

The rise of the furbaby: Investigating the psychological reasons behind owner's attachment to their dogs

Amy Fortune

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Supervisor: Dr Lucie Corcoran

Programme Leader: Dr Garry Prentice

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Department of Psychology

Dublin Business School

Table of contents

Acknowledgements	2
Abstract	3
1. INTRODUCTION	4
1.1. The origins of attachment theory	5
1.2. Attachment figures and the internal working model	5
1.3. Attachment styles and the importance of the secure base	6
1.4. Dogs as surrogate children and the rise of the furbaby	8
1.5. The use of dogs to cope with negative psychological effects	10
1.6. Aims, rationale and main hypotheses of the study	11
2. METHODS	13
2.1. Participants	13
2.2. Design	13
2.3. Materials	14
2.4. Procedure	16
3. RESULTS	18
3.1. Hypothesis 1	18
3.2. Hypothesis 2 a) and b)	20
3.3. Hypothesis 3	21
3.4. Hypothesis 4	23
3.5. Qualitative Report	24
4. DISCUSSION	29
4.1. Hypothesis 1	29
4.2. Hypothesis 2 a) and b)	30
4.3. Hypothesis 3 and 4	31
4.4. Strengths and limitations of the study	32
4.5. Future research and conclusion	32
5. REFERENCES	34
6. APPENDICES	37

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ABSTRACT

The aim of this study was to explore the psychological reasons behind owner's attachment to their dogs by investigating whether dogs are being used to fulfil an absent maternal/ paternal need, whether an owner's personal attachment style affects how attached they become to their dog and also whether owners are developing attachment to their dog as a way to cope with certain types of psychological stress. This was a mixed method correlational study employing snowball, convenience and self-selecting sampling in order to recruit participants who were required to fill out a five part online questionnaire. 172 participants took part in this study. Inferential statistical analysis reported no significant results for all hypotheses although descriptive statistics showed small non-significant trends that lend support to each hypothesis. Qualitative analysis was also performed to get a deeper understanding into attitudes held by people with and without children in relation to pet attachment.

Keywords: Pet attachment, Attachment theory

1. INTRODUCTION

The term 'furbaby' will be defined, for the purposes of this study, as a term of endearment for a dog which has been elevated by their owner to hold equal status with other family members, usually as a child. Although the term 'furbaby' is not used directly in literature discussing pet attachment and, perhaps, not frequently used amongst the local population, many pet dogs enjoy this elevated status (whether their owners recognise them as a furbaby or not). This study aims to explore the psychological reasons behind the ensuing attachment bond that owners develop for their dog as a result (Greenbaum, 2004) and, by doing so, validating that this attachment is caused by something deeper in the human psyche. This study will specifically concentrate on whether dogs are being used by their owner to fulfil an absent maternal/paternal need, to address whether an owner's personal attachment style has a bearing on how attached they become to their dog and also to explore whether owners are developing attachment to their dogs as a way to cope with certain types of psychological stress.

Up until recently Ireland would have been considered to have a rural attitude to animals, meaning that the material value of the animal took precedent over any other value the animal had to offer, with affection for animals being a rare occurrence (Kellert, 1984). They were merely there to serve a material purpose rather than elicit any emotional bonds with family household members. However, it is clear that in Irish culture today, with the availability of doggy day care facilities, dog hotels, dog grooming parlours, pet shops offering bespoke clothing and accessories for dogs and the opening of the first purpose built dog friendly cafe in South Dublin that the position of our canine companions has changed. Dogs are now beginning to be accepted as an integral part of the family unit and in doing so, people are now forming attachment bonds to them that are just as valid and enduring as those formed with other people (Margolies, 1999; Turner, 2011) which is why this study wishes to investigate the main reasons behind this new found attachment. Recent research (Sable, 2013; Rockett & Carr, 2014) into the area of pet attachment has employed attachment theory as a means to explore this profound bond and therefore it is

necessary to explain some of the basic concepts of attachment theory starting with its origins.

1.1. The origins of attachment theory

Bowlby defined attachment behaviour as “any form of behaviour that results in a person attaining or maintaining proximity to some other clearly defined individual who is conceived as better able to cope with the world” (Bowlby, 2003, p.26). He was encouraged to explore the area of attachment behaviour after becoming interested in the work of ethologists, who study animals in the wild. One such ethologist was Lorenz who, recognising this attachment behaviour in animals, sought to explore and understand it and through his experiments examining the imprinting behaviour of geese, and various other birds, was responsible for the discovery of a ‘critical period’ in which attachment behaviour is most salient (Lorenz, 1935, as cited by Crain 2005). Furthermore, Harlow and Zimmerman’s (1958) experiments with Rhesus monkeys demonstrated that attachment behaviour is not just required to satisfy the biological needs of infants, such as hunger, but also is needed to fulfil emotional needs too, such as the need to feel comforted and safe. Bowlby, however, was one of the first to apply the ethological approach to human behaviour and as a result attachment theory was produced. Attachment theory is an attempt to “explain both attachment behaviour... and also the enduring attachments that children and other individuals make to particular others,” (Bowlby, 2003, p.29) and this study will use its concepts to explore whether the attachments that adults have developed with other humans influence the intensity of the attachment they feel to their dog. As a result it is necessary to discuss how attachment theory explains the development of attachment bonds and the internal cognitive processes involved.

1.2. Attachment figures and the internal working model

Bowlby (1969) observed that different attachment behaviours, such as crying, smiling, hand holding and selective babbling at familiar figures, are used by young children to encourage the proximity of their caregiver and ensure that their caregivers

develop an attachment to them thereby guaranteeing their biological and emotional needs are met. Bowlby believed there are four phases of development with the most important of these phases spanning from 6 months to 3 years as this is when children develop a general idea of how responsive to their needs their caretaker is and how accessible they tend to be (Crain, 2005). During this time the infant also develops an attachment to these figures and it is the quality of this attachment bond that will eventually have an impact on how children will engage with, and attach to, other people in the future (Crain, 2005). How children view this attachment is explained by Bowlby's (1969) idea of the 'internal working model', where young children, through repeated exposure to their attachment figures gradually develop a mental representation of the "self, other people and the relationship between the self and others" (Howe, 2011, p.33). That is, they learn, through associating and examining different negative and positive interactions between themselves and their attachment figures "... expectations and beliefs about (1) one's own and other people's behaviour; (2) the lovability, worthiness and acceptability of the self; and (3) the emotional availability and interest of others, and their ability to provide protection" (Howe, 2011, p.35). These internal working models are important as they guide the way the child thinks, feels and behaves with regard to relationships in general and these working models can continue right into adulthood affecting their adult relationships also. For example, a study by McCarthy and Maughan (2010) found that adults who reported that they experienced negative parenting in childhood were found to have insecure working models of attachment and were more likely to report problems in adult love relationships. The concepts of attachment figures and internal working models are important as they form the basis of another important feature of attachment theory, the development of attachment styles.

1.3. Attachment styles and the importance of the secure base

Whilst investigating the nature of attachment behaviour, Ainsworth and Bell (1970) developed the 'Strange Situation', which is still considered to be the most effective way of measuring a child's attachment style. The strange situation consists of a caregiver and

young child, approximately 1 – 2 years old, being exposed to a series of separations and reunions that gradually escalate in duration affecting the amount of stress the child experiences at the departure of their caregiver whilst being left with a stranger. The child's reaction at the return of their caregiver is recorded each time. As a result of this experiment, three main attachment styles were defined; *secure*, *insecure-avoidant* and *insecure-ambivalent*. Securely attached children have experienced reliable and responsive parenting and therefore have developed an internal working model of the self as being loved and lovable and see other people as reliable and trustworthy allowing them the confidence to develop trusting relationships both in childhood and adulthood (Howe, 2011). Children who are insecure avoidant have experienced parenting that has been insensitive and rejecting and, as a result, tend to downplay their emotions and avoid explicit displays of attachment behaviour and affection. Their working model of the self has been developed to make them feel that they can only be loved once they do not cause a fuss and look for attention (Howe, 2011). Children who are insecure ambivalent have experienced parenting that has been inconsistent and consequently the child does not know what to expect leading them to overplay their needs and distress and become easily stressed and aroused (Howe, 2011). Ainsworth also was the first to introduce the concept of the 'secure base' meaning that parents should always be a source of security and comfort should their child become distressed and require reassurance. This ultimately leads the child to develop positive attachment behaviour later into adulthood due to the development of an internal working model that sees oneself and others as trustworthy and reliable (McCarthy & Maughan, 2010).

