

COMPANION ANIMALS AND PERSONALITY: A STUDY OF PREFERENCE

HUMBOLDT STATE UNIVERSITY

By

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A Thesis

Presented to

The Faculty of The Department of Psychology

In Partial Fulfillment

Of the Requirement for the Degree

Master of Arts in Psychology

December, 2009

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## Abstract

This study explored Extraversion personality differences among people who prefer dogs, people who prefer cats, people who prefer both, and people who prefer neither. Participants were 120 students from the Psychology Department Participation Pool at Humboldt State University. Personality was evaluated using the NEO-PI-R Extraversion Scale. Also, participants were given a list of personality trait adjectives and asked to assign them to either people who prefer dogs or people who prefer cats.

Results showed significant differences in Extraversion among the pet preference groups. People who preferred dogs scored higher than people who preferred cats on the overall domain of Extraversion and the facets Excitement-Seeking and Gregariousness. People who preferred dogs also scored higher than people who preferred both on Extraversion and the facets Warmth, Excitement-Seeking, and Gregariousness.

Results also showed that there are certain personality traits that people tend to assign to those who prefer dogs vs. those who prefer cats. The top personality traits chosen for people who prefer dogs were Sociable, Friendly, Excitement-Seeking and High-Spirited. The top personality traits chosen for people who prefer cats were Quiet, Shy, and Independent. All of the traits predominantly chosen for people who prefer dogs were traits used as general descriptors of those measuring higher in Extraversion. All of the traits predominantly chosen for people who prefer cats were traits used as general descriptors of those measuring lower in Extraversion.

## TABLE OF CONTENTS

Abstract.....	iii
CHAPTER I Introduction.....	1
CHAPTER II Literature Review .....	3
CHAPTER III Hypothesis and Research Questions.....	21
CHAPTER IV Method .....	22
CHAPTER V Results .....	27
Chapter VI Discussion.....	34
References.....	42
Appendix A Website Announcement .....	47
Appendix B Verbal and Written Instructions .....	49
Appendix C Pet Preference Questionnaire .....	53
Appendix D NEO-PI-R Extraversion Scale .....	56
Appendix E Trait Checklist .....	58
Appendix F Trait Checklist Key.....	61

Appendix G Participant Comments .....63

## CHAPTER I

### Introduction

Humans and animals have always shared a powerful bond, providing food and clothing, transportation, protection, companionship and friendship. Animals have always played a significant role in human life. While we still use animals for food and clothing, we are often not personally connected to these processes. Many Americans experience animals, specifically dogs and cats, as pets. Dogs and cats commonly serve the purpose of providing affection, companionship, and attention.

The importance of the relationship between people and their pets has even been discussed in a recent issue of Time Magazine (Gibbs, 2008). Gibbs discussed the impact not only of the President's dog, but his choice of dog, whether or not he chose to have a dog at all and from where the dog would be obtained. Gibbs discussed the importance the American people placed on these options, exemplifying the attention humans show towards the symbolic nature of human-animal relationships, not only in popular but political culture.

This type of relationship has been the subject of many myths and legends. Orion and his dog Sirius exemplified this bond, with Sirius being so distraught over the death of his beloved master that he was given a place next to him among the stars (Apollodorus & Hard, 1999). In Ancient Egyptian religion, the cat, called mau, was highly symbolic and worshipped (Malek, 1993/1997). In Japan, the Manekineko cats represent fortune and good luck (Wellman, 2004).

It is this historical and complex bond that has led to the uses of animals for therapeutic purposes. The specifics of this bond, however, still remain somewhat of a mystery. Some people seem preferential towards certain types of animals, others seem to like all animals and still some do not care for animals at all. The nature and causes of these preferences remain somewhat elusive, thus impacting the effectiveness of animal therapy.

To establish a connection between a human trait and a specific preference for certain animals, or any animals at all, would allow for animal-assisted therapies to become more concise, effective, and proactive in practice.

This study focuses on whether or not there is a correlation between human personality traits and a preference for specific types of animals. Specifically, this study addresses whether those with a tendency towards higher Extraversion show a preference for dogs and those with a tendency towards lower Extraversion show a preference for cats.

## CHAPTER II

### Literature Review

#### *Personality*

Personality traits are the complex pieces that, in combination, create individual patterns of personality (Corsini & Wedding, 2008). A widely accepted definition of what defines personality traits, as described in The Diagnostic and Statistical Manual of Mental Disorders 4<sup>th</sup> Edition Revised (American Psychiatric Association, 2000) is that, “Personality traits are enduring patterns of perceiving, relating to, and thinking about the environment and oneself that are exhibited in a wide range of social and personal contexts” (p. 686).

The ways these traits originate and develop is theoretically debatable. Sigmund Freud believed that personality was the manifestation of the conflict between inherent impulses and social restraints. He theorized that early childhood experiences and the desire to resolve those experiences greatly influenced the development of personality (Freud, 1894). Alfred Adler thought that personality developed based on social experiences and one’s perception of themselves in relation to a social context (Adler, 1958). Carl Jung believed that personality was a combination between our intrinsic relationship with the collective world and the specific, complex personal features on which we focus (Jung, 1921/1971).

These theories, however, seek to explain the development and manifestation of personality but not to, in fact, identify and define the traits that interact to create the

personality as a whole. While early theories were limited in the sense of classification, they still sought to explain the inner system through which the world is experienced in combination with exhibited behavior, a foundation that maintains relevance in most personality theories.

Gordon Allport's trait perspective sought to break down the system of personality into microcosmic and identifiable singular behavior traits (Allport, 1961). His trait perspective placed importance on both behavior and early experience, the inner world and social experiences. However, Allport did not consider any of these explanations complete enough to explain the uniqueness and complexity of personality. His trait perspective broke down personality into categories: cardinal traits, central traits, and secondary traits. Cardinal traits are dominantly themed traits that shape a person's behavior. Central traits are common characteristics that most people have to certain varying degrees. Secondary traits are traits that manifest only in certain contexts (Allport, 1961).

This three-trait theory was the foundation for work that resulted in factor analysis studies of personality traits and the comprehensive Five-Factor Model of personality traits most commonly accepted and used today (Costa & McCrae, 1992). Allport's work resulted from the use of the Lexical Hypothesis, a hypothesis designed by Sir Francis Galton which stated that anything of importance in the human world would have a place in human language, including but not limited to personality traits. He theorized that any word necessary to describe human nature could be found in this comprehensive break down of the language (Galton, 1883). Allport took the Lexical

Hypothesis a step further, studying dictionaries until he was able to break down language into a list of relatively consistent and descriptive personality traits. Later, Raymond Cattell took Allport's list of adjectives and eliminated traits he considered to be synonymous. He thus reduced Allport's extensive list into sixteen factors of personality traits and developed the Sixteen Personality Factor Personality Questionnaire (Cattell, 1957). Following Cattell's work, W.T. Norman was the first to break down the sixteen factors into what he considered to be the five most comprehensive descriptive personality traits. They were, in their original form, Surgency, Agreeableness, Conscientiousness, Emotional Stability, and Culture (Norman, 1963).

Following this work, the psychologist Lewis Goldberg researched the five-factor model, concurred with the existence of five main factors of personality and created the Big Five Model: Surgency, Agreeableness, Conscientiousness, Emotional Stability, and Intellect (Goldberg, 1993). Factor analysis by Paul T. Costa, Jr. and Robert R. McCrae created the OCEAN model or Five-Factor Model. While Costa and McCrae's model is based upon and similar to the Goldberg model, distinct differences in trait names and descriptors are maintained. The five traits in the OCEAN model are as follows: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. Each of these traits are referred to as domains. Each domain is comprised of six facets. Facets are the separate characteristics that, in combination, blend together to create the experience of the larger domain. Individual scores on facets within each domain can contribute to unique presentations of personality and behavior. This is the model used

today in Costa and McCrae's NEO-PI-R, the Neuroticism-Extraversion-Openness-  
Personality Inventory-Revised (NEO-PI-R; Costa & McCrae, 1992).

