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Bereavement among Companion Animal Primary Caregivers in Punjab, PakistanMs. Saira Javed^{a*}, Maj. Faiza Aslam^b, Dr. Muhammad Shehroz Aamir^a, Brig (Dr). Shoaib Kiani^b, Ms. Nimra Tahir^a*a* Department of Psychology, National University of Medical Sciences Rawalpindi, Pakistan*b* Personnel Administration Directorate, GHQ Rawalpindi, Pakistan

Abstract

Animals are family to the pet lovers, and the demise of the fellow animals highly caused bereavement among primary pet caregiver. To investigate the human-animal bond 180 participants (male=96, female=84) were recruited from the pet clinics at Lahore, Faisalabad, Rawalpindi and Islamabad on purposive and convenient sampling techniques. The study was conducting during the month of June 2020 to July 2021. The results found that younger age and lack of family support are at higher risk for pet loss bereavement than older and married. It is concluded that being its human or animal, demise of loved one makes significant difference in life of people and extremely difficult and challenging at the time of bereavement. Therefore, bereavement should be dealt with social and moral support.

Keywords: Pet loss bereavement, Primary pet caregiver, Punjab Pakistan

Correspondence: Ms. Saira Javed**Lecturer Clinical Psychology National University of Medical Sciences Rawalpindi.****Email:** saira.javed@numspak.edu.pk**Pages 124-131 /Received 3 Dec, 2024, Accepted 27 Dec, 2024, Published: 28 Dec, 2024**

1. Introduction

Since the beginning of human existence, humans have kept companion animals. Companion animals are like family to those who take care of them. Companion animals have positive physical, emotional, and social effects on their caregivers (Purewal, Christley, Kordas, Joinson, Meints, Gee, & Westgarth, 2017). Humans who have daily contact with their companion animals (dogs & cats) often get their support and affection needs satisfied through the companion animal's unconditional love.

Human-animal closeness is essential as humans rely on companion animals for play and assistance. Approximately 70% of families in the United States have a companion animal (American Pet Products Association, 2019; De Mello, 2012), and more than 3 million animals are used for experiments in the United Kingdom (Home Office, 2012). Similar trends were found in Australia, Japan, Europe, and China (Islam & Towell, 2013). For example, more than three million dogs and cats in 100 countries are domesticated (Batson, 2008), and caregivers spend billions of dollars on their care every year (Case, 2008). Furthermore, dogs have been kept as companion animals, security, and communication, while other pets were raised and bred for food and farming purposes (e.g., milk, meat) dating back to 9400 years ago (Wylde, 2017; Ford, 2012).

Additionally, empathy plays a significant role in human and animal closeness through interpersonal relationships (Colombo, Crippa, Calderari, & Prato-Previd, 2017). The strength of relationship depends on the relationship quality between the companion animal and its caregiver. For example, companion animals provide emotional bonding (Kellert & Wilson, 1993; Cromer & Barlow, 2013; Hoffman, Chen, Serpell & Jacobson, 2013) and reduce anxiety in teenagers (Ward-Griffin et al., 2018), minimizing feelings of loneliness, irritation, other mood disorders and boost calmness among military personnel (Stern, Donahue, Allison, et al., 2013). Grandgeorge and Hausberger (2011) found that the animal-human bond contributes to emotional and mental health and provides mutual benefits for the caregiver and companion animal. Another study revealed that middle-aged married men, especially women, are highly affected by the death of a companion animal (Gage & Holcomb,

1979). Thus, the death of a companion animal poses quite a turmoil in caregivers' emotional and psychological states (Wylde, 2017).

It is important to note that the death of a companion animal can significantly affect the daily routine for quite an extended period, sleep patterns, change in eating habits, and a reduction in social activities among caregivers (Quackenbush & Glickman, 1984). Gerwolls and Labott (1994) conducted a comparative study of those who lost their fellow humans and those who lost their companion animals. Since the lapse of 26 weeks, the data was taken and found an equal magnitude of grief among guardians and the general population. The literature found that depression was much more significant in caregivers than in the general population (Stallones, 1994, Colombo et al., 2017). Similarly, Keddie (1977) provided cases of three different women who were severely affected by the deaths of companion animals and were mourning for a long time. Keddie (1977) found an elevated level of depression and suicidal ideation were experienced by those women admitted to a psychiatric hospital. Death and companion animal long-illnesses were likely to result in clinical symptoms of depression among caregivers.

Gosse and Barnes (1994) asserted that other factors directly impact the degree of grief on a companion animal loss. Some of these factors include the caregiver's age, gender, and marital status. Gosse and Barnes (1994) found that the middle-aged women who had limited social circles were affected negatively by the companion animal loss. According to McCutcheon and Fleming (2002), females were more likely to seek psychological support to deal with distress (emotional and psychological) compared to males who experienced companion animal death.

