

The Impact of Pet Ownership on Self-Esteem, Life Satisfaction and Personality.

Leda Juliana Connaughton

Submitted in partial fulfilment of the requirements of the BA Hons in Psychology at Dublin Business School, School of Arts, Dublin.

Supervisor: Dr Siobhan Nic Fhlannchada

Programme Leader: Dr Rosie Reid

March 2016

Department of Psychology

Dublin Business School

Table of Content

Acknowledgements	3
Abstract	4
Chapter 1: Introduction	5
1.1 Pet Ownership & Self-Esteem	7
1.2 Pet Ownership & Life Satisfaction	9
1.3 Pet Ownership & Personality	11
1.4 The Present Study	13
1.5 Main Hypotheses	14
Chapter 2: Methodology	
2.1 Participants	15
2.2 Design	16
2.3 Materials	16
2.4 Procedure	18
Chapter 3: Results	
3.1 Preliminary Analyses	20
3.2 Descriptive Statistics	22
3.3 Inferential Statistics	25
Chapter 4: Discussion	
4.1 First Hypothesis	27
4.2 Second Hypothesis	28
4.3 Third Hypothesis	29
4.4 Limitations & Evaluations	30
4.3 Conclusions	31
References	32
Appendix	39

Acknowledgements

Firstly I would like to thank the participants who were kind enough to take the time to complete the questionnaires and contribute to this research, without you this study would not have been possible. I would like to thank my supervisor Dr Siobhan Nic Fhlannchadh for your support and help throughout. Thank you to Festina Lente, Ark Vetcare and DSPCA for their willingness and help in data collection. Finally I would like to give a special thank you to my parents for their unwavering assistance and encouragement.

Abstract

The purpose of this quantitative study was to explore the effects of pet ownership on self-esteem, life satisfaction and personality in pet and non-pet owners. Participants were (N=100) in total with (N=71) females and (N=29) males. Participants were asked demographic questions along with three self-report measures. The Rosenberg Self Esteem Scale (RSE; Rosenberg, 1965) was used to measure participant's self-esteem. The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985) was used to measure subject's life satisfaction. The Big Five Inventory (BFI; John & Srivastava, 1999) was used to measure the personalities of participants. Independent sample t-tests found no significant differences between pet and non-pet owners in relation to levels of self-esteem as well as personality. In addition, a Mann Whitney U test showed no significance differences in life satisfaction between pet and non-pet owners. These findings and the implications of the findings are discussed in greater detail.

Chapter 1: Introduction

Animals have played an important role for people since pre historic times, providing food, clothes and transport (Vigne, 2011). Cats owned by Egyptian pharaohs were amongst the first historical recording of pets; however for religious reasons more so than companionship (Spencer et al., 2006). In more recent times researchers and practitioners have begun to investigate the reasons why animals appear to impact positively on a person's well-being. Consequently they have begun to experiment with different theoretical frameworks in their quest for understanding (O'Haire 2010; Walsh, 2009).

Pets can provide many psychological and physical benefits for their owners (McConnell, Brown, Shoda, Stayton & Martin, 2011). From a physical perspective, pet owners compared to non-owners were found to show significantly reduced risk factors for cardiovascular disease (Anderson, 1992). Research has provided evidence to suggest that pet owners are less likely to die within 1 year of having a heart attack than those who do not own pets (Friedmann & Thomas, 1995). Supposed psychological benefits of owning a pet included better well-being, it is proposed that pet owners suffer fewer episodes of depression (Francis, Turner & Johnson, 1985), experience more happiness (Lago, Knight & Connell, 1983) and enjoy life more (Francis et al., 1985). Levinson (1972) noted that pets are particularly salubrious for individuals marginalised from society. Hence pets play a large role in redeeming feelings of love and need, potentially restoring levels of self-esteem and life satisfaction. In parts of the world where society is modernised and somewhat individualised, pets can be a source of comfort to those who are alienated (Levinson, 1978). The mere presence of a pet can reduce psychological feelings of unhappiness such as depression (Folse

at al., 1994). This evidence suggests that the ownership of pets can be greatly beneficial to one's physical and psychological health.

The importance of pets can be due to the absence of family members in the household in particular siblings. Having sole responsibility is also linked with higher levels of pet importance (Siegel, 1995). Pets have advanced from having instinctually functional purposes such as vermin eradicators to becoming domesticated family members. Pet importance can be observed in the great lengths owners to provide for their animals. Basic pet ownership requires monetary commitment such as paying for pet food, vet bills. With an ample amount of services available in contemporary society; some owners go beyond the basic pet ownership requirements and make online pet profiles on www.mycatspace.com or Dogbook on Facebook. Pet owners can further anthropomorphise their pet by purchasing wigs for their dogs (www.wigglesdogwigs.com) or providing them with a stay in a luxury cat hotel (www.longcroftcathotel.co.uk) offering designer cat beds for its feline guests.

Cats and dogs behave in such ways that their human owners find appealing (Serpell, 1996). Cats, although self-governed appear to like being petted by their owners while dogs show clear signs of affection to their owners, and are attentive to them (Smith, 1983). Cats and dogs therefore appear to treat their owners with love and affection which could be the reason they are the most favourable pet choice for many. The FEDIAF European Pet Food Industry, Fact and Figures report (2014) estimated that there are nearly 75 million pet-owning households across Europe, who own at least one pet animal. Of that estimation, 24% of those households own cats and 21% own dogs. (FEDIAF European Pet Food Industry; Fact and Figures report, 2014) (<http://www.fediaf.org/facts-figures/>). According to the PFMA, Pet Food Manufacturing Association pet population report, 2015 46% of UK households own pets, of which 24% own dogs and 17% own cats. (Pet Food Manufacturing Association; Pet

Population Report, 2015) (<http://www.pfma.org.uk/pet-population-2015>). In 2006 there were an estimated 640,620 pet dog owning households and 215,542 pet cat owning households in Ireland (Downes et al., 2011). It is clear that cats and dogs are an integrated part of Irish society; this study aims to explore some of the potential impacts of pet ownership.

1.1 Pet Ownership and & Self Esteem

Self-esteem can describe an overall sense of self-worth and personal value, this inclusive evaluation of one's self can be seen as a continuum varying from low, medium to high. There appears to be a lack of a clear consensual definition for self-esteem, with many definitions highlighting different aspects of self-esteem. According to Brown and Marshall (2006) there are three aspects to self-esteem, Global Self-Esteem also known as trait self-esteem refers to a personality trait that represents how individuals generally feel about themselves. Then follows State Self-Esteem which concerns feelings of self-worth such as feeling pleased or embarrassed with oneself. Lastly, Domain Specific Self-Esteem represents self-evaluations, denoting the way in which people evaluate their capabilities and attributes such as physical abilities and personality characteristics. Maslow (1943) stated that people are motivated to achieve certain needs, when one need is fulfilled a person seeks to continuously fulfil the next need until satisfied. Maslow's hierarchy of needs is a five stage model which includes the need for esteem. This need encompasses that of achievement, independence, status, self-respect, and respect from others. Maslow's model of needs suggests the importance of high self-esteem and how once these needs are fulfilled, one is closer to reaching self-actualization, the highest level of needs.

