

Analysis of the emotional relationship between humans and animals with regards to the death of dogs and cats

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Summary

The aim of the study was to assess the relationship between humans and animals and to analyze the opinions expressed by pet owners about cremation and burial of their dead pets. The survey-based study was carried out among 876 respondents, and data on the number of cremations performed in 2016-2021 obtained from an animal crematorium were analyzed. The statistical analysis assessed the correlations between the responses and the sex, education, and place of residence of the respondents. The responses were analyzed using the Pearson Chi-square test. The percentage data collected from the crematorium included the number of collective and individual cremations with their mutual percentage ratio in a year and the number of purchased memorabilia of the deceased pet over the five subsequent years. The statistical analysis was performed in the Statistica 13.3 program. The research results allow for the formulation of a conclusion about the constantly growing empathy for the four-legged members of families.

Keywords: companion animal, human-animal relationship, cremation

The bond between a human and an animal should not be viewed as less important than any other relationship. It differs from the relationship with an individual of the same species, but is worth the same attention and respect (6). Dog-human relationships are regarded as social interactions crossing the species barrier (2). A particularly unique contribution of companion animals to the bond with their owners is the unconditional love, which is rarely found in any other types of relationships (21).

The loss of a pet can be caused by a variety of factors, not only by the death of the animal. The human-animal bond can be broken when the animal has been lost or stolen or has escaped. In turn, death may also be associated with various factors: the animal may die of natural causes such as old age and disease or it may be a victim of an accident; in some cases, the pet has to be euthanized (6). Losing an animal that has accompanied a person for several years may cause grief similar to that experienced after the loss of another person, e.g. a family member (6, 14, 26). The loss of a beloved pet

may be one of the most difficult moments in a person's life. The sadness after losing a pet can be the same or even greater than that experienced by a human after losing a loved person (20). Due to the relatively short lifespan of most companion animals, the owner may experience more than one loss of an animal friend during a lifetime (17).

Grief is a normal response to the traumatic loss of loved ones. It may appear immediately after the animal dies or be delayed, depending on individual circumstances (21). In the case of children, the death of their animal may be the first experience of loss and grief (5). Children in single-parent families have a much higher level of bonding with pets than children in two-parent families (3). An additional stressor in the experience of losing a four-legged friend is the lack of social understanding resulting from the instrumental treatment of animals by some members of the public (21).

Considering the important role played by companion animals in the lives of many people and the effects exerted by the death of a beloved pet, some authors

even mention the religious and spiritual aspect of such a loss. As suggested by Brown (5), this aspect is important, as the pastor/priest, pastoral counselor, and spiritual guardian may be able to offer support and care where the aspects of faith are relevant (5).

Psychiatry publications have long emphasized that the death of a pet may disturb the balance of existing social roles and family relationships. It may also result in damage to relationships between the animal owner and other important people (spouse, children, and co-workers) (8). Emphasis is placed on providing support and knowledge of the grieving process, which has the same typical stages (shock, numbness, searching, and yearning) in the event of the loss of a pet. The stages are necessary in the return to everyday life without the presence of the pet (8, 25). In the United States and Europe, there are frequent references to the Rainbow Bridge, i.e. the heaven for companion animals invented by their owners, in which the dead animal lives and no longer feels pain. This makes it easier for owners to come to terms with the loss (26).

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Another issue that arouses many contradictory public emotions is the burial of deceased animals. In the times of post-humanism, humans begin to perceive animals as subjects rather than objects suitable for consumption or captivity. It is now natural to accept, obey, and enforce animal rights, e.g. the right to a dignified burial and commemoration (13). The issue of the dignified treatment and burial of a dead human being in Poland is regulated by law under Article 12 (1) of the Act of January 31, 1959 (11), while the manner of burial of a deceased animal still raises many doubts. In the eyes of the law, the issue of dead animal bodies is regulated by Regulation (EC) No 1069/2009 of the European Parliament and of the Council (22), where bodies of dead animals are considered as animal by-products and their disposal is ordered. As an alternative to disposal, cremation is used to incinerate the body of an animal with dignified respect. On the other hand, if we look at the issue of cemeteries, Poland does not currently have any legal regulations on the burial of dead animal bodies, and the burial of a dead pet would require a permit issued by administrative decision by the district veterinarian, with the approval of the provincial environmental protection inspector. In Europe, the first pet cemeteries were established in the 1870s in France and later in Germany (26). Since then, increasing numbers of animal owners have been insisting on the possibility of organizing a dignified burial and commemoration of their deceased four-legged friends. However, this may still be perceived by others as excessive humanization of the animal. As shown by an analysis of official reports on the possibility of burying