A weak or lack of social support also affects the levels of grief upon companion animal loss. Stallones, Marx, Garrity, & Johnson (1990) found that individuals with poor/lack of support are more likely to get attached to their companion animals and consequently severely affected by their companion animal's death than those who had a dedicated support network. The main predictor of grief is attachment (Brown & Katcher, 2001) as the

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caregivers consider the companion animal as a friend or family member (McConnell, Lloyd, & Buchanan, 2017; Ryan, & Ziebland, 2015) and show empathy for companion animals (Colombo et al., 2017). The high degree of attachment correlates with dissociation, anxiety, and a low level of human social support (Brown & Katcher, 2001).

Sharkin and Knox (1990) reported that many caregivers believed that they received unconditional love and acceptance from their companion animals which is more difficult to obtain from human relationships. It made their bond stronger with companion animals than other humans; hence, the death of a companion animal is an altogether distinct experience than the loss of a fellow human.

The normative bereavement after the companion animal loss differs from the human loss. According to Brown, Richards, and Wilson (1996), the sequence of reactions to human death is denial, anger, bargaining, depression, and finally, acceptance. On the other hand, the series of responses to companion animal loss may be similar in numerous ways, although other factors surfaced in the bargaining phase are guilt reactions (Quackenbush & Graveline, 1985). The emergence of the guilt element may result from the unique responsibility feelings, the degree of closeness, and the empathy towards the companion animals. The feelings of severe grief do not allow the caregiver to concentrate on other activities (Sharkin & Knox, 1990; Colombo et al., 2017). Due to the heightened anger levels, the caregivers refusing to take responsibility for the death and instead, blame others (e.g., the veterinarian and caregivers). The anger eventually subsides and is replaced with guilt, depression, and sorrow (Sharkin & Bahrack, 1990).

Current Research

Previous research has demonstrated a human-animal bond based on attachment factors. It is expected that the companion animal's caregiver would be negatively affected when the bond between caregiver and companion animal was disrupted due to death or loss. Therefore, the studies aimed at explaining the masses among primary companion animal caregivers as losing a companion animal and coping with the grief is as difficult as losing a fellow human. The current study investigates the degree of grief and the psychological impact on the

loss of the companion animal. Four specific hypotheses are explored in the current study.

It was Hypothesized that caregivers who are married, receive family support, and have an external support system will have a lower degree of bereavement as compared to caregivers who are unmarried, receive low or no family support, and lack external supports. Secondly, Mean differences exists among the caregivers' age categories, employment status, and causes of death, Death of fellow animals predicts bereavement among the caregivers and lastly, Female participants shows higher risk of bereavement than male participants.

2. Method.

2.1 Research Design

This study was based on the cross sectional research design.

2.2 Sample

Participants were recruited (male = 96, female = 84) from the companion animal clinics (Lahore, Faisalabad, Rawalpindi, and Islamabad, and the associates of the researchers). Data was collected through purposive and convenient sampling techniques from June 2020 to July 2021. Participants had to be the primary caregiver and 16 years of age or older to be included in the final analysis. They had to have owned the companion animal for at least six months, and the companion animal must have been dead for at least one month. Participants who failed to complete the materials provided, or whose animal died less than a month ago, were not included.

2.3 Instruments

The participants first completed the demographic form (i.e., age, gender, marital status, external support, duration of a companion animal at least six months, companion animal's demise at least a month, first caregiver). We utilized the Pet Bereavement Questionnaire [PBQ] developed by Hunt and Dalmau (2006), consisting of 16 statements utilizing a four-point Likert rating (0, 1, 2, 3, or 4) for each item. It contains three subscales, measuring grief (e.g., items: 2, 3, 5, 7, 10, 12, 15), anger (e.g., items: 1, 4, 11, 13, 14), and guilt (e.g., items: 6, 8, 9, 16). The statement scores were summed for each subscale of the PBQ, with a higher score indicating a higher level of grief, anger, and guilt, respectively. Scores for all items were summed to yield a composite score ranging from 0-48. Participants were instructed to respond to the statements

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in relation to feelings about their companion animal's death.

2.4 Procedure

The current study was conducted following ethical research standards and received approval from an institutional review board (IRB). The IRB ensured that the research design adhered to ethical principles, particularly regarding participant rights, confidentiality, and informed consent. Before participating, all individuals were briefed about the study's nature, objectives, and potential significance. The study aimed to explore the experiences of bereavement among primary caregivers of companion animals in Punjab, Pakistan.