### *NEO-PI-R*

The following explanation of Costa and McCrae's Five-Factor Model should be considered basic and extreme descriptions of indicative scores. Scores on the NEO-PI-R are not diagnostic. The NEO-PI-R is intended to provide insight into the degree to which a person expresses each trait and the manner in which they express it. High or low scores are not necessarily positive or negative and should always be assessed in context, as the NEO-PI-R is a dimensional rather than categorical personality assessment (Costa & McCrae, 1992).

Neuroticism refers to the way a person expresses and experiences stress and anxiety. On the NEO-PI-R, those scoring high on Neuroticism might have more of a tendency towards emotional instability and impulsive behavior. Those scoring low are considered to be more even-tempered and better equipped to handle stress in an emotionally stable manner. The facets of Neuroticism are Anxiety, Angry Hostility, Depression, Self-Consciousness, Impulsiveness, and Vulnerability (Costa & McCrae, 1992).

Openness to Experience is the presentation of a person's propensity for creativity, aesthetic stimulation and intellectual thought. Those scoring high on Openness are considered more broad-minded, artistically driven, and interested in abstraction. Those scoring low are considered less openly emotional and have a

tendency to be more interested in rational, concrete ideas. The facets of Openness are Fantasy, Aesthetics, Feelings, Actions, Ideas, and Values (Costa & McCrae, 1992).

Agreeableness is a person's tendency towards being socially pleasant, cooperative, and empathetic. Those scoring high on Agreeableness are considered honest, thoughtful, and cooperative. Those scoring low are likely to be more manipulative, egotistical, and stubborn. The facets of Agreeableness are Trust, Straightforwardness, Altruism, Compliance, Modesty, and Tender-Mindedness (Costa & McCrae, 1992).

Conscientiousness refers to an individual's ability to be organized, deliberate, and thorough. Those scoring high on Conscientiousness are likely to be goal-oriented and methodical. Those scoring low are likely to be more easy-going, ill-prepared, and unreliable. The facets of Conscientiousness are Competence, Order, Dutifulness, Achievement-Striving, Self-Discipline, and Deliberation (Costa & McCrae, 1992).

### *Extraversion*

Extraversion, according to the NEO-PI-R, refers to a person's social desires, expression, and level of activity. Those scoring high on Extraversion are likely to be friendly, assertive, and high-spirited. Those scoring low are likely to be more independent, shy, and quiet. The facets of Extraversion are Warmth, Gregariousness, Assertiveness, Activity, Excitement-Seeking, and Positive Emotions (Costa & McCrae, 1992)

Extraversion was popularized by the personality theorist Carl Jung (Jung, 1921). Jung theorized that people have intrinsic ways in which they act and react, and these

patterns involve the flow and generation of energy. He found the two predominant forms of acting within the world and generating a flow of energy to be introversion and extraversion. Jung theorized that introverts exist within the world and generate energy through their own internal sources, basing perception upon internal rather than external sources. He found that introverts used quiet and alone time to regenerate their force of energy. Extraverts, in contrast, place their perceptions upon external sources, requiring outside input in order to regenerate energy and draw conclusions. He described introverts as having more of a tendency towards seclusion and less of an inherent desire to interact with many other people, because they require an internal flow of energy in order to regenerate. Extraverts, as theorized by Jung, tended to interact with others on a larger and more frequent scale, because their flow of energy regeneration is directed outwards (Jung).

Hans Eysenck elaborated upon Jung's theory and adapted it into the form most commonly understood today (Eysenck, 1971). Eysenck related extraversion predominantly to individuals' exhibited and preferred social interaction characteristics and level of impulsivity. He theorized that Extraverts preferred more social interaction and were generally more outgoing and energetic, while Introverts preferred less social interaction and tended to be less energetic and quieter. Eysenck linked expressed degree of Extraversion and Introversion to brain physiology, specifically the variance in the level of cortical arousal between Introverts and Extraverts.

Research has shown a level of support for this hypothesis, indicating that there are certain neurobiological correlates between introverted and extraverted behaviors and

preferred level of stimulus and arousal (Depue & Collins, 1999; Johnson, Wiebe, Gold, & Andreason, 1999). The study by Depue and Collins (1999) explored the relationship between extraverted behaviors, response to stimuli, and dopamine production. Results indicated that identified extraverts respond more intensely to and actively seek increased environmental incentives based on heightened sensitivity and activity in the mesolimbic dopamine system. Behaviorally, extraverts thus link positive environmental experiences with the pleasurable effects of dopamine production and therefore reciprocally develop a heightened preference for dopamine. This results in characteristic dopamine-producing behaviors. This study further establishes a genetic correlate to certain behavioral characteristics, but also relates genetic distribution and evolution to epigenetic factors (Depue & Collins, 1999).

Johnson, et al. (1999) found a significant difference in blood flow patterns in the brains of self-identified Introverts and Extraverts. The brains of Introverts showed blood flow predominantly in the frontal lobes and anterior thalamus, while Extraverts showed blood flow predominantly in the anterior cingulate thalamus, the temporal lobes, and the posterior thalamus (Johnson et al., 1999). As the functions of these brain regions are different, the expected behaviors are as well. The frontal lobes are associated predominantly with reasoning, planning, emotions, and problem-solving while the temporal lobes are associated with perception and recognition of stimuli, providing some indication that Introverts and Extraverts are interacting within their environment with different expectations and responses (Pope, 2000).

These studies suggest that Introverts and Extraverts desire and activate different stimuli from their environment. As companion animals are often an environmental choice, understanding how that choice is linked to an Extraverted or Introverted personality style could provide greater understanding of what will be beneficial and to whom when placing services animals or involving clients in programs.

### *Personality and Pets*

As Jung theorized, those with a tendency towards Extraversion demand more energy from their environment. The reciprocal nature of their energy regeneration extends outwards. In contrast, those with Introverted tendencies reciprocate their energy internally, demanding less of a response from their environment in order to feel renewed (Jung, 1921).

A recent survey of 266 college-aged males and females conducted at Ball State University in Muncie, Indiana (Ransford, 2008) found that most cat owners see themselves as having similar characteristics to that of their pets, such as being more submissive and independent. Most dog owners consider themselves to be friendly and dominant, similar to the characteristics of their pets. The article discussing these results noted, however, that not all dogs and cats will exhibit the same characteristics and the most important finding was the relationship found between people's opinions of their own personalities and their opinions of their pet's personalities.

A Master's Thesis conducted at Humboldt State University (Eggert, 2004) sought evidence of a link between a preference for either dogs or cats and certain personality traits as characterized by the Five-Factor Model. Eggert's study included

200 participants, 143 females and 57 males. All participants were college students aged 18 or over. Eggert administered a questionnaire designed to identify participants' preference for specific pets and then administered the NEO-FFI (Neuroticism-Extraversion-Openness-Five Factor Inventory).

Eggert expected that participants who expressed a preference for dogs would score higher on Openness, Conscientiousness, Agreeableness, and Extraversion than participants who expressed a preference for cats or participants who expressed a non-preference for animals. Participants who preferred cats were expected to score higher on Neuroticism than those who preferred dogs or those who preferred neither. Eggert also hypothesized that participants who expressed a non-preference for animals would score lower on Conscientiousness than those who preferred either dogs or cats.

Results indicated that those who expressed a preference for both dogs and cats scored higher on Openness than those who preferred dogs or neither cats nor dogs. Those who preferred cats also scored higher on Openness than those who preferred neither cats nor dogs. There were no significant differences present on the other domains. There were, however, various limitations within this study that support exploring further research in this area.

A limitation of the NEO-FFI test is that it does not include the facet subscores for each domain as included in the NEO-PI-R, limiting the individualized details derived from examining scores on the individual facets and leaving the question of whether or not there are differences within facets of a domain. The results on the Openness scale were also affected by the limited number of participants expressing a

preference for neither dogs nor cats, limiting the possibilities for post-hoc statistical analysis and the strength of the results considered significant.