animals, Poland is lagging behind other countries due to the low availability of crematoria and official burial sites; hence many people decide to bury their pets illegally, e.g. in home gardens, parks, and suburban forests (13). There are approximately 15 official animal burial places in Poland, i.e. pet cemeteries. The process of cremation of the animal's body consists in complete incineration of soft tissues and evaporation of liquids in a special furnace, where the temperature reaches several hundred degrees. The cremation time depends on the animal's weight and the content of body fat and water. All cremation services have strictly defined prices, with discounts, for instance, for state service dogs. After cremation, animal ashes do not necessarily have to be scattered or placed in a cat- or dog-shaped ceramic urn. For an appropriate fee, the ashes can be turned into jewelry (e.g. pendants) or a diamond (13). Pet crematoria also offer memorabilia; e.g. a lock of fur, a paw print, or a nose print.

It should be emphasized that commemoration of the deceased companion animal is an important part of the mourning process and provides many owners with emotional satisfaction (9). Tombstones often reflect the religion of companion animal owners, clearly indicating their belief that the animal has the same religion. The need for the ritual commemoration of the pet generally implies the belief that the animal was God's creature (26). In addition to the traditional forms, i.e. burial of animal's body or ashes, the pet is commemorated in obituaries posted on the Internet (16). They often contain photos and music as well as a description of the pet's character, the owner's grief, and the bond between them (2).

Material and methods

Cremation data. Data on the cremation of companion animals (dogs and cats) carried out in a Lublin crematorium in 2016-2021 were compiled. The percentage of individual and collective cremations in individual years was calculated. Additionally, the percentage of owners that choose collective or individual cremation of their pets and want to buy pet memorabilia was calculated. The calculations and graphs showing the results were made in MS Excel 2019.

Survey data. The questionnaire on the respondents' knowledge of cremation of companion animals and their attitude to cremation of dead pets was conducted via the Google Forms platform. The survey, shared on a social network (Facebook), was targeted at adults with at least one animal. The survey started on November 22, 2021 and ended on January 3, 2022. It was completely anonymous. All respondents expressed their voluntary willingness to take part in the survey. The questionnaire was written in Polish and targeted at Polish respondents.

The questionnaire consisted of two parts: a general part with questions about the owner of the animal, e.g. sex, age, education, place of residence, number and species of pets (dog, cat, others). The second part of the questionnaire was focused on the issue of cremation of animals. All questions

were close-ended with the option of selecting one answer. In the first question, the respondents rated the strength of the bond with their pet on a scale from 1 to 5, where 5 meant “I cannot imagine living without my pet”, and 1 was “I would rather not take care of my pet, as the animal is a burden to me”. The next question was focused on the grief after the loss of the pet (“Do you think that a person may grieve over the loss of the pet?”) assessed in a scale from 1 to 5, where 5 meant “definitely yes”, and 1 meant “definitely not”. In the subsequent questions, it was possible to choose a Yes/No answer. The following questions were asked: “Have you heard about the possibility of burying the animal in a pet cemetery?”; “Have you heard about the possibility to cremate the animal body?”; “If you had the possibility to bury the body of your pet in your garden, orchard, or plot, would you choose this option?”; “Pet cremation companies offer pet memorabilia (paw print, nose print, jewelry made of ashes). Would you like to have such memorabilia of your deceased pet?”; “Would you like to receive an urn with the ashes of your pet?”; “Would you like to attend the cremation of your pet?” The last question was: “Which option would you choose if you were faced with a choice between individual cremation and collective cremation (together with the bodies of other animals)?” The answers to this question were “individual cremation” and “collective cremation”.

