

Examining Pet Attitude in Relationship to Loneliness and Parenthood Motivation in Pet-Ownning Adults

Cheryl A. Krause-Parello^{1*}, Yvonne Wesley², Minnie Campbell³

¹College of Nursing, University of Colorado Denver, Anschutz Medical Campus, Aurora, USA

²Independent Health Consultant, Rahway, USA

³College of Nursing, Seton Hall University, South Orange, USA

Email: Cheryl.Krause-Parello@ucdenver.edu

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Abstract

Pets' growing role in family dynamics creates questions about resources pets may provide in parenthood motivation. Pet ownership has been suggested in the literature as an antecedent to parenthood in terms of developing skills needed to rear offspring, nurturance, and responsibility. Participants ($N = 118$) who were pet owners, completed an online survey that recorded demographics and consisted of loneliness, pet attitude, and parenthood motivation scales. Results supported that loneliness and pet attitude were positively related to parenthood motivation (all p 's < 0.05). Loneliness and parenthood motivation did not vary by pet species. Pet attitude varied by pet species; dog owners had the most positive attitude. Pets were shown to be a valuable resource in alleviating feelings of loneliness and parenthood preparation in this sample. Implications for nursing practice and future research are discussed.

Keywords

Pet Attitude; Loneliness; Pets; Parenthood

1. Introduction

Children are for people who can't have dogs.

~Author Unknown

*Corresponding author.

Globally, pets have transcended status as property and are increasingly being regarded as family members. The growing role of pets in family dynamics creates questions about the resources and context pets may provide in parenthood motivation. In American families, there were more than 72 million dogs and nearly 82 million cats compared to 24.3 million children less than 18 years of age [1]. Pets are becoming an integral part of families for multiple reasons. Pets, akin to children for some, are a form of companionship; they alleviate loneliness and provide pleasure, unconditional love, a sense of nurturance, and caretaking responsibilities [2].

Loneliness is a significant emotion that has been described as painful and unpleasant [3]. Pet attitudes can be described as a favorable or unfavorable evaluative reaction exhibited in one's beliefs and feelings towards pets that may influence feelings of loneliness and one's desire for children. Moreover, a positive pet attitude may displace feelings of loneliness and provide a sense of companionship and friendship [4].

Parenting is a personal choice, and companion animals have been cited in the literature as an antecedent to parenthood [5]. Pets, to some, provide "practice" for childrearing, and in turn assist individuals in developing the skills needed to rear offspring such as nurturance, responsibility, and reliable alliance [6]. Pets may provide structure and a sense of responsibility to family as basic needs must be met such as daily feedings, cleaning up, transporting pet to the veterinarian for routine care and emergency visits, budgeting pet care, costs self-sacrificing personal time, and learning how to discipline effectively. There are similar connections and accountabilities in pet keeping and childrearing.

This research served to better understand the operant mechanism by which pet attitude affects feelings of loneliness and parenthood motivation in a sample of adult pet owners.

1.1. Background and Significance

Literature supports the notion of pets being regarded as children [5]. Research on attitudes of pet owners revealed that 90% of the participants viewed their personal pets as important members of the family and that the pet fulfilled a role analogous to a child [7]-[9]. A recent survey revealed that 78.2 million Americans owned dogs and 86.4 million owned cats [10] and almost two-thirds of households in the US owned at least one pet. For many, having a pet is similar to childrearing in that it presents challenges and learning opportunities, such as roles, responsibilities, rules, discipline, and boundaries [5].

Pet attitude, derived from social orientation, is an underlying inclination to respond to pets either favorably or unfavorably. Many pet owners have wonderful relationships and positive attitudes regarding their pets. However, there are individuals that do not experience such bliss. Alternations in the pet relationship can occur due to the pet's poor health, disposition, size, and personality among others. These alternations may influence feeling of loneliness and one's desire to be a caretaker for others.

There are three components of attitude: cognitive, affective, and behavioral [11]. In relation to *pet* attitude, the cognitive component includes thoughts, beliefs, and ideas about pets. The affective component of pet attitude includes feelings or emotions that the pet evokes. The behavioral component of pet attitude includes tendency or disposition to act in certain ways toward the pet. Attitude towards personal pets may also be associated with childrearing. Individuals of childbearing years may choose to become a parent to create an individual support network. This theory was supported by research conducted by Dykstra and Wagner [12]. The study finding suggested that individuals without children often lack social support networks [12]. Research further revealed that young adults' motives for childrearing reflected a strong interest in establishing an identity and social network [13].