Also, there was a lack of gender homogeneity within the participant groups, with a significant portion of the participants being female. Studies show gender-oriented variability within NEO-PI-R scores that is consistent between college-age and adult samples and across cultures. Females tend to score higher on Neuroticism, Agreeableness, and the Openness facet Openness to Feelings. Males tend to score higher on the Extraversion facet Assertiveness and the Openness facet Openness to Ideas. Relatively, there is greater variance indicated between gender heterogeneous scores than gender homogenous scores, which also might have influenced the results in the Eggert study (Costa Jr., Terracciano, & McCrae, 2001; Eggert, 2004).

Eggert's study was primarily influenced by Kidd and Kidd's study (1980), which also attempted to find a link between specific personality characteristics and the types of pets people prefer. The Kidd study remains the predominant influence for the current study, as research in the area of animals in relation to humans has remained limited.

The purpose of the Kidd study was to examine the potential benefits of matching pets to owners based on identifiable personality traits. The study consisted of 223 participants, 130 females and 93 males with a mean age of 34. Participants completed the Edwards Personal Preference Test (EPPT), which measures individual expression of autonomy, dominance, nurturance, and aggression (Edwards, 1959). Participants also completed a questionnaire similar to the one designed for the Eggert study and for this

study. The purpose of the questionnaire was to assess a preference for specific types of animals and to examine participant's history of pet ownership. Specifically, participants were asked to categorize themselves as preferring pets in general, dogs, cats, or neither. Results indicated that, in relation to all preference groups: male and female pet lovers scored lower on autonomy and male cat lovers scored higher; males who preferred pets in general or dogs scored higher on dominance and females who preferred cats scored lower; females who preferred all pets scored higher on nurturance and male and female cats lovers scored lower and male dog lovers scored higher on aggression while female dog and cat lovers scored lower.

While the results of the Kidd and Kidd study indicate that there is indeed a difference in the personality expression of those who prefer different types of animals, there were several limitations within this study. The participant sample was taken from areas in which there would already be an assumption for a preference for animals in general, such as dog shows and veterinarian offices, which means that the results of this study might not generalize beyond the participant sample. Also, the traits autonomy, dominance, nurturance, and aggression are, according to the current standard in relation to the Five Factor Model, considered inclusive within larger trait descriptions (Costa & McCrae, 1992). For example, the domain of Extraversion includes the facet Assertiveness, which is related to aggression. This is not to say that those scoring high or low on assertiveness can be assessed as aggressive or not aggressive, but that the tendency for such a trait can be assessed in relation to other scores on the Five Factor Model. As this is the current standard in personality trait descriptive theory, any current

study would employ the NEO-PI-R in order to obtain results that would be considered significant.

While there continues to be limited research in the area of pets and personality, there are several studies similar to the Kidd and Kidd study (1980) which were cited in the Eggert study. Further review of the literature in this area reveals that these same studies continue to be the most predominant and scientifically relevant within this area of research, and are typically found in similar reviews.

Edelson and Lester (Edelson & Lester, 1983) measured participant's preference for and history of ownership of dogs, cats, fish, or birds, their relationships with their parents, and their level of Extraversion according to the Eysenck Personality Inventory (Eysenck & Eysenck, 1965). They found that males and females with closer relationships to their fathers were more likely to prefer dogs and males who exhibited a tendency towards Extraversion were more likely to prefer dogs. Females were more likely to own cats and exhibited more of a desire to own cats in the future. This study supports evidence of a possible difference between those with tendencies towards Extraversion and specific pet preference. This study also supports further research in this area, as the Eysenck Personality Inventory is no longer considered standard in this area of research and because the results were limited by their broad-natured approach. More specifically focused research would be necessary to determine if there is indeed a difference.

Perrine and Osbourne (1998) found that males and females who preferred dogs rated themselves higher on masculinity and independence than males and females who

preferred cats. Their research supported the idea that whether or not people consider themselves as preferring either dogs or cats is related to their personality characteristics and that people also associate different personality characteristics with those who prefer cats or dogs. A study done by Marks and Koepke (1994) found that attachment to a pet by those who were primary caregivers of that pet was related to more positive generativity in young adulthood. A study done by Martinez and Kidd (1980) compared pet ownership history to different personality types and found differences in the area of self-reported well-being. However, this study further indicated a need for more research in the area of relationships between pets and personality. It focused on the lack of clarity surrounding the human-animal bond and the difficulties in identifying the unique characteristics specific not only to that bond, but to the need or lack thereof of such a bond within human-nature.

#### *Contemporary Cultural Beliefs and Statistics*

Pop cultural belief often differentiates between “Cat People” and “Dog People,” those who have a similarity to either cats or dogs and who also prefer the company of either animal. According to an informal survey of several Humboldt State University Students and non-student residents of Arcata, California, there is a difference between the personalities of dog and cat people. Specifically, people believe that dog-lovers are more social than cat-lovers and cat-lovers are more independent than dog-lovers. Certain websites such as *salon.com* and *marriage.families.com* further support such cultural beliefs, specifically that Dog People are thought of as outgoing, gregarious, energetic, loyal, and friendly. Cat People are considered quiet, independent, subtle,

mysterious and less sociable. The 2007 Edition of the U.S. Pet Ownership and Demographics Sourcebook (The American Veterinary Medical Association, 2007) stated that cat owners are more likely to be single while dog owners are more likely to be married with children, with 67% of dog owners being married with children as opposed to 61.8% of cat owners. Findings also showed that 52.6% of dog owners have three or more people in their family as opposed to 47% of cat owners. Also, 82.7% of dog owners visit the vet at least once a year as opposed to 63.7% of cat owners (The American Veterinary Medical Association, 2007).

#### *Animal-Assisted Therapy*

While the current study is not directly related to animal-assisted therapy, the purpose of linking personality traits with inherent animal preference would be to better match companion animals with owners and recipients of animal-assisted therapy based upon a greater understanding of what different animals provide for people and the goal of a specific therapy. For example, if the goal of therapy is to teach a specific skill and certain animals are shown to promote such a skill, recipients could then be matched with that type of animal. If the goal of therapy is to provide someone with an animal that inherently compliments certain aspects of their personality, understanding which personality types are best matched with specific animals could enhance a human-animal therapeutic relationship.

This study is designed to begin creating a foundation to understand in greater detail how exactly animals benefit people and what specific benefits they encourage to promote the positive results they have been shown to inspire. Therefore, a brief

explanation of some current uses, benefits and limitations of animal-assisted therapy is included in this review.

Animal-assisted therapy, which is the inclusion of animals in a therapy program for the purpose of increasing cognitive, emotional and physical well-being, has been increasingly understood as adding immense benefit to therapy programs (Connor & Miller, 2001; Daly & Morton, 2006). Animals are commonly used in many situations, and more recently, have begun to be used in prison programs as a form of social rehabilitation (Fournier, Gellar, & Fortney, 2007). While there is adequate research about the animals used for these programs (Fredrickson & Howie, 2000), there is little research addressing the issue of matching humans to the most beneficial companion animal. In the prison programs, inmates are selected based on criteria such as the crime they committed and the amount of time they have left to serve (Fournier, et. al., 2007). There is no psychological selection criteria used to determine which inmates will most likely benefit from the programs, nor is there a criterion to determine which types of animals they would most benefit from working with.

These trends are common in all fields which use companion animals, and many human-animal interaction studies have determined that, “the critical issue for all planned animal interventions, regardless of context, is a scientifically accumulated body of evidence that documents the effectiveness and limitations of the particular technique, approach, or program used,” (Barker & Wilson, 2003, p. 17). There is a bond that can develop between an animal and a human that has not been closely examined by research for theoretical or empirical purposes (All & Loving, 1999). Finding evidence-based

reasons for the development and subsequent benefits of such bonds could vastly improve the way Human-Animal Interaction therapy is employed.