2.5 Data Analysis

Table 1

Percentage of overall sample for age, gender, employment status, causes of death, language, external support, marital status, and family support. (N=180)

Variables	N (%)	N (%)	N (%)
Age	15-25 (27.77)	26-35 (52.22)	36-45 (20)
Gender	Males 96 (53.33)	Females 84 (46.66)	excluded (21)
Employment status	Govt/private 41 (22.77)	Unemployment/housewives 60 (33.33)	Students 79 (43.88)
Causes of death	Natural death 82 (45.55)	Loss/run away 55 (30.55)	Accidents 43 (23.88)
Language	Urdu and Punjabi 162 (90)	Other languages 18 (10)	
External support	Yes 72 (40)	No 108 (60)	
Marital status	Married 44 (24.44)	Unmarried 136 (75.55)	
Family support	Yes 70 (38.88)	No 110 (61.11)	

The basic description of the measures is presented in Table 2. It indicates levels of grief, anger, guilt, and the composite scores. Each subscale and overall composite of the PBQ has shown acceptable Cronbach's alpha, grief ($M = 24.0$, $S.D = 2.34$, $\alpha = .71$), anger ($M = 16.0$, $S.D = 2.12$, $\alpha = .82$), guilt ($M = 13.0$, $S.D = 1.69$, $\alpha = .83$) and PBQ overall ($M = 54.03$, $S.D = 5.87$, $\alpha = .90$). The statistical values are in line with Testoni, De Cataldo, Ronconi, Colombo, Stenfanini, Dal Zotto, & Zamperini (2019), for example ($\alpha = 0.87$).

Statistical values indicated difference between males and females on the companion animal bereavement [$CI = -4.09$ -5.2], $p = .013$. Interestingly, those individuals who have family support and those who do not have family support [$CI = -5.25$ $.67$], $p = .12$ have not reached the significant difference at the bereavement level. It is worth noting that individuals who do not have

SPSS version 26.0 for Windows was used to analyze the data. The statistical procedures were applied according to the requirements of the present study. We utilized descriptive statistics, independent sample t-test for comparison between two variables, one-way ANOVA for group comparison, and regression analysis for the prediction.

3. Results

One hundred eighty participants participated in the survey. Participants provided basic information such as age, gender, language, family support, external support, marital status, employment status, and causes of the companion animals' death.

external support will have higher bereavement levels compared to those individuals who do have external support (e.g., family and friends) are statistically significant [$CI = -7.27$ -3.06], $p < .001$. For example, unmarried individuals were more prone to higher levels of bereavement than those who are married or have external support [$CI = 1.57$ 6.78], $p = .002$ (see table 3).

Table 4 shows significant difference at lower age ($M = 55.2$, $SD = 5.4$) individuals than middle age ($M = 54.0$, $SD = 5.7$) and middle-aged individuals were significantly different than older age individuals ($M = 51.01$, $SD = 6.2$), $p = .04$. The results also display the employment categories, e.g., students were highly affected among the employment categories compared to government/private employees. The government/private employees are comparatively at higher risk than homemakers ($M = 50.12$, $SD = 6.02$) at a significant level

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($p < .001$). The companion animal loss causes significant grief compared to the natural death and accident of the companion animal ($p < .05$).

Linear Regression Analysis has shown that companion animal bereavement level is caused by time

Table 2

Mean, Standard deviation, Cronbach's Alpha Reliability, Skewness, Kurtosis of Range of Pet Bereavement Questionnaire among measures (N=180)

Variable	k	M	SD	α	Skewness	Kurtosis	Rang	
							Actual	Potential
Grief	7	24.0	2.34	.71	.06	-.42	7-28	15-24
Anger	5	16.0	2.12	.82	.10	-.92	5-20	13-20
Guilt	4	13.0	1.69	.83	-.33	-.62	4-16	9-16
PBQ	16	54.03	5.87	.90	.08	-.57	16-64	41-64

Notes: Significance levels * $p < .05$, ** $p < .01$.

Table 3

Independent sample T-test of Gender, Family support, External Support, and Marital status (N=180)

Gender	Male (96)	Female (84)	t	p	95%		Cohen's d
	M(SD)	M(SD)			LL	UL	
	53.08(5.56)	58.87 (6.07)	-1.53	.013	-4.09	.52	-
Family Support	Yes (70)	No (110)	-2.56	0.12	-5.25	-.67	.5
	M(SD)	M(SD)					
	52.24(5.86)	55.36(5.59)					
External Support	Yes (72)	No (108)	-4.86	.000	-7.27	-3.06	.8
	M(SD)	M(SD)					
	51.32(5.22)	56.40(5.37)					
Marital Status	Unmarried(136)	Married (44)	3.224	.002	1.57	6.78	.6
	M(SD)	M(SD)					
	55.36 (511)	51.13(6.43)					

