# Personalities of Self-Identified "Dog People" and "Cat People" 

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ABSTRACT Alleged personality differences between individuals who selfidentify as "dog people" and "cat people" have long been the topic of widespread speculation and sporadic research. Yet existing studies offer a rather conflicting picture of what personality differences, if any, exist between the two types of person. Here we build on previous research to examine differences in the Big Five personality dimensions between dog people and cat people. Using a publicly accessible website, 4,565 participants completed the Big Five Inventory and self-identified as a dog person, cat person, both, or neither. Results suggest that dog people are higher on Extraversion, Agreeableness, and Conscientiousness, but lower on Neuroticism and Openness than are cat people. These differences remain significant even when controlling for sex differences in pet-ownership rates. Discussion focuses on the possible sources of personality differences between dog people and cat people and identifies key questions for future research.

Keywords: Big Five, cat people, dog people, personality, pet ownership traits

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"Dogs come when they're called; cats take a message and get back to you later." (Bly 1998). Like many of the jokes about dogs and cats, this one focuses on the different ways each kind of pet is supposed to interact with its owner. Consistent with the idea that dogs and cats may suit different kinds of human personalities, many pet owners intuitively label themselves as either a "dog person" or a "cat person" (Woodward and Bauer 2007). Indeed, there is a widely held cultural belief that the pet species-dog or cat-with which a person has the strongest affinity says something about that individual's personality. Even individuals who do not own and perhaps have no intention of owning a pet can identify themselves as a dog or a cat person. Beliefs about the two kinds of people permeate many domains of social interaction (e.g., the kinds of questions a person might ask a potential dating partner or potential housemate) and numerous forms of popular culture (e.g., as the topic of jokes and blog posts).

It is likely that the beliefs about people who self-identify as dog people and cat people are driven, at least in part, by real and perceived differences between the two species. Dogs and cats display different species-typical behaviors, their ancestors occupied different ecological niches, they have different physical (and possibly psychological) needs, and they express different personality traits (Gosling and Bonnenburg 1998). Given the tight psychological connections between people and their pets, it is likely that dogs and cats may be suited to different human personalities.

What it is that "dog person" and "cat person" is said to denote varies considerably from source to source. One source characterized "the canine person" as loyal, direct, kind, faithful, utilitarian, helpful, and a team player and "the feline person" as graceful, subtle, independent, intelligent, thoughtful, and mysterious (Long 2006). Another source suggested the labels do little more than offer a different way of saying masculine and feminine (Wade and Sharp 2009).

Despite the abundance of opinions on the matter, there has been a paucity of scientific research designed to identify the characteristics of "dog people" and "cat people" or even to support the claim that any personality differences exist between the two groups. One of the few studies to address the topic directly (Edelson and Lester 1983) found that among males but not females, extraversion predicted a preference for dogs rather than cats. Another study found that masculinity and independence predicted a preference for dogs but that dominance and athleticism did not predict a preference for either dogs or cats (Perrine and Osbourne 1998). Yet another study found that participants who were less hostile and less submissive reported that dogs were their ideal pet over cats (Woodward and Bauer 2007). Kidd and Kidd (1980) found that elevated dominance scores predicted a preference for dogs and pet-lovers (in males) and low dominance scores predicted a preference for cats. Participants that were rated as more nurturing tended to be female pet-lovers, while those low on nurturing tended to prefer cats. In contrast to the Woodward and Bauer study, Kidd and Kidd (1980) found that aggressiveness in males predicted a preference for dogs while low aggressiveness predicted female preference for dogs or cats. Autonomy was found to be a predictor of a cat-lover (males only).

Contrary to these findings, several studies failed to find differences between dog people and cat people (Podberscek and Gosling 2000). Johnson and Rule (1991) did not find any differences in extraversion, neuroticism, general self-esteem, and social self-esteem. In addition, no differences were found in studies of self-acceptance (Martinez and Kidd 1980), masculinity, femininity, independence, athleticism, and dominance (Perrine and Osborne 1998). Another study found that cat people were more neurotic than dog people but found no differences for extraversion, agreeableness, conscientiousness, and openness (Gosling and Bonnenburg 1998).