Bowlby always hoped that attachment theory would offer a "lifecourse theory of human behaviour and relationships" (Howe, 2011, p.55), and stressed that as adults, it is necessary for humans in times of great stress, threat and upheaval, to be able to turn to their attachment figures as a source of comfort and support. Bowlby (2003) felt that this should not be seen as weakness on the part of the adult but as something that is natural and necessary for human beings to function properly in society. Today in Ireland house

prices are increasing in urban areas forcing some people to move further away from their close relatives, or secure base, which they rely on for support in times of need. According to the results of the last Irish census (CSO, 2011) there were more single people (630,157) than married people (595,031) living in Leinster alone between the ages of 20 and 55. It also revealed that there were more single person households (392,000) than married and co habiting households combined (313,257). Consequently many adults, now finding they live alone, may find they are turning to a different type of secure base for company and comfort and in many cases dogs have become this safe haven which is why it is important to investigate the reasons behind the development of this attachment and establish its importance.

1.4. Dogs as surrogate children and the rise of the furbaby

Attachment behaviour not only encourages care seeking behaviour from the child but also encourages care giving behaviour from the primary caregiver enabling the care giver to get to know their child and form an attachment bond with them. However in the absence of having a child, either voluntarily or due to circumstances beyond their control, it is often the case that adults turn elsewhere to fulfil this maternal/paternal need missing from their lives. In some circumstances this leads to people forming strong attachment bonds to their dogs in order to compensate for the absence of a child in their lives (Blackstone, 2014; Margolies, 1999). People can also use their dog to replace an attachment bond that has been lost with their adult children, such as when they leave the family home, maybe to go to college or to start a family of their own (Turner, 2011).

Recently Siniscalchi, Stipo and Quaranta (2013) adapted Ainsworth's strange situation in order to identify the attachment styles of dogs. It was found that there was a direct correlation between an owner's attachment style and the attachment style of their dog with dogs of insecurely attached owners engaging in more exploratory behaviour in the absence of their owner as they did not regard their owner as a secure base from which to explore their environment. Similar research conducted by Konok, Kosztolányi, Rainer, Mutschler, Halsband and Miklósi (2015) also revealed that there is a correlation

between dog's level of separation anxiety and their owner's attachment style, with avoidant owners eliciting a greater amount of separation anxiety from their dog as a result of not being completely responsive to their needs. Additionally it was demonstrated that oxytocin levels (a hormone released to encourage bonding in social animals, including humans) increase in dog owners when they are able to look in to their dogs eyes whilst interacting with them and they also report stronger feelings of attachment to them when allowed to do so (Nagasawa, Kikusui, Onaka & Ohta, 2009). These studies indicate that dogs have evolved to become more socially responsive to their owner's attachment styles, much the same way children have with their parents or primary caregivers, engaging in their own attachment behaviours in order to elicit care giving behaviour from humans and perhaps this is a reason why some people find it natural to develop a maternal/paternal attachment to their dog or furbaby as dogs elicit the same cues and responses from their owners as a young infant would from a parent.

A qualitative study by Greenebaum (2004) examined a group of dog owners who considered themselves as parents of their dog rather than owners and looked upon their pets as a furbaby. It showed that the relationship they have with their dog is similar to one that they would experience with a child, even down to the gender roles each person is assigned in the care of the dog with the males typically being the one to initiate play and being in control of achieving obedience and females assuming the caring motherly role, responsible for duties such as feeding, cleaning and providing comfort to the dog. This and the aforementioned research identifies that owners, especially women, can use their dogs as a means to address the absence of the maternal bond in their lives and, as such, will be investigated in this study on a dog owning sample in Ireland as most of the literature above has taken place in the United States. So far the discussion has been about how people develop attachment bonds to their dogs in order to engage in care giving behaviours, however this study also wishes to investigate how attachment develops when this is reversed and people engage in care seeking behaviour in order to

elicit care giving behaviour from their pets as a means to cope with certain types of psychological stress.

1.5. The use of dogs to cope with negative psychological effects

There is much research highlighting the positive psychological effects that an attachment bond to a dog can bring to a person's life such as a decrease in blood pressure, depression, anxiety and loneliness (Sable, 2013) but, conversely, there are also some negative aspects to pet attachment. For example in some cases people (especially elderly people) are so attached to their pets that they are willing to forego medical treatment or respite care because they will be unable to have their pet with them and do not want to see them being surrendered to a shelter or adopted by a new owner (Chur-Hansen, Winefield & Beckwith, 2009). Problems specifically arise when, as already mentioned, people develop an insecure attachment bond with their pets and engage in care seeking behaviours to encourage care giving behaviour from their pets to cope with underlying psychological stress which may otherwise be treated using therapy or social support. One study (Peacock, Chur-Hansen & Winefield, 2012) saw that attachment to a companion animal was a stronger predictor of psychological stress than gender and marital status but the support from a companion animal was not equivalent to support gained from human interaction and this is echoed in the before mentioned study where elderly people sighted their main reason for getting a pet was for companionship and to combat loneliness, and by association, depression and anxiety (Chur-Hansen et. al, 2009). Young adults especially tend to report having higher feelings of attachment to their dogs and this seems to again coincide with feelings of social exclusion and isolation from close family and relatives on the part of the owner (Netting, Wilson, Goodie, Stephens, Byers & Olsen, 2013). Some studies even suggest that when a client presents themselves for therapy the attachment style they have with their dog possibly should be considered, along with other factors, as an important indicator of underlying attachment issues relating to important attachment figures they have had in their life especially if a person is suffering a severe grief reaction to their pet's death (Margolies, 1999). The

notion of considering a person's relationship with their dog should they present themselves for therapy is not surprising considering the groups that have been identified as most likely to be highly attached to their pets are those who are socially isolated, childless or suffering from a psychological or chronic illness (Chur-Hansen, 2010). This links in with the findings of Kurdek (2009) which suggests that, apart from romantic partners, people turn to their dogs for security more frequently in times of high stress than any other attachment figures in their lives, such as parents, siblings and friends, meaning that humans can form attachment bonds with their dogs that are comparable to those outlined in the literature explaining attachment theory which is why this study wishes to investigate this further in relation to the newly emerging dog friendly population in Ireland.

1.6. Aims, rationale and main hypotheses of the study

As already mentioned, this study aims to explore the psychological reasons behind why people become attached to their dogs in Ireland today in order to demonstrate that the attachments that develop have their basis in valid psychological processes. Attachment theory has established that the type of attachment style developed in early childhood can have implications on future attachments and relationships formed in adulthood (Howe, 2011; Bowlby, 1969). Whilst some studies (Siniscalchi et al., 2013; Konok et al., 2015) explored how an owner's attachment style can affect a dog's behaviour this study aimed to take a different perspective and investigate whether a person's attachment style affects how attached they become to their dog.

- **It is hypothesised that there will be a relationship between a dog owner's personal attachment style and the level of attachment to their dog.**

Based on previously discussed research (Turner, 2011; Margolies, 1999; Blackstone, 2014) it has been established that some people become attached to their dog in order to fulfil an absent maternal/ paternal bond. To study this with relation to the Irish population the following hypotheses are proposed:

- **Dog owners without children will be more attached to their dog than owners with children.**

- **Single people without children will show the highest attachment to their dog.**

Previously discussed research also suggests that dogs can be used to mask certain psychological distress such as loneliness and depression (Peacock et al., 2012; Chur-Hansen, 2010). With the rising amount of single households in Ireland (according to the most recent census) and the fact that young adults tend to report higher attachment to their pet as a result of feelings of social isolation (Netting et al., 2013) it was prudent to explore whether this is true in Irish culture.