Pets are often cited in the literature as a coping mechanism and source of social support to combat feelings of loneliness [2]. The relationship between loneliness and pet ownership has been well studied [14]-[16] and research indicated that pet relationships may help to decrease feelings of loneliness [4] [17]. People are motivated to form and maintain interpersonal bonds that may be found through different mechanisms such as pet ownership and parenthood. A review of the current research revealed a gap on the relationships between loneliness, pet attitude, and parenthood motivation in individuals of child bearing years. Additional study in this area may be a beneficial contribution to the scientific literature on loneliness, family planning, and preparation for parenthood in young adults.

1.2. Definition of Terms

Parenthood motivation, for the purpose of this investigation, was defined as a personal and subjective assess-

ment of one's desire for children [18] and operationalized by a score on the Modified Index of Parenthood Motivation [19].

Loneliness, for the purpose of this investigation, was defined as a subjective emotional experience caused by some form of social relationship deficit [3] and operationalized by a score on the Revised UCLA Loneliness Scale [20].

Pet attitude, for the purpose of this investigation, was defined as a subjective feeling or emotion towards a companion animal and was operationalized by a score of the Pet Attitude Scale [21].

2. Methods

2.1. Research Design

A descriptive exploratory design was employed for the purpose of this research.

2.2. Sample

The rights of human subjects were protected by obtaining approval from Kean University's institutional review board prior to data collection. Inclusion criteria for participation in this study were individuals: 1) 18 years and older; 2) owned a pet; 3) had Internet and computer access; and 4) could read in English.

The resulting correlation coefficient between the pet attitude and parenthood motivation in a recent study [22] was 0.29. Based on the power tables, to ensure a medium effect size 0.30 and α 0.05, a minimum of 85 participants were required to achieve a power of 0.80. All participants $N = 118$ were pet owners (males $n = 20$, females $n = 97$, undisclosed $n = 1$) with a mean age of 36.63 ($SD = 12.13$).

A descriptive analysis for the demographic data was conducted to describe the pet owners' characteristics. The variables included gender, age, marital status, race, living arrangements, and employment (see **Table 1**). Pets were represented by dogs ($n = 83$), cats ($n = 23$), and other ($n = 12$). A snapshot of other pets listed includes fish, horses, and frogs.

2.3. Instruments

The Revised UCLA Loneliness Scale: Loneliness was measured using The Revised UCLA Loneliness Scale [20]. The 20-item summative 4-point Likert-type rating scale measures the subjective experience of loneliness by degrees of agreement and disagreement: 1 (*never*), 2 (*rarely*), 3 (*sometimes*), and 4 (*often*). The scale scores can range from 20 to 80 with higher scores indicating higher levels of loneliness. Psychometric evidence for the Revised UCLA Loneliness Scale has been reported in college students [20]. The instrument has been found to be reliable in a sample of adults in that the coefficient alpha of 0.89 was reported in a study of personal who were between the ages of 18 - 29 [23]. Among the 118 participants of this study, the Cronbach alpha reliability coefficient was 0.92.

Pet Attitude Scale: Pet attitude was measured by the Pet Attitude Scale (PAS) [21]. The 18-item summative 7-point Likert-type rating scale measured the subjective experience of pet attitude by utilizing degrees of agreement and disagreement: 1 (*strongly disagree*), 2 (*moderately disagree*), 3 (*slightly disagree*), 4 (*unsure*), 5 (*slightly agree*), 6 (*moderately agree*), 7 (*strongly agree*). The scale score can range from 18 to 126, with higher scores indicating a more positive attitude toward pets. The scale developers reported a Cronbach alpha of 0.93 and a test-retest reliability of 0.92 [21]. Among the 118 participants of this study, the Cronbach alpha was 0.89.

Modified Index of Parenthood Motivation: Parenthood motivation was measured by the Modified Index of Parenthood Motivation (MIPM) [19]. The 14-item summative 5-point Likert-type scale measured the subjective experience of parent good motivation by utilizing degrees of agreement and disagreement: 1 (*strongly disagree*), 2 (*disagree*), 3 (*neutral*), 4 (*agree*), and 5 (*strongly agree*). The scale scores can range from 14 to 70, with higher scores indicating a more positive motivation for parenthood. The scale developer reported a Cronbach alpha of 0.85 a sample of African American women aged 18 - 45 [19]. Among the 118 participants of this study, the Cronbach alpha was 0.84.

2.4. Procedures

Participants in the parent study were recruited using chain sampling technique, a variant of convenience sam-

Table 1. Participants' demographics & characteristics. *N* = 118.