Together these studies offer a somewhat inconsistent picture of the personality differences between individuals who claim to be dog people and cat people. Even when differences are found they appear to differ across studies. For example, Kidd and Kidd (1980) found that male dog lovers were aggressive but Woodward and Bauer (2007) found that participants whose ideal pet was a dog were significantly less hostile than those whose ideal pet was a cat. Overall then, while provocative, the literature paints a confusing portrait of the personality differences that might exist between those who identify themselves as dog people and cat people.

Eight features of the research literature may contribute to the inconclusiveness of past findings. More worrisome, these features also hinder future progress on the question. Below, we describe these potentially problematic features.

First, as clearly demonstrated by the literature review, the studies use a broad range of concepts and scales, making it almost impossible to compare the findings across studies or to compare them with those emerging from other literatures. For example, the studies to date have measured differences using, among others, the Eysenk's Personality Inventory (Edelson and Lester 1983), the Edwards Personal Preference test (Kidd and Kidd 1980), the Impact Message Inventory-Generalized Others (Woodward and Bauer 2007), the Lexington Attachment to Pets Scale, the California Psychological Inventory (Bagley and Gonsman 2005), as well as somewhat idiosyncratic selections of other traits (e.g., Perrine and Osbourne 1998).

Second, the traits examined are not systematically chosen to represent the breadth of the personality spectrum. For example, one study looked only at extraversion (Edelson and Lester 1983), while another examined individual traits, such as masculinity, femininity, independence, and athleticism (Perrine and Osbourne 1998). Without using a systematic framework that is specifically designed to capture traits from the full spectrum of domains in which personality is expressed, it is quite possible that studies will neglect traits of particular relevance to the areas that distinguish dog people from cat people.

Third, without a unifying framework in which to place the traits, it is not clear where there is conceptual overlap among the traits. For example, to what extent should hostility and aggression be considered similar constructs? How are autonomy and submissiveness related? Ideally, a system would be used in which the traits measured have already been extensively studied so that the possible links among them are clear.

Fourth, the past research is based on a wide variety of instruments that vary in the extent to which they employed rigorous test-development and validation procedures. For example, whereas the Eysenck Personality Inventory and the California Psychological Inventory are the products of decades of rigorous psychometric evaluation, instruments like the Lexington Attachment to Pets Scale have a less established empirical base. Ideally, the instrument used to measure personality will have been subjected to extensive psychometric evaluation.

The first four problematic features of past research have a common solution-the use of an extensively researched personality framework that is used widely and has solid psychometric credentials. The personality system that best fits these criteria is the Big Five model (e.g., Goldberg 1992; John and Srivastava 1999; McCrae and Costa 1999). The Big Five model is made up of five relatively independent and very broad dimensions specifically designed to capture the breadth of the domains in which personality is typically expressed. The five dimensions, each of which consists of sub-facets, are known as, Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. Over the past three decades, the Big Five have been subject to an enormous amount of research, ranging from studies of their genetic, neurological, and developmental roots to studies examining their impact on work, relationships, and health (Ozer and Benet-Martinez 2006; Roberts et al. 2007). Moreover, several instruments to measure the Big Five dimensions have been developed and validated.

The fifth problem with past research is that the samples studied have not been very diverse. For example, Gosling and Bonnenburg's (1998) study of pet owners was based on a sample that was overwhelmingly female; such sampling issues are particularly problematic in domains like the current one where sex differences have proven to be or are thought to be important. Other studies were based on samples that were overwhelmingly highly educated (i.e., college
students). Several of the studies focused on one particularly narrow population-pet owners who were willing to or enthusiastic about completing questionnaires about their pets (e.g., pet owners returning questionnaire packets [Johnson and Rule 1991] and pet owners recruited in veterinary offices [Kidd and Kidd 1980]). It is quite likely that these participants were unusually knowledgeable about pets and particularly favorably inclined towards them, both of which could bias the findings for a topic that is meant to apply to a population that extends well beyond pet owners and enthusiasts. Thus, for the findings to be generalized to the broader population, a relatively diverse sampling strategy is needed.

Sixth, some of the previous studies have used samples that are quite small, raising the possibility that they did not have sufficient power to detect small differences between dog people and cat people. In particular, the studies to date have a median sample size of only 163. A large sample is needed to reliably detect the personality differences between dog and cat people, which could be quite subtle.