Statistical analysis. The survey results were analyzed statistically in the Statistica program (version 13.3). The Pearson chi-square test was performed to determine significant relationships between the respondents’ sex, place of residence, and education and their choices in the second part of the questionnaire. The Mann-Whitney U test was applied to identify significant differences between independent variables (sex (female/male/I do not want to disclose my sex), place of residence (big city/small town/village), education (elementary school/junior high school/vocational school/high school/university)) and dependent variables (responses in the second part of the questionnaire). To perform the test, the Yes/No data were replaced with numerical data: Yes = 1, No = 0. In the question about the cremation type, the answer “individual cremation” was assigned the value “1”, and “group cremation” was assigned “0”. Higher values indicated stronger respondent’s bonds with the pet and higher awareness of the possibility of animal burial and cremation. P values below 0.05 were considered statistically significant.

Results and discussion

Number of cremations. In comparison with collective cremations, the number of individual cremations is increasing yearly. In the analyzed center, only 2.02% of individual cremations were carried out in 2016, while 5.09%, 5.46%, and 5.98% of this type of cremations were carried out in 2017-2019, respectively. In 2020, there was a significant increase in the number of individual cremations (12.40%), and 14.70% of such cremations were performed in 2021 (Fig. 1). Pet owners exhibit growing interest in the purchase of pet memorabilia. In 2016 and 2017, no pet owner choos-

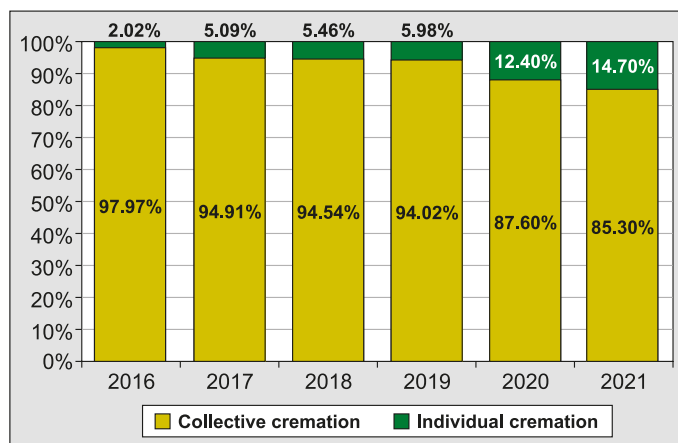


Fig. 1. Percentage of collective and individual cremations performed in 2016-2021 in the analyzed center

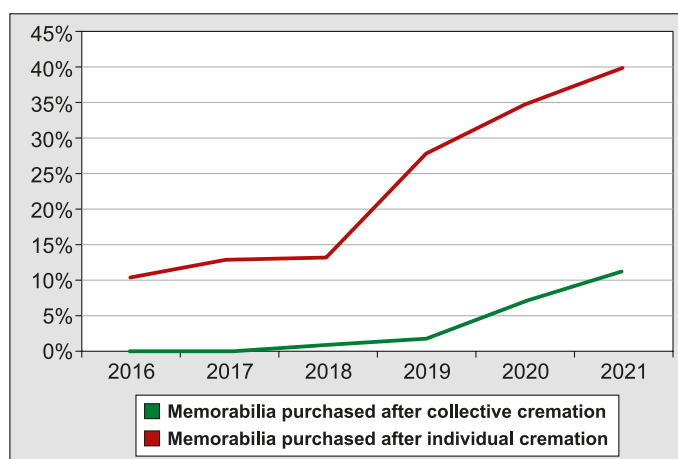


Fig. 2. Percentage of purchased memorabilia after collective and individual cremations in 2016-2021 in the analyzed center

ing the collective cremation bought memorabilia. In turn, 10.5% and 13.04% of owners choosing individual cremation of their pets in 2016 and 2017, respectively, purchased memorabilia. Increasing interest in this manner of commemoration was observed in the subsequent years. From 2018 to 2021, the percentage of owners purchasing memorabilia after collective cremation increased from 0.96% to as much as 11.5%. Additionally, the number of collective cremations decreased at that time. In the case of individual cremations, the percentage of memorabilia purchased in 2018-2021 was 13.33%, 28.12%, 34.9%, and 40%, respectively (Fig. 2). Pet memorabilia were bought more frequently by owners that ordered individual cremation services.

