

國立臺灣大學獸醫專業學院獸醫學研究所

碩士論文

Graduate Institute of Veterinary Medicine

School of Veterinary Medicine

National Taiwan University

Master Thesis

一堂「以同理心對待動物」課程之成效與
國小教師的動物同理心及對人道教育在校施行之態度

The Effects of a One-Hour Humane Education Class,
Elementary School Teachers' Empathy towards Animals
and Attitudes towards Humane Education at School

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中華民國 101 年 7 月

July, 2012

ACKNOWLEDGEMENTS

For many years, I had been wondering what I can do for the animals. I thought about becoming a veterinarian, but my background and received trainings are too far from it. Three years ago, when I was out looking for a stray cat, I had the chance to meet a neighbor who volunteers at a local animal rescue group. The moment she mentioned about Professor Fei's Animal Welfare Program at National Taiwan University, I knew that was what I wanted to do.

Having determination and a heart for animals are good starts but not enough. A science-based study is not easy for me, who have been concentrated in music all my life. I consider it a miracle that I managed to finish the thesis, and I owe it to many people for their help and encouragement. Firstly, I want to express my deepest gratitude to Professor Fei, for his teaching, guidance and support. Secondly, I want to thank my parents for their unconditional love and encouragement. Moreover, my project cannot be done without my best friend, Carol Reichert, the Executive Director and Founder of Richmond Animal Protection Society, who has always stood by my side and has been my role model of reaching out to animals (and people) in need. Professor Donald Broom at the University of Cambridge, who not only inspired me with his dedication for animal welfare but also shared his words of wisdom with me: "Everyone can do something, no matter big or small, to make the world a better place."

I want to thank all the elementary school teachers at Taipei Fuhsing Private School for spending their precious time during busy work helping me complete my thesis. My

appreciation goes the same to the students who participated in our 100-minute “Share the World” humane education lesson.

This year, for personal reasons, I have been going through a very difficult time of my life. I lost sight of the meaning and purpose of life, together with my enthusiasm for studies and personal growth. It is my beloved cat, Baibai, who always gives me warm welcome and keeps me company when I feel rejected and left out. She never judges me or counts my mistakes when I fail to meet other people’s expectations. Her purring and lying sound asleep beside me warm up my frozen heart. She is not a well kitty, but she has my promise to love her and never give on her till the last second of her life (or mine).

Baibai was the stray cat that led me to this program. She has accompanied me through my study at NTU and constantly reminded me of my love for animals and my heart’s desire to contribute to their welfare and rights.

中文摘要

幾年來的教學經驗讓作者體會到教育的重要以及教師對學生的影響力，尤其是年幼的學生。動物在兒童的成長過程中扮演重要的角色。近年來動物保護意識提高，人民逐漸體認到動物為生命個體，非只是商品或物品。新時代興起的跨領域學門，致力於研究動物及人類之間的各種關係。提倡動物福利及權利必須從人民的同理心開始教育起，人們若能夠設身處地替動物著想，就能夠體會尊重他們的生命。法律或規範能夠消極地防範動物虐待，但唯有教育能夠從根本出發，啟發人們用「心」關懷生命。

本研究分為兩大主題：第一個主題在探討一堂長度為一小時的人道教育的實施情形及成效。本堂課的主題為「用同理心對待動物」，對象為 107 位來自台北市公私立小學的六年級學生。學生於課前及課後作答的問卷結果在本研究中探討並分析。第二個主題的對象為 97 位台北市某私立國小老師，旨在調查現任小學教師的動物同理心程度，並且藉由問卷調查，了解老師們對人道教育的態度及看法，從現行小學教育中，人道教育的實施現況、可預見的阻礙及困難，去探討今後及未來的發展方向。

關鍵字：動物、同理心、人道教育、小學教育、教師、學生

ABSTRACT

From the five years of teaching experience, the author was impressed with students' abilities to learn and how much influence a teacher can have on the students, particularly the young ones. As previous studies show, animals play a vital role in children's cognitive and emotional development. With the rising of animal welfare concepts, people have started to recognize animals as "living beings" but not "objects" or "merchandise". The growth of this field has prompted studies in various disciplines, from veterinary science to social science such as law, philosophy, and education. People's concerns for animals root in "empathy" and "respect for all life", and such attitudes should be established in early stages of one's life and be encouraged throughout. Education is the only way to lead and guide people towards desired behaviors from within (voluntarily), while the laws and regulations are made to be enforced and obeyed (passively). Only when animal welfare becomes an awareness and attitude for the general public will we be powerful enough to overturn the present situations and make big chances.

In this study, two major components are presented. In the first part, we look into the design and implementation of a one-hour humane education class for 107 grade six students. The results of the Before-Class Survey and After-Class Survey are examined and discussed. In the second part, 97 elementary school teachers from a private school in Taipei were asked to do the Animal Empathy Scale, developed by Elizabeth Paul, as well as a survey on teachers' views and attitudes about humane education at school. The results showed the teachers' attitudes toward animals, their willingness and interest in

carrying out humane education at school, and the difficulties and challenges they might encounter. Elementary school teachers are “seed planters”, who have the potential to influence our next generation. This study allowed us to have a glimpse of their opinions and views about humane education.

From the first part of the study, we see great effectiveness of a single one-hour humane education class. Findings also pointed out a correlation between pet ownership and students’ attitudes towards animals. Pet experience helped the students to be more knowledgeable about animals, more responsible and thoughtful, more empathic towards animals, and more interested and motivated in learning more about animals. From the second part of the study, we see a strong positive correlation between pet ownership and empathy towards animals from the teacher participants. Pet ownership in childhood in particular affected one’s empathic attitudes towards animals, while the “quality” of pet experience played a decisive role. Lastly, possible solutions and methods in implementing humane education at school were discussed.