Levels of self-esteem can have many impacts on daily lives; low self-esteem can be associated with a number of negative consequences such as depression and eating disorders (Silverstone & Salsali, 2003). Moreover low self-esteem can be correlated with antisocial and illegal behaviour. Trzesniewski et al. (2006) discovered that adolescents with low levels of self-esteem had higher levels of criminal behaviour in adulthood compared to those with high self-esteem. Results also found other negative connotations associated with low levels of self-esteem such as worse economic prospects and poorer mental and physical health in adulthood.

Individuals with high levels of self-esteem tend to view themselves in a more positive manner and feel a higher sense of self-worth than those with low self-esteem do (Brown, 1998), they acquire positive views of the self (Campbell & Lavalley, 1993). In light of the recent studies highlighting the negative effects of low self-esteem (Silverstone, & Salsali, 2003; Trzesniewski et al., 2006) it would appear that those with higher self-esteem would have a lower likelihood of involvement with criminal activity and be less susceptible to mental health issues in particular eating disorders and depression compared to those with low self-esteem.

A growing body of research has indicated the positive effects of pet ownership on one's emotional well-being. Bergesen (2015) investigated the effect of a pet-child bond on the self-esteem of primary school children. Findings demonstrated animal contact significantly improved participant's self-esteem. Furthermore, Van Houtte and Jarvis (1995) examined the role of pets in preadolescent psychosocial development. 130 third to sixth class primary school children were selected based on whether they were pet owners and non-pet owners. Participants answered questionnaires which measured independence, self-concept, self-esteem, and attachment to animals. They found that pet-owning fifth and sixth class

children reported higher self-esteem levels than non-pet owners, suggesting that pets can function as an intervention for people suffering from low self-esteem.

As is assumed that owning a pet can provide many benefits to our psychological well-being, it can therefore be said that owning a pet could hypothetically help alleviate low self-esteem. McConnell et al. (2001) carried out a study to investigate whether pet owners enjoy better well-being than non-pet owners. 217 participants took part in an online study completing well-being measures, individual-difference measures, social support measures, pet-specific items as well as giving demographic information. Results indicated that pet owners had greater self-esteem than non-owners. Serpell (1990) provides evidence for the long term effects of pet ownership on human health. The results of this study found that dog owners showed an improvement in self-esteem 10 months post dog acquisition.

1.2 Pet Ownership & Life Satisfaction

Based on the research of life satisfaction, quality of life is associated with living conditions compared to life satisfaction which is termed as a state of emotion. Life-satisfaction can be described as the extent to which one evaluates the quality of their life as-a-whole (Veenhoven, 1996).

Similar to low self-esteem, low satisfaction with life can impact negatively on the psychological health of individuals. Suldo and Huebner (2004) found that life satisfaction influenced the behaviour of teenagers when stressful events occurred. This longitudinal study researched life satisfaction and how it moderates the effects of stressful life events on psychopathological behaviour during adolescence. A sample of 816 school students aged 11-18 completed self-reporting questionnaires on two occasions, one year apart. Findings

suggested that adolescents with positive life satisfaction compared to those who were dissatisfied with their lives were less likely to develop later externalising behaviours when presented with stressful life events.

It is fair to say that those who are depressed do not experience feelings of life satisfaction. Koivumaa-Honkanen et al. (2004) carried out a study which investigated the cross-sectional and longitudinal relationship between life satisfaction and depressive symptoms in healthy adults. Findings indicated a strongly increased risk of moderate to severe depression observed amongst dissatisfied participants compared with the satisfied participants. Moreover Swami et al. (2007) also found that less satisfied lonelier individuals are more likely to report higher levels of depression. However they concluded that this is because higher loneliness and life dissatisfaction are associated with poorer health.

Life satisfaction can be affected by the social support one receives; Danielsen et al. (2009) examined the effect of school-related social support on the life satisfaction of students. Findings confirmed the importance of self-related domains to students' life satisfaction. Life satisfaction can also be strongly influenced by external factors such as relationships such as those between work and family (Adams et al., 1996). Research suggests that perceived support from friends leads to a better overall life satisfaction (Young, 2006).

These studies highlight the importance of social support on levels of life satisfaction; however social support may not be readily available to some people, especially those who are elderly. Thus, pets can hypothetically act as a substitute for human social support therefore potentially raising levels of life satisfaction. Levinson (as cited in Enders-Slegers, 2000) noted how pets can become friends for older people, possibly providing them with a reason for living. In addition, Siegel (1990) found that respondent-generated benefits of pet

ownership indicated three quarters of the elderly pet owners mentioned that their pet provided them with companionship. Likewise Irani et al. (2006) who carried out a study to assess the link between pets, physical functions and psychological factor found that perceived and anticipated social support was significantly higher in the pet owning group compared to the non-pet owning group. Antonacopoulos and Pychyl (2010) discovered that dog owners who lived alone with high levels of human social support were significantly less lonely than non-owners.

Irani et al. (2006) proposed that pets are potentially associated with a better quality of life. They carried out a study involving 104 pet and non-owning pet lung transplant recipients. The aim of their study was to assess the link between pets, physical functions and psychological factors. Results found significantly higher ratings for pet owners in life satisfaction, they concluded that post lung transplantation pets are potentially associated with a better quality of life. Further research was carried out which explored the influence of pets on the life satisfaction in recent and long-term retirees (Norris, Shinew, Chick & Beck, 1999). The study also examined other influencing factors on life satisfaction which included participant's level of personal safety and satisfaction with the level of income. Results indicated that life satisfaction decreased significantly from short to long-term retirement irrespective of whether they owned a pet or not. However, non-pet owner's satisfaction with levels of personal safety, perceived health as well as satisfaction with health decreased significantly, compared to that of pet owners who did not. These findings in conjunction with those of Irani et al. (2006) support the question of pet the influence pet ownership has on life satisfaction.

1.3 Pet Ownership & Personalities

Personality can be depicted as a hypothetical construct designed to bring order and consistency to the explanation of an individual's behaviour. Personality can also involve the psychological qualities that contribute to an individual's enduring and distinctive patterns of feeling, thinking and behaving (Cervone & Pervin, 2008, p.8)

Levinson (1978) suggests matching appropriate pets with compatible personalities of owners to optimise total health and therapeutic benefits from the animal. Implying that specific personalities are suited to specific pets, such as dog people being extraverts, agreeable, conscientiousness and less neurotic than cat people (Gosling et al., 2010). Social psychology suggests that people select friends on the basis of similarity (Murstein, 1970). Pet selection and bonding can also be based on such similar characteristics. A Norwegian study looked at exploring pet ownership and personality correlations among older people (Enmarker, Hellzén, Ekker, & Berg, 2013). The results revealed that a person's personality is associated with cat and dog ownership. Enmarker et al. (2013) aimed to identify personality traits among older cats and dogs owners and to compare their health in relation to their personality. Participants included 1897 Norwegian cat or dog owners over the age of 65. Findings indicated that cat ownership was more associated with introversion and neurotic traits than dog ownership, while dog ownership had a stronger association with extraversion.