- **There will be a relationship between dog owners' satisfaction with life and their level of attachment to their dog**
- **There will be a relationship between dog owners' general mental health and their level of attachment to their dog**

In order to achieve a deeper understanding of the attitudes and opinions held by owners with and without children in relation to their pet dog thematic analysis will also be performed using the data from five qualitative questions that participants were required to answer such as, "What are the positive aspects of owning a dog?" and "What are the negative aspects of owning a dog?" This analysis aims to complement the main quantitative hypotheses by providing a 'real life' perspective on how people feel and think about their pet dogs in Ireland today.

2. METHODS

2.1. Participation

Convenience, snowball and self-selecting sampling were used and a total of 172 participants took part in the study by filling out an online questionnaire. This questionnaire was posted to the author's personal facebook page and the facebook pages of Dogs Trust Ireland, D.S.P.C.A., D.S.P.C.A. King of Paws training, G.R.A.I (Greyhound Rescue Association of Ireland), Cork D.A.W.G. (Dog Action Welfare Group) and pages belonging to two doggy day care centres which cannot be named in order to protect the anonymity of any participants who may use their services. All participants needed to be over 18 years of age and to own a dog to participate. 135 participants reported not having children and 37 participants had children. Participants included 156 females and 16 males. Participants were single (n=46), married (n=69), co habiting (n=45) and divorced (n=5). Participants reported belonging to the following age groups: 18-25 (n=14), 26-35 (n=90), 36-45 (n=41), 46-55 (n=20), 56-65 (n=6), 66-75 (n=1).

2.2. Design

This was a mixed methods, correlational study employing convenience sampling, snowball sampling and self-selecting sampling through the use of an anonymous, confidential and voluntary online questionnaire to recruit participants for the study. The questionnaire consisted of five sections that the participant had to complete in order to capture general demographics, level of attachment to their dog, personal attachment style, satisfaction with life and general mental health. Dogs were chosen as the pet of choice for this study so that pet attachment scores were measured using the same variable for consistency of results. The criterion variable (CV) used for all hypotheses was the level of attachment that people had to their dogs (measured using participant's scores on the Pet Attachment Scale (Holcomb, Williams & Richards, 1985). Apart from using general demographics such as marital status, and whether a participant had a child or not, there were three predictor variables (PVs) used; scores on the Measures of

Attachment Qualities Questionnaire (Carver, 2003), the Satisfaction with Life scale (Pavot & Diener, 2013) and the General Health Questionnaire (Goldberg, 1992).

2.3. Materials

Google forms was used to create the questionnaire, post it online and collect the subsequent data.

Demographic details: Demographic data was gathered on each participant to ascertain their gender, what age group they belonged to, whether they had children or not, how many children they had and what age group they belong to and marital status. Questions were also asked to ascertain whether participants had a dog and if they were the primary carer of the dog. Participants were also asked for their answers to five qualitative questions such as “For what reason did you buy/ rescue/ adopt your dog?” (Appendix 2).

Pet Attachment: In order to measure participant’s attachment to their dog the CENSHARE Pet Attachment Survey (PAS) was used. The PAS is a 27-item scale of personalised statements, each rated on a 4-point scale, ranging from 1 (almost always) to 4 (almost never). For the purposes of this study question 19, “When your pet misbehaves, you hit him/her” was omitted as it was regarded as inappropriate and therefore only 26 questions were included in the study (Appendix 3). The questions of the PAS measures aspects of attachment through physical interaction (“You like to touch and stroke your pet”) and aspects of attachment surrounding emotional importance (“Within your family, your pet likes you best”). If a participant had more than one dog they were asked to answer the questionnaire with relation to the dog that they felt closest to. Total scores were obtained by first reverse-scoring items (2, 13, 19 and 26) and then summing item responses, such that, the lower the score the greater the level of attachment (the minimum score being 26 and the highest being 108).

Owner’s Attachment Style: In order to measure participant’s individual attachment style the Measures of Attachment Qualities Questionnaire (MAQ) was used. The MAQ is a 14-item scale of personalised statements, each rated on a 4-point scale, ranging from 1 (I disagree with the statement a lot) to 4 (I agree with the statement a lot). For the purposes

of this study the word 'others' was replaced with 'other people' (items 3,4,6,8,9 and 11) to ensure that participants were certain they were answering regarding their view on people and not on dogs (Appendix 4). The MAQ has four scales that measure: (a) Secure Attachment (sum of items 1, 7 and 14) with questions such as "It feels relaxing and good to be close to someone", (b) Avoidant attachment (sum of items 4, 6, 8, 11 and 13) with questions such as "I find it easy to be close to other people", (c) Ambivalence-worry (sum of items 2,5 and 9) with questions such as "I often worry that my partner doesn't really love me," and (d) Ambivalence-merger (sum of items 3,10 and 12) with questions such as "My desire to merge sometimes scares people away". Scale scores were obtained by first reverse-scoring items 4, 8 and 9 and then summing the appropriate item responses already indicated above.

Satisfaction with life: The Satisfaction with Life scale (SWL) was used to measure participant's satisfaction with life. The SWL is a 5-item scale of personalised statements, each rated on a 7-point scale, ranging from 1 (Strongly disagree) to 7 (Strongly agree) and measures the participant's current satisfaction with life through their answers to questions such as, "In most ways my life is close to ideal" (Appendix 5). The total score was obtained by summing the five item responses where the higher the score the higher the participant's satisfaction with life (the minimum score being 5 and the maximum score being 35).

General Mental Health: In order to measure the general mental health of participants the General Health Questionnaire (GHQ) was used. The GHQ is a 12-item scale of personalised statements which asks if the participant has experienced a particular symptom or type of behaviour within the last three weeks of completing the questionnaire such as, "Have you recently been able to concentrate on whatever you're doing?" or "Have you recently loss much sleep over worry?" (Appendix 6). Items are rated on a 4-point scale ranging from 0 (more so than usual / not at all) to 3 (much less than usual / much more than usual). Higher scores indicate greater probability of clinical disorder (the minimum score being 0 and the maximum score being 36).

2.4. Procedure

Participants were requested to take part in a voluntary, anonymous and confidential online questionnaire which was posted online using Google forms. The first page of the questionnaire contained an information page (Appendix 1) which informed participants that they needed to be over 18 and own a dog to take part. It also reminded participants of the voluntary nature of the questionnaire and of their right to withdraw at any stage in the completion of the questionnaire. In order to avoid biasing answers, participants were not given the full rationale behind the study before answering but were advised that a full debrief would be given at the end of the study before submitting their answers. Contact information was given should they have any questions about the questionnaire. On the second page participants were required to answer questions regarding general demographics (Appendix 2) such as age, gender, marital status, whether they had children or not, and if they did have children what age group they belonged to. They were also asked to confirm that they owned a dog and state whether they were the primary carer of the dog. Finally they were required to answer five qualitative questions. On the third and fourth page (given the length of this particular scale) participants were given the PAS to complete (Appendix 3). They were advised that should they have more than one dog they should answer the questionnaire based on the dog they felt closest to. On the fifth page of the questionnaire participants were required to complete the MAQ questionnaire based on how much they agreed or disagreed with the statements presented to them (Appendix 4). On the sixth page participants were required to complete the SWL scale (Appendix 5). Finally on the seventh page participants were required to complete the GHQ and were asked specifically to answer their questions based on how they felt over the last three weeks (Appendix 6). The final page of the survey (Appendix 7) thanked the participants for their time and gave full disclosure of the rationale behind the study. Participants were again reminded of the voluntary nature of the study and their right to withdraw at this stage. They were also reminded that once their answers were submitted that they could not be retrieved owing to the anonymous nature of the study.

Finally participants had to answer 'yes' or 'no' to the question, "*I understand that by submitting my answers I am giving my informed consent to have my answers used in the aforementioned study.*" All participants answered yes which meant that all responses received could be used for the study. Participants were also given contact details to Dogs Trust Ireland and the Samaritans in the event they were affected by any issues that arose during their completion of the questionnaire.

3. RESULTS

SPSS, Version 22, was used to run statistical analysis. Parametric testing was used to perform all inferential statistics unless basic assumptions were broken (as in the case of the MAQ scales) and in these cases non-parametric testing was used. All variables were assessed for internal consistency using Cronbach's alpha and strong results were obtained which were also found to be in line with values reported in the original studies from which each scale was taken (see Table 1).