The fifth and sixth problematic features of past research have a common solution-the use of an Internet survey that is not targeted specifically to pet owners. For many years Internet samples were thought to be subject to a number of drawbacks that made them unsuitable for research. However, extensive empirical comparisons between Internet-based and traditional forms of data collection have shown that Internet samples are relatively diverse with respect to gender, socioeconomic status, geographic region, and age, that Internet-based findings generalize across presentation formats, are not adversely affected by nonserious or repeat responders, and are consistent with findings from traditional methods (Gosling et al. 2004). Moreover, Internet samples can be used to collect samples that are much larger than samples that can be readily collected using traditional methods (Gosling and Bonnenburg 1998; Gosling et al. 2004).

The seventh problem with past research is that the studies have not always classified participants using people who self-identify as a "dog person" or a "cat person." For example, some studies have asked people to name their ideal pet or have simply used pet ownership as a proxy for "dog person" or "cat person" (e.g., Russel 1956; Edelson and Lester 1983; Gosling and Bonnenburg 1998; Bagley and Gonsman 2005); it is quite possible that such methods do not capture what is widely meant by a "dog person" or a "cat person." A person could consider himself a dog person but might still own a cat or not own any pet for other reasons (e.g., due to condominium rules about pet ownership).

The eighth problem with some past research is that it did not give respondents the opportunity to self-identify as both a "dog person and a cat person" or as "neither." For example, in one study (Kidd and Kidd 1980), participants had to choose between "dog-lover," "cat-lover," or "pet-lover." By forcing participants into one of two or three categories, any true differences between "dog people" and "cat people" could be diluted or biased by the inclusion of individuals who do not genuinely belong in either category.

The solution to the seventh and eighth problems is to assess participants by asking them to self-identify as a "dog person" or a "cat person" and by giving them opportunities to filter themselves out of the sample by including options of "both" and "neither," too.

Thus, the current study sought to build on previous research by making a number of design improvements. Specifically, to ensure the findings were comparable with other research and sampled broadly from the spectrum of personality traits, we used the Big Five framework. To make sure the traits were defined in ways that they are widely understood and that they were measured appropriately, we assessed personality with a widely used and well-validated
instrument. To ensure the sample was reasonably diverse and did not over-represent groups with a particular interest in dogs or cats, we collected data using the Internet and used a survey that was framed as a broad test of personality, not as a test of dog people and cat people. To ensure that we were able to detect even subtle effects, we collected a large sample size. To ensure that we collected data on what is widely meant by dog people and cat people, we specifically used the categories "dog people" and "cat people" (instead of using pet ownership as a proxy for these groups). To ensure that we did not dilute the effects by including people who considered themselves both dog and cat people or as neither, participants had the opportunity to indicate "both" and "neither."

## Methods

## Participants and Procedure

Participants were 4,565 volunteers who provided personality and demographic information over the World Wide Web, as part of the Gosling-Potter Internet Personality Project (see Srivastava et al. 2003). Participants' age ranged from 10 to 95 years with a mean age of 23.4 years ( $S D=9.7$ ), and $63.3 \%$ were female. The sample was diverse in terms of nationality and ethnicity. Regarding nationality, $66.7 \%$ were residents of the United States, $5.1 \%$ were residents of Canada, $3.5 \%$ were residents of the United Kingdom, $2.4 \%$ were residents of Australia, $1.6 \%$ were residents of India, $1.6 \%$ were residents of the Philippines, $11.1 \%$ were residents of other countries, and 8\% did not specify. Regarding ethnicity, 63.9\% were White/Caucasian, 7.7\% were Black/African American, 4.9\% were Latino, 4.1\% were Indian/Pakistani, $3.6 \%$ were Chinese, $3.1 \%$ were Filipino, $11.8 \%$ were of other ethnicities, and $0.9 \%$ did not specify.

Participants were part of the Gosling-Potter Internet Personality Project and were recruited with the use of a noncommercial, advertisement-free website through one of several channels: (1) major search engines (in response to keywords such as "personality tests"), (2) portal sites, such as Yahoo! (under directories of personality tests), (3) voluntary mailing lists that participants had previously joined, and (4) "word-of-mouth" from other visitors. Upon arrival at the website, participants opted to take a personality test. They completed the 44item Big Five Inventory. The question about being a dog person or cat person was available from April 19 to 24, 2009. Only those participants who responded to that question are included in the current analyses.

## Measures

Index of Dog Person and Cat Person: To measure whether people self-identified as a dog or cat person, participants were given a single-item measure with which they indicated whether they saw themselves as a cat person, a dog person, both, or neither.