Much research has been carried out to examine the differences between dog versus cat people, Gosling, Sandy and Potter (2010) examined differences in dog and cat people using the Big Five Inventory to assess personality dimensions. 4,565 participants completed the Big Five Inventory and self-identified as a dog person, cat person, both, or neither. Results indicate that dog people score higher on Extraversion, Agreeableness, and Conscientiousness,

but lower on Neuroticism and Openness than cat people. However, Perrine and Osbourne (1998) explored personality differences between dog people and cat people, with results showing no personality differences between dog or cat owners versus non owners. However, McConnell et al. (2001) concluding that overall, pet owners were more conscientious and more extraverted than non-owners.

Research has been carried out to further investigate the compatibility of pet and owner by the inclusion of gender. Kidd and Kidd (1984) carried out a study which aimed to explore personality differences in self-identified dog and cat lovers. The Edward Personal Preference Test using the scales, aggression, nurturance, dominance and autonomy measured 223 adult participant's personalities. Results showed that male cat lovers scored higher in autonomy. Male pet and dog lovers scored higher in dominance, compared to female cat lovers who scored lower in dominance. Results also signified female pet lovers scored higher in nurture while male dog lovers scored higher in aggression compared to female dog and cat owners scoring lower in aggression. In addition Edelson and Lester (1983) found that extraverted males displayed a preference for dogs rather than cats. Furthermore, Parslow et al. (2004) also included gender differences within pet owner personality. Parslow, Jorm, Christensen, Rodgers, and Jacomb, (2004) hypothesized that pet owners and carers would have lower neuroticism scores and higher extraversion scores than those who do not own or care for a pet. The study involved older Australian adults aged 60–64, results indicated that males with caring responsibilities of pets reported higher levels of extraversion than non-carers. Due to conflicting results regarding personalities associated with pets, the present study will investigate the relationship between pet ownership and personality with a focus on pet ownership rather than cat or dog ownership.

1.4 The Present Study

The present study will attempt to answer the question of whether or not pets can impact our lives so much so that they can influence our self-esteem, life satisfaction and personality. The main aim of this study is to see if pet owners experience higher levels of life satisfaction and self-esteem as well as different personalities in comparison to non-owners. It is hoped that the results of this research will help highlight the numerous benefits of pet ownership. The present study seeks to build upon previous work with regard to the benefits of pet ownership and influence. Where previous research has examined personality and pet type, this research aims to fill the gaps in research that has failed to examine the differences in personality of pet owners as one category. Research carried out within the present study aims to address the gap in literature examining the psychological benefits of pet ownership in Ireland.

The questionnaires used in the present study are Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965), The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985), and the Big Five Inventory (BFI; John & Srivastava, 1999).

1.5 Main Hypotheses

1. It is hypothesised that there will be a significant difference in self-esteem between non-owners and pet owners.

2. It is predicted that there will be a significant difference in life satisfaction between non owners and pet owners.

3. It is hypothesised that there will be a significant difference in personalities between non owners and pet owners.

Chapter 2: Methods

A self-report questionnaire was created which included demographic information followed by psychological measures of Self Esteem, Life Satisfaction and Personality. The questionnaire was spaced out between twelve pages in paper form which included a cover letter informing participants of their voluntary participation as well as the nature of the study. Measures included the Rosenberg Self Esteem Scale (RSE; Rosenberg, 1965), The Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985) and the Big Five Inventory (BFI; John & Srivastava, 1999). The five demographic questions included age, occupation, sex, highest level of education, and finally if the participant owned a cat, dog, both or neither.

2.1 Participants

Participants were sourced through three animal associated centres through the use of flyers requesting participants in those centres. Those centres included Festina Lente Foundation, Dublin Society for Prevention of Cruelty to Animals (DSPCA) and Dun Laoghaire Ark Vetcare. Participants were also sourced through Dublin Business School (DBS). Participation was voluntary and no incentives were offered. 100 participants were acquired with females making up 71% (n=71) of the sample and males making up 29% (n=29) of the sample. Pet ownership was the main variable with 78% (n=78) pet owners and 22% (n=22) non owners. The data was collected over seven weeks.

2.2 Design

This is a quantitative study using three standardised measures to explore the impact of pet ownership on self-esteem, life satisfaction and personality. The main independent variable (IV) was pet ownership which was split into four groups, 'dog owner', 'cat owner', 'dog & cat owner', 'non dog & cat owner'. The main dependent variables (DV) were self-esteem, life satisfaction and personality.

2.3 Materials

The Rosenberg Self-Esteem Scale (RSE; Rosenberg 1965) was used to measure self-esteem. The Rosenberg Self-Esteem Scale is a widely used self-report tool for evaluating individual self-esteem (Gray-Little et al., 1997). This 10-item scale measures self-worth by assessing both positive and negative feelings about the self. Items are answered using a 4-

point Likert scale format, ranging from strongly agree=3 to strongly disagree=0. Participants rated ten statements regarding general feelings about themselves using the scale, on statements such as “On the whole, I am satisfied with myself.” Some statements which were negatively worded required reverse scoring, such as “I feel I do not have much to be proud of.” The self-esteem scores range from 0-30 with higher scores indicating higher levels of self-esteem. The RSE has received more psychometric analysis and empirical validation than any other self-esteem measure (Gray-Little et al., 1997). The Cronbach’s Alpha for this scale was reported at a high $\alpha=.894$, giving this scale a high level of reliability.

The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985) is a 5-item scale designed to measure the satisfaction with one's life as a whole. This scale displays discriminant validity from emotional well-being measures. It is suggested that this scale is paired with other scales which centre on emotional well-being as it assesses the individual conscious judgement of one’s life using their personal standards (Pavot & Diener., 1993). Questions are scored on a seven-point scale extending from strongly agree=7 to strongly disagree =1. No reverse scoring is necessary in this scale as there are no negatively worded questions. Higher scores signify higher levels of satisfaction with life, scores of between 5 and 9 indicate an extreme dissatisfaction with life, whereas scores of between 31 and 35 indicate an extremely satisfied life. The Cronbach’s Alpha for this scale was reported at $\alpha=.852$ giving this scale a high level of reliability.

The Big Five Inventory (BFI; John & Srivastava, 1999) is a 44-item inventory that measures an individual on the Big Five Factors of personality. Each factor is then further divided into different personality facets. Extraversion vs. introversion is one of the five dimensions, which are associated with the following trait adjectives, gregariousness,

assertiveness, activity, excitement-seeking, positive emotions and warmth. According to research of Costa and McCrae (1995) this questionnaire should be used as a guide to discover one's personality traits. Questions are scored on a five point scale, ranging from strongly disagree=1 to strongly agree=5. Individuals rate statements regarding their perception of themselves in a variation of situations, such as 'I see myself as someone who is talkative.' Some questions require reverse scoring as they are negatively worded for example 'I see myself as someone who tends to find fault with others.' The Cronbach's Alpha for the scale was reported at $\alpha=.765$, providing a high level of reliability.

2.4 Procedure

Ethical clearance was carried out and obtained from the Ethics Committee within the Department of Psychology in Dublin Business School (DBS). Post ethical approval, the questionnaire was piloted amongst ten adults aged between 18-70 years. The pilot study signified that the questionnaires took 5-7 minutes to complete.