Table 1: Mean scores, Standard deviations and Cronbach's alpha (from current study and original study) for each scale used

Variable	Mean	SD	Alpha (current)	Alpha (original)
PAS	54	9.01	.83	not available
Secure	9.73	1.97	.68	.72
Avoidant	9.94	5.55	.83	.76
Amb-Worry	5.20	2.17	.68	.69
Amb-Merger	4.74	1.90	.74	.73
SWL	24.20	7.53	.84	.84
GHQ	11.58	6.29	.91	.83

3.1. Hypothesis 1

It is hypothesised that there will be a relationship between a dog owner's personal attachment style and the level of attachment to their dog.

Using participant's scores on the PAS (CV) and scores on each of the four scales of the MAQ (PVs), a Kendall's tau b correlation was run and found that there was no significant relationship between scores on secure adult attachment and scores on the PAS (tau b (168) = -.01, $p=.844$). There was also found to be no significant relationship between

scores on the PAS and scores on avoidant adult attachment ($\tau b(168) = -.02, p=.755$), ambivalent-worry attachment ($\tau b(168) = -.05, p=.426$) and ambivalent-merger attachment ($\tau b(168) = -.08, p=.160$).

To further investigate this hypothesis the data was divided into three groups according to participant's score on the PAS; 'high attachment to dog' (score in the range of 26 - 50), 'normal attachment to dog' (a score in the range of 51 - 60) and 'low attachment to dog' (a score in the range of 61 - 85) to create a new variable 'PAS groups'. These ranges were assigned based on the range of results in the data (39 – 82) and the fact that the mean score of the group was 54% (indicating a 'normal' attachment in this particular data set). The rationale behind this divide was to explore whether there was a significant difference on scores on all four scales of the MAQ between these three groups. A one way between groups unrelated ANOVA was run and found that there were no significant differences in scores on all four scales of the MAQ between the three groups. Therefore the null was accepted overall.

However, it should be noted that descriptive statistics (Table 2) indicated that those in the 'low attachment to dog group' had the highest mean score in secure attachment and had the lowest means in the insecure attachment groups implying that attachment style has a small influence on dog attachment.

Table 2: Mean scores on four attachment styles according to which PAS group participants belonged to

PAS Group	Secure	Avoidant	Amb.-Worry	Amb.-Merger
High dog attachment	9.85	10.15	5.32	4.94
Normal dog attachment	9.48	10.21	5.27	4.83
Low dog attachment	10.23	9.15	4.85	4.30

3.2. Hypothesis 2

a) Dog owners without children will be more attached to their dog than owners with children

An independent samples t-test was run using scores on the PAS (CV) and participants with and without children as the PV. It was found that there was no significant difference between levels of dog attachment between participants with children ($M=56.83$, $SD=10.60$) and those without children ($M=53.26$, $SD=8.42$), ($t(166) = 1.84$, $p = .071$, $CI(95\%) - .323 \rightarrow 7.469$). The null hypothesis was accepted.

However, it is interesting to note that the means scores of owners without children were lower than those of owners with children and the overall PAS average (shown on Table 1) indicating that they were more attached to their dogs.

b) Single people without children will show the highest attachment to their dog.

A one way between groups unrelated ANOVA was run using marital status (single, married and co-habiting) as the PVs and scores on the PAS as the CV. This ANOVA was run by dividing the data in to participants with children ($F(2, 31) = .166$, $p = .848$) and participants without children ($F(2, 120) = 1.437$, $p = .242$) and there were no significant results and therefore post hoc analysis was not required and the null was accepted.

Descriptive statistics (Figure 1) show that those co habiting in both the 'child' and 'no child groups' tended to show the lowest mean average scores on PAS (indicating higher attachment to their dog) with married participants showing the highest means. Also all marital groups without children show higher attachment to their dogs when compared to their counterparts with children implying those without children are more attached to their dogs generally.

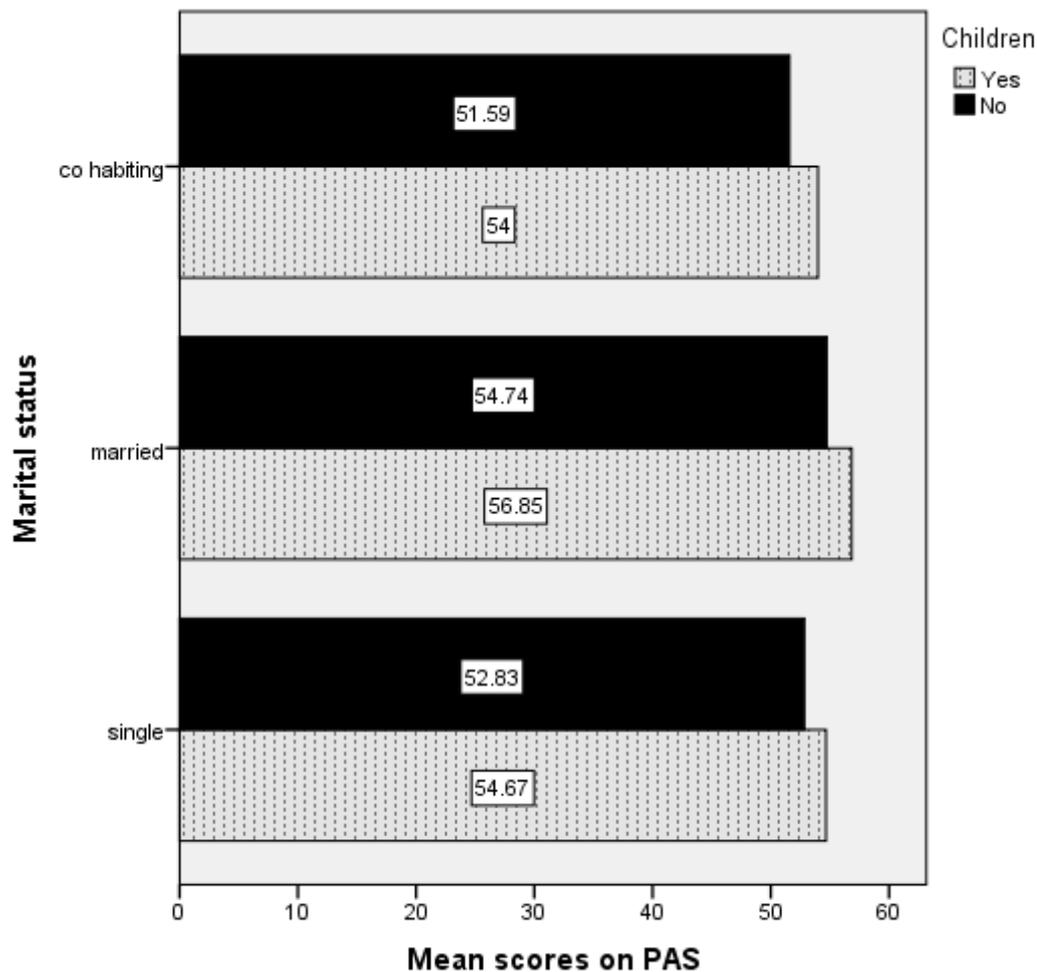


Figure 1: Mean scores on PAS based on marital status and whether participants had children or not

3.3. Hypothesis 3

There will be a relationship between dog owners' satisfaction with life and their level of attachment to their dog.

Using scores on the PAS (CV) and scores on the SWL (PV), a Pearson correlation coefficient was run. It was found that there was no significant relationship between satisfaction with life scores ($M = 24.17$, $SD = 7.55$) and scores on the PAS ($M = 54$, $SD = 9.01$), ($r(166) = -.015$, $p = .844$) and therefore the null hypothesis was accepted.

To further investigate this hypothesis data was divided again into 'PAS groups' (as described in hypothesis 1) to see if there were any significant differences in scores on the SWL between the three groups. A one way between groups unrelated ANOVA was run but reported no significant results. However, descriptive statistics show that those in the 'high attachment to dog' ($M = 23.98$, $SD = 7.82$) group have slightly lower mean scores on the SWL than those in the normal ($M = 24.30$, $SD = 7.16$) and low attachment ($M = 24.25$, $SD = 7.86$) groups.