Survey results. The survey involved 876 respondents (811 females, 59 males, and 6 persons that did not disclose their sex). The majority were young people aged from 18 to 30 (53.7%). Respondents aged 31-50 years accounted for 42.4%, and those aged over 50 represented 4%. The numbers of respondents from small towns and villages were similar (180 and 232, respectively), and 464 respondents came from big cities. The questionnaire was mostly completed by respondents with higher (613 persons) and secondary

Tab. 1. Average scores of responses to the survey questions in the sex groups ($\bar{x} \pm SD$)

	Female, n = 811		Male, n = 59		Not declaring gender, n = 6	
Strength of the bond with the animal	4.53 ^a	0.63	4.14 ^a	0.86	5.00	0.67
Awareness the feeling of grief after the loss of the pet	4.91 ^b	0.35	4.66 ^b	0.71	5.00	0.00
The awareness of the possibility to bury their animal in a pet cemetery	0.91	0.28	0.86	0.33	1.00	0.00
The awareness of the possibility of cremation	0.88 ^c	0.32	0.76 ^c	0.41	1.00	0.00
Willingness to choose individual cremation	0.80 ^d	0.40	0.64 ^d	0.48	0.67	0.52
Willingness to bury their pets themselves	0.82	0.39	0.88	0.35	0.67	0.52
The wish to purchase memorabilia	0.61 ^e	0.49	0.34 ^e	0.48	0.50	0.55
The wish to purchase the urn	0.56 ^f	0.50	0.36 ^f	0.48	0.33	0.52
The willingness to attend the cremation	0.29	0.45	0.37	0.49	0.50	0.55
Sum	14.31 ^g	1.82	13.02 ^g	2.40	13.83	1.94

Explanations: a-g – values in the lines marked with letters differ significantly ($p < 0.05$)

(237) education. The groups of respondents with 1, 2, and 3 or more animals were almost equal and accounted for 35.2%, 25.3%, and 39.5%, respectively. Many respondents had both dogs and cats (574 dogs and 532 cats).

In response to the questions about the cremation and burial of animals, more than half of the respondents (58.3%) declared that they could not imagine living without their pet, only one person declared indifference to the pet, and one of the respondents said that the animal was a burden and would rather not take care of the pet. In the case of the question about grieving the loss of their pet, as many as 92.1% of the respondents chose the “definitely yes” answer. The vast majority of the respondents were aware of the possibility of burying the animal in pet cemeteries and cremating the body after death (91.2% and 87.7%, respectively). Individual rather than collective cremation of the pet was indicated by 78.9% of the respondents. However, if Polish legislation allowed burial of animals in a garden, orchard, or plot, 81.8% would choose this option. Slightly more than half of the respondents would like to purchase pet memorabilia (58.8%) and an urn with ashes (54.5%). Interestingly, despite the high interest in the possibility of cremation of pets and in the purchase of memorabilia or urns declared by the respondents, as many as 70.7% would not like to attend the cremation of their pet although many crematoria offer such a service.