Permission was obtained from Festina Lente, DSPCA and Ark Vetcare to facilitate data collection. This included displaying an A4 coloured poster titled 'Participants needed' with a small description of participation entailment on a notice board or window. Centre facilitation also included accommodating a medium sized plain cardboard box with uncompleted questionnaires enclosed in open bare envelopes at the front of the box and a slot on the top of the box to insert completed questionnaires. Participants who read the notice

were guided to take a questionnaire at the front of the box. The cover sheet at the front of the questionnaire informed participants of their involvement, the names and contact details of the researcher and the research supervisor, the aims of the study, confidentiality regarding their data, and finally the benefits and the risks of involvement. At the back of the cover sheet was a consent form, participants drew a tick under the statement 'I agree to take part in this study' and signed the date after acknowledging the information on the cover sheet of their participation. Once completed participants were guided to enclose the completed questionnaire into the blank envelope and insert into the opening on-top of the box and thanked for their participation. The boxes were collected after seven weeks and staff in each centre was thanked for their participation in the study.

Permission was granted from two Psychology lecturers through email to enter their class at an agreed time to obtain participants from Dublin Business School. Students were greeted and briefly informed on their voluntary participation; those who were willing to engage in data collection were handed out a questionnaire. As mentioned the cover sheet at the front of the questionnaire informed participants of their involvement, the names and contact details of the researcher and the research supervisor, the aims of the study, confidentiality regarding the data, the benefits and the risks of involvement. At the back of the cover sheet was a consent form, participants drew a tick under the statement 'I agree to take part in this study' and signed the date after acknowledging the information on the cover sheet of their participation. Once questionnaires were completed students were prompted to raise their hand and they questionnaires would be collected. Students and the lecturers were thanked for their participation.

Once all data was collected, scores were inputted into the computer programme Statistical Package for the Social Sciences (SPSS) version 22 for statistical analysis. Data was coded and recoded where appropriate.

Chapter 3: Results

A total of 100 questionnaires were analysed. The research findings are provided in three sections of preliminary analysis, descriptive findings and inferential findings.

3.1 Preliminary Analysis

A preliminary analysis was carried out on the data to determine the internal reliability of the data as well as to test for assumptions of normality.

Table 1. Cronbach's alpha coefficient of 3 questionnaire scales in the current sample.

Cronbach's Alpha	Measure
.765	The Big Five Inventory
.894	Rosenberg Self-Esteem Scale
.852	The Satisfaction with Life Scale

First Hypothesis-test of normality

The first hypothesis predicts that there will be a significant difference in self-esteem between non-owners and pet owners.

Test of normality was carried out using the Shapiro Wilk's test to ascertain that the variables were normality distributed. The assumption of normality was met ($p > .05$). Visual observation of the boxplots reveals only 4 outliers. This was deemed insignificant and therefore included in the analysis. The assumption of normality and no significant outliers was met and an independent samples t-test was carried out to find out whether there is a statistically significant difference in self-esteem between pet owners and non-pet owners

Second Hypothesis-test of normality

The second hypothesis predicted that there will be a significant difference in life satisfaction between non owners and pet owners.

A test of normality was carried out and it showed that Satisfaction with life was not normally distributed for pet owners ($p < .05$) this violates the assumption of parametric statistics. Though there were no outliers, the non-parametric alternative (Mann Whitney U) of the independent samples t-test will be used to test hypothesis 2 because of the violation of normality.

Third Hypothesis- test of normality

The third hypothesis predicted that there will be a significant difference in personalities between non owners and pet owners.

Test of Normality was carried out on The Big Five Inventory which showed that it was normally distributed for pet owners and non-pet owners ($p > .05$) and there were no outliers as observed with the boxplots.

3.2 Descriptive Statistics

Descriptive statistics were carried out to establish means, percentages and standard deviations across independent and dependant variables.

Gender

The overall number of participants was 100 of whom 29% (n=29) were male and 71% (n=71) were female.

Pet Ownership

78% (n=78) of participants were pet owners and 22% (n=22) were non-owners. Among pet owners 74.4% (n=58) were female and 25% (n=20) were male.

Occupation

Among pet owners 29.5% (n=23) are students, 56.4% (n=44) are employed and 14.1% (n=11) are unemployed. Furthermore, of all the non-pet owners 72.7% (n=16) are students and the remaining 27.3% (n=6) are employed.

Education

Undergraduates accounted for 37% (n=37) of all the participants, those with a Leaving Certificate qualification accounted for 34% (n=34) of the participants. Post graduates accounted for 12% (n=12) of the participants, 8% (n=8) accounted for Master graduates, Higher Diploma graduates accounted for 5% (n=5), and Junior Certificate participants accounted for the remaining for 4% (n=4) of participants.

Pet Category

Dog ownership was found to be the highest in the pet ownership category with 46.2% (n=36) of the participants owning a dog, compared to 30.8% (n=24) who own both a cat and

a dog. Those lowest category of pet ownership with only 23.1% (n=18) of all participants was those who own a cat. These statistics are also illustrated in figure 1.

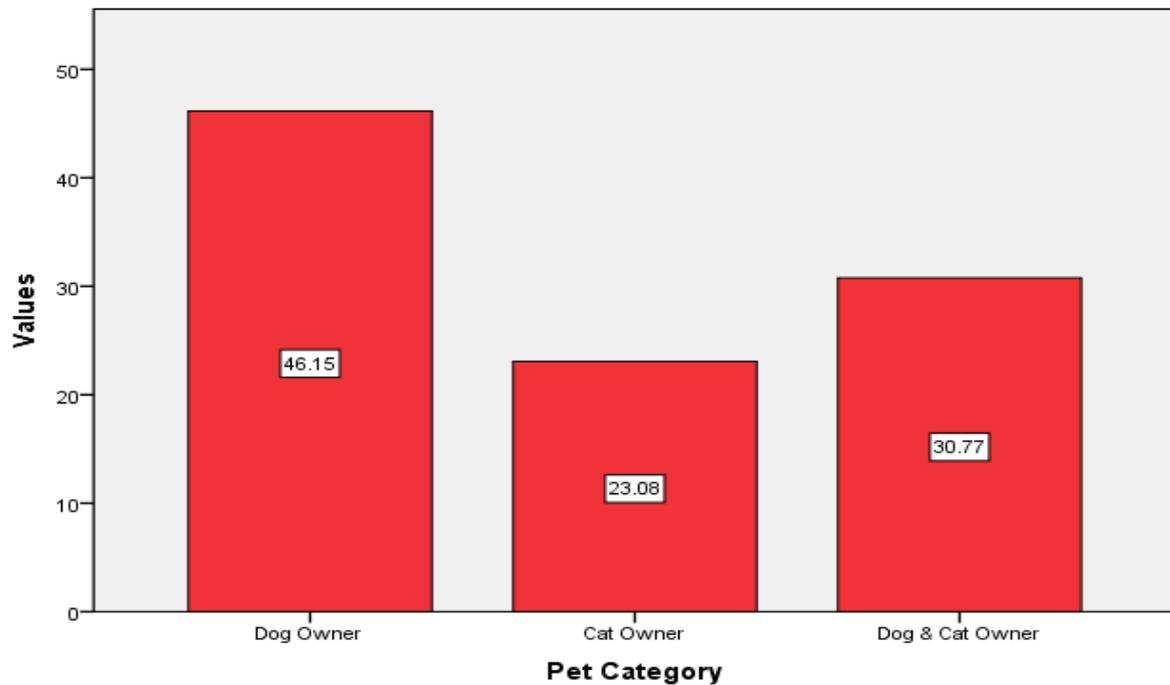


Figure 1. Bar chart illustrating the different pet categories

Self-esteem, Life Satisfaction and Big Five Inventory

Table 2. Shows the means for pet owners are higher for levels of self-esteem, life satisfaction and big five inventory compared to non-pet owners.