A final investigation involved splitting the data into three groups depending on participants performance on the SWL: dissatisfied (scores in the range of 5 and 14), normal (scores in the range of 15 and 25) and satisfied (scores in the range of 26 and 35). A one way unrelated between groups ANOVA was run using scores on the PAS as the DV and no significant results were found between the three groups. On the other hand, descriptive statistics (Figure 2) show that those in the dissatisfied group had the lowest mean scores on the PAS ($M = 53.29$, $SD = 10.45$) compared to those in the normal ($M = 54.38$, $SD = 8.53$) and satisfied ($M = 53.93$, $SD = 8.99$) groups.

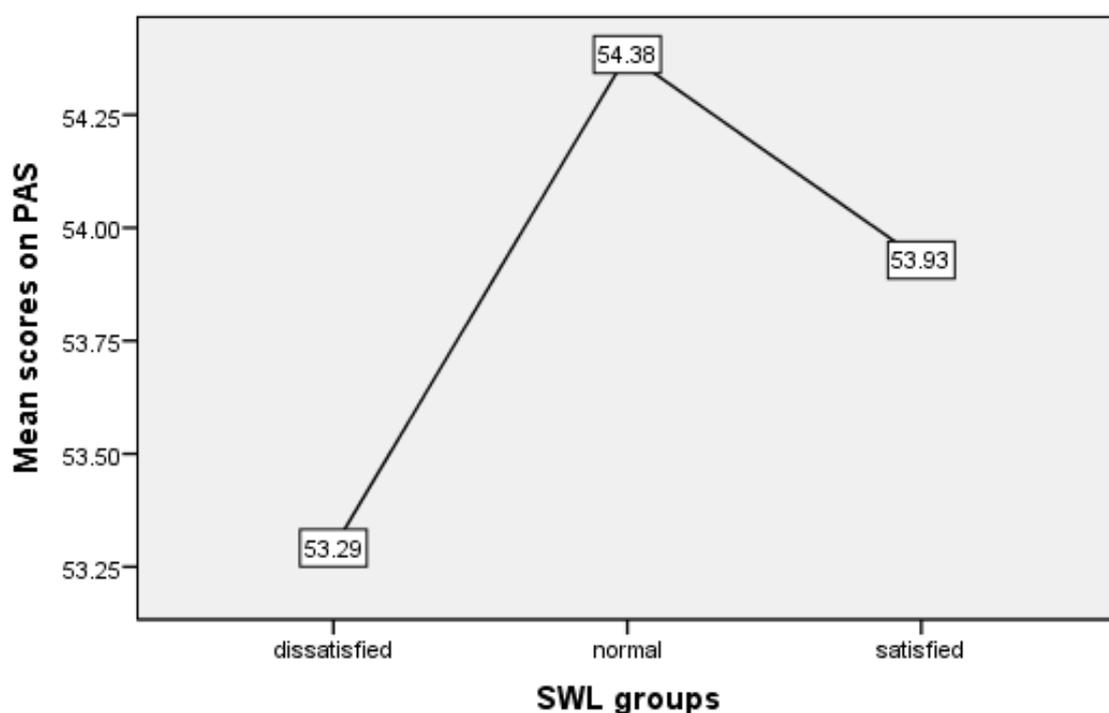


Figure 2: Mean scores on PAS according to SWL group participants belonged to

3.4. Hypothesis 4

There will be a relationship between dog owners' general mental health and their level of attachment to their dog.

Using scores on the PAS (CV) and scores on the GHQ (PV), a Pearson correlation coefficient was run and found there was no significant relationship between scores on the GHQ (M = 11.58, SD = 6.22) and scores on the PAS (M = 54, SD = 9.01), ($r(166) = -.009$, $p = .911$).

To investigate this further data was divided again into 'PAS groups' and a one way unrelated between groups ANOVA was run which reported no significant differences between the groups. Descriptive statistics (Figure 3) show that those in the high attachment group have the highest mean scores on the GHQ (M = 12.35, SD = 6.71) in comparison to those in the normal (M = 11.14, SD = 5.54) and low attachment (M = 11.03, SD = 6.22) groups indicating these owners were experiencing slightly more psychological distress than their counterparts and possibly were more attached to their dogs as a result.

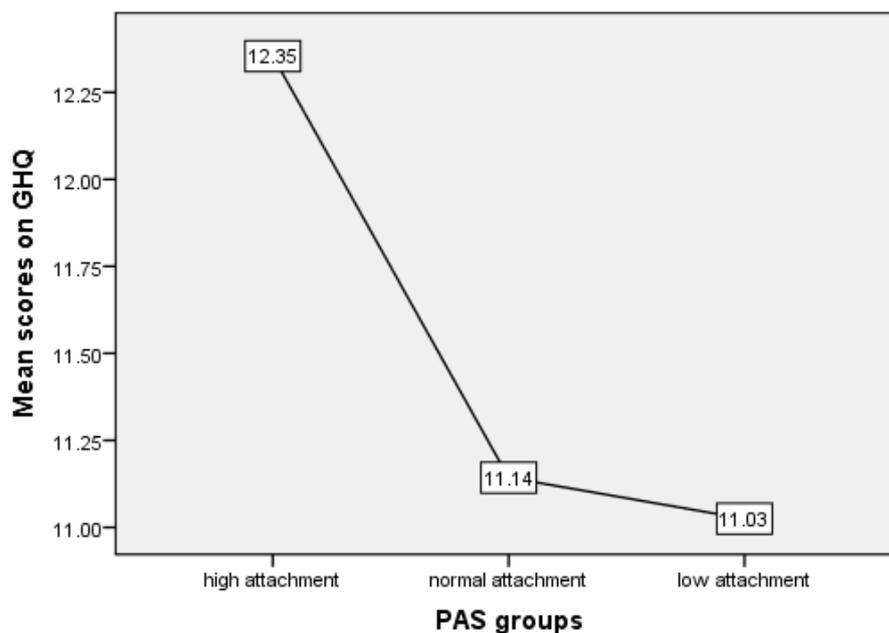


Figure 2: Mean scores on the GHQ with relation to PAS groups participants belonged to

3.5. Qualitative results write up

Thematic analysis was carried out, using the Braun and Clarke (2006) method, on five qualitative questions participants were required to answer. This method involved becoming familiar with the data and then coding the data into initial codes or themes and then gradually identifying main or overarching themes that emerged. There were 37 participants with children (HC= 'have children') and 135 participants without children (NC= 'no children'). Each question will be analysed individually but due to the restrictions placed on word count it will only be possible to discuss the most popular themes emerging for each question. A table is provided (Appendix 8) with a list of all main themes for each question should the reader wish to refer to it.

Question 1: For what reason did you buy/ rescue/ adopt your dog?

This question was asked to establish the purpose that the new dog would serve in the lives of their new owners and investigate whether people with children had different uses for their pet dog than those people without children. For both groups 'love of dogs' was sighted as a main theme (HC=8, NC=24) which may be obvious given the nature of the study. However, another primary theme to emerge for both groups was the fact that participants got a dog because they either 'grew up with a dog' or 'always had a dog in their lives' (HC=4, NC=36) as shown by the following quotes:

Participant 1 (NC): "I always had a dog growing up. It wouldn't feel natural to me to have a home without a pet".

Participant 89 (HC): "Because I love animals and have always had a dog as part of my family"

Another theme to emerge in both groups was that participants either wanted to rescue a dog or were required to rescue a dog due to unforeseen circumstances (HC=5, NC=36):

Participant 5 (HC): "We took on the dogs for a friend who was emigrating for work. He wanted to make sure they would be cared for in a good home."

Participant 19 (NC): "A friend who owned my dog was emigrating so I took him"

A theme that specifically occurred in the HC group was that they got a dog because the family wanted a dog:

Participant 105: “For my child as a pet”

On the other hand, a theme that specifically occurred in the NC group was that participants wanted a dog for ‘something to love’ and ‘to provide structure and purpose to their lives’:

Participant 12: “I needed something to love who would love me back”.

Participant 41: “Source of affection, fulfils need of taking care of a being”.

Question 2: What are the positive aspects to owning a dog?