Results of statistical analyses. Significant relationships were found between the respondents’ sex, place of residence, and education and the responses indicating the strength of the bonds with the animal and the attitude towards burial and cremation. The normality of the distribution was checked with the use of the Shapiro-Wilk test and the result of $p = 0.0000$ indicated a non-normal distribution. Non-parametric tests were used to find statistically significant differences, and the Pearson chi-square test was employed to determine significant associations between the independent and dependent variables. The Pearson chi-square depen-

dence test showed a significant relationship between the female (F)/male (M) sex and the strength of the bond with the animal ($p = 0.0003$), the feeling of grief after the loss of the pet ($p = 0.00002$), the awareness of the possibility of cremation ($p = 0.006$), the choice of individual cremation (0.005), and the wish to purchase memorabilia ($p = 0.00006$) or an urn with ashes ($p = 0.002$). The females more often chose responses in the questionnaire indicating a strong emotional relationship with their pet, their awareness of the possibility of cremation, and their willingness to cremate their dead pets. Significant differences were shown by the Mann Whitney U test (Tab. 1) in terms of the following variables: the strength of the bond with the animal ($p = 0.0003$; F: $X = 4.53$, M: $X = 4.14$), the feeling of grief after loss of the pet ($p = 0.00002$; F: $X = 4.91$, M: $X = 4.66$), the awareness of the possibility of cremation ($p = 0.006$; F: $X = 0.88$, M: $X = 0.76$), the choice of individual cremation ($p = 0.0045$; F: $X = 0.80$, M: $X = 0.64$), and the wish to purchase memorabilia ($p = 0.00006$; F: $X = 0.61$, M: $X = 0.34$) or an urn with ashes ($p = 0.002$; F: $X = 0.56$, M: $X = 0.36$). In contrast to the females, the male respondents were more likely to bury their pets themselves. However, they declared that they would like to attend the cremation more often than the females, but the differences were statistically insignificant. Significant relationships (in the Pearson chi-square test) were also observed between the declared strength of the bond with the pet ($p = 0.03$), the feeling of grief after loss of the pet ($p = 0.001$), the awareness of the possibility of cremation ($p = 0.00043$), the choice of burying the pet themselves ($p = 0.00006$) and the place of residence: big city (BC), small town (ST), village (V). There were also relationships between the education levels: elementary school (ES), junior high school (JHS), vocational school (VS), high school (HS), university (U) and the awareness of the possibility of cremation ($p = 0.04$), the choice of individual cremation ($p = 0.006$), the wish to purchase memorabilia ($p = 0.0000$) or an urn with ashes ($p = 0.02$), and the willingness to attend the

Tab. 2. Average scores of responses to the survey questions in the residence groups ($\bar{x} \pm SD$)

	Big city, n = 464		Small town, n = 180		Village, n = 232	
Strength of the bond with the animal	4.56 ^{a, b}	0.62	4.43 ^a	0.69	4.42 ^b	0.70
Awareness the feeling of grief after the loss of the pet	4.93 ^c	0.36	4.94 ^d	0.24	4.81 ^{c, d}	0.57
The awareness of the possibility to bury their animal in a pet cemetery	0.93 ^e	0.28	0.89	0.31	0.88 ^e	0.32
The awareness of the possibility of cremation	0.91 ^f	0.32	0.87	0.34	0.81 ^f	0.39
Willingness to choose individual cremation	0.80	0.41	0.76	0.43	0.79	0.41
Willingness to bury their pets themselves	0.77 ^{g, h}	0.42	0.84 ^a	0.36	0.90 ^h	0.30
The wish to purchase memorabilia	0.61 ⁱ	0.49	0.62	0.49	0.53 ⁱ	0.50
The wish to purchase the urn	0.55	0.50	0.56	0.50	0.52	0.50
The willingness to attend the cremation	0.30	0.45	0.27	0.44	0.29	0.46
Sum	14.36 ^j	1.84	14.18	1.75	13.95 ^j	2.09