Table 2. Differences between owners and non-owners on 3 separate measures

Scale	Mean	SD
-------	------	----

Pet Ownership	Self-Esteem	20.58	4.46
	Satisfaction with Life	25.19	5.72
	<u>Personality factors</u>		
	Conscientiousness	32.13	6.99
	Neuroticism	21.63	6.09
	Openness	35.49	5.14
	Extraversion	27.26	6.13
Non Pet Ownership	Agreeableness	34.83	4.28
	Self-Esteem	19.59	5.68
	Satisfaction with Life	21.95	7.30
	<u>Personality factors</u>		
	Conscientiousness	30.77	6.82
	Neuroticism	24.23	5.68
	Openness	34.00	6.63
	Extraversion	24.81	7.97
	Agreeableness	32.41	6.34

3.3 Inferential Statistics

First Hypothesis

The first hypothesis predicts that there will be a significant difference in self-esteem between non-owners and pet owners.

An independent samples t-test was conducted to analyse the differences in self-esteem between pet and non-pet owners. The independent samples t-test found no significant differences among pet and non-pet owners in levels of self-esteem ($t(98) = -.860, p = .392$). Accordingly, the null hypothesis was accepted.

Second Hypothesis

The second hypothesis predicted that there will be a significant difference in life satisfaction between non owners and pet owners.

The result of the Mann Whitney U analysis shows that there was no statistically significant difference in life satisfaction between pet owners and non-pet owners ($U = 631.00, Z = -1.893, p = .058$). Therefore, the null hypothesis is accepted.

Third Hypothesis

The third hypothesis predicted that there will be a significant difference in personalities between non owners and pet owners.

Independent sample t-test's were carried out to find out if the five factors of the big five inventory (extraversion, agreeableness, conscientiousness, neuroticism & openness) differed statistically significantly between pet owners and non-pet owners. No significant

differences were observed between pet owners and non-pet owners based on the big five inventory ($p > .05$).

The independent samples t-test found no significant differences among pet and non-pet owners in relation to extraversion ($t(98) = -1.539$, $p = .127$). Accordingly, the null hypothesis was accepted.

The independent samples t-test found no significant differences among pet and non-pet owners in relation to agreeableness ($t(98) = -2.092$, $p = .039$). Accordingly, the null hypothesis was accepted.

The independent samples t-test found no significant differences among pet and non-pet owners in relation to conscientiousness ($t(98) = -.807$, $p = .421$). Accordingly, the null hypothesis was accepted.

The independent samples t-test found no significant differences among pet and non-pet owners in relation to neuroticism ($t(98) = 1.792$, $p = .076$). Accordingly, the null hypothesis was accepted.

The independent samples t-test found no significant differences among pet and non-pet owners in relation to openness ($t(98) = -1.122$, $p = .265$). Accordingly, the null hypothesis was accepted.

Chapter 4: Discussion

The aim of the current study was to investigate the influence of pet ownership on psychological well-being factors such as self-esteem and life satisfaction. Another aim of the study was to examine any impact pet ownership has on personality.

4.1 First Hypothesis

The first hypothesis predicted that there would be a significant difference in self-esteem between pet owners and non-owners. The results of an independent samples t-test found no significant differences among pet and non-pet owners in levels of self-esteem. This does not support the hypothesis. This result failed to replicate findings from previous research literature such as McConnell et al. (2011) who found increased self-esteem levels in pet owners compared to non-owners. However, McConnell et al. (2011) controlled for differences in fitness levels, they found that pet owners who had greater self-esteem tended to be more physically fit than non-pet owners. Further research should include exercise as a variable which may affect self-esteem in pet owners as high self-esteem is associated with healthy behaviours such as exercise (Fox, 2000).

Nor did these findings confer with findings from Serpell (1990) who found improved self-esteem in dog owners. Future research should look at whether pet owners are the sole owners or if the pet is a shared or family pet. Siegel (1995) found that having sole responsibility for one's pet, and owning a cat or dog were associated with higher levels of pet importance. This pet importance could be investigated to see what role pets plays in owner's well-being. The results of this present study do support those found by Johnson and Rule

(1991) who discovered no significant results between pet and non-pet owners on levels of self-esteem. Perhaps the benefit of pet ownership is more evident in children. The results of Bergesen's (2015) research into the effect of a pet-child bond on the self-esteem of primary school children demonstrated animal contact significantly improved participant's self-esteem. Furthermore, Van Houtte and Jarvis (1995) findings on the role of pets in preadolescent psychosocial development found pet-owning children reported higher self-esteem than non-pet owners.

4.2 Second Hypothesis

The second hypothesis predicted that there would be a significant difference in life satisfaction between pet owners and non-owners. The results of a Mann Whitney U test found no significant differences amongst pet and non-pet owners in levels of life satisfaction. This does not support the hypothesis. Parslow et al. (2004) who researched pet ownership and health in older adults, found that on average pet owners and carers reported significantly more depressive symptoms compared to those without pets. As previously discussed, those with lower levels of life satisfaction are more likely to be or to become depressed (Swami et al., 2007; Koivumaa-Honkanen et al., 2004). Therefore the findings of this study coincide similarly with those of Parslow et al. (2004).

The results from this study did fail to replicate findings from previous research literature such as Irani et al. (2006) who found that lung transplant patients with pets showed statistically higher ratings of life satisfaction when compared with non-owners. This could be due to the fact the participants in this study had gone through a stressful life event. Therefore pets could potentially be more advantageous to life satisfaction for those facing life stressors.

Little supplementary research was found concerning the impact of pet ownership on life satisfaction, suggesting a gap in research needing to be addressed. Future research could include a variable on the health status of participants to investigate whether pet ownership impacts are more strongly correlated to those with ill health.

4.3 Third Hypothesis

The third hypothesis stated that there would be a significant difference in personality between pet owners and non-pet owners. The independent samples t- test conducted found no significant difference between pet owners and non-pet owners and did not support the hypothesis. Results of this study coincided with the findings from Perrine and Osbourne (1998) who found no personality differences between dog and cat owners versus non owners. Moreover the results in this study corroborate with the findings of Johnson and Rule (1991) who found no significant results between pet and non-pet owners when tested on extraversion, neuroticism. They concluded that pet and non-pet owners have perhaps been stereotyped by researchers and society.