Personality Measure: The Big Five personality traits were measured with the self-report version of the 44-item Big Five Inventory (BFI; John, Naumann and Soto 2008). The BFI was derived from the "Big Five" model of personality, which provides a useful organizing framework for classifying and measuring distinct personality dimensions (John, Naumann and Soto 2008). Scale means, standard deviations, reliabilities, and intercorrelations were consistent with those typically obtained in laboratory studies (e.g., John, Donahue and Kentle1991). Reliability was acceptable for all five factors: Extraversion ( $\alpha=0.85$ ), Agreeableness ( $\alpha=0.79$ ), Conscientiousness $(\alpha=0.82)$, Neuroticism ( $\alpha=0.82$ ), and Openness $(\alpha=0.77)$.

## Results

Of the 4,565 people who reported what type of pet person they were, 2,088 ( $45.7 \%, 1,223$ female, 865 male) reported being a dog person, 527 (11.5\%, 359 female, 168 male) reported being a cat person, 1,264 (27.7\%, 874 female, 390 male) indicated they were both a dog and cat person, and 686 ( $15 \%, 433$ female, 253 male) reported to be neither a dog nor a cat person. These frequencies stand out from previous studies because participants were given the option to choose "both" or "neither." These analyses show that when given free choice, only about half of the participants (57.3\%) self identify as a dog or cat person.

A one-way ANOVA revealed significant differences among type of pet person for all Big Five dimensions: Extraversion ( $F_{(1,3)}=30.69, p<0.001$ ), Agreeableness $\left(F_{(1,3)}=17.46, p<0.001\right)$, Conscientiousness ( $F_{(1,3)}=12.95, p<0.001$ ), Neuroticism $\left(F_{(1,3)}=12.44, p<0.001\right)$, Openness $\left(F_{(1,3)}=35.3, p<0.001\right)$. Planned comparisons (see Figure 1) revealed significant differences between dog people and cat people for all five of the Big Five dimensions (for comparison purposes, the means for people responding "both" and "neither" are also shown). Effect sizes were calculated using Cohen's d. Dog people scored significantly higher on Extraversion $\left(t_{t-8.09}=-0.33, p<0.001, d=0.40\right)$; Agreeableness $\left(t_{t-6.76)}=-0.21, p<0.001, d\right.$ $=0.33)$; and Conscientiousness $\left(t_{(-5.64)}=-0.19, p<0.001, d=0.27\right)$; and significantly lower on Neuroticism $\left(t_{(6.07)}=0.23, p<0.001, d=0.30\right)$; and Openness $\left(t_{(5.54)}=0.17, p<0.001\right.$, $d=0.27$ ) than did cat people.


Figure 1. Big Five personality profiles of people who self-identify as dog persons and cat persons. Values for trait means are given on the $y$-axis. Note: All differences are significant ( $p<0.01$ ).

There are a number of known personality differences between men and women (e.g., Schmitt et al. 2008). To make sure the current findings were not driven by different rates of dog and cat ownership among men and women, we ran the analyses controlling for sex and we also ran the analyses separately within each sex. As shown in Figures $2 a$ and 2b, the patterns remain the same when analyzed separately for men and women and the differences remained statistically significant in all cases, too. Consistent with these findings, General Linear Model
analyses showed that adding sex as a covariate did not eliminate the personality differences between dog and cat people.
a) Male Participants

b) Female Participants


Figure 2. Big Five personality profiles of people who self-identify as dog persons and cat persons. Values for trait means are given on the $y$-axis. Figure 2a represents male participants ( $n=1,582$ ). Figure 2b represents female participants $(n=1,033)$. Note: All differences are significant ( $p<0.01$ ).

## Discussion

The present research suggests that, consistent with widely held views, there are significant differences on all Big Five dimensions between dog people and cat people. Somewhat consistent with previous findings, dog people were found to be more extraverted (Edelson and Lester 1983) and less neurotic (Gosling and Bonnenburg 1998) than cat people. In addition, dog people were higher on Conscientiousness and Agreeableness and lower on Openness than
were cat people. By addressing the limitations of previous research, we were able to identify significant differences that have sporadically emerged in previous studies between individuals who self identify with each of these two pet species.