Keywords: Empathy, Humane education, Pet ownership, Elementary school education, Teacher, Student, Animal Empathy Scale, Companion animal

Subject Headings: The effects of humane education, Elementary school students’ attitudes towards animals, Correlation between pet ownership and humane attitudes towards animals, Teachers’ empathy towards animals, Teacher’s attitudes towards humane education

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Chapter One

Introduction

Why do some people care about animals and others do not? Why do some people see animals as living beings just like us and others see them merely as objects, products or merchandise? Why are there people who are considered nice, and yet have “no hearts” for animals? What makes people think and feel so differently about animals? Is it just innate personal traits or is there a way to intervene?

An example given here illustrates the different ways people see animals. The same statement was made by the author but different reactions were received. The incident happened when the author talked with family members about a cat sleeping on her bed. The reaction from the author’s mother was, “Isn’t that dirty? You’d better watch out for the germs she brings.” while from the author’s grandmother, “Isn’t that dangerous? You’d better be careful not to crush your cat.” Both reactions were genuine and legitimate; however, the difference in the attitudes toward animals gives us something to think about. We can definitely tell which one is more human-centered or animal-centered. What is the key to make such difference in people’s attitudes toward animals?

In every society, there is the group of people who actively and spontaneously stands up and fights for animals, and the group of people who exploits and abuses or maliciously hurts animals. They exist in every society; it is just a matter of bigger or smaller groups. In between the two extremes is the “general public” who are quiet and

seemingly indifferent to issues that do not directly concern them, with their attitudes being, “It does not matter whether I agree or not, my opinion is not going to change what others think.”, “When my effort is not going to make a change, why bother?”

There was a discussion in Animal Right class about vegetarianism. A student asked, “Even if I do not eat meat, the farm animals will still be slaughtered because other people eat them. What is the point of being a vegetarian if I am of no help?” Of course the student had a valid point, but the way the author sees it is that, if one could spare one bite of meat a day, which can make a big piece of meat a week, then to help sparing lives is not entirely impossible in the long run. Perhaps no fewer animals are slaughtered merely because one person becomes a vegetarian, but more will be slaughtered if one remains a meat-eater. Of course being a vegetarian or not is a personal choice to make, and the choice is respected. The point that the author emphasizes here is that, people tend to underestimate what they can achieve and discard their beliefs when they are not in agreement with the majority. We need to be reminded that starting with ourselves is the first step to change others. Sharing our beliefs with people around us, family and friends is the first step to change the world. Small changes, even though hard to see immediately, can build up to big ones in time.

Awareness and knowledge are the keys to change and improvement. Only when people are equipped with the required knowledge, the proper attitude towards certain issues, and are informed of what is really going on would they be able to make their judgments and informed decision. Truth is not always easy to be accepted, as it can be cruel and upsetting. Paul Bernal, Founder of the Society for the Advancement of Animal

Wellbeing, once stated that his friends refused to watch the documentary films about animal exploitation because they did not want the films to seriously affect their moods.

Thanks to modern technology, people can learn and absorb knowledge from all sorts of media and resources throughout their lifetime. However, children are still the most open-minded, unbiased and flexible learners and school is still the best place for systematical learning. From five years of teaching experience in Taiwan, the author was impressed with students' abilities to learn and the amount of influence a teacher can have on the students, particularly the young ones. People's concerns for animal root in "empathy" and "respect for all life", and such attitudes should be established in early stages of one's life and be encouraged throughout. Education is the only way to lead and guide people towards desired behaviors from within (voluntarily, spontaneously), while the laws and regulations are made to be enforced and obeyed (passively and perhaps unwillingly). Scientific education is important, such as knowledge about animals, about how to take care of companion animals and such. More importantly, humane education is what we need to cultivate humans' empathy and kindness towards animals, and have respect for all life that we share the planet with and the environment we live in. Only when people start to recognize animals as "living beings" that deserve respect and kind treatment will they start understanding the concepts of "animal welfare." When the general public bears animal welfare in mind, we will be powerful enough to overturn the present situations and make big change.