Findings of this current study contradict the findings of McConnell et al. (2001) who concluded that pet owners were more conscientious and extraverted than non-pet owners, However, they controlled for attachment styles using the measure developed by Bartholomew and Horowitz Relationships Questionnaire (RQ) and found that pet owners tended to be less fearful as well as less worried than non-pet owners. Application for such control would have been useful in this present study as there is evidence which supports the argument that self-esteem serves as an anxiety-buffer (Greenberg et al., 1992). It is suggested that future research controls for attachment levels when investigating personalities of pet owners.

A lot of research has reported on the supposed personality differences between cat and dog owners rather than pet and non-pet owners. There are only two personality traits which appear to be linked to dog and cat ownership, dog ownership is said to be strongly associated with extraversion (Enmarker, Hellzén, Ekker, & Berg., 2013; Gosling et al., 2010; Edelson & Lester., 1983). While Enmarker et al. (2013) and Gosling et al. (2010) both found that cat owners had neurotic traits. Apart from extraversion in dog owners and neuroticism in cat owners there appears to be little clarity concerning additional personality traits associated with pet owners. Interestingly Enmarker et al. (2013) and Gosling et al. (2010) found conflicting results in their research. Enmarker et al. (2013) observed introversion in cat owners, which contrast to findings of Gosling et al. (2010) which reported on openness in cat owners. Such ambiguity in this field of pet ownership requires more research to fill this gap.

4.4 limitations & Evaluation

Some additional limitations, other than those mentioned above apply to this study. Firstly all the measurements used were self-report measures so the accuracy of these cannot be fully guaranteed. Especially those completed by students in a classroom setting, it is possible that participants may not have answered some questions truthfully in the presence of classmates. Another limitation to this study is the sample size which was small, in order to allow for generalization future studies should consider a larger sample size to better reflect the population. The study also only collected data from two out of thirty two counties in Ireland, to get a better reflection of the Irish population future studies should look at getting a broader sample. One Final weakness to this study is that there was an uneven distribution of

pet and non-pet owners which may have impacted on results. In order to better compare pet and non-pet owners future research should get an even sample size of these two groups.

A great deal of research in this field has been carried out around the benefits of pet ownership only regarding specific populations such as children or those aged over 60 years. One particular strength of the study is how it attempted to look at a wider population to get a generalisation on the overall population instead of a target population. Another strength is the variation in participants, although undergraduate students made up the majority of the participants, data collection from three additional sources as well as DBS helped to vary the participants, therefore giving a better overview of the population. A strength of this study is the length of the questionnaire which resulted in all of the participants completing the full questionnaire. The benefit of using a shorter questionnaire means that participants are more likely to complete the questionnaire and not stop mid-way. One final strength regarding this study was the piloting of the questionnaire before participants filled them out. This was useful in gauging an average completion time as well as flagging any possible mistakes or areas of ambiguity within in questionnaire.

4.5 Conclusions

To conclude, the main findings of this study did not demonstrate that pet ownership will have an impact on self-esteem, life satisfaction or personality. However, it is important to acknowledge that the present findings reflect a single sample of participants. A sample greater in number and diversity may yield positive results for the role of pet ownership. The shortcomings of the study should encourage future research in this area that employs a

number of varied approaches and methods that may help expand our understanding of pet ownership.

References

- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work–family conflict with job and life satisfaction. *Journal of applied psychology, 81*(4), 411.
- Anderson, W. P., Reid, C. M., & Jennings, G. L. (1992). Pet ownership and risk factors for cardiovascular disease. *The Medical Journal of Australia, 157*(5), 298-301.
- Antonacopoulos, N. M. D., & Pychyl, T. A. (2010). An examination of the potential role of pet ownership, human social support and pet attachment in the psychological health of individuals living alone. *Anthrozoös, 23*(1), 37-54.
- Bergesen, F. J. (2015). *The effects of pet facilitated therapy on the self-esteem and socialisation of primary school children* (Doctoral dissertation).
- Brown, J. D. (1998). *The self*. New York: McGraw-Hill.
- Brown, J. D., & Marshall, M. A. (2006). The three faces of self-esteem. *Self-esteem issues and answers: A sourcebook of current perspectives, 4-9*.

- Campbell, J. D., & Lavalley, L. F. (1993). Who am I? The role of self-concept confusion in understanding the behavior of people with low self-esteem. In *Self-esteem* (pp. 3-20). Springer US.
- Cervone, D., & Pervin, L. A. (2008). *Personality: Theory and research* (10th ed.). Hoboken, NJ: Wiley.
- Costa Jr, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of personality assessment*, 64(1), 21-50.
- Danielsen, A. G., Samdal, O., Hetland, J., & Wold, B. (2009). School-related social support and students' perceived life satisfaction. *The Journal of Educational Research*, 102(4), 303-320.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, 49(1), 71-75
- Downes, M. J., Clegg, T. A., Collins, D. M., McGrath, G., & More, S. J. (2011). The spatial distribution of pet dogs and pet cats on the island of Ireland. *BMC veterinary research*, 7(1), 28.
- Edelson, J., & Lester, D. (1983). Personality and pet ownership: A preliminary study. *Psychological reports*, 53(3), 990-990.
- Enders-Slegers, M. (2000). The meaning of companion animals: Qualitative analysis of the life histories of elderly cat and dog owners. *Companion animals and us: Exploring the relationships between people and pets*, 237-256.

- Enmarker, I., Hellzén, O., Ekker, K., & Berg, A. G. T. (2013). Personalities and health in older cat and dog owners: A HUNT-study. *Health, 2013*.
- Folse, E. B., Minder, C. C., Aycock, M. J., & Santana, R. T. (1994). Animal-assisted therapy and depression in adult college students. *Anthrozoös, 7*(3), 188-194.
- Fox, K. R. (2000). The effects of exercise on self-perceptions and self-esteem. *Physical activity and psychological well-being, 13*, 81-118.
- Francis, G., Turner, J. T., & Johnson, S. B. (1985). Domestic animal visitation as therapy with adult home residents. *International Journal of Nursing Studies, 22*(3), 201-206.
- Friedmann, E., & Thomas, S. A. (1995). Pet ownership, social support, and one-year survival after acute myocardial infarction in the Cardiac Arrhythmia Suppression Trial (CAST). *The American journal of cardiology, 76*(17), 1213-1217.
- Gosling, S. D., Sandy, C. J., & Potter, J. (2010). Personalities of self-identified “dog people” and “cat people”. *Anthrozoös, 23*(3), 213-222.
- Gray-Little, B., Williams, V.S.L., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 23*, 443-451.
- Greenberg, J., Solomon, S., Pyszczynski, T., Rosenblatt, A., Burling, J., Lyon, D., ... & Pinel, E. (1992). Why do people need self-esteem? Converging evidence that self-esteem serves an anxiety-buffering function. *Journal of personality and social psychology, 63*(6), 913.