All five dimensions have a pole that is more socially desirable than the other, so such patterns raise the possibility that the findings are simply an artifact of one group rating itself more positively than the other group. However, it is unlikely that such social desirability effects can explain the present findings because dog people did not rate themselves more favorably than did cat people across the board; specifically, dog people rated themselves lower than cat people did on openness. Accordingly, we believe the current findings provide a robust estimate of the mean personality differences between people who self-identify as dog people and cat people.

## Limitations and Future Directions

Much of the previous research conducted on the personality of pet ownership and pet preferences has been subject to selection bias (e.g., pet owners returning questionnaire packets [Johnson and Rule 1991] and pet owners recruited in veterinary offices [Kidd and Kidd 1980]). It is unlikely that the sample in the current study is subject to the same selection bias because the survey was not promoted as focusing on pet ownership or pet preference. Instead, the pet person question was added to a long-running website that provides participants with feedback on their personalities. Moreover, the pet person question was placed at the end of the questionnaire, making it unlikely that knowledge of the question interfered with the responses to the personality items. Nonetheless, to ensure the sample examined here was not anomalous, we compared the personality scores of the participants in this sample with the scores of participants taking the survey the following week. Instead of the pet person question, this sample was asked a question on an entirely unrelated topic (online social network usage). The comparison sample was collected from April 21 until April 25, $2009(n=5,395)$. Ages ranged from 10 to 94 . There were 1,857 males (34.4\%) and 3,538 females ( $65.6 \%$ ). A one-way ANOVA revealed no significant differences for Extraversion $\left(F_{(1,1)}=0.08, p=0.78\right)$, Agreeableness ( $\left.F_{(1,1)}=0.50, p=0.48\right)$, Conscientiousness $\left(F_{(1,1)}=1.45, p=0.23\right)$, or Neuroticism $\left(F_{(1,1)}=0.46, p=0.50\right)$. There was a significant difference found for Openness $\left(F_{(1,1)}\right.$ $=4.44, p=0.04)$, but the effect size $(d=0.04)$ was dwarfed by the pet-person effect size for that trait $(d=0.26)$. These data suggest that the two samples are comparable and that our present findings cannot be explained by an unusual selection bias.

The goal of the current study was to identify any differences between the personalities of individuals who self-identify as dog persons or cat persons. Having documented the existence of such differences, future research should examine the factors that could contribute to a person self-identifying with one pet species rather than the other. The specific relationships between people and their pets (real, hypothetical, or from the past) may provide insights into how people assess themselves and identify as a certain type of pet person. For example, childhood experiences with pets may shape adult personality (Podberscek and Gosling 2000) and also influence people's response to whether they call themselves a dog person or a cat person (Perrine and Osbourne 1998). Attachment styles are another potential factor influencing pet preference (e.g., Endenburg 1995; Bagley and Gonsman 2005).

Another interesting line of future research would be to apply this methodology to a larger variety of animal species and to specific breeds of dog and cat (e.g., Katz et al. 1994; Coren 1998). Previous research on owners of other pet species (ferret, rabbit, horse, hedgehog) provides preliminary evidence to suggest the personalities of owners of these species may
differ from cat and dog owners (Gosling and Bonnenburg 1998); the samples were too small to draw firm conclusions about such differences, but they do suggest that it may be worthwhile extending the question beyond the domain of dogs and cats.

Self-identification as a certain type of pet person may also provide relevant and practical information for areas such as pet selection within animal shelters, pet welfare, and other human-animal relationships. Pet person identifications could also be useful in healthcare settings (e.g., hospitals, mental healthcare facilities, nursing homes), where an affinity for certain types of animals may affect the selection of species used in pet therapy.

More broadly, our research suggests that there is some truth to the widely held view that, in general, the personalities of dog people differ from those of cat people. Moreover, our findings provide an initial outline of the specific ways dog and cat people differ. Compared to cat people, dog people tend to be more extraverted, agreeable, and conscientious, and less neurotic and open.

## References

Bagley, D. K. and Gonsman, V. L. 2005. Pet attachment and personality type. Anthrozoös 18: 28-42.
Bly, M. 1998. Performance Management Company. <www.squarewheels.com/jokes/dogandcatjokes.html> Accessed on August 23, 2009.
Coren, S. 1998. Why We Love the Dogs We Do: How to Find the Dog that Matches Your Personality. New York: Free Press.
Edelson, J. and Lester, D. 1983. Personality and pet ownership: A preliminary study. Psychological Reports 53: 990.