Chapter Two

Review of Literature

2.1 Human-Animal Relationship

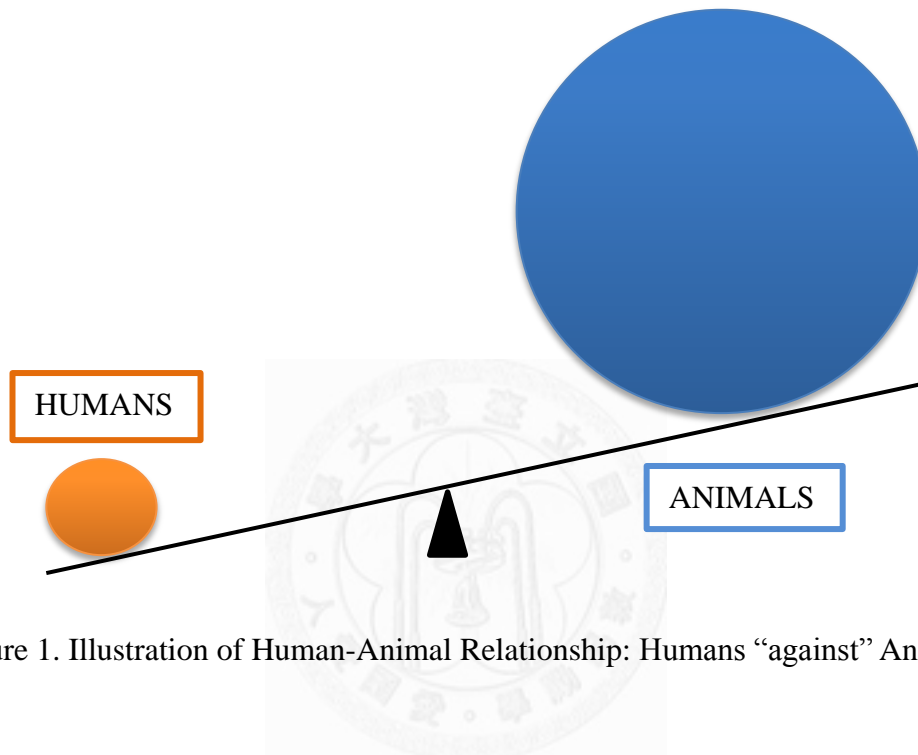


Figure 1. Illustration of Human-Animal Relationship: Humans “against” Animals

Figure 1 depicts the way the majority of humans see the relationship between humans and non-humans. Humans are “humans”, and all the other non-humans are “animals”, the two are distinctly separate. In this anthropocentric view, humans do not see themselves as part of animal kingdom. Besides, despite the fact that there are millions of different kinds of non-human animals on the planet and there is much greater number and bigger population of them, humans tend to be self-centered and weigh themselves much more than non-human animals.

In a different mindset illustrated in Figure 2, humans are in the same category as

non-human animals. Both human animals and non-human animals are “animals”. “Human animals” are part of “animals”, but they are not any superior than “non-human” animals.

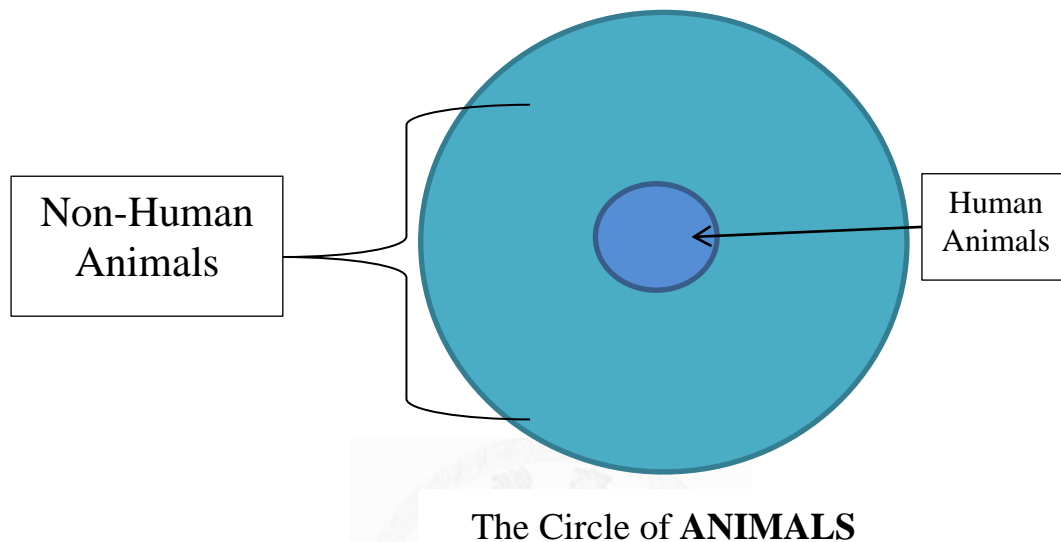


Figure 2. Illustration of Human-Animal Relationship:
 $\text{Animals} = \text{Human} + \text{Non-Human Animals}$

Shapiro (2007) stated that scholars of Human-Animal Studies are trying to figure out the historical origins of and the impact of this “category mistake” which make distinction between “humans” and animals”. To deal with the lacking of a proper word, Kemmerer (2006) in Shapiro has created a word “anymal”, a contraction of “any” and “animal” to define “any animal who is not a human”.

Having gradually recognized the connection between humans and non-human animals, an interdisciplinary field of study is emerging. Given the wide and interwoven nature of this study, it calls upon scholars from different fields, across from social sciences, humanities in addition to natural science. The aim of Human-Animal Studies

(HAS) is to explore every possible relationship between human and non-human animals and to expose human animals' unfair treatments towards non-human animals.

It does not take an expert of Human-Animal Studies to see the close bonds between humans and their companion animals. "Bonds with companion animals may not be our whole lives, but they can make our lives whole." (Walsh, 2009) The way to describe the human-animal bond from the animals' point of view is that, our companion animals might not be our entire world, but to our companion animals, we are their entire world. The bond between humans and non-human animals has come a long way, dates back to ancient times in various cultures all over the world, notably cats in ancient Egypt. Many studies show that companion animals have great impact on human's physical and mental health, such as lowering blood pressure, coping with chronic disease, helping recovery from serious illness, lowering anxiety, relieving depression, encouraging exercises, connecting people, providing company, and so forth. (Walsh, 2009; Beck & Katcher, 2003) The influence of companion animals on people's health can be so prominent that the final presentation of the National Institute of Health Technology Assessment Workshop proposed that:

"No future study of human health should be considered comprehensive if the animals with which they share their lives are not included." (Back & Glickman, 1987 in Beck & Katcher)