Many people benefit from the presence of animals, and animal-assisted therapy has shown to improve the benefits of mental health treatment (Gasalberti, 2006; Rothe et al., 2005). For example, children with good animal experiences are also more likely to exhibit positive and empathetic behaviors, which contribute to effective social skills (Daly & Morton, 2006). Pet ownership itself is shown to improve social experiences and increases the possibility of social interactions, with people who own pets reporting that they have less trouble meeting other people (Wood, Giles-Corti, & Bulsara, 2005).

Dogs, specifically, have been identified as beneficial in the process of social interactions between adults (Wells, 2004). A twenty-five-year-old female of average height and weight was observed while walking alone, with a teddy bear, with a plant, with a Labrador puppy, with an adult Labrador, and with an adult Rottweiler. The researchers observed people's reactions to, and interactions with, the female when she was with each separate stimulus. The female received more attention and experienced more social interaction when she was walking with the dogs than when she was walking alone, with the plant, or with the teddy bear. Interestingly, when people spoke to her, the dog was the only topic of conversation, further suggesting that the dog itself was the reason for the initiation of the interaction. Specifically, she received the most attention when she was with the puppy, suggesting that the positive social effect of a dog is also related to the age and breed of the dog. This experiment was limited by the use of only one subject, limiting knowledge of gender-bias effect. More research would need to be

done to show if the social enhancement effect extended to males as well as females. In fact, more females than males actually spoke to the woman, which leaves a question as to whether or not the effect of the dog only enhances interaction homogenously (Wells, 2004). Despite these limitations, this study further establishes the benefit of animal presence in relationship to social interactions.

An experimental Human-Animal Interaction (HAI) intervention that has been successfully utilized in prison settings is called the PenPals Program. Dogs with problems leaving them unadoptable are selected from local shelters and are sent to live with selected inmates. It becomes the inmate's job to work with and train the dog so that it can be placed up for adoption. The selected inmates are educated in basic dog-training skills and are responsible not only for training but caring for all of the dog's basic needs, such as grooming and feeding (Fournier, et al., 2007). After 8 to 10 weeks, the dogs are adopted and the inmate receives a new animal to work with. Results of this program show that the inmates who participated showed increased positive responses to other therapeutic environments within the prison-setting (such as talk therapy), fewer infractions within the prison community and enhanced social skills. Specifically, the participants showed increased social sensitivity, which is defined as the ability to accurately assess certain social cues and behaviors and respond to situations in more appropriate and insightful ways.

A similar program implemented at Coffee Creek Correctional Facility, a women's prison in Oregon, places 4 month old puppies who will be future service dogs with inmates who then provide them with their initial training. Program staff report that

the dogs trained in the prison program have a higher success rate for service placements than dogs trained in regular family homes. Prison staff report that the presence of the dogs alters the inherently solitary and volatile nature of a prison because dogs force the inmates not only to socialize, but gives the socialization focused meaning. Prisoners in the program report that the dogs help them learn to communicate more effectively and helps them feel like they are contributing to society and making restitution (Von Lunen, 2009).

In conclusion, there is much evidence which illustrates the type of benefits animals provide for people. Most of the evidence is cause-and-effect in nature, showing what occurs when animals are present but not the details of why such results are obtained. As personality is largely a socially observed and experienced creation, it is then a reasonable place to begin examining the complexity of the interactive nature inherent in the human-animal bond. Research-based information about these relationships can enhance the positive benefits of animal-assisted therapy by providing therapists with a greater knowledge base from which to create future programs and to enhance currently existing ones.

## CHAPTER III

### Hypothesis and Research Questions

This study explored the relationship between Extraversion and companion animal preference. As part of a sub-study intended to enhance the results of this study, participants were asked to identify specific traits as belonging to either “dog people” or “cat people.” Specifically, it was expected that a notable relationship would be found showing a preference for cats by those scoring lower on Extraversion and a preference for dogs by those scoring higher on Extraversion.

Hypothesis #1. The mean scores on the Extraversion domain of those identifying as Dog People will be significantly higher than the mean score of those identifying as Cat People.

Research Question #1. Is there a difference between those identifying as Dog People, Cat People, Both People, and Neither People in mean scores on the total Extraversion domain score and on the score of each of the five facets of the Extraversion domain?

Research Question #2. Is there a pattern of Extraversion personality traits that are attributed to dog people or cat people as judged by typical respondents?

## CHAPTER IV

### Method

#### *Participants*

This study used data collected from participants of the Humboldt State University Psychology Department Participation Pool. The participation pool is available to any faculty member or student conducting research who has Institutional Review Board approval and faculty approval. Students who are enrolled in psychology courses can enroll in the participation pool and volunteer for studies through the HSU website. Participants were also recruited from other University departments and classes. Students who participate in research are entitled to informed consent and have the right to terminate participation at any time. Participation was on a volunteer basis and students who chose to volunteer received course credit for their participation.

Participants remained anonymous and were identified only by their age and gender. Results of this study are only available on an anonymous basis. Students under the age of 18 were restricted from participating.

Some students were excluded from this study according to certain criteria. Those with allergies to animals were not allowed to participate. Volunteers were also asked whether or not they had ever had a traumatic experience with an animal. Traumatic experiences were defined as having been attacked by an animal or having a close friend or relative who was attacked. Traumatic experiences did not include the death of a pet. Those who had what they considered to be a traumatic experience with

an animal were not allowed to participate. The reason for these exclusions was that the purpose of this study was to measure personality-based psychological predisposition towards certain animals rather than preferences based on other experiences.

### *Procedure*

Participants were recruited from the Humboldt State University Psychology Department Participation Pool Website and from other University departments and classes. An announcement was posted on the Participation Pool website asking for volunteers for this study (see Appendix A).

Volunteers who met the requirements for this study participated either individually or in groups based on schedule and availability.

When participants arrived for the study they were given verbal instructions (see Appendix B) and written instructions (See Appendix B). They were then given a stapled packet of three measures to complete as described below.

### *Instrumentation*

The first measure given was a short questionnaire designed for the purposes of this study to provide information about pet preferences. It reminded them not to participate if they were under the age of 18 and also reminded them not to put their names anywhere on any of the surveys. The questionnaire first asked them their age and gender. The rest of the questionnaire consisted of items measuring preference for either dogs or cats. For the purposes of reliability, participants were asked for five differently phrased confirmations of their preference for either dogs or cats (See Appendix C).

The second measure was the Extraversion scale of the NEO-PI-R (NEO-PI-R; Costa & McCrae, 1992; see Appendix D). The NEO-PI-R measures the Five-Factor Model. The Five-Factor Model factors are Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. These factors are referred to as domains. Each of these domains has six separate descriptive sub-factor categories that measure what makes up each trait. These sub-factors are referred to as facets. Note that this was discussed in further detail in the Literature Review.

For the purposes of this study, all domains except Extraversion were omitted. It is assumed that administering the Extraversion scale alone will not affect the psychometric properties of the NEO-PI-R enough to warrant concern.

The NEO-PI-R describes those who score high on Extraversion ( $T > 55$ ) as people who are “friendly, sociable, and excitement-seeking.” They are also thought of as more “forceful”, “assertive”, and generally as “leaders” and “optimists.” Those who score low on Extraversion ( $T < 45$ ) are described as those who desire less social interaction and have a tendency towards shyness. They are thought of as, “less assertive, quieter and less optimistic.”

The six facets of Extraversion are Warmth, Gregariousness, Assertiveness, Activity, Excitement-Seeking, and Positive Emotions.

The NEO-PI-R rates items on a five-point Likert scale, with the response choices being Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. Sample questions from the Extraversion scale include “I really like most people I meet,”

“I don’t get much pleasure from chatting with people,” and “I’m known as a warm and friendly person.” Some items are reverse scored.