<i>Variable</i>	<i>n</i>	<i>%</i>
Gender		
Male	20	16.9
Female	97	82.2
Undisclosed	1	0.8
Race		
Black	30	25.4
White	71	60.2
Hispanic	7	5.9
Asian	9	7.6
Other	1	0.8
Marital status		
Married	54	45.8
Single	52	44.1
Divorced	4	3.4
Cohabiting	8	6.8
Housing & Living Arrangement		
Rent with significant other	14	11.9
Rent without significant other	22	18.6
Own with significant other	51	43.2
Own without significant other	31	26.3
Employed		
Yes	103	87.3
No	15	12.7
Pet Type Owned		
Dog	83	70.3
Cat	23	19.5
Other	12	10.2

pling [24]. The investigators sent an email to 65 (approximately 22 participants were identified by each of the three investigators) contacts (seeds) who met the inclusion criteria and invited them to voluntarily participate in the online study. The online survey was a self-reported format and was developed and powered using the online survey software program by Qualtrics.

An invitation email was sent to the seeds which included an introduction to the study, a direct link to the online survey, and a "share this" web link. In order to recruit other potential subjects, the seeds were asked to forward the web link to others who met the inclusion criteria. There was no incentive given to the participants for referring new people. When the potential participants clicked on the direct link to the survey and entered the site, a formal letter of introduction followed by an Informed Consent was provided. Upon agreeing to the informed consent, the participants gained access to the online survey for completion. The completion of the online survey took approximately 20 minutes.

2.5. Data Analysis

Pearson product-moment correlations and one-way analysis of variance (ANOVA) using Statistical Package for the Social Sciences (SPSS), version 16.0 for Windows [25]. Two-tailed tests were used to determine statistical significance ($p \leq 0.05$). A descriptive exploratory design was employed for the purpose of this research.

3. Results

The mean scale score for loneliness was 62.75 ($SD = 9.79$). The mean scale score for pet attitude was 106.94 ($SD = 15.21$). The mean scale score for parental motivation was 50.31 ($SD = 9.43$). The distribution of loneliness, pet attitude, and parenthood motivation scores by pet species can be found in **Figure 1**.

The results supported a statistically significant positive relationship between loneliness and parenthood motivation ($r = 0.33, p = 0.00$); and between pet attitude and parenthood motivation ($r = 0.20, p = 0.03$). An insignificant relationship was found between loneliness and pet attitude ($r = 0.08, p > 0.05$).

ANOVA's were conducted to assess if the average subjective responses for loneliness, pet attitude, and parenthood motivation differed among three groups of pet owners: dog owners, cat owners, and "other" (see **Figure 1**).

First, an ANOVA was conducted to evaluate the relationship between pet owners and loneliness. The independent variable pet owners included three groups of pet owners: dog owners, cat owners, and "other" pet owners. The dependent variable was loneliness. The ANOVA was not significant $F(2, 115) = 0.81, p > 0.05, \eta^2 = 0.01$.

Second, an ANOVA was conducted to evaluate the relationship between pet owners and pet attitude. The independent variable pet owners included three groups of pet owners: dog owners, cat owners, and "other" pet owners. The dependent variable was pet attitude. The ANOVA was significant $F(2, 115) = 4.86, p = 0.01, \eta^2 = 0.08$. The strength of the relationship between pet owners and pet attitude was assessed by η^2 , with pet type accounting for 8% of the variance on the dependent variable.

Post hoc analyses were conducted to evaluate pair-wise differences among the means. Assuming equal variances post hoc comparisons were conducted using Tukey HSD. There was a significant difference in the means