However, there are people who see close relationships with companion animals as a sign of inability to form relationships with humans. It can be understood that people

who are going through hard times, who are socially rejected or emotionally wounded by humans appreciate even more the nonjudgmental love, reliable company, and loyalty from their companion animals. At times, the vulnerable group of people might choose the company of their animal friends over their human friends to avoid people's judgement, unwanted comments, expectation from others, possible friction or awkwardness. It does not necessarily mean that they refuse to receive social support and have connections with humans. Even if so for a short period of time, it does not mean that they wish to stay away from humans for a life time. Instead of labelling them as anti-social or psychologically abnormal, more studies are to be done on how to reach out to these group of people, initiate human contacts with them and help them develop social confidence with humans. The emotional support that companion animals can provide cannot be denied or "defiled." Walsh (2009) agreed with Serpell (2006) that people who fail to recognize and acknowledge the importance of human-animal bond are encouraged to expand vision beyond the anthropocentric mindset.

2.2 Children and Animal

When people talk about children, we naturally think of animals. Animals and children both have the qualities of pureness, simplicity and innocence, and they both offer welcoming and nonjudgmental acceptance. Pictures or images of children and animals always catch our attention and bring smiles on our faces.

Arluke (2007) mentioned that children are "wired" to be drawn to living things, and they have natural affinity for animals. This idea is in accordance with biophilia hypothesis, which posits that humans have adapted to be attentive to life forms and

there is an instinctive bond between human beings and other living systems. Wilson (1984) defines biophilia as "the urge to affiliate with other forms of life" Melson (2003) pointed out that the studies of child development have been largely anthropocentric and thus focused on children's relationship with other humans, when in fact children show interest in and have interactions with non-humans as well, including animals, plants and natural ecologies.

Young animals, including children, are known for their vigorous curiosity. They seem to be always exploring and finding things new to learn. By playing with and observing animals, children learn the similarities and differences between animals and themselves. Thus, they get a chance to construct their identities and to have a better idea of what it is to be a human.

Animals provide children warm company, safety, comfort, love, which give children emotional assurance. Animals are more genuine, straightforward and easy to read (in the sense that they do not hide how they feel), their presences can be considered as less threatening and more stable than relationships with human beings. Elementary school children considered ties with pets most likely to last "no matter what" and "even you get mad at each other." (Furman 1989). Children consider their relationship with their companion animals the most reliable, and even young as children can see that relationships between humans could corrupt easily for various complex reasons. Some children prefer company of their pets to that of other children, or even their siblings. Children who have close relationship and bond with their companion animals consider them as part of family.

In our daily life, there are animal characters, symbols and images everywhere. Animal characters can sometimes be more advertising and more effective in marketing than human characters. Without doubt, they have strong appeal to children, but maybe not just to children. Adults, who make the majority of consumers and customers, seem to be enticed by animal characters as well. As Arluke (2007) quoted Blum (1949) and added his personal view about animal characters: “Animal images can facilitate freedom of personal expression because they depict characters that possess human qualities in a classless, raceless, ageless, and often sexless way.” One of the strategies that the local convenient stores frequently employ to boost sales is to encourage the customers to collect points and exchange for series of little gifts made of popular animal characters, such as Miffy Rabbit, Peter Rabbit, Paddington Bear, Hello Kitty, just to name a few.

Since animals and children are inseparable, many studies have been done to prove that animals are important for children’s development. Among the many contributions of companion animals, the most important aspect is that they provide opportunities for children to learn about other living beings very different from themselves. Through taking care of the animals, children get to know not only about the body structure, physical needs of the animals, but also behavior and emotions of their animal friends. The learning experience broadens children’s views about life, and helps them to be less self-centered; instead, to be more understanding, thoughtful and considerate of others. That is how children develop and practice empathy, as Melson (2007) stressed, “The ability to take the perspective of another, especially when that perspective is different from one’s own, is a crucial building block of empathy.” Furthermore, there are studies and evidences show that the empathy towards animals is linked to empathy towards

humans. (Asione 1992; Paul 2000) Bryant (1992) pointed out that although there were possible costs of pets to children, such as worrying about pet's health and safety, pets provide important social support by mutual sharing, ensuring lasting relationship, making children feel loved and feel good about themselves.

The author's own experience can serve as evidence that keeping pets in childhood is positively related to holding empathic attitudes towards animals through life. The author also hopes that it can teach a good lesson about the importance of proper guidance and education, which can come from family members, school teachers or any caretaker, to teach children "the wrong things" and to do things "in the right ways". Love for animals does not necessarily make people do the right things; love can possibly hurt and cause damage too.

Since I was a baby, I was never away from animals. My grandmother raised chicken in the backyard, so I loved touching and holding little furry chicks. My grandmother said that I held them in my hands too tight (out of love) that I suffocated few of them. (Proper guidance and education was needed to teach children how to take care of animals.) When I was about 3 or 4 years old (which I had very little memory of), I had a white cat which was given by my mother's colleague. I could only see from the old photo that I was very attached to the cat. According to my grandmother, the cat got scared and ran away when she was taken to a veterinarian. I do not remember any of those events, but I believe that somehow the sudden loss of my pet cat left an emotional trauma which can affect me psychologically. (Again, proper emotional support or counseling was needed to help children cope with pet loss.) Growing up, I had