Explanations: a-j – values in the lines marked with letters differ significantly ($p < 0.05$)

cremation ($p = 0.00006$). The Mann-Whitney U test revealed significant differences primarily between the respondents from big cities (BC) and villages (V) (Tab. 2). The residents of big cities declared stronger bonds with their pets ($p = 0.016$; BC: $X = 4.56$; V: $X = 4.42$), the feeling of grief after loss of the pet ($p = 0.0006$; BC: $X = 4.93$, V: $X = 4.81$), the awareness of the possibility of burying their animal in a pet cemetery ($p = 0.03$; BC: $X = 0.93$, V: $X = 0.88$), the choice of cremation of their pets ($p = 0.00008$; BC: $X = 0.91$, V: $X = 0.81$), and the wish to purchase pet memorabilia ($p = 0.04$; BC: $X = 0.61$, V: $X = 0.53$). In turn, the residents of villages were more willing to bury their pets themselves ($p = 0.00002$; BC: $X = 0.77$, V: $X = 0.90$). In terms of the education level, the greatest differences were observed between the respondents with high school and university education (Tab. 3). In comparison with the respondents with university education, those with high school education more often declared a stronger bond with the pet ($p = 0.008$, HS: $X = 4.59$, U: $X = 4.46$), the choice of individual rather than collective cremation ($p = 0.001$; HS: $X = 0.86$, U: $X = 0.76$), the wish to purchase

memorabilia ($p = 0.000$; HS: $X = 0.75$, U: $X = 0.51$), and the willingness to attend the cremation ($p = 0.014$; HS: $X = 0.35$, U: $X = 0.27$). In turn, the respondents with university education declared the awareness of the possibility to bury the animal in a pet cemetery ($p = 0.046$; HS: $X = 0.88$, U: $X = 0.92$). In the vocational school group, the lowest number of respondents declared the awareness of the possibility of cremation, which differed from the respondents with university education ($p = 0.004$; VS: $X = 0.64$, U: $X = 0.89$) and high school education ($p = 0.04$; VS: $X = 0.64$, HS: $X = 0.85$). However, they declared the wish to purchase memorabilia more frequently than the respondents with university education ($p = 0.043$; VS: $X = 0.79$, U: $X = 0.51$).

The pioneering statistical analyses of the number of cremations carried out in Lublin in 2016-2021 revealed that the number of individual versus collective cremations and the number of purchased memorabilia of deceased pets increased yearly in both studied groups. Moreover, the survey involving 876 respondents revealed a strong emotional human-animal bond. These results confirm the findings on the relationship between

Tab. 3. Average scores of responses to the survey questions in the education groups ($\bar{x} \pm SD$)

	University, n = 613		High school, n = 237		Vocational school, n = 14		Junior high school, n = 6		Elementary school, n = 6	
Strength of the bond with the animal	4.46 ^a	0.67	4.59 ^a	0.62	4.36	0.74	4.83	0.41	4.83	0.41
Awareness the feeling of grief after the loss of the pet	4.90	0.38	4.89	0.39	4.64	0.84	5.00	0.00	5.00	0.00
The awareness of the possibility to bury their animal in a pet cemetery	0.92 ^b	0.26	0.88 ^b	0.32	0.86	0.36	0.83	0.41	0.83	0.00
The awareness of the possibility of cremation	0.89 ^c	0.31	0.85 ^d	0.36	0.64 ^{cd}	0.50	0.83	0.41	0.83	0.00
Willingness to choose individual cremation	0.76 ^e	0.43	0.86 ^e	0.35	0.71	0.47	1.00	0.00	1.00	0.41
Willingness to bury their pets themselves	0.81	0.39	0.84	0.37	0.93	0.27	0.83	0.41	0.83	0.41
The wish to purchase memorabilia	0.51 ^{ghi}	0.50	0.75 ⁱ	0.43	0.79 ^o	0.43	1.00 ^h	0.00	1.00 ⁱ	0.00
The wish to purchase the urn	0.52 ^j	0.50	0.59 ^j	0.49	0.43 ^k	0.51	0.83	0.41	1.00 ^{kl}	0.00
The willingness to attend the cremation	0.27 ^{mn}	0.44	0.35 ^{mo}	0.48	0.14 ^r	0.36	0.00 ^p	0.00	1.00 ^{nopr}	0.00
Sum	14.05 st	1.93	14.62 ^{suw}	1.70	13.50 ^{uy}	2.44	15.17 ^v	0.75	16.50 ^{twxy}	0.55