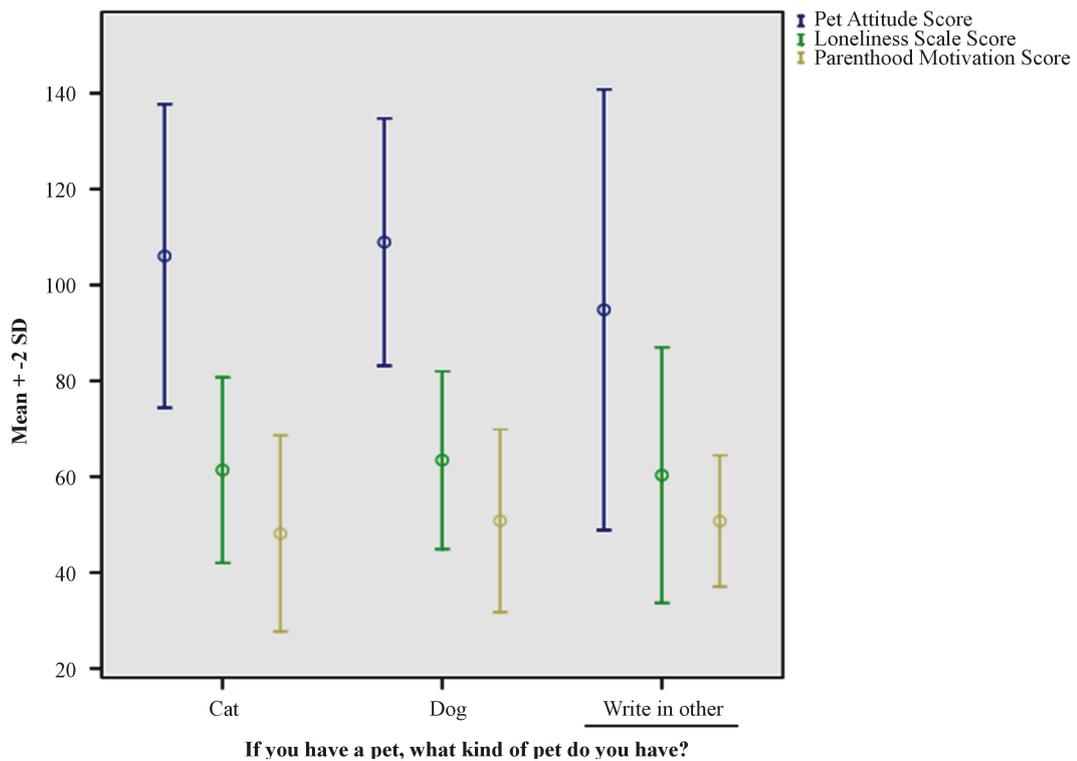


Figure 1. Distribution of loneliness, pet attitude, and parenthood motivation scores by pet species.

between dog owner and “other” on pet attitude ($p = 0.00$) 95% CI [24.91, 3.30]. There was no significant difference in the means between dog owners and cat owners on pet attitude or cat owners and “other” on pet attitude.

Third, an ANOVA was conducted to evaluate the relationship between pet owners and parenthood motivation. The independent variable pet owners included three groups of pet owners: dog owners, cat owners, and “other” owners. The dependent variable was parenthood motivation. The ANOVA was not significant $F(2, 115) = 0.73$, $p > 0.05$, $\eta^2 = 0.01$.

3.1. Marital Status and Parenthood Motivation

The mean scores for parenthood motivation in regards to marital status categories were married ($M = 52.46$, $SD = 7.89$); single ($M = 49.46$, $SD = 9.32$); cohabiting ($M = 46$, $SD = 10.45$); and divorced ($M = 40.75$, $SD = 19.12$). Findings revealed an inverse relationship between marital status and parenthood motivation ($r = -0.23$, $p = 0.01$). An ANOVA was conducted to evaluate the relationship of marital status on parenthood motivation. The ANOVA was significant $F(3, 114) = 3.18$, $p = 0.03$, $\eta^2 = 0.08$. Post hoc analyses were conducted using Tukey HSD to evaluate pairwise differences among the means. The results revealed no significant pairwise differences between marital status and parenthood motivation.

3.2. Race and Pet Attitude

Race was found to be positively related to pet attitude ($r = 0.19$, $p = 0.045$). The mean scores for pet attitude in regards to race were Asian ($M = 111.66$, $SD = 10.30$); White ($M = 109.31$, $SD = 14.11$); Hispanic ($M = 105.43$, $SD = 5.38$); and Black ($M = 100.87$, $SD = 18.63$). An ANOVA was conducted to evaluate the relationship of race on pet attitude. The ANOVA approached statistical significance $F(3, 113) = 2.59$, $p = 0.05$, $\eta^2 = 0.06$. Post hoc analyses were conducted using Tukey HSD to evaluate pairwise difference among the means. The results revealed a significant difference between Blacks and Whites on pet attitude ($p = 0.05$) 95% [CI-16.89, 0.01]; no other races were significantly different on pet attitude.

4. Discussion

The findings of this research suggested an association between pet attitude and parenthood motivation. In this sample, pet attitude varied by pet species as dog owners had a more positive pet attitude compared to cat owners and “other” pet owners contrary to parenthood motivation which did not vary by pet species. Pet relationships, for some, may be a surrogate for other types of relationships such as the parent-child relationship. In this study loneliness was positively related to parenthood motivation, which is consistent with theory and previous research. Loneliness is caused not by being alone but is caused by and is a response to some definite needed relationship [26]. Feelings of loneliness may cause some individuals of childbearing years to seek alternatives to increase social support networks such as desiring children.