numerous birds as companions. My family had birds in a wooden cage that got attacked and eaten by rats. Later on, I had many parrots and some of them were still babies when I acquired them and I enjoyed hand-feeding them to build bonds. Some of them even had babies. I had one parrot which I was very attached to, to accompany me for late night studies. I had him/her stand under study light for hours at night when I should have let him/her rest. When he/she died, I was so sad but I did not even know why. I had quails but I was not careful enough so one of them jumped out of the box and drowned in a bucket of water nearby. I had rabbits and I was very close to them, but when their front tooth grew so long that they had trouble eating, I did not know what to do. I took a puppy home, but the place I lived was too small to keep a dog, so my grandmother put him in a cage on the balcony of another apartment. We left him there all alone and only went there to feed him. The dog grew so fast that the cage was too small for him and his barking bothered the neighbors, so my grandmother “released” him somewhere. In retrospective, I have done so many cruel things to the animals that I feel awfully sorry about. I have always loved animals but if only I were better educated and guided about how to take care of them, I could have been a better and more responsible owner. Instead of making the animals pay the price of my ignorance and finally learned my lesson through their suffering (and death), I could have learned from other sources. I have to say that I did learn about animals (mostly in science and biology classes), but I did not learn anything about how to give proper care to animals, to respect all living beings or anything related to animal welfare from schools and parents. I do not want my children or my students to experience the same regret and feel sorry the way I did.

According to A.J. Rud and Alan Beck (2003), there are elementary schools in the States where they keep companion animals in the classroom and have animal visitors to teach responsibility, provide chances of learning hands-on experience to care and nurture, create more fun and to make the classroom more like “home”. Although it has great potential to give children valuable lessons, especially for children who do not have companion animals at home, it has to be done carefully and properly on consideration of animal welfare, under supervision and guidance. Animals might suffer from stress and hazards, and in some places it might not be as feasible as in others. For example, in a classroom in a heavily populated city like Taipei, where the class size is big and the space is limited, may not be a good place for animals to live. Locking animals up in small cages just for displaying does not teach children the right lesson. The purpose of keeping companion animals in classrooms is to educate students to treat animals properly, care for their needs and cater to their welfare.

Many parents find companion animals for their children mainly for the purpose of teaching the children responsibility and providing company. While this might be true in some cases; however, a lot of times when the novelty and excitement subside, feeding and cleaning after the animals become parents’ chores. And just when the parents get tired of “taking over the job from their children,” they get rid of the animals and blame it on their children. That alone teaches the children the worst lesson of irresponsible ownership and not following through the commitment. Besides, a lot of people take animals home without knowing how to take care of them properly. Although not being abandoned, the animals’ welfare is not met and they do not get the proper treatment that any living being deserves. It would be very irresponsible of parents to simply “buy” any

companion animal from the pet store, and assume that their children know how to nurture a life form so different from themselves and to take responsibility. Proper guidance and education are absolutely necessary.

Parents are human beings too, who need to be educated in order to guide their children. It would be a lot easier if they had already learned how to take care of animals and had been instilled the right attitudes about animals when they were children. Education is like planting trees, it takes time to grow and see the effects. Rules and regulations are not too hard to set, but culture needs time to mold. New concepts and ideas need to be introduced and advocated. It takes fair amount of time and even a few generations to be accepted, absorbed and eventually become internalized as culture of a society or country. While laws are important to distinguish right from wrong, and set a clear line between what can be done and what cannot be, they do not necessarily encourage people to do the good things. For example, setting an Animal Protection Law which by all means needs to be enforced and obeyed, does not necessarily promote humans empathy towards animals and to respect for life from within. The laws lay the minimum that needs to be done for the animals. Whether one decides to meet only the minimum in order not to violate the laws or choose to do much more for the sake of animal welfare is completely up to one's morality and conscience. Education is what it takes to lead people towards desired and favorable behaviors voluntarily, and it is crucial to start it early. While a child is growing, forming and developing his/her personality, and picking up ideas about rights or wrongs from surrounding people and environment, it can be the most ideal timing for the child to be directed and shaped towards humanity—positive attitudes and kind behavior towards animals.

Animals can possibly have positive or negative influences on the children. Animal experience can teach children responsibility, nurturance, compassion and respect; however, it can also lead children to negligence, abuse, cruelty and hatred. It is not the animals, but the adults— parents and teachers, who hold the key to a possible successful lesson of life that teaches important values to the children. It can make a great impact not only on the children’s lives but also on the animals’. For the well-beings of both children and animals, the role of educator is to be taken by parents and teachers, who have the power to influence children on daily basis.

2.3 Empathy

According to Merriam-Webster Dictionary, empathy is: 1. the imaginative projection of a subjective state into an object so that the object appears to be infused with it. 2: the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another of either the past or present without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner; also: the capacity for this. (Empathy, 2012)

The Oxford Dictionary points out the common confusion people have about the words empathy and sympathy. Empathy means “the ability to understand and share the feelings of another” whereas sympathy means “feelings of pity and sorrow for someone else’s misfortune”. (Empathy, 2012) In short, empathy is the highest level of

understanding the feelings of another, whether positive or negative feelings. It is not about feeling happy or sorry “for someone else”, it is “being that person” and feeling however he feels.

A survey done by Paul and Serpell (1993) showed significant positive correlations between childhood involvement with companion animals and concern and empathy for companion animals, other animals, and human beings in adulthood. Members of organizations concerned with animal welfare, as well as environment organizations, reported greater pet involvements during childhood than non-members. Vegetarianism was also highly linked with pet experience in childhood.

