scientific Study of Religion*, 26, 218-236. doi.org/10.1163/9789004299436\_015

- Francis, L. J., Philipchalk, R., & Brown, L. B. (1991). The comparability of the short form EPQ-R with the EPQ among students in England, the USA, Canada and Australia. *Personality and Individual Differences*, 12, 1129-1132. doi.org/10.1016/0191-8869(91)90075-M
- Francis, L. J., Turton, D. W., & Loudon, S. H. (2007). Dogs, cats and Catholic parochial clergy in England and Wales: Exploring the relationship between companion animals and work-related psychological health. *Mental Health, Religion and Culture*, 10(1), 47-60. doi.org/10.1080/13674670601012329
- Friedmann, E., Katcher, A. H., Lynch, J. J., & Thomas, S. A. (1980). Animal companions and one-year survival of patients after discharge from a coronary care unit. *Public Health Reports*, 95(4), 307-312.
- Gunby, P. (1979). Patient progressing well? He may have a pet. *Journal of the American Medical Association*, 241(5), 438. doi.org/10.1001/jama.241.5.438
- Headey, B., Grabka, M., Kelly, J., Reddy, P., & Tseng, Y.-P. (2002). Pet ownership is good for your health and saves public expenditure too: Australian and German longitudinal evidence. *Australian Social Monitor*, 5(4), 93-99.
- Hughes, M. J., Verreynne, M.-L., Harpur, P., & Pachana, N. A. (2020). Companion animals and health in older populations: A systemic review. *Clinical Gerontologist*, 43(4), 365-377. doi.org/10.1080/07317115.2019.1650863
- Janssens, M., Janssens, E., Eshuis, J., Lataster, J., Simons, M., Reijnders, J., & Jacobs, N. (2021). Companion animals as buffer against the impact of stress on affect: An experience sampling study. *Animals*, 11, article 2171, 1-12. doi.org/10.3390/ani11082171
- Kidd, A. H., & Feldmann, B. M. (1981). Pet-ownership and self-perceptions of older people. *Psychological Reports*, 48(3), 867-875. doi.org/10.2466/pr0.1981.48.3.867



- Kramer, C. K., Mehmood, S., & Suen, R. S. (2019). Dog ownership and survival: A systematic review and meta-analysis. *Circulation: Cardiovascular quality and outcomes*, 12(10), e005554. doi.org/10.1161/CIRCOUTCOMES.119.005554
- Levinson, B. M. (1972). *Pets and human development*. Springfield, IL: Thomas.
- Lima, M., Mateus, T. L., & Silva, K. (2022). With or without you: Beneficial and detrimental associations between companion dogs and human psychological adjustment during a Covid-19 lockdown phase. *Anthrozoös*, 35(5), 713-732. doi.org/10.1080/08927936.2022.2042081
- Maslach, C., & Jackson, S. E. (1986). *Maslach Burnout Inventory manual* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Mueller, M. K., King, E. K., Habreich, E. D., & Callina, K. S. (2022). Companion animals and adolescent stress and adaptive coping during the Covid-19 pandemic. *Anthrozoös*, 35(5), 693-712. doi.org/10.1080/08927936.2022.2027093
- Mugford, R. A. (1980). The social significance of pet ownership. In S. A. Corson, E. O. Corson, & J. A. Alexander (Eds.), *Ethology and non-verbal communication in mental health* (pp. 111-122). Elmsford, NY: Pergamon.
- Mugford, R. A., & M'Comisky, J. (1975). Some recent work on the psychotherapeutic value of cage birds with old people. In R. S. Anderson (Ed.), *Pet animals and society* (pp. 54-65). London: Bailliere Tindall.
- Olivia, J. L., & Johnston, K. L. (2021). Puppy love in the time of Corona: Dog ownership protects against loneliness for those living alone during Covid-19 lockdown. *International Journal of Social Psychiatry*, 67(3), 232-242. doi.org/10.1177/0020764020944195
- Purewal, R., Christley, R., Kordas, K., Joinson, C., Meints, K., Gee, N., & Westgarth, C. (2017). Companion animals and child/adolescent development: A systematic review.

*International Journal of Environmental Research and Public Health*, 14(3), article 234, 1-25. doi.org/10.3390/ijerph14030234

Ryder, R. D. (1973). Pets in man's search for sanity. *Journal of Small Animal Practice*, 14(11), 657-668. doi.org/10.1111/j.1748-5827.1973.tb06404.x

Siegel, J. M. (1990). Stressful life events and use of physician services among the elderly: The moderating role of pet ownership. *Journal of Personal and Social Psychology*, 58(6), 1081-1086. doi.org/10.1037/0022-3514.58.6.1081

Wells, D. L., Clements, M. A., Elliott, L. J., Meehan, E. M., Montgomery, C. J., & Williams, G. A. (2022). Quality of the human-animal bond and mental wellbeing during a Covid-19 lockdown. *Anthrozoös*, 35(6), 847-866. doi.org/10.1080/08927936.2022.2051935

Youmans, E. G., & Yarrow, M. (1971). Aging and social adaptation: A longitudinal study of healthy old men. In S. Granich & R. D. Patterson (Eds.), *Human aging II: An eleven-year follow-up biomedical and behavioural study* (pp. 95-104). Washington, DC: US Government Printing Office.

Table 1

*Scale properties*

	Alpha	Mean	SD
<i>Francis Burnout Inventory</i>			
Scale of Emotional Exhaustion in Ministry	.87	29.00	7.50
Satisfaction in Ministry Scale	.88	40.80	5.94
<i>Eysenck Personality Questionnaire Revised</i>			
Extraversion	.87	6.49	3.65
Neuroticism	.83	4.94	3.28
Psychoticism	.61	2.27	3.42

N = 621

Table 2

*Bivariate correlations*

	SEEM	SIMS
<i>Personal factors</i>		
Sex	-.07	.07
Age	-.19**	.11**
<i>Psychological factors</i>		
Extraversion	-.29***	.28***
Neuroticism	.55***	-.33***
Psychoticism	.11**	-.30***
<i>Companion animals</i>		
Cats	-.10*	.09*
Dogs	-.02	.06

Note: N = 621, \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Table 3

*Regression model on Scale of Emotional Exhaustion in Ministry*

	Model 1 $\beta$	Model 2 $\beta$	Model 3 $\beta$
<i>Personal factors</i>			
Sex	-.07	-.04	-.04
Age	-.19	-.11***	-.11**
<i>Psychological factors</i>			
Extraversion		-.18***	-.18***
Neuroticism		.51***	.51**
Psychoticism		.16***	.15**
<i>Companion animals</i>			
Cats			-.07*
Dogs			.01
$\Delta$	.014***	.336***	.005
$R^2$	.014	.377	.381

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Table 4

*Regression model on Satisfaction in Ministry Scale*

	Model 1 $\beta$	Model 2 $\beta$	Model 3 $\beta$
<i>Personal factors</i>			
Sex	.07	.03	.03
Age	.11**	.05	.04
<i>Psychological factors</i>			
Extraversion		.22***	.22***
Neuroticism		-.31***	-.31***
Psychoticism		-.33***	-.32***
<i>Companion animals</i>			
Cats			.05
Dogs			.03
$\Delta$	.017**	.251***	.004
$R^2$	.017	.268	.272

Note: \*\* $p < .01$ , \*\*\* $p < .001$