Theory posits that loneliness may motivate individuals to improve social networks by using their existing social systems or initiating “surrogate” relationships with pets [27]. Interestingly, people’s caretaking behaviors for pets are similar to those for children. For many people, pets embody the relational provisions of social support [28]. Pets can provide humans with: 1) a feeling of attachment, 2) a sense of safety and security, 3) social interaction with individuals who have common interest and concern for their pets, 4) the opportunity for nurturance, 5) reassurance of worth from the human-pet relationship, and 6) a sense of reliable alliance in that pets can count on their master for assistance with basic needs [6].

The results of this study supported that even though the pet owners in this study have a positive relationship with their personal pets, as evidenced by a positive pet attitude, some of pet owners in this sample identified feelings of loneliness regardless of pet species. Moreover, loneliness was positively related to parenthood motivation in this sample. The findings from this research may suggest that parenthood motivation may be influenced by feelings of loneliness.

In this study, a negative relationship was found between marital status and parenthood motivation. Although no significant differences were found between marital statuses, the mean scores gleaned some interesting findings. The married participants in this study had a higher intensity for parenthood compared to divorced individuals and single individuals had a stronger desire for parenthood compared to cohabitating individuals. Since

married individuals had the highest sentiment for parenthood, there may be variables related to matrimony that play a role in the desire for children. However, research is needed to support this premise.

The findings supported current literature in that there are cultures and ethnic variations on how pets are viewed [29]. Results revealed significant differences between Whites and Blacks on pet attitude. This finding was consistent with research conducted by Brown [30] in that White veterinary students were more attached to their pets compared to Black veterinary students. In this study, Asians participants had the most positive pet attitude, followed by Whites, Hispanics, and lastly Blacks. This finding is consistent with current literature in that pet ownership in individuals of Asian descent is increasing and that pets are becoming an important attachment figure in this culture [31].

A substantive explanation for Blacks having the least positive attitude, compared to other races represented in this study, may stem from folk tales that have been passed down from generation to generation highlighting the fierce and aggressive animals living in African forests [30]. People of African descent traditionally viewed pets as possessions that were acquired to serve their owners [32]. Moreover, dogs were acquired for security and hunting purposes. However, today Blacks are increasingly viewing pets as a form of companionship and for at least one woman, a “surrogate child” [29].

5. Limitations

There are limitations that must be taken under consideration when interpreting the findings. Due to the sampling methodology, the findings cannot be generalized, in part because a convenient, non-probability sampling was employed increasing the risk of selection bias. When interpreting the strength of the relationships the effect sizes are small and must be taken under consideration. In addition, only participants with Internet access had an opportunity to participate in this study.

6. Key Points

1) Loneliness was related to parenthood motivation ($r = 0.33, p = 0.00$), those with increased loneliness reported increased parenthood motivation. 2) Pet attitude was related to parenthood motivation ($r = 0.20, p = 0.03$), those with increased positive attitude toward pets reported increased parenthood motivation. 3) Loneliness does not vary by pet species. 4) Pet attitude varied by pet species, dog owners had the most positive attitude toward pets. 5) Parenthood motivation did not vary by pet species.

7. Implications for Practice

The findings from this study have implications for health practitioners working with individual of childbearing years. In this study of pet owners, there was a pet presence in the home and the majority had a positive attitude for their pet. Instinctively, human response patterns towards nurturing and positive pet attitude may increase the premise of pets being seen as surrogates for children. Anecdotal reports often suggest that in preparation for children, one should get a pet. This premise is often echoed throughout family literature as many people view their pets as part of the family and for many having a pet is like having a child [33]. Care giving and nurturing behavior towards pets is a close form of childrearing and according to Walsh [5] as many couples and singles “often chose to raise pets before or instead of parenthood, gaining abilities to provide nurturance, affection, limit-setting, and concern for another living being” (p. 482). Therefore, it is suggested that health practitioners discuss pet ownership as a precursor to parenting for some individuals. Pets can be a cost effective preparation, particularly for the target populace who are likely to have vitality required for pet management. However, it must be noted that pet ownership is a personal decision and may not be a conventional option for some. Health practitioners working with individuals of childbearing years should inquire about pet relationships and the instinctual bond they represent. The results of this study suggested a sense of loneliness and an increased motivation for parenthood. Therefore, it is suggested that health practitioners also screen individuals for feelings of loneliness.

8. Conclusion

In conclusion, pets have been shown as a valuable resource in the influencing feelings of loneliness and parenthood motivation. The findings from this research suggested an association between cohabitating with a pet and providing the pet with the provisions of social support [26] that may initiate an instinct to nurture others. In the

healthcare practice settings pets should be considered in assessments and interventions for individuals of child bearing years. Future research is needed to further examine the interrelationships among loneliness, pet attitude, and parenthood motivation in pet owners across the lifespan.

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