In a survey using postal questionnaires, Paul (2000) found a significant but modest correlation between the two scales: Questionnaire for the Measurement of Emotional Empathy (Mehrabian and Epstein 1972) which measures empathy with humans, and Animal Empathy Scale which measures empathy with non-human animals. Different sources of variation were linked to human- and animal-oriented empathy in different level. Animal-oriented empathy was related to current ownership of pets and to the ownership of pets during childhood, while human-oriented empathy was related to current presence of children at home. Interestingly, pet owners and non-pet owners did not score much differently in human-oriented empathy. Similarly, child raiser and non-child raisers did not score much differently in animal-oriented empathy. Besides, Female participants scored significantly higher than the males in both scales, and older participants showed lower levels in both scales. The author’s hypothesis is that, as people age, physical and emotional sensitivity decrease. Elder people have “seen it all”

from their life experience, so the same amount of stimuli and arousal for younger people do not produce the same amount of reactions and feedbacks from the elder ones. Paul concluded that more specific human targets and animal targets to be explored as variants in empathy in future empathy scale and studies. In support of this hypothesis, the author learned from own experience that having kept certain kinds of animals as companion animals make a significant difference in empathy toward those particular kinds of animal, especially the ones that the author has or had close bond with.

The experiments done by Mehrabian and Epstein (1972) provided evidence that highly empathic people aggressed less toward the objects when the negative emotional feedbacks serve as an inhibitor of anger. Also, highly empathic people are more likely to engage in altruistic helping behavior toward others. Krebs (1970) in Mehrabian and Epstein concluded that altruistic behavior is a correlate of empathic tendency, which is determined by subject's liking of the object, similarity of the object to the subject, and the dependency of the object. Although Mehrabian and Epstein found empathic tendency to be the only correlate of helping behavior, it can be hypothesized that people are more likely to empathize animals because animals are dependent, vulnerable and needy.

A study of Asione, Latham, Worthen (1985) found significant grade and gender differences in a one-year school-based intervention of a relatively weak intensity (10 hours of instruction in a school year). As a follow-up, Ascione (1992) assessed the impact of a more intense (minimum of 40 hours of instruction in a school year) year-long, school based humane education program and found that the program

enhanced more humane attitudes toward animals and greater empathy toward other children, with the effects differ from grade to grade. The program achieved better results in older students (grade 4 and 5, particularly grade 4) than younger ones (grade 1 and 2). Fitzgerald (1981) and Cameron (1983) in Ascione suggested that a more focused and intensive classroom presentation, which could be as short as one single class session, can have a positive impact on older students. With presentations fewer than three hours, Hein (1987) in Asione found significant increase in humane attitudes from grade 2 to 4, but no change in grade 5. Inconsistent with the findings of Paul and Serpell (1993) and Paul (2000), Asione (1992)'s result showed that pet ownership was not a significant factor of enhancing children's attitudes toward animals; however, Asione urged that the quality of the relation between child and companion animal be examined in future studies.

As Samuels (2007) pointed out, children's primary caretaker holds an important role in developing children's empathy. Depending on how people react, children's inborn empathy can be encouraged or discouraged. Developing empathy toward humans is not the same as developing empathy toward animals, so it is better to cultivate empathy wherever it is desired, and not to rely on generalization of empathy. Identifying the difference between humans and non-humans, understanding animals' feelings and emotions through their behaviors are part of the learning process. Empathy alone is not enough, and sometimes one can cause harm due to lack of knowledge and experience even though he means well.

2.4 Humane Education

The Canadian Federation of Humane Education defines Humane Education as follows:

“In its most general sense, humane education refers to all those activities designed to encourage children to “be kind.” Its goal is to help children develop empathy and compassion for other people and animals, respect for the environment, and the ability to make decisions based on the welfare of others as well as themselves.”

According to Weil (2007), the term “humane education” was first used by the societies for the prevention of cruelty to animals and child-protection organizations in the late 19th century when people started to recognize the importance and see the need to educate children about kindness and respect for all people and all animals. For decades, humane education has been considered merely as elementary school programs that teach children how to treat and take care of companion animals. With the rising of global issues and challenges, humane educators enlarge the scope of humane education, which now encompasses animal-protection education, environmental and sustainability education, media literacy, character education and social justice education. Humane educators equip students with awareness and knowledge, encourage students to live with compassion for the planet and respect all creatures, and inspire students to make the informed and wise decisions which can change the future.

The four elements in a quality humane education: (Weil 2007)

1. Providing accurate information.
2. Fostering 3Cs: curiosity, creativity, and critical thinking.
3. Instilling the 3Rs: reverence, respect and responsibility.
4. Offering positive choices that benefit everyone.

The four goals of humane education: (Selby, 1995)

1. Humane education is to develop a biophyllic ethic-an ethic that loves and affirms life and living system.
2. Humane education is about interconnectedness. People need to be reminded that many things we tend to separate are actually inseparable and intertwined. (For example, human and animal)
3. Humane education is to clarify values and perspectives, to know where we and other people stand on issues and what the perspectives are.
4. Humane education is about democratic principles and processes. There is more interaction between people in classroom and more chance for students to express their true feelings and thoughts.

Mather described the things student should take home from a class on human-animal relationship. (Mather, 2007)

1. Factual knowledge about the animals and how we interact with them in all different ways.
2. The extent to which we humans control and dictate the lives of animals-we are in charge.
3. Students exit the class having thought about the morality of what we do every day, being fully aware that we are making complex decisions of costs and benefits that need a morality behind them.
4. Respect for all the animals that we share the planet with.

Samuels (2007) posits that teaching children to empathize must also equip them with abilities to help others, otherwise they can be exposed to more suffering and eventually have to look away from other's struggle due to helplessness and guilt. In fact, not just children, people all have tender feelings that they try to protect. After all, feeling bad for ourselves or other people is an unpleasant feeling which we want to avoid, even if it means to escape from the truth at times. A humane educator would take this into consideration, employ a variety of strategies and include actual helping activities into learning, providing successful and positive helping experiences, which reward children with sense of achievement.