Notes: Significance levels: * $p < .05$, ** $p < .01$. Bold indicate significance

4. Discussion

The current study investigated the death of a fellow companion animal, causing bereavement among caregivers. The results have shown the mean differences in external support and marital status (see Table 3). More specifically, support from family and friends in the time of loss could be beneficial at coping better with grief among caregivers. It could be why those who feel lonely adopt a companion animal and get attached to a companion animal. The caregivers with a lack of family support are more prone to a higher level

of bereavement due to losing a companion animal (Katcher & Rosenberg, 1979). It may be due to the perceiving them as a family member, a child, a parent, or an alternate partner (Archer, 1997).

Younger people or students are at higher risk of a higher degree of grief with the loss of their companion animal (see Table 4). This could be related to the human-animal bond and the interdependency between humans and companion animals through the parent-child bonding process.

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Table 4
One Way ANOVA of the Variables (n=180)

Age	15-25(n = 50) M(SD)	26-35(n =94) M(SD)	36-45(n =36) M(SD)	F	p	η^2
Employment Status	55.2(5.4)	54.0 (5.7)	51.01 (6.2)	3.38	.04	.79
Death Causes	Govt/Private (n=42)	Student (n=78)	House Wife/ unemployment (n=60)	6.19	.00	.67
	53.01(6.3)	55.21(5.3)	50.12(6.2)			
	Lost (n= 55)	Accidental (n =43)	Natural (n = 82)	3.58	.02	.87
	57.74(4.42)	53.0(5.66)	53.36(6.36)			

Note: Age: 15-25 > 35-45*

Table 5
Linear Regression (N=180)

Predictor	Outcome	Standardized B	SE	Unstandardized β	p	R
Time Elapsed since Death Pet R ²	Bereavement Level	.02	.01	.21	.04	.21
F		4.43*				

Notes: Significance levels: * $p < .05$, ** $p < .01$. Bold indicate significance

Humans depend on companion animals for jogging, security, friendship (Home Office, 2012; De Mello, 2012), and assistance, especially disabled individuals (Sachs-Ericsson, Hansen, & Fitzgerald, 2002). Younger and single individuals who lack a family support are especially at greater risk for experiencing a higher level of bereavement than those who have external support, such as friends and spouses (Katcher & Rosenberg, 1979). Young and single individuals lack support from family and external than they adopt companion animals for assistance, security, support, play, affection, particularly single parent or both working parents' children. Although, the current research result was found inconsistent with the previous study (see table 3, Gosse and Barnes, 1994).

Finally, the factor of time elapsed since a companion animal's death significantly predicts bereavement. The mean time was recorded to be 9.88 months, suggesting that the caregivers have high chances of having depression and if it prolongs, then PTSD as well.

Limitations & Recommendations

The first limitation of the study is a minimal sample size, which may have undermined our ability to examine the significant differences in the family support categories and gender. Results may not be generalizable to a larger population. Still, future studies should attempt to use larger, clinical, and non-clinical samples for comparison to maximize their capabilities to examine the differences between the family support categories and gender on bereavement levels. Second, because our sample consisted of only four locations and three employment categories, they may be busy in official tasks and maintain busy lives; therefore, they do not feel alone when adopting a companion animal. Further studies should include data collected from other cities and other types of employment.

Based on the current study's findings, it is recommended that the element of grief must never be left untreated. In general, grief must be considered in the context of other psychological disorders. It is also

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recommended that a comparative study of close friend (human) loss with companion animal loss be conducted to compare the degree of grief between the two essential figures in life.

In addition, it is also recommended to assess for symptoms of PTSD and depression in future studies if individual scores are higher on PBQ. It is recommended that the PBQ be translated, normed, and used in the Urdu language, making it a more inclusive measure.

Conclusion

This study aimed to examine the differences in age, gender, marital status, and work position in predicting mourning among caregivers of companion animals. Young age, single females, students, and those their family or external assistance has not supported, and death cause “loss” were shown to have significant disparities. As a result, the strongest bond is related to the highest amount of mourning, leading to suicide, PTSD, and other mental disorders. High levels of family and external support are protective factors in companion animal loss. It is exceedingly tough to say goodbye to our loyal companion animals. As a result, it must be managed with love and care. The grieving process takes time. Family support, community support, extracurricular activities, and therapy are ways to heal.

Institutional Review Board Statement: the current study was deemed exempt from review by the university institutional review board.

Informed consent form: informed consent was obtained from all the study participants.

Data availability statement: the data have used in the current study is available upon request by emailing the corresponding author.

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