The NEO-PI-R manual reports that the internal consistency coefficient relating to Extraversion is approximately .82. The test-retest reliability was measured by assessing a sub-set of college students. The students were first given the NEO-PI-R and then three months later given the NEO-FFI, which is a version of the NEO-PI-R that excludes the six-facet scales. The results showed an average test-retest reliability of .79.

The third measure was a checklist designed for the purposes of this study. The checklist is called the Trait Checklist and is designed to measure whether or not people consider certain traits to belong to “dog people” or “cat people.” The Trait Checklist lists twenty traits that were taken from the terms used in the NEO-PI-R manual to describe those who score high on Extraversion and those who score low on Extraversion (See Appendix E).

#### *Statistical Analysis*

Results for the Pet Preference Questionnaire and the NEO-PI-R Extraversion Subscale were analyzed using an analysis of variance. Mean scores on the Extraversion scale were compared for each pet preference category (Dog, Cat, Both, Neither). Appropriate post hoc tests were employed.

Results for the Trait Checklist were analyzed by comparing the frequency of the traits chosen by all respondents as related to dog people versus cat people.

#### *Potential Risks and Benefits*

This study represented minimal or no risk to participants. No deception was used and the subject matter was not believed to be of a sensitive nature.

Even though participants were seen face-to-face when they came to fill out the questionnaires, no record of participant names was kept. The researcher maintained any face recognition in a confidential manner, in no way divulging participant identity in any fashion.

Benefits include the opportunity to enhance the efficacy of animal-assisted therapies by more appropriately matching animals with people based on selected personality traits. This study may also help to provide information and insight for future studies related to understanding the advantages and successful outcomes of supplementing traditional therapies with the use of animals.

## CHAPTER V

### Results

#### *Pet Preference Questionnaire*

A total of 120 participants were surveyed. Two participants did not meet the age requirements and the results of their surveys were not included in the results of this study. Of the remaining 118 participants, 37 (31.4%) were male and 81 (68.6%) were female. The mean age was 19.61 with the minimum age being 18 and the maximum age being 25.

A general preference for dogs, cats, both, or neither was decided by a participant's most consistent response on three questions. For example, a participant who responded that they generally preferred both dogs and cats, considered themselves more of a Dog Person and would rather own a dog was thus labeled a Dog Person. This result was then further verified by a participant's response to whether or not they disliked dogs or cats.

A total of 70 (59.3%) participants reported themselves as dog people; 21 (17.8%) participants reported themselves as cat people; 22 (18.6%) participants reported themselves as preferring both; 5 (4.2%) participants reported themselves as preferring neither dogs nor cats. (See Table 1)

#### *NEO-PIR Extraversion Domain and Six Facets of Extraversion*

Raw scores were obtained for each of the six facets and those scores were combined to obtain a domain score. A mean score for each facet and for the domain

Table 1

Pet Preference as Reported by 118 Participants

Pet Preference	Males <i>n</i> =37 <i>n</i> (%) % of <i>N</i>	Females <i>n</i> =81 <i>n</i> (%) % of <i>N</i>
Dogs	19(51.3) 16.1	51(62.9) 43.2
Cats	12(32.4) 10.1	9(11.1) 7.6
Both	5(13.5) 4.2	17(20.9) 14.4
Neither	1(2.7) .8	4(4.9) 3.3

were obtained for each pet preference group. The range of a facet score is 0-32 and the range of a domain score is 0-192.

A comparison of NEO-PI\_R Extraversion facet and domain score means of Dog and Cat People was completed using an independent samples *t*-test. Results indicated that Dog People were significantly more Extraverted than Cat People. Significant differences between these two groups was found on the facet Gregariousness,  $t(89)=2.598, p<.05$ , the facet Excitement-Seeking,  $t(89)=2.040, p<.05$ , and the total Extraversion score,  $t(89)=2.116, p<.05$ .(See Table 2)

A one-way ANOVA was used to compare NEO-PIR Extraversion facet and domain mean scores of Dog People, Cat People and people who indicated a preference for both. Due to the low number of participants who indicated a preference for neither dogs nor cats( $n=5$ )the mean scores of that group were not analyzed. Results indicated that the three groups differed on the facet Warmth,  $F(2,110)=4.001, p<.05$ , the facet Gregariousness,  $F(2,110)=8.267, p<.05$ , the facet Excitement-Seeking,  $F(2,110)=6.202, p<.05$ , and total Extraversion,  $F(2,110)=5.600, p<.05$ .

Post-hoc analysis indicated that Dog People scored significantly higher than Both People on Warmth,  $p<.05$ , Dog People scored significantly higher than Cat People,  $p<.05$ , and Both People,  $p<.05$ , on Gregariousness, Dog People scored significantly higher than Both People on Excitement-Seeking,  $p<.05$ , and Dog People scored significantly higher than Both People on total Extraversion,  $p<.05$ .(See Table 2)

Table 2

Comparisons of Means of Facet Scores and Total Extraversion Domain Scores Among Participants Reporting Themselves as Preferring Dogs, Cats or Both

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Facet/Domain	Dog Person <i>n</i> =70 mean(SD)	Cat Person <i>n</i> =21	Both <i>n</i> =22
Warmth	24.4(4.6) <sup>a</sup>	23.3(4.2) <sup>ab</sup>	21.2(4.9) <sup>b</sup>
Gregariousness	19.9(4.9) <sup>a</sup>	16.6(5.8) <sup>bc</sup>	15.4(4.7) <sup>c</sup>
Assertiveness	16.6(4.6) <sup>a</sup>	14.7(4.9) <sup>a</sup>	15.4(4.5) <sup>a</sup>
Activity	17.3(4.2) <sup>a</sup>	16.3(3.8) <sup>a</sup>	16.0(4.3) <sup>a</sup>
Excitement Seeking	22.1(4.5) <sup>a</sup>	19.7(4.9) <sup>ab</sup>	18.4(4.6) <sup>b</sup>
Positive Emotions	22.5(4.5) <sup>a</sup>	21.1(4.4) <sup>a</sup>	21.0(4.4) <sup>a</sup>
Total Extraversion	122.9(21.1) <sup>a</sup>	111.9(20.0) <sup>ab</sup>	107.6(20.4) <sup>b</sup>

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Across rows, means with different superscripts differ significantly,  $p < .05$

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*Trait Checklist*

Response frequencies were compared to obtain percentages of those who attributed a trait to a dog person or a cat person. Results indicated notable difference in response frequencies.(See Table 3)

Participants then went back and indicated the top three traits they would attribute to dog people and the top three traits they would attribute to cat people. The top three dog person traits were Sociable, 69(58.5%), Friendly, 57(48.3%), and Excitement-Seeking and High-Spirited received the same amount of responses, 23(35.6%). The top three cat person traits were Quiet, 70(59.3%), Shy, 60(50.8%), and Independent, 47(39.8%).(See Table 4)

The traits used for the Trait Checklist were obtained from descriptive words used to explain High Extraversion and Low Extraversion in the NEO-PI-R manual (Costa and McCrae, 1992). All 10 traits describing Low Extraversion were predominantly assigned to Cat People and all 10 traits describing High Extraversion were predominantly assigned to Dog People.(See Appendix F)

Participants were asked to write any comments or questions in a space provided in the survey following completion of the Trait Checklist. A total of 26 participants chose to comment. Out of these, 7 comments were written by males and 19 comments were written by females. Dog People accounted for 20 comments, Cat People accounted for 2 comments, and Both People accounted for 4 comments. Open-ended comments will be presented in further detail in the discussion section. A complete list of comments is available in the Appendix section.(See Appendix G)