This question was asked to assess whether people with children saw different benefits from dog ownership compared to people without children. Four themes emerged that were common to both groups; the fact that a dog provides company was overwhelmingly the main theme for both groups (HC=22, NC=87), followed closely by the fact that they encourage more exercise and ‘get you out’ (HC=16, NC=81), the unconditional love dogs provide (HC=12, NC=57) followed next along with the happiness they provide (HC=7, NC=39):

Participant 21 (NC): “Great company, get me out and about, make me smile daily, give me unconditional love, make me happy.”

Participant 78 (HC): “She gives us a lot of pleasure and we walk a lot more since we got her”

However the theme of security seemed to be more important to the HC group, whereas the entertainment and fun dogs provide appealed more to the NC group:

Participant 5 (HC): “Good companions at night when I’m on my own. Great watch dogs too.”

Participant 18 (NC): “Fun, entertaining and they’re great.”

Question 3: What are the negative aspects of owning a dog?

This question was used to establish the challenges experienced by both groups and to see whether these are shared by both groups. It was found that the restrictive

nature of dog ownership was the main theme shared by both groups (HC=27, NC=93) and these restrictions were broken down into six sub themes: restrictions on going away, schedule, feeling confined, restricted when going on holidays, planning to go out or restricted socially;

Participant 2 (HC): “You can’t just go away as you need to arrange someone to mind it”.

Participant 19 (NC): “If I’m going out need to make sure my dog is minded”.

Participant 27 (NC): “You have to adapt your lifestyle to take the dog into consideration, you can’t go away at the drop of a hat or have a mad night out as the dog will be home alone”.

Cleaning (HC=9, NC= 32) and the cost of having a dog (HC= 7, NC=37) were the next popular themes to emerge for both groups. On a positive note, the answer ‘none’ was given by a number of participants in both groups (HC=5, NC=10).

Question 4: Do you consider your dog a furbaby?

(Refer to Appendix 2 for full question). This question was used to establish whether there is a marked difference in both groups as to how they view their dog in the context of their family and general lives. 127 participants (HC= 21, NC= 106) considered their dog a furbaby. The most common theme occurring for both groups was that the dog was seen as an important part of the family group:

Participant 79 (HC):“My dogs are part of our family and as such are my babies.”

Participant 27 (NC): “When making big family decisions my husband and I would consider our dog’s needs...”

Both groups also reported either seeing or regarding their dogs as a baby or a child which was the second most popular theme:

Participant 99 (NC): “I call him furbaby all the time. I treat him like a human”.

Participant 100 (HC):“Like my real baby, I take care of and love him and he loves me back.”

Interestingly, two common themes emerged among those participants who said they would not regard their dogs as a furbaby (HC= 16, NC= 29), the most common one

being the need for boundaries between dogs and humans and for dogs to know that they are lower than humans on the pecking order:

Participant 47 (NC): “In my opinion if you have a furbaby and equal status there is no boundary or control.”

Participant 5 (HC): “The dogs understand that they are part of the pack...but they obey the commands of the kids and see me as their pack leader.”

The second most popular theme to emerge from this group was that dogs were not equal to people or children nor were they considered to be a baby or child:

Participant 8 (NC): “I love my dog but I don’t consider him equal to a person.”

Participant 105 (HC): “Even though I consider her a part of the family I don’t equate her to a baby.”

Question 5: Do you think that society/local government bodies could do more to support dog owners in general?

This question was used to establish whether dog owners feel there could be more done to support them. A total of 147 participants (HC= 30, NC= 117) felt that more could be done to support dog owners. The main theme in both groups was a call for more off-lead, good quality dog parks where dogs could be let off the lead without worrying for their safety:

Participant 20 (HC): “Stop placing restrictions on walking dogs off-lead in parks.”

Participant 44 (NC): “More off lead dog parks so that you won’t bother other users of the park without dogs.”

Interestingly the need for more dog friendly places and public transport appeared to be a major theme in the NC group with 53 participants overall requesting this service:

Participant 99: “I think more shops/ restaurants/ public areas should support dog owners and allow entry”

Participant 41: “Dogs are allowed on public transport in majority of European countries. This doesn’t exist in Ireland. It pains me as I don’t have a car but would like to travel with my dog.”

On the other hand, educating people in responsible dog ownership and dog care and the introduction of better welfare laws appeared to be a theme more popular with the HC group:

Participant 90: “I believe that more education is needed around responsible dog ownership.”

Of those participants that answered ‘no’ to the question the main reason stated was that it was a dog owner’s own responsibility to look after and support their dog.

Others left no comment.

Participant 17: “Onus on the owner to look after your pets if you decide to get a dog.”

4. DISCUSSION

The aim of this study was to add credence to the fact that an owner's attachment to their dog is based on valid psychological reasons. The fact that inferential statistics reported non-significant results for all hypotheses meant that the null was accepted in each case although descriptive statistics showed a number of non-significant trends that require further discussion.

4.1. Hypothesis 1

Attachment theory led to the development of Bowlby's (1969) conception of the 'internal working model' and Ainsworth's establishment of three different attachment styles that develop in childhood which can have implications on attachment bonds developed with others later in adulthood (McCarthy & Maughan, 2010). Securely attached people perceive others to be trustworthy and reliable and therefore are able to depend on others with confidence in times of difficulty (Howe, 2011) with little need to establish an emotional bond with their dog to replace this. The expectation was that those who were highly attached to their dogs were more likely to display insecure attachment, especially in avoidance, as they are unable to trust people completely with their emotional security and thereby would seek comfort in the consistent and non-judgemental temperament of their dog. Inferential statistics reported no significant results and descriptive statistics, whilst it did reveal that owners with the lowest attachment to their dog had the highest overall mean scores in secure attachment and lowest mean scores in all insecure attachment types (Table 2), did not report differences substantial enough to make inferences regarding pet attachment and therefore the null was accepted overall. The most surprising result emerged from qualitative analysis, which revealed that apart from loving dogs, participant's main reason for getting their dogs was because they either grew up with a dog or always had a dog in their lives. This reveals that it is not the individual's attachment style that influences their level of attachment to their dog but rather the internal working model of the dog that they developed in childhood which regards the dog as an integral part of the family structure and, as stated by Participant 1, it would seem

unnatural not to have a dog as part of their lives. Consequently it could be suggested that people become attached to their dogs, not because of their attachment style but because they have learned early on that the dog belongs in their original working model of the secure base that is the family unit.

4.2. Hypothesis 2 a) and 2 b)

Inferential statistics reported non-significant results but descriptive statistics seemed to contradict these results and demonstrated that participants without children showed slightly higher attachment to their dogs than those with children (e.g. Figure 1). This, coupled with the fact that the majority of participants who took part in this voluntary study were woman, with no children, in the 25 – 45 age group seems to support the literature (Blackstone, 2014; Margolies, 1999; Turner, 2011) suggesting that owners, especially women, use dogs to fulfil an absent maternal need in their lives either because they cannot or have chosen not to have children or because their children have left home. Additionally, in support of this argument, one of the main themes to emerge from qualitative analysis that was unique to the 'no children' group was the fact that they got their dog because they wanted something to love or care for. On the other hand, the majority of participants, irrespective of whether they had children or not, considered their dog to be a furbaby and saw their dog as similar to or as an actual baby or child and treated them as such. Both groups also shared the same opinion regarding the most positive and negative aspects of owning a dog leading to the conclusion that whilst not having a child can be a primary reason that people introduce a dog into their lives it does not automatically ensure that they will develop the highest attachment to their dog. On the contrary, as demonstrated by the results of this study, owners with children are just as likely to become as attached to their dog as people without children and this could be attributed to the fact that (evidenced by studies from Siniscalchi et al., (2013); Nagasawa et al., (2009); Konok et. al., (2015)) dogs have evolved socially to mirror human attachment behaviour and as a result elicit the same care giving behaviour from their owner which is usually saved for the care of an infant or a child.