Explanations: a-y – values in the lines marked with letters differ significantly ($p < 0.05$)

humans and companion animals reported by other authors. For example, the dimensions of anthropomorphism and utilitarianism were identified by Boya et al. (4) and Dotson and Hyatt (10). A study conducted by Testoni et al. (24) emphasizes the humanization of companion animals, also in terms of burial and mourning. Clemente-Ricolfe and González-Navarro (7) describe the strength of the human-animal bond and show that the feeling of loss does not differ from the grief experienced after a loss of a loved person. As emphasized by Kemp et al. (12), pet owners declare that their companion animals, i.e. pets, are part of home and equal members of their families.

In many studies, other authors exhibit a tendency to focus on females and their bonds and the feeling of grief after the loss of their pets. Testoni et al. (24) observed that females showed much more pronounced signs of despair than males. However, this does not imply that males are not affected by the loss of their companion animals. The present survey has shown that males establish strong bonds with their pets and experience grief after the death of the animals. In 2010, researchers found that livestock loss may be a severe experience and affect the mental health of male farmers (6).

The analysis of the issue related to animal burial resulted in an interesting finding, i.e. the vast majority of the respondents expressed their willingness to bury the deceased animal in their home garden if possible. Most probably, this is related to the desire to stay close to the animal or visit the grave and preserve the memories of the pet. As suggested by Adriana and Stitta (1) and Tesfomu and Birch (23), a strong bond increases the likelihood that the owner of the companion animal will be willing to choose a burial of the pet or purchase memorabilia.

In a similar study, Dickinson and Hoffmann (9) found that approximately 60% of the 567 respondents who had cremated their pets keep the ashes in an urn at home. Owners that did not cremate their pets (37%) declared that they had buried their companion animals in a pet cemetery to be able to visit the grave frequently. In turn, 23% of the respondents left the ashes of their companion animals for disposal in the veterinarian clinic or cremation company. The willingness to keep the animal close (an urn with ashes at home, burying the pet near the house or in a pet cemetery) is undoubtedly related to the strong emotional attachment of the owner to the deceased animal and is one of the ways for the mitigation of emotional loss (19). As shown by Neimeyer (18), owners of deceased pets declared a lasting memory of their beloved animals, as they kept ashes at home, visited pet cemeteries, displayed pet photos and memorabilia in the house, and watched films showing their deceased animals (16).

The percentage of collective or individual cremations has been increasing year by year, and pet owners

decide to bury the urn with ashes or dispose of the body. The memorabilia offered by animal crematoria are intended to preserve the memories of the pet. The most common ways of commemorating an animal declared by respondents in studies conducted by other authors included the construction of a tombstone to mark the burial place of the deceased animal (15.6%) and the use of photographs to commemorate the animal (at home, in an album; 13.6%). In turn, 2.6% of respondents ordered a plaster paw print (9). Bardina (2) conducted an analysis of burials of animals in pet cemeteries in Moscow. Individual animal graves accounted for 85%, with 10% containing the remains of two animals and approximately 5% containing the remains of three or more animals. This may indicate a strong bond between the owner and not only one but several lost pets.

The results of the present statistical analysis indicate an increasing percentage of individual cremations and a growing number of purchased animal memorabilia; i.e. a lock of fur, a paw print, or a nose print. Over 5 years, the number of individual cremations increased from 2.02% to 12.4% of all cremations carried out in the clinic where the observations were made, which demonstrates the growing respect and willingness to commemorate the deceased animal. The study evidences that the memory of the deceased pet persists, and the relationship built up over several years does not disappear on the day of animal's death.

The results allow for a conclusion that the bond between the human and the companion animal is strong, and the desire to commemorate the four-legged friend is very important for the owner. This is evidenced by the constantly growing number of individual cremations and purchased memorabilia. Certainly, human emotions about companion animals are worth emphasizing, and the survey results provided by so many respondents prove that humans need to have companion animals and establish strong bonds with their pets.

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