Table 3

Response Frequencies on Trait Checklist

Trait	Dog Person <i>n</i> (%)	Cat Person
Sociable	115(97.5)	3(2.5)
Excitement-Seeking	110(93.2)	8(6.8)
High-Spirited	109(92.4)	8(6.8)
Friendly	107(90.7)	11(9.3)
Leader	106(89.8)	12(10.2)
Assertive	105(89)	13(11)
Optimistic	103(84.6)	15(12.7)
Forceful	96(81.4)	22(18.6)
Dominant	85(72)	33(28)
Warm	78(66.1)	40(33.9)
Steady	57(48.3)	61(51.7)
Follower	45(38.1)	73(61.9)
Independent	38(32.2)	80(67.8)
Slow	29(24.6)	89(75.4)
Tentative	29(24.6)	89(75.4)
Passive	28(23.7)	90(76.3)
Pessimistic	22(18.6)	90(76.3)
Loner	9(7.6)	109(92.4)
Shy	7(5.9)	111(94.1)
Quiet	4(3.4)	114(96.6)

Table 4

Top Three Traits on Trait Checklist Selected By Participants as Belonging to Dog or  
Cat People

Rank	Dog Person Trait <i>n</i> (%)	Cat Person
1	Sociable 69(58.5)	Quiet 70(59.3)
2	Friendly 57(48.3)	Shy 60(50.8)
3	Excitement Craving 23(35.6) High Spirited 23(35.6)	Independent 47(39.8)

## Chapter VI

### Discussion

This study was conducted with the intention to provide a greater understanding of human-animal interaction and to possibly enhance the efficacy of animal-assisted therapy. Results of this study indicated there is indeed a relationship between certain personality traits and preferences for different types of animals. Significant differences in Extraversion were shown between participants who preferred dogs, cats and both. There was also a clear trend in the way participants viewed low and high Extraversion personality trait descriptors of people who prefer either dogs or cats.

The hypothesis in this study proposed that those with a preference for dogs would score significantly higher on the Extraversion domain than those who preferred cats. The first research question inquired whether or not there was a significant difference on the Extraversion domain and facet scores of those who preferred dogs, cats, both or neither. The second research question inquired whether or not there was a trend in the Extraversion personality traits assigned to either Dog or Cat People.

The hypothesis in this study was supported. A significant difference was seen in the mean scores on the Extraversion domain between participants who prefer cats and participants who prefer dogs, with dog people scoring significantly higher. This study also illustrated a significant difference on the mean Extraversion scores of those preferring dogs and those preferring both, with Dog People scoring significantly higher.

This was inconsistent with previous research that found no differences between pet preference groups on the Extraversion domain of the NEO-FFI (Eggert, 2004).

The Eggert study found that participants who preferred both dogs and cats scored significantly higher on Openness than participants who preferred dogs or participants who preferred neither and participants who preferred cats scored significantly higher on Openness than participants who preferred neither. The Eggert study supports an indication of a pattern of personality traits belonging to people who prefer different types of animals.

This result is also consistent with research conducted by Kidd and Kidd (1980), which also indicated a pattern of personality characteristics on the Edwards Personal Preference Test in relation to pet preference. Kidd and Kidd found that males and females who preferred animals in general scored lower on autonomy than males who preferred cats, males who preferred animals in general scored higher on dominance than females who preferred cats, females who preferred animals in general scored higher on nurturance than males and females who preferred cats and males who preferred dogs scored higher on aggression than females who preferred both dogs and cats.

The traits on the EPPT can be related but are not equated to the traits on the NEO-PIR (Costa Jr. et al., 2001). The facet Assertiveness is related to aggression and both studies supported the idea that a preference towards dogs is correlated with higher tendency towards assertiveness or aggression. Though the two traits are different, a relationship is noted.

These findings are also consistent with previous findings which show males who prefer dogs scored higher on Extraversion on the Eysenck Personality Inventory (Edelson & Lester, 1983). Edelson and Lester found that females were more likely to own cats, whereas this study had a higher percentage of females who preferred dogs and a higher percentage of males who preferred cats.

The results of the second research question indicated there is a significant trend in the personality characteristics thought to belong to either dog or cat people. The trait checklist also supplemented the hypotheses of this study, as the traits most commonly assigned to dog people were higher Extraversion traits and the results most commonly assigned to cat people were lower Extraversion traits (See Appendix F). These results were consistent with the popular cultural belief that Dog people are more outgoing than Cat People.

The trait checklist responses also supplement findings that people who prefer different animals view themselves as having different personality traits (Perrine & Osbourne, 1998). Perrine and Osbourne found that those who preferred dogs considered themselves to be more independent than those who preferred cats, while this study found that participants believed cat people to be more independent than dog people. These results indicate the possibility that there is a difference between the traits that one would assign to themselves as a dog or cat person and the traits they would assign to others as dog or cat people.

This study is consistent with findings in research surrounding animal-assisted therapy which proposes that dogs promote positive socialization (Daly & Morton, 2006;

Wells., 2004; Wood et al., 2005). High Extraversion is consistent with being more social and outgoing, and animal-assisted therapy programs that use dogs have found the benefits to be enhanced social skills and constructive communication skills (Fournier et al., 2007; Von Lunen, 2009). indicating the possibility of a relationship between experiences with dogs and an increase in certain aspects of higher Extraverted behaviors. This correlation does not intend to imply that those who score lower on Extraversion are not social, but that dogs promote certain aspects of social behavior.

Participant comments and suggestions indicated that many enjoyed participating in this study. Participants also took the opportunity to explain some of their ideas about why people prefer dogs or cats, where stereotypes of pet owners may come from, and why people would choose to own different animals. A female Dog Person thought that, "...cat people enjoy a presence (of) company whereas dog people enjoy interactive company." A female Both Person commented that she felt, "...all pet owners show love and compassion towards other species over those who prefer not to own a pet." A male Cat Person commented that, "...people who get cats prefer a relatively low-maintenance pet..." A female Dog Person wrote that, "...people seek a friend and companion and their level of activity out of house and type of care (required for a pet) play a major role..." A female Dog Person who also indicated a dislike for cats commented that, "Cats used to pee in (her) bedroom when (she) was a teenager." A female Dog Person felt that, "...cats are seen as unfriendly because they don't crave interaction like dogs do..." and that, "...dog people tend to be outgoing and

friendly....someone who is not those things may get a dog in order to become those things.”

Some participants found this survey too judgemental. A male Dog Person felt that, “The dog and cat trait questions were too subjective and characteristics of people’s personalities are not limited by the pets they own.” Another female Dog Person commented, “Why are introverted qualities always given negative connotations? Only one of the extraverted qualities can be seen as negative.” She also felt that, “Using absolutes seems like fishing for answers.” It is interesting to note that none of the traits were identified on the Trait Checklist as either positive or negative or as being traits belonging to either Introverts or Extraverts.

Based on the findings of this study and the possibility of future research in this area, animal-assisted therapy could be enhanced and altered in several ways. This study is supportive of the current use of dogs in many therapy environments that seek to enhance social skills and increase positive social interactions and provides further research-based evidence for continued practice and future programs. When the goal of animal companionship is social and interactive, dogs would continue to be the animal of choice. If the goal of therapy is to provide a person with an animal that they might show an inherent preference for based on high or low Extraversion personality characteristics, the animal of choice might be different.

The current research provides more of a basis to match animals with program goals by furthering our understanding of differences in what those animals are providing for individuals, and also characteristics with which people think those

animals correlate. By knowing what high Extraverts desire from their environment and knowing what low Extraverts desire from their environment (Depue & Collins, 1999), the current study, by indicating a correlation between Extraversion and pet preference, can begin to create an understanding of exactly what certain animals provide for people. Therefore, animal-assisted therapy programs could select animals based on program goals and the aptitude of certain animals for such goals.

Animals could also be more appropriately matched with program participants. If the goal of a program is to provide complimentary companionship, then a participant could be matched with an animal for whom they have an inherent preference. If the goal of a program is to teach specific skills, animals could also be chosen based on their ability to promote those skills. For example, if the goal of a program is to teach a lower Extraverted person to be more social, choosing a dog over a cat would be a more effective choice based on the results of this study.

This study was limited in several aspects. The greatest limitation was the number of participants and their diversity. All of the participants were college students between the ages of 18 and 25. While homogenous studies can illuminate significant differences, heterogeneous studies have greater generalizability. However, it is worth noting that the mean scores obtained in this study were reasonably consistent with the college-aged norms for scores on the Extraversion domain as presented in the NEO-PI-R manual (Costa & McCrae, 1992). Therefore, this sample, while small, could be considered representative of other college-aged populations.