4.3. Hypotheses 3 and 4

Chur-Hansen (2010) maintained that groups who were most likely to be attached to their dogs were those who were socially isolated or suffering from psychological or chronic illness. This study aimed to measure participant's psychological stress by measuring their satisfaction with life (SWL) and their general mental health (GHQ). With relation to hypothesis 3, inferential statistics showed no significant results whilst descriptive statistics showed that those who were dissatisfied with their lives showed slightly higher attachment to their dog than those who were satisfied (Figure 2). Similarly those who were classed as highly attached to their dog showed the lowest mean scores on the SWL. The fact that these differences were very small and also might be attributed to some other variable, such as marital status (which was positively correlated with SWL scores), meant that no inferences with relation to dog attachment could be made and the null was accepted. It would be preferable in future studies to replace this scale with a scale that specifically measures the degree of social isolation the participant experiences daily, thereby allowing more substantial inferences to be made from the results regarding pet attachment. Inferential statistics for hypothesis 4 again reported no significant results but descriptive statistics (Figure 3) did reveal that those who were highly attached to their dog had higher mean scores on the GHQ than those who displayed low attachment to their dog indicating slightly higher psychological distress within the highly attached group. Qualitative analysis revealed that company, exercise/getting you out, unconditional love and happiness were the main positive aspects of having a dog reported by participants which supports literature (Chur- Hansen, 2010; Chur-Hansen et. al, 2009) claiming that people are using dogs to combat social isolation and loneliness. However, considering the restrictive nature of dog ownership also revealed by qualitative analysis with regard to social outings and going on holidays, dogs also might inadvertently aggravate a person's negative social situation which would support the assertion by Peacock et.al. (2012) that the support from a companion animal is not equivalent to support gained from human

interaction. As a result, the hypothesis regarding dog attachment's relationship with the mental health of the individual is partially accepted owing to the results found in this study.

4.4. Strengths and limitations of the study

This study aimed to be all encompassing and studied dog attachment from different psychological perspectives rather than just concentrating on one, allowing a more comprehensive picture of dog attachment to be drawn. Qualitative analysis added to the depth of this exploration. Restrictions placed upon this thesis prevented a deeper qualitative analysis from being presented and therefore only a limited amount of the information collected is contained within. This study may be criticised for obtaining its participants from a group of people who would be considered as dog lovers and probably already quite attached to their dogs (as only dog lovers would frequent the sites that the online study was posted on) and therefore it may be argued that this may have diluted the impact of scores between the different groups analysed. It would have been preferable to have gained the data from a more general population of dog owners, however the data that was collected still proved diverse with PAS scores showing a normal distribution and therefore capable of withstanding analysis.

4.5. Future research and conclusion

Dogs were chosen for this study to ensure consistency of results with regard to pet attachment and it would be interesting to employ the same study using different pets as the main variable (such as cats, horses and small animals) to compare the results. Additionally, the gender imbalance in the data prevented investigation into whether levels of dog attachment differ between genders and it would be beneficial to repeat this study on a male population and again compare results.

Qualitative analysis revealed that the majority of participants view their dogs as furbabies and also called upon local authorities to provide more dog friendly places, transport and better quality dog parks so that they could include their dogs more frequently and easily in their daily lives. The intention of this study was to determine the psychological factors that contribute to people's attachment to their dog and, in doing so,

demonstrate that it is an attachment that should be taken seriously by the wider population of Ireland. It is hoped that the results of this study will open a dialogue that aims to support the dog owning population of Ireland and accept the fact that the furbaby is now no longer an isolated phenomenon but a valid psychological construct that exists in Irish society today.

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6. Appendices

Appendix 1:

Questionnaire exploring owner's attachment to their pet dogs

My name is Amy Fortune and I am currently studying a Higher Diploma in Psychology in Dublin Business School (DBS). To complete my course I must undertake a research project, that will be submitted for examination in March, and as a result am looking for your participation in the following questionnaire.

Before taking part in this survey there are a few important points to take note of:

- You must be over 18 years of age
- You must own a dog
- Participation in this questionnaire is completely voluntary and you are not obliged to take part. You have the right to withdraw even if you have begun answering some of the questions.
- Participation is anonymous and confidential. Thus responses cannot be attributed to any one participant. For this reason, it will not be possible to withdraw from participation after the questionnaire has been submitted.
- The questionnaires and data collected will be securely stored on a password protected computer and only I will have access to any data collected.
- There may be the possibility that the thesis I produce, drawing on the data collected through this questionnaire, will be published in peer reviewed journals/articles or used in conference papers. However, I would like to reassure you that you can in no way be identified in this questionnaire as it is completely anonymous and confidential.
- It is necessary that you be naive to the exact research question as, knowing this, it may influence your responses. Therefore, I can only inform you that I am conducting research to explore the attachment that people have to their pet dogs. A debriefing will be provided at the end of the questionnaire which will explain the purpose of the study more fully and will give you the opportunity to opt-out of submitting your responses should you wish them not to be included in the research.
- The attached questionnaire will take, at most, 15 minutes to complete. While some questions might cause some negative feelings, the questionnaires have been used widely in research. If any of the questions do raise difficult feelings for you, contact information for support services are included on the final page.

It is important that you understand that by completing and submitting the questionnaire that you are consenting to participate in the study.

Should you require any further information about the research, please contact (*details not included in appendix*)

Thank you for taking the time to complete this survey.

Appendix 2:**Questionnaire to capture demographics and qualitative data**

- 1) What gender are you? 1) Male 2) Female
- 2) What age group do you belong to?
 - 1) 18 – 25
 - 2) 26 – 35
 - 3) 36 – 45
 - 4) 46 – 55
 - 5) 56 – 65
 - 6) 66 – 75
 - 7) 76 +
- 3) Do you have children? 1) Yes 2) No *(If no please go to question 4)*
- 4) How many children do you have?
- 5) What age group does your child/children belong to? *(tick all that apply)*
 - 1) 0 – 10
 - 2) 11 – 17
 - 3) 18 – 25
 - 4) 26 +
- 6) What is your marital status?
 - 1) Single
 - 2) Married
 - 3) Co habiting
 - 4) Widowed
 - 5) Divorced
 - 6) Other
- 7) Do you own a pet dog? 1) Yes 2) No
(If no please discontinue this questionnaire)
- 8) Are you the primary caregiver of the dog? 1) Yes 2) No
- 9) Why did you adopt/rescue/buy your dog?
(Please be as detailed as you can)
- 10) In your opinion what are the positive aspects of owning a dog?
(Please be as detailed as you can)
- 11) In your opinion what are the negative aspects of owning a dog?
(Please be as detailed as you can)
- 12) The term 'fur baby' is defined, for the purposes of this study, as a term of endearment for a pet which has been elevated to hold equal status with other family members, usually as a child. Would you consider your dog to be a furbaby?
 - 1) Yes
 - 2) No*(Please explain your answer)*
- 13) Do you think that society/local government bodies could do more to support dog owners in general?
 - 1) Yes
 - 2) No*(Please explain your answer)*

Appendix 3:

CENSHARE Pet Attachment Survey also known as Pet Attachment Scale (Holcomb, Williams & Richards, 1985)

(The following statement introduced the questionnaire to the participants)

The following statements are intended to establish how you experience the relationship you have with your pet dog. If you have more than one dog please answer the following statements in relation to the dog you feel closest to. Please answer as honestly as you can. Remember there are no wrong or right answers and this questionnaire is completely anonymous and confidential

1. Within your family, your pet likes you best
2. You are too busy to spend time with your pet
3. You spend time each day playing with or exercising your pet
4. Your pet comes to greet you when you arrive
5. You talk to your pet as a friend
6. Your pet is aware of your different moods
7. Your pet pays attention and obeys you quickly
8. You confide in your pet
9. You play with your pet when he/she approaches
10. You spend time each day training your pet
11. You show photos of your pet to your friends
12. You spend time each day grooming your pet
13. You ignore your pet when he/she approaches
14. When you come home, your pet is the first one you greet
15. Your pet tries to stay near by following you
16. You buy presents for your pet
17. When you feel bad, you seek your pet for comfort
18. You prefer to be with your pet more than with most people you know
19. Your pet is a nuisance and a bother to you
20. You consider your pet to be a member of your family
21. You like to touch and stroke your pet
22. You feel sad when you are separated from your pet
23. You like to have your pet sleep near your bed
24. You like to have your pet sleep on your bed
25. You have your pet near you when you study, read, or watch TV
26. You don't like your pet to get too close to you

Items 2, 13, 19, 26 are reverse coded.