- Irani, S., Mahler, C., Goetzmann, L., Russi, E. W., & Boehler, A. (2006). Lung transplant recipients holding companion animals: impact on physical health and quality of life. *American journal of transplantation*, 6(2), 404-411.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*, 2(1999), 102
<http://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Personality-BigFiveInventory.pdf> -138.
- Johnson, S. B., & Rule, W. R. (1991). Personality Characteristics and Self-esteem in Pet Owners and Non-owners. *International Journal of Psychology*, 26(2), 241-252.
- Kidd, A.H., and R.M.Kidd. 1984a. Animals: Best Friends and Good Medicine. In 1985 *Medical and Health Annual*, 90–105. Chicago: Encyclopaedia Britannica.
- Koivumaa-Honkanen, H., Kaprio, J., Honkanen, R., Viinamäki, H., & Koskenvuo, M. (2004). Life satisfaction and depression in a 15-year follow-up of healthy adults. *Social psychiatry and psychiatric epidemiology*, 39(12), 994-999.
- Lago, D. J., Knight, B., & Connell, C. (1983). Relationships with companion animals among the rural elderly. *New perspectives on our lives with companion animals/AH Katcher, AM Beck, editors*
- Levinson, B. (1972). *Pets and Human development*, Springfield, IL: Thomas
- Levinson, B. M. (1978). Pets and personality development. *Psychological Reports*, 42(3c), 1031-1038.

- Maslow, A. H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370.
Chicago
- McConnell, A. R., Brown, C. M., Shoda, T. M., Stayton, L. E., & Martin, C. E. (2011). Friends with benefits: on the positive consequences of pet ownership. *Journal of personality and social psychology*, 101(6), 1239.
- Murstein, B. I. (1970). Physical attractiveness and marital choice. *Journal of Personality and Social Psychology*, 22(1), 8.
- Norris, P. A., Shinew, K. J., Chick, G., & Beck, A. M. (1999). Retirement, life satisfaction, and leisure services: the pet connection. *Journal of Park & Recreation Administration*, 17(2).
- O'Haire, M. (2010). Companion animals and human health: Benefits, challenges, and the road ahead. *Journal of Veterinary Behavior: clinical applications and research*, 5(5), 226-234.
- Parslow, R. A., Jorm, A. F., Christensen, H., Rodgers, B., & Jacomb, P. (2004). Pet ownership and health in older adults: Findings from a survey of 2,551 community-based Australians aged 60–64. *Gerontology*, 51(1), 40-47.
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological assessment*, 5(2), 164.
- Pavot, W., Diener, E. D., Colvin, C. R., & Sandvik, E. (1991). Further validation of the satisfaction with life scale: Evidence for the cross-method convergence of well-being measures. *Journal of personality assessment*, 57(1), 149-161.

- Perrine, R. M., & Osbourne, H. L. (1998). Personality characteristics of dog and cat persons. *Anthrozoös*, 11(1), 33-40.
- Rosenberg's Self-Esteem Scale. International Encyclopedia of the Social Sciences. 2008.
Retrieved March 04, 2016 from
Encyclopedia.com: <http://www.encyclopedia.com/doc/1G2-3045302309.html>
- Serpell, J. A. (1996). Evidence for an association between pet behavior and owner attachment levels. *Applied Animal Behaviour Science*, 47(1), 49-60.
- Serpell, J. A. (1990). Evidence for long term effects of pet ownership on human health. *Pets, benefits and practice*, 20, 1-7.
- Siegel, J. M. (1995). Pet ownership and the importance of pets among adolescents. *Anthrozoös*, 8(4), 217-223.
- Siegel, J. M. (1990). Stressful life events and use of physician services among the elderly: the moderating role of pet ownership. *Journal of personality and social psychology*, 58(6), 1081.
- Silverstone, P. H., & Salsali, M. (2003). Low self-esteem and psychiatric patients: Part I—The relationship between low self-esteem and psychiatric diagnosis. *Annals of General Psychiatry*, 2(1), 2.
- Smith, S. (1983). Interactions between pet dogs and family members: an ethological study. In: *New Perspectives on our Lives with Companion Animals* (Katcher A. & Beck A., eds). University of Pennsylvania Press, Philadelphia.

- Spencer, S., Decuyper, E., Aerts, S., & De Tavernier, J. (2006). History and ethics of keeping pets: Comparison with farm animals. *Journal of Agricultural and Environmental Ethics*, 19(1), 17-25.
- Suldo, S. M., & Huebner, E. S. (2004). Does life satisfaction moderate the effects of stressful life events on psychopathological behavior during adolescence?. *School Psychology Quarterly*, 19(2), 93.
- Swami, V., Chamorro-Premuzic, T., Sinniah, D., Maniam, T., Kannan, K., Stanistreet, D., & Furnham, A. (2007). General health mediates the relationship between loneliness, life satisfaction and depression. *Social psychiatry and psychiatric epidemiology*, 42(2), 161-166.
- Trzesniewski, K. H., Donnellan, M. B., Moffitt, T. E., Robins, R. W., Poulton, R., & Caspi, A. (2006). Low self-esteem during adolescence predicts poor health, criminal behavior, and limited economic prospects during adulthood. *Developmental psychology*, 42(2), 381.
- Van Houtte, B. A., & Jarvis, P. A. (1995). The role of pets in preadolescent psychosocial development. *Journal of Applied Developmental Psychology*, 16(3), 463-479.
- Veenhoven, R. (1996). Developments in satisfaction-research. *Social Indicators Research*, 37(1), 1-46.
- Vigne, J. D. (2011). The origins of animal domestication and husbandry: a major change in the history of humanity and the biosphere. *Comptes rendus biologiques*, 334(3), 171-181.

Walsh, F. (2009). Human-animal bonds II: The role of pets in family systems and family therapy. *Family process*, 48(4), 481-499.

Young, K. W. (2006). Social support and life satisfaction. *International journal of psychosocial Rehabilitation*, 10(2), 155-164.

Appendix

Impact of Pet Ownership

Researcher: Leda Connaughton, Undergraduate student School of Psychology DBS

Dr Siobhán Nic Fhlannchadha

Supervisor,UCD

Dear Participant,

My name is Leda Connaughton and I am an undergraduate research student in Dublin Buisness School of Psychology (DBS) under the supervision of Dr Siobhán Nic Fhlannchadha. I am researching the psychological impact of pet ownership as my thesis research. This research has received full ethical approval in DBS. I would be very grateful if you would read the following information and consider your participation in this study.

What are the aims of this study? I hope to investigate the psychological impacts of pet ownership.

Your Participation: Your participation will involve the completion of a number of standardised questionnaires, which will take 5-7 minutes.

What will happen to the results of the study? The information collected will be submitted as part of my thesis.

Confidentiality: Your information will be confidential and will not be passed on to any 3rd party. All data will be collected anonymously as you do not need to include your own name at any stage.

Voluntary Participation: Participation is completely voluntary. Please be aware that as data is anonymously collected, it cannot be withdraw as it will be unidentifiable.

Are there any benefits to participating? Yes, by participating you are enhancing the understanding of the impact of pet ownership.

Are there any risks involved? The study will follow full ethical procedures, and confidentiality of participant is assured. If you have any questions about the research, please do not hesitate to contact me or my Supervisor (details above). If you wish to receive a copy of the final results, please include your contact details and I will contact you when the research is complete.

Thank you very much for reading this information leaflet and I hope you are willing to support this research.

Kind Regards,

Leda Connaughton.