This study had a significantly greater number of women than men and significantly greater number of those who preferred dogs to any other preference. With such a lack of diversity, it is unclear whether or not these results are reflective only of a comparison of women who prefer dogs to a small percentage of men and women who prefer dogs, cats, both or neither.

Another limitation was within the measure itself. The Pet Preference Questionnaire asked for five confirmations of pet preference. Participants were asked what type of pet person they are, what type of pet they would rather own and what type of pet they generally preferred. Therefore, a participant who said in general they preferred both, they were a Both Person and they would rather own a cat would then be called a Both Person. Upon further consideration, personality is perhaps more apparent in lifestyle choices than in what a person says they prefer or do not prefer. Someone may like all animals but their lifestyle may be more suited to owning a specific type of animal. A correlation between personality and an actual animal lifestyle choice such as owning a dog or a cat might be more reflective of an inherent link between personality and animal preference, as opposed to a correlation between personality and what someone generally says they enjoy.

Additionally, the Trait Checklist only offered participants a forced decision. Several participants indicated that they felt that most traits could belong to both and felt like they only made a choice because it was required. One participant suggested giving participants a nominal scale, similar to the scale on the NEO-PIR, which would allow

participants to indicate to what extent they felt certain traits belonged to dog or cat people.(See Appendix G)

Further research may take into consideration such limitations within measures and also the small sample size and sample homogeneity. As this study used a domain of the NEO-PI-R and the study it was based upon (Eggert, 2007) used the NEO-FFI, future studies could perhaps measure another NEO-PI-R domain or use the test in its entirety in order to gain a greater depth of understanding.

There is also further research that could be done with existing data. For example, it would be interesting and valuable to look at the relationship between what type of pet preference a person identified themselves as and which traits they assigned as belonging to their pet preference. This might be more of an indication of the differences and inherent biases between how people view others and how they view themselves in relation to animals.

This study does not confirm a definite relationship between pet preference and personality but it does provide the beginnings of an indication that the two may be linked, consistent with popular opinion, and that there is cause to consider examining the details of such an important relationship. As animals are, and will continue to be, supportive in not only a therapeutic but everyday environment and will continue to be employed in therapy programs, service programs and as family companions, further knowledge of the human-animal bond can only enhance such relationships.

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## Appendix A

### Website Announcement

#### **Study Name**

# Companion Animals and Personality: A Study of Preference

#### **Description**

The purpose of this study is to learn how pet preference is related to personality. Participants will complete four surveys which will take approximately one half-hour to complete. The results of the study may lead to further understanding of the human/animal bond. If you are allergic to animals or have had a traumatic experience with an animal (such as being attacked, not including the death of a pet) we ask that you do not sign up to participate. The research study will be conducted by Jennifer Levinson, a graduate student researcher, at Humboldt State University in the Psychology Department.

#### **Eligibility Requirements**

DO NOT SIGN UP IF you are allergic to any type of animal or if you have ever been attacked by an animal

#### **Duration**

30 minutes

**Credits**

2 Credits

**Researcher**

Jen Levinson

Email: [jenlevinson@gmail.com](mailto:jenlevinson@gmail.com)

**Principal Investigator**

**Jim Dupree**

**Deadlines**

Sign-Up: 24 hour(s) before the appointment

Cancellation: 1 hour(s) before the appointment

## Appendix B

### Verbal and Written Instructions

#### **Verbal Instructions and Written Instructions Given Prior to Administering the Pet Preference Questionnaire, the Extraversion subscale of the NEO-Personality Inventory-R and the Trait Checklist.**

(First hand out all surveys and then begin.)

Hello, my name is \_(person distributing questionnaire)\_\_. Thank you for volunteering to participate in this study. Please do not fill out any of the surveys until you are asked to do so. If you are not at least eighteen or if you are allergic to any type of animal than please do not continue your participation.

This is an anonymous study so do not put your name on any of the forms. Please keep the forms stapled together. Each survey in the packet has a number in the upper right hand corner that will help keep them matched should they become separated, while still maintaining your confidentiality. Results for this study will be made available, however the results from your individual surveys will not. Following completion of this study, all forms will be destroyed.

Completion of the surveys indicates your consent for participation. You have the right to stop before completion without any negative consequences.

The packet you have been given contains three surveys.

The first survey is a simple questionnaire designed for this study asking you to indicate your gender, age and your preference towards certain types of animals.

The second survey is a subscale of the Neuroticism-Extraversion-Openness-Personality Inventory-Revised, which is a standardized personality inventory measuring certain personality traits.

The third survey is a trait checklist designed for this study. It will ask you to indicate your opinion on the pet preferences of certain personality traits.

Feel free to come up to me and ask if you have any questions or need assistance will taking these surveys. Upon completion of the surveys, please feel free to address me with any questions or concerns about this study.

Thank you and you may now begin.

Jennifer Levinson, Principle Investigator, Department of Psychology

**INFORMATION AND INSTRUCTIONS FOR PARTICIPATION IN THIS STUDY:**

Please feel free to ask questions at any time before, during or after your participation.

Completion of the following surveys indicates consent for participation. Participation is voluntary. You have the right to stop at any time prior to completion without any negative consequences. The investigator reserves the right to terminate your participation at any time.

It will take approximately 30 minutes to complete these surveys.

Do not continue participation if you are not at least 18 years of age.

Do not continue participation if you are allergic to any type of animal.

Do not continue participation if you have ever had a traumatic experience with an animal such as being bitten or attacked by an animal. This does not include experiencing the death or loss of a pet.

This is an anonymous study and participation is confidential. Do not put your name on any of these surveys.

Please keep the surveys stapled together. Each survey in the packet has a number in the upper right hand corner that will help keep them matched should they become separated.

Participation is confidential. Data from this study will be made available on an anonymous basis. Results from individual surveys will not be available.

Data will be kept for three years following the completion of this study. After three years, the data will be destroyed.

The first survey is a simple questionnaire designed for this study asking you to indicate your gender, age and your preference towards certain types of animals.

The second survey is a subscale of the Neuroticism-Extraversion-Openness-Personality Inventory-Revised, which is a standardized personality inventory measuring certain personality traits.

The third survey is a trait checklist designed for this study. It will ask you to indicate your opinion on the pet preferences of certain personality traits.

There is no known risk for subjects participating in this study. Please feel free to contact either Jennifer Levinson ([jenlevinson@gmail.com](mailto:jenlevinson@gmail.com)) or Dr. James Dupree ([jld3@humboldt.edu](mailto:jld3@humboldt.edu)) if you have any questions or concerns.

## Appendix C

### Pet Preference Questionnaire

### **Pet Preference Questionnaire**

This survey is designed to assess your preference for certain types of animals. Please do not fill out this survey if you are not at least eighteen years of age, if you have any animal allergies or if you have ever been attacked by an animal. Do not put your name on this form. The data is anonymous and all participation is confidential. Completion of this survey indicates consent for participation. You have the right to stop at any time should you not wish to continue participation. Participation is voluntary. Time commitment is approximately 30 minutes. You may withdraw from this study at any time. Investigator can terminate your participation at any time. There is no known risk to subjects for participation in this study. Your handout gives contact information if needed.