In a modern and urbanized society, children have very limited contact with animals. Other than companion animals, they can only rely on "intentional wildlife experiences" (Melson, 2007), such as zoo, aquarium to get in touch with animals. As for wild animals, children get to know them majorly through books, movies and television programs. In

Taipei, a heavily populated city, there are high-rises all over the city. There is no garden or yard for birdfeeders or insects, and indoor space is limited due to the high housing cost. Keeping a companion animal may be hard due to space limit. Most children's parents are both working, thus they have limited time to participate in children's education. Aside from their study at school, many parents send children to all kinds of cram school or hire tutors in order to learn more or achieve better grades. Children's popular pastimes are video games and non-educational cartoons on television. Since animal contact is very limited and parent's involvement cannot always be expected, the author believes that school teachers play a vital role in educating children systematically about animals, not just in science classes, but also humane attitudes towards animals.

More and more educators, scholars and animal caretakers see the need of incorporating humane education into public schooling and developing a curriculum on humane education for public schools.

“As humane education is integrated into curricula and as humane educators are hired by schools in the same number as math or language arts teachers, students will gain knowledge, opportunity and will to live with more respect for others...”

(Weil, 2007)

“Including humane education as part of the regular school curriculum ensures that all children learn appropriate behaviours, not just those fortunate enough to come from stable, caring

home environments.” (Canadian Federation of Humane Education, n.d.)

However, taken into consideration that an elementary school student in Taiwan already have long hours of schooling (7:30 a.m. to 4:30 p.m.) with 8 periods of class per day, it is more feasible to intergrade humane education into all current subjects and be taught as part of regular class instead of creating extra time.

Asione (1992) commented on the advantages of the lessons and activities included in the National Association of Humane and Environmental Education curriculum guides (Savesky and Malcarne, 1981)

1. Appeal to teachers and administrator because the materials, activities and lessons may be used as part of regular instruction in language arts, social studies, math, health, and science, and not have to be added as additional curriculum area.
2. Materials to be used on a more extensive basis than single visit by a humane educator.

In addition to passion for education, a humane educator needs to be innovative. Shapiro (2007) mentioned that the Humane Society of the United States has been giving an annual award to the best established, new, and innovative Human-Animal Studies courses, for example, a course that teaches teachers in various fields to develop their own courses in their own field.

However, the effort from one single teacher is limited. At times, the effort to promote humane education is not acknowledged or appreciated by the school. For example, the author once designed and implemented a humane education integrated music class for grade 5 students. Deriving from a song “Love Found Me”, the author directed the students to the concept of “adopting animals from shelters instead of buying” and other issues related to animal welfare. The students showed high interest and participated very well in class; however, the author was later reprimanded by the Curriculum Coordinator for “not doing what a music teacher should do.” The experience learned from this incident is that, passing on humane attitudes toward animals to the young generation requires much more than one teacher’s effort and commitment. The school policies, the attitude of administrative staffs and parents are also part of the link. Adequate communication and education are needed for related personnel at school to realize the importance of humane education. Their cooperation, teamwork and support will facilitate teachers’ implementation of humane education at school.

In light of the previous studies, a one-hour intense humane education class targeted for grade 6 students was designed and implemented, and the results are discussed in the next chapter. It is understood that results can vary due to many factors such as setting, course design, implementation, and many others; however, students at different age and grade level demonstrate different cognitive developments, learning strengths and needs. How to design and implement the humane education tailored to different grades of students, which brings out the most effects, is what humane educators dwell on. Aspects

like duration of the class, length and intensity of the program, materials presented and used in class, presentation methods and skills, and relationship between students and the teacher are to be carefully considered.

The author had the opportunity to work with various grade levels of students in Taiwan and found that in general, younger students (grade 1 and 2), although not capable of understanding complex concepts, respond very well to love, care, attention and positive reinforcement. They are simple-minded and flexible, and they tend to take everything the teacher says (if understood) into their beliefs, especially the teacher who they have strong liking for. They show natural affinity to animals and interest in anything that moves. It is hypothesized that it is the best age to start cultivating empathy toward animals and humans, and to be introduced to and guided toward humane attitudes. Since younger students go home and tell their parents what they learn at school, messages and information can be passed on to the parents through the students. As Jimmy Gonzalez, the Bridgeport's Chief Animal Control Officer said, "The best way is to teach families humane animal care from the bottom up." "Educating kids is the best way to get to the parents." (Lyle, 2011) The older the student gets, the better they can understand complicated issues and apply their critical thinking to discover and solve problems. However, older students' personal traits become more obvious and more fixed, so do their learning habits and attitudes. From a teacher's point of view, older students' personal traits are harder to be molded or reconstructed. From what the author saw in her teaching experience, younger students are more willing to share what they think and feel, to volunteer and to participate, regardless of the outcome. Older students do have their own minds and likings, but not as willingly as the young students to share,

especially in front of the class. They are selective in what to listen or who they listen to. They have doubts and questions but do not necessarily raise them in class. They are conscious about social desirability, self-aware and yet care about comments and views from peers, seeing “answering wrong” or “asking unwise questions” as embarrassment. From an open discussion (though with their eyes closed) with grade 5 students, even the students who know the answer restrain themselves from raising hands because they are afraid of being accused of being “attention stealers.” The older students the author saw in Taiwan definitely possess the ability to learn more advanced knowledge and skills, however they are more restricted by various concerns, more academic pressure from heavy assignment load and tests, less freedom to express personal feelings and behaviour due to culture and environment factors. The above situation is quite obvious from grade 5 above. As for high school students in Taiwan, other than their personal interests, they are occupied with studies of “main subjects”, which are graded toward and tested in college entrance exam. Very few of them have interest in and available time for humane education.