CONSENT FORM

I confirm that I have read and understood the Information Leaflet for the research study and have received an explanation of the nature, purpose and duration of the study. I understand what is involved.

I have had the time to consider whether I want to take part in this study. Any questions I have been answered satisfactorily.

I understand that my participation is completely voluntary and that as data is anonymously collected it cannot be withdrawn as it will be unidentifiable.

I understand that the study will be submitted as part of the researcher's studies.

Please tick one:

I agree to take part in this study

I do NOT agree to take part in this study

Date: _____

**Please fill out the following information, circle
answer where appropriate**

--	--

Age:	
Occupation :	
Sex:	Female Male
Highest level of education:	<p>Junior Certificate Leaving Certificate Undergraduate</p> <p>Postgraduate Higher Diploma Masters Doctorate</p>
Are you a:	<p>Dog Owner Cat Owner Dog AND Cat Owner</p> <p>Yes No Yes No Yes No</p>
If none of the above, have you:	<p>Previously owned a pet No pets Other pets</p> <p>Yes No Yes No Yes No</p>

--	--

Rosenberg Self-Esteem Scale (SES)

Instructions

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.
Strongly Agree Agree Disagree Strongly Disagree α
2. At times I think I am no good at all.
Strongly Agree Agree Disagree Strongly Disagree
3. I feel that I have a number of good qualities.
Strongly Agree Agree Disagree Strongly Disagree
4. I am able to do things as well as most other people.
Strongly Agree Agree Disagree Strongly Disagree
5. I feel I do not have much to be proud of.
Strongly Agree Agree Disagree Strongly Disagree
6. I certainly feel useless at times.
Strongly Agree Agree Disagree Strongly Disagree
7. I feel that I'm a person of worth, at least on an equal plane with others.
Strongly Agree Agree Disagree Strongly Disagree
8. I wish I could have more respect for myself.
Strongly Agree Agree Disagree Strongly Disagree
9. All in all, I am inclined to feel that I am a failure.
Strongly Agree Agree Disagree Strongly Disagree
10. I take a positive attitude toward myself.

Strongly Agree Agree Disagree Strongly Disagree

Satisfaction with Life Scale (SWLS)

Instructions

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

____ In most ways my life is close to my ideal.

____ The conditions of my life are excellent.

____ I am satisfied with my life.

____ So far I have gotten the important things I want in life.

____ If I could live my life over, I would change almost nothing.

The Big Five Inventory (BFI)

Instructions

The following statements concern your perception about yourself in a variety of situations. Indicate the strength of your agreement with each statement, utilizing a scale in which 1 denotes strong disagreement, 5 denotes strong agreement, and 2, 3, and 4 represent intermediate judgments. After each statement, circle the number 1 to 5 from the following scale

1. Strongly disagree
2. Disagree
3. Neither disagree nor agree
4. Agree
5. Strongly agree

I see myself as someone who...

1...Is talkative

Strongly Disagree 1 2 3 4 5 Strongly Agree

2....Tends to find fault with others

Strongly Disagree 1 2 3 4 5 Strongly Agree

3....Does a thorough job

Strongly Disagree 1 2 3 4 5 Strongly Agree

4....Is depressed, blue

Strongly Disagree 1 2 3 4 5 Strongly Agree

5....Is original, comes up with new ideas

Strongly Disagree 1 2 3 4 5 Strongly Agree

6....Is reserved

Strongly Disagree 1 2 3 4 5 Strongly Agree

7....Is helpful and unselfish with others

Strongly Disagree 1 2 3 4 5 Strongly Agree

8....Can be somewhat careless

Strongly Disagree 1 2 3 4 5 Strongly Agree

9....Is relaxed, handles stress well

Strongly Disagree 1 2 3 4 5 Strongly Agree

10....Is curious about many different things

Strongly Disagree 1 2 3 4 5 Strongly Agree

11....Is full of energy

Strongly Disagree 1 2 3 4 5 Strongly Agree

12....Starts quarrels with others

Strongly Disagree 1 2 3 4 5 Strongly Agree

13....Is a reliable worker

Strongly Disagree 1 2 3 4 5 Strongly Agree

14....Can be tense

Strongly Disagree 1 2 3 4 5 Strongly Agree

15. ...Is ingenious, a deep thinker

Strongly Disagree 1 2 3 4 5 Strongly Agree

16....Generates a lot of enthusiasm

Strongly Disagree 1 2 3 4 5 Strongly Agree

17....Has a forgiving nature

Strongly Disagree 1 2 3 4 5 Strongly Agree

18....Tends to be disorganized

Strongly Disagree 1 2 3 4 5 Strongly Agree

19....Worries a lot						
Strongly Disagree	1	2	3	4	5	Strongly Agree
20....Has an active imagination						
Strongly Disagree	1	2	3	4	5	Strongly Agree
21....Tends to be quiet						
Strongly Disagree	1	2	3	4	5	Strongly Agree
22....Is generally trusting						
Strongly Disagree	1	2	3	4	5	Strongly Agree
23....Tends to be lazy						
Strongly Disagree	1	2	3	4	5	Strongly Agree
24....Is emotionally stable, not easily upset						
Strongly Disagree	1	2	3	4	5	Strongly Agree
25....Is inventive						
Strongly Disagree	1	2	3	4	5	Strongly Agree
26....Has an assertive personality						
Strongly Disagree	1	2	3	4	5	Strongly Agree
27....Can be cold and aloof						
Strongly Disagree	1	2	3	4	5	Strongly Agree
28....Perseveres until the task is finished						
Strongly Disagree	1	2	3	4	5	Strongly Agree
29....Can be moody						
Strongly Disagree	1	2	3	4	5	Strongly Agree
30....Values artistic, aesthetic experiences						

Strongly Disagree 1 2 3 4 5 Strongly Agree

31....Is sometimes shy, inhibited

Strongly Disagree 1 2 3 4 5 Strongly Agree

32....Is considerate and kind to almost everyone

Strongly Disagree 1 2 3 4 5 Strongly Agree

33....Does things efficiently

Strongly Disagree 1 2 3 4 5 Strongly Agree

34....Remains calm in tense situations

Strongly Disagree 1 2 3 4 5 Strongly Agree

35....Prefers work that is routine

Strongly Disagree 1 2 3 4 5 Strongly Agree

36....Is outgoing, sociable

Strongly Disagree 1 2 3 4 5 Strongly Agree

37....Is sometimes rude to others

Strongly Disagree 1 2 3 4 5 Strongly Agree

38....Makes plans and follows through with them

Strongly Disagree 1 2 3 4 5 Strongly Agree

39....Gets nervous easily

Strongly Disagree 1 2 3 4 5 Strongly Agree

40....Likes to reflect, play with ideas

Strongly Disagree 1 2 3 4 5 Strongly Agree

41....Has few artistic interests

Strongly Disagree 1 2 3 4 5 Strongly Agree

42...Likes to cooperate with others

Strongly Disagree 1 2 3 4 5 Strongly Agree

43...Is easily distracted

Strongly Disagree 1 2 3 4 5 Strongly Agree

44...Is sophisticated in art, music, or literature

Strongly Disagree 1 2 3 4 5 Strongly Agree

Thank you for your participation in this study, it is greatly appreciated.