Endenburg, N. 1995. The attachment of people to companion animals. Anthrozoös 8: 83-89.
Goldberg, L. R. 1992. The development of markers for the Big-Five factor structure. Psychological Assessment 4: 26-42.
Gosling, S. D. and Bonnenburg, A. V. 1998. An integrative approach to personality research in anthrozoology: Ratings of six species of pets and their owners. Anthrozoös 11: 148-56.
Gosling, S. D., Vazire, S., Srivastava, S. and John, O. P. 2004. Should we trust Web-based studies? A comparative analysis of six preconceptions about Internet questionnaires. American Psychologist 59: 93-104.
John, O. P., Donahue, E. M. and Kentle, R. L. 1991. The "Big Five" inventory - Version 4a and 54. Berkeley: University of California, Berkeley, Institute of Personality and Social Research.
John, O. P., Naumann, L. and Soto, C. J. 2008. The Big Five trait taxonomy: Discovery, measurement, and theoretical issues. In Handbook of Personality: Theory and Research. 3rd edn, 114-158, ed. O. P. John, R. W. Robins and L. A. Pervin. New York: Guilford Press.

John, O. P. and Srivastava, S. 1999. The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In Handbook of Personality: Theory and Research. 2nd edn, 102-138, ed. L. A. Pervin and O. P. John. New York: Guilford Press.

Johnson, S. B. and Rule, W. R. 1991. Personality characteristics and self-esteem in pet owners and nonowners. International Journal of Psychology 26: 241-252.
Katz, J. S., Sanders, J. L., Parenté, F. J. and Figler, M. H. 1994. Personality traits, and demographic and lifestyle characteristics as predictors of dog breed choice. Paper presented at the International Society for Anthrozoology (ISAZ) Annual Meeting, New York, New York, USA, October 13, 1994.
Kidd, A. H. and Kidd, R. M. 1980. Personality characteristics and preferences in pet ownership. Psychological Reports 46: 939-949.
Long, H. 2006. Dog person versus cat person. <www.marriage.families.com/blog/dog-person-versus-a-catperson> Accessed on August 13, 2009.
Martinez, R. L. and Kidd, A. H. 1980. Two personality characteristics in adult pet owners and non-owners. Psychological Reports 47: 318.
McCrae, R. R. and Costa, P. T., Jr. 1999. A five-factor theory of personality. In Handbook of Personality: Theory and Research. 2nd edn, 139-153, ed. L. A. Pervin and O. P. John. New York: Guilford Press.
Ozer, D. J. and Benet-Martínez, V. 2006. Personality and the prediction of consequential outcomes. Annual Review of Psychology 57: 8.1-8.21.

Perrine, R. M. and Osbourne, H. L. 1998. Personality characteristics of dog and cat persons. Anthrozoös 11: 33-40.
Podberscek, A. L. and Gosling, S. D. 2000. Personality research on pets and their owners: Conceptual issues and review. In Companion Animals and Us: Exploring the Relationships between People and Pets, 143-167, ed. A. L. Podberscek, E. S. Paul and J. A. Serpell. New York: Cambridge University Press.
Roberts, B. W., Kuncel, N. R., Shiner, R., Caspi, A. and Goldberg, L. R. 2007. The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. Perspectives on Psychological Science 2: 315-345.
Russel, W. M. S. 1956. On misunderstanding animals. Universities Federation for Animal Welfare Courier 12: 19-35.
Schmitt, D. P., Realo, A., Voracek, M. and Allik, J. 2008. Why can't a man be more like a woman? Sex differences in Big Five personality traits across 55 cultures. Journal of Personality and Social Psychology 94: 168-182.
Srivastava, S., John, O. P., Gosling, S. D. and Potter, J. 2003. Development of personality in early and middle adulthood: Set like plaster or persistent change? Journal of Personality and Social Psychology 84: 10411053.

Wade, L. and Sharp, G. 2009. My cat person/dog person rant. Sociological Images. <www.contexts.org/socim-ages/2009/02/16/my-cat-persondog-person-rant/> Accessed on August 13, 2009.
Woodward, L. E. and Bauer, A. L. 2007. People and there pets: A relational perspective on interpersonal complementarity and attachment in companion animal owners. Society \& Animals 15: 169-189.