Answers coded as follows: 1= Almost Always, 2=Often, 3 = Sometimes, 4 = Almost Never

Appendix 4:

Measure of Attachment Qualities (MAQ) – Carver, 2013

(The following statement introduced the questionnaire to the participants)

Respond to each of the following statements by expressing how much you agree with it (if you do generally agree) or how much you disagree with it (if you generally disagree). Please be as accurate as you can be throughout, and try especially hard not to let your answer to any one item influence your answer to any other item. Treat each one as though it is completely unrelated to the others. There are no right or wrong answers, you are simply to express your own personal feelings and opinions

1. When I'm close to someone, it gives me a sense of comfort about life in general.
2. I often worry that my partner doesn't really love me.
3. I have trouble getting others to be as close as I want them to be.
4. I find it easy to be close to others.
5. I often worry my partner will not want to stay with me.
6. Others want me to be more intimate than I feel comfortable being.
7. It feels relaxing and good to be close to someone.
8. I am very comfortable being close to others.
9. I don't worry about others abandoning me.
10. My desire to merge sometimes scares people away.
11. I prefer not to be too close to others.
12. I find others are reluctant to get as close as I would like.
13. I get uncomfortable when someone wants to be very close.
14. Being close to someone gives me a source of strength for other activities.

Answers coded as follows:

- 1 = I Disagree with the statement a lot
- 2 = I Disagree with the statement a little
- 3 = I agree with the statement a little
- 4 = I agree with the statement a lot

Items 4, 8, and 9 are reverse coded.

Security = Items 1, 7, and 14.

Avoidance = Items 4, 6, 8, 11, and 13.

Ambivalence-worry = Items 2, 5, and 9.

Ambivalence-merger = Items 3, 10, and 12

Appendix 5:**Satisfaction With Life (SWL) scale (Pavot & Diener, 2013)**

(The following statement introduced the questionnaire to the participants)

Below are five statements that you may agree or disagree with. Please indicate which answer best describes how you feel about each statement. Please be open and honest in your responding, there are no right or wrong answers.

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

Answers coded as follows:

7 = Strongly agree

6 = Agree

5 = Slightly agree

4 = Neither agree nor disagree

3 = Slightly disagree

2 = Disagree

1 = Strongly disagree

31 - 35 = Extremely satisfied

26 - 30 = Satisfied

21 - 25 = Slightly satisfied

20 = Neutral

15 - 19 = Slightly dissatisfied

10 - 14 = Dissatisfied

5 - 9 = Extremely dissatisfied

Appendix 6:**General Health Questionnaire (GHQ) – Goldberg, 1992**

Due to copyright restrictions it is not possible to include this particular scale in the appendices section.

Appendix 7:

Debrief

Thank you for taking time to complete this survey. I really appreciate your participation!

Through the responses that have been recorded I am endeavouring to research the phenomenon of the 'fur baby'. The research primarily explores the attachment relationships between owners and their dogs. In addition, there is a focus on the attachment styles with pets and how this relates to: the number and ages of children in the family; attachment style in human relationships; general satisfaction with life; and general psychological health.

By taking part in this study you will help me add to the existing literature regarding pet attachment and, as a result, contribute further information on the importance of the attachment bond that exists between different groups of dog owners and their pet dogs. It is my hope that the research will provide further insight regarding the attachment that owners feel for their dog as to date the vast majority of attachment research has neglected these relationships.

Now that you have been debriefed as to the focus of the study - I must again remind you that participation is completely voluntary and by submitting your answers to the questionnaire you are consenting to participate in the study.

Due to the anonymous nature of the survey it will be impossible to withdraw once answers have been submitted.

The following contact details may prove useful if you have been affected by any of the issues addressed in this questionnaire:

Dogs Trust Ireland

Phone: 01 8791000 Emails: enquiries@dogstrust.ie

Website: www.dogstrust.ie

Samaritans

Phone: 01 6710071 Website: www.samaritans.org

Appendix 8

Main themes that appeared in response to qualitative questions

Question 1: For what reason did you buy/ rescue/ adopt your dog?

Theme	Have children (HC)	No Children (NC)
Love dogs	8	24
Grew up with dogs /had dogs	4	36
Wanted one for children	2	-
Experience	1	-
Family wanted dog	8	-
Rescue	5	36
Always wanted dog	3	23
Company	6	26
Replace deceased dog	2	13
Empty without one	2	13
Stress relief	1	1
Emotional Support	1	6
Affection	-	2
Provide structure/purpose	-	2
Life enrichment	-	1
Something to love	-	5
Gift	-	5
New home	-	9

Question 2: What are the positive aspects of owning a dog?

Theme	Have children (HC)	No Children (NC)
Friendship	5	10
Rewarding	3	15
Loyalty	5	14
Entertainment/Fun	5	38
Responsibility	2	11
Improved mental health	3	5
Unconditional love/ love	12	57
Something to look after/care for	1	9
Exercise	16	81
Greeting	5	13
Company	22	87
Social life	4	17
Good with kids	1	-
Affection	4	9

Good for children/teaches responsibility	7	-
Comfort	3	15
Security	6	13
Stress relief	2	11
Feeling needed	1	-
New experiences	1	8
Happiness	7	39
Like a child/satisfies maternal instinct	2	2
Emotional support	1	7
Relationship/special bond	-	4
Sense of purpose/focus in life	-	3
Part of family	-	2
Everything	-	3
Improved relationship	-	3
Consistency/non judgemental	-	6
Encourages self care/better person	-	2

Question 3: What are the negative aspects of owning a dog?

Theme	Have children (HC)	No Children (NC)
Restrictive (general)	2	7
Restrictive (going away)	5	18
Restrictive (schedule)	6	18
Feeling confined	1	1
Restricted (holidays)	5	20
Restricted (going out)	5	22
Restricted (social)	3	7
Not enough time with dog	1	1
Cleaning/ Dog hairs	9	32
Cost	7	37
Worry	1	10
None	5	10
Having to walk everyday	1	11
Lack of dog friendly places	2	6
Time commitment	1	8
No lie ins	1	3
Demanding / extra responsibility	2	18
Bad behaviour/ Damage	2	13
Guilt leaving dog/missing dog while away	1	12
Lack of support/other people's attitudes	2	2

Finding somebody to care for them	-	4
Short lives	-	7

Question 4: Do you consider your dog a furbaby?

Theme	'Yes' Response	
	Have children (HC)	No Children (NC)
Part of the family	6	34
Seen as a baby/child	7	13
Worry about them	1	-
Need to look after them	2	-
Similar feelings for dog as child	2	2
Like a baby/child	5	17
Different from a child	1	-
Emotionally tied to dog	1	-
Accurate definition	-	1
Do same for dog as child	-	9
Considered when making decisions	-	2
Like more than people	-	3
Responsibility	-	4
Love like family	-	2
Empty without	-	1
Substitute child	-	13
Most important thing	-	5
Impacts life same as child	-	1
More rewarding than kids	-	1

Theme	'No' Response	
	Have children (HC)	No Children (NC)
Need boundaries/lower in pack	5	5
Not equal to baby/human	7	6
Still deserves love/respect	2	3
Not as much looking after	1	2
Not substitute child	-	5
Wouldn't use definition	1	1
Have own needs	-	4
Not a human/child	-	10

Short lives	-	1
Still part of the family	2	-

Questions 5: Do you think society/ local government bodies could do more to support dog owners?

Theme	'Yes' Response	
	Have children (HC)	No Children (NC)
Bins/Provision of pooh bags	1	29
Dog Friendly places/transport	3	35
Dog Parks/indoor facilities	11	50
Education	7	18
Support for vet fees/costs	4	14
Free vaccinations	1	-
Revise license laws	5	7
Better welfare laws/enforce current ones	7	28
Revise restricted breed laws	2	7
Support rescues/charities	1	7
Enforce litter laws	1	6
Nursing homes dog friendly	1	-
Better informed legislation	-	2
Become more dog friendly society	-	3
Flexibility re work hours/dog to work	-	2