**Please circle or write in your answers to the following questions. CIRCLE ONLY ONE ANSWER FOR EACH QUESTION:**

1. **I identify as:**                      Male                      Female

2. **My age is:** \_\_\_\_\_

3. **I generally prefer:**                      Dogs              Cats              Both  
Neither

4. **If I had to choose, I would say I am more of a:**              Dog Person

Cat Person

I like both

I am not a dog or cat person

5. **If I had to choose between owning a dog or a cat, I would choose a:**              Dog

Cat

6. **I dislike dogs:** Yes

No

7. **I dislike cats:** Yes

No

Appendix D

NEO-PI-R Extraversion Scale

**There are 48 statements below. Read each statement carefully. For each statement, circle the response that best represents your opinion. There are no right or wrong answers. Describe yourself honestly and state your opinions as accurately as possible. Answer every item. Only circle one answer for each item. Do not write your name on this form.**

**Circle SD if you strongly disagree or the statement is definitely false.**

**Circle D if you disagree or the statement is mostly false.**

**Circle N if you are neutral on the statement, if you cannot decide, or if the statement is about equally true or false.**

**Circle A if you agree or the statement is mostly true.**

**Circle SA if you strongly agree or the statement is definitely true.**

1. I really like most people I meet. SD D N A SA

2. I shy away from crowds of people. SD D N A SA

3. I am dominant, forceful and assertive.

SD D N A SA

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“In response to your recent request, permission is hereby granted for you to reproduce up to a total of 120 copies of the 48 items in the Extraversion Domain of the NEO Personality Inventory-Revised (NEO-PI-R) for your use in your research study titled, *Companion Animals and Personality: A Study of Preference*. Permission is also granted for you to include up to a total of three (3) sample items from the Extraversion Domain of the NEO-PI-R in the appendix of your dissertation/thesis. If additional copies are needed, it will be necessary for you to write to PAR for further permission.”

Appendix E

Trait Checklist

**Trait Checklist**

The following is a list of personality traits. Please circle your answer next to each indicating whether you think the trait **GENERALLY** belongs more to a person who prefers dogs or a person who prefers cats. We understand these traits can belong to both dog and cat people, but we are asking you to go with your first instinct. **CIRCLE ONLY ONE ANSWER FOR EACH QUESTION.**

- |                    |            |            |
|--------------------|------------|------------|
| 1. <b>Warm</b>     | Dog Person | Cat Person |
| 2. <b>Friendly</b> | Dog Person | Cat Person |
| 3. <b>Sociable</b> | Dog Person | Cat Person |
| 4. <b>Dominant</b> | Dog Person | Cat Person |
| 5. <b>Shy</b>      | Dog Person | Cat Person |
| 6. <b>Loner</b>    | Dog Person | Cat Person |

7. <b>Forceful</b>	Dog Person	Cat Person
8. <b>Independent</b>	Dog Person	Cat Person
9. <b>Passive</b>	Dog Person	Cat Person
10. <b>Slow</b>	Dog Person	Cat Person
11. <b>Steady</b>	Dog Person	Cat Person
12. <b>Pessimistic</b>	Dog Person	Cat Person
13. <b>Assertive</b>	Dog Person	Cat Person
14. <b>Leader</b>	Dog Person	Cat Person
15. <b>Excitement-Craving</b>	Dog Person	Cat Person
16. <b>Follower</b>	Dog Person	Cat Person
17. <b>High-Spirited</b>	Dog Person	Cat Person

18. **Quiet**                                      Dog Person                                      Cat Person

19. **Optimistic**                                      Dog Person                                      Cat Person

20. **Tentative**                                      Dog Person                                      Cat Person

Please go back to the previous page and put a “**D**” next to the **THREE TRAITS** you think of as most related to **Dog People**. Then put a “**C**” next to the **THREE TRAITS** you think of as most related to **Cat People**.

Is there anything you would like to add that you think will help us better understand the relationship between pet preference and personality? Please write your answers/comments/opinions/questions/concerns in the space provided below or feel free to address the researcher with any of these. Thank you.

## Appendix F

### Trait Checklist Key

#### **Trait Checklist Key**

##### High Extraversion/Dog People

- 1.warm
- 2.friendly
- 3.sociable
- 4.dominant
- 5.forceful
- 6.assertive
- 7.leader
- 8.excitement-craving
- 9.high-spirited
- 10.optimistic

##### Low Extraversion/Cat People

- 1.shy
- 2.loner
- 3.independent

4.passive

5.slow

6.steady

7.pessimistic

8.follower

9.quiet

10.tentative

## Appendix G

### Participant Comments

1. “Dogs seem more sociable and needy. While cats seem more independent and like to be more alone. So I think item reflects in people who love dogs more or cats more.”-

Male, Dog Person

2. “I think cat people enjoy a presence for company whereas dog people enjoy interactive company.”-Female, Dog Person

3. “Why are introverted qualities always given negative connotations? Only one of the extraverted qualities can be seen as bad but many of the introverted ones can be. Also, many of my answers I did not feel strongly about. Perhaps future tests could use a scale instead of an absolute one-or-the-other? Using absolutes seems like fishing for answers. I also think it would be interesting if other questionnaires included other pets like aquarium fish, birds and reptiles. Thank you.”-Female, Dog Person

4. “A lot of the time cats are seen as unfriendly because they don’t crave interaction like dogs do, so someone who wants a cat or has a cat could be a person who wants companionship just not all the time. Dog people tend to be outgoing and friendly, so someone who is not those things may get a dog in order to become those things.”-

Female, Dog Person

5. “I feel many of the normalized stereotype on cat owners (old woman with many cats who sits on the porch all day) will affect how these questions are answered. Fun questionnaire to answer. Thank you.”-Female, Dog Person
6. “I think it is really about the human because the human is choosing the pet and the pet will learn the traits of it’s owner based on what the owners traits are like.”-Female, Both Person
7. “This study was very interesting to me. I enjoyed being a participant.”-Female, Dog Person
8. “Well done!”-Female, Dog Person
9. “I believe cat people are more shy and quiet because cats tend to be that way also. Cats are also very low-maintenance, which might be more attractive to somebody who is slow and passive.”-Female, Cat Person
10. “I think that people with dogs live a better life and they are more happy with themselves.”-Male, Dog Person

11. "I think that dogs depend on people more and interact better with people. Cats are more independent. So I think that the animal's behavior should also be considered."

Female, Dog Person

12. "Dogs like everyone. Cats only like their owners and are kind of mean to other people."-Female, Dog Person

13. "I believe pet preference is all in how one acts. The way a person acts throughout a day I think determines whether they like a dog or cat."-Male, Dog Person

14. "I feel dog people are more friendly and sociable because when they tend to be out walking their dogs, new dogs and owners tend to greet each other. Cat people tend to be more passive and laid-back just like their cats who like lounging and relaxing."

Female, Dog Person

15. "It might not just depend on personality but lifestyle as well."-Female, Both Person

16. "Maybe the personality is reflected by whether the person lives in isolation/rural areas or in the city."-Female, Dog Person

17. "What do people do when they have a cat or dog? Do they have their pets because they feel alone or just because they want one."-Female, Dog Person

18. "I prefer owning a dog over a kitty, unable to own a dog, but absolutely love both!"-Female, Dog Person
19. "I think dog people are more active than cat people."-Female, Dog Person
20. "Dogs, generally, like their owners, are pack animals. They'll behave that way. Cats, generally, are the opposite. Best of luck."-Male, Both Person
21. "I think people who get cats prefer a relatively low-maintenance pet that is warm, furry, and not always in your face or barking at things in odd hours of the night."-Male, Cat Person
22. "Cats are cool and have no soul, which makes them fickle. Dogs are slobber and sniffing and one must walk fast or be left behind."-Male, Dog Person
23. "The dog and cat traits questions were too subjective and characteristics of people's personalities are not limited by the pets they own."-Male, Dog Person
24. "Cats used to pee in my bedroom when I was a teenager. To this day when I go visit my Mom, I can still smell the remnants in the carpet pad. Disgusting. With the exception of being a puppy, my dog has never pissed in a house."-Female, Dog Person

25. "I think all pet owners show love and compassion towards other species over those who prefer not to own a pet."-Female, Both Person

26. "I think people seek a friend and a companion and their level of activity out of house and type of care play a major role. I think a chore list must also be considered. I identify cats with being hairy, more so than dogs. Lint rollers and litter boxes-yuck. Cost benefit analysis."-Female, Dog Person