Judging from the teaching experience, it is the author’s hypothesis that a humane education program which is fun-based, more activities and movements involved, shorter class time (1 period) over longer period of time frame, more frequency, instructed by teachers who the students are familiar with and fond of working with is recommended for younger students. For older students, a program that is more intense, compact, lecture-based with intellectual work involved, longer class time (2 periods), less frequency is more ideal in current education system.

Chapter Three

Topic I: The Effects of a One-Hour Humane Education Class on Grade Six Students

3.1 Setting and Participants

The author had been teaching in Taipei Fuhsing Private School since February 2008, with the main job content of teaching general music class to bilingual students. Every year in April, the school holds an “English Camp” to provide Grade 6 students from other elementary schools a chance to learn various topics in English and to get to know the school. During the Camp, in addition to going to English classes of different subjects, such as music, travelling, sports, and many others; the students’ English abilities are tested. This event is also to the school’s benefit to advertise its English teaching, and to attract and enroll students who possess strong English abilities into middle school.

In 2012, the event was held on April 14 and 15. Among the hundreds of grade 6 students who participated in English Camp, 107 students (divided into 4 sessions) were assigned to “Share the World”—a 1-hour long humane education class, with the main focus on empathy towards animals. There were 51 boys and 56 girls in total.

The author had taught the class once in 2011, with similar contents and setting; however without pretest and protest. The class in 2012 spanned two periods of 40 minutes and the breaks in between to cover the tests and materials. Since each test took

the students around 20 minutes to complete, and actual instruction time was about an hour. The students were told to go to the bathroom whenever they felt a need to, but almost nobody left the classroom in the middle of the class. It was because most of the students were very focused and involved in class. Not having a break in between the 2 periods helped in keeping the students' focus and attention in class. Also, since the students were gathered from different schools and they did not know each other very well, in some ways it helped the students stay disciplined and concentrated on the instruction. As mentioned in the last chapter, students in Taiwan restrain themselves from expressing their thoughts in class for multiple reasons, one of them being the concerns for classmates. In this setting, since they hardly knew each other and they were only classmates for 2 days, group discussion would have been difficult to engage and was avoided; however, it was relatively easy to encourage their individual involvement in class. To further motivate their participation, reward cards were given to the students who volunteered to express their thoughts in class. Comments were made by the instructor to encourage further thinking but no judgments of right or wrong were given. Sharing, creative thinking, and critical thinking were encouraged.

Students in Taiwan start learning English from grade 1. Some of them start as early as kindergarten. English is considered an important subject to learn, with the same academic weight as Chinese. Most students who came to the English Camp are the ones who are highly interested and motivated in learning the language, so their English level is above average. Students' abilities to speak and write differ individually, but they showed no difficulty in understanding the class instruction.

All of the participants were grade 6 students, who were mostly aged 12 (range from 11 to 14). The students were from different public or private elementary schools in Taipei and New Taipei City, with 1 student from USA.

Efforts were made to reduce, as much as possible, English proficiency as a variant in the result. Even though the materials used in class and main instruction were in English. Chinese translation of key words was written on the blackboard. The key concepts taught in class were explained both in English and Chinese. Students were reminded that they could ask and answer questions in Chinese if they had trouble understanding or expressing themselves clearly in English. The main video played in class was in English, with Chinese subtitle. The other short video clips, even though without Chinese subtitle, were closely related to the topics we talked about in class, and they were quite explicit that the students could tell clearly what happened in the video clips from actions, for example, giving shots to animals (euthanasia). Students were told that they could answer the questions on the tests in Chinese if they feel more comfortable doing so, and extra time was given for the students who required longer time to complete the tests.

Kept in mind the comment Asione (1992) gave on the investigation of Cameron (1983, in Asione): “The individual who provides the instruction should not conduct the assessment to avoid potential bias.” The author, who was the instructor, had the co-teacher lead the pre-test and pro-test. Even though the author remained on site in order to provide language assistance (the co-teacher did not know Chinese), the influence from the instructor was very minimum since the students did not develop any

bond with the instructor over such a short time. There was no obvious reason to please the instructor and there was no particular expectation set by the instructor to be met.

3.2 Materials and Methods

The most part of the materials used in the class were selected from “Share the World.” It is a free educational program presented by the People for the Ethical Treatment of Animals (PETA) Foundation. It contains a 30-minute video and worksheets. The suggested age range for this lesson is 7 to 10.

The Program Objectives are: (Share the World, n.d.)

- To enhance the pupils’ understanding that animals are living, feeling beings to be treated with respect and compassion.
- To assist pupils in recognizing that animals often experience the same needs and feelings as we do.
- To encourage pupils to see humans and animals in context with the natural world and to explore this theme.
- To help pupils understand how humans’ regard for animals has changed and developed as our knowledge of animals has increased.

Among the worksheets that “Share the World” provides, the author included “Making Humane Choices” and “Companion Animal Overpopulation Math Sheet” (Teach Kind, 2012) in the class of the present study. For the video, we watched the parts

of “Introduction-Everyone Matters”, “The Amazing World of Animals” and “Animals Have Feelings” in class, with the total length of 14 minutes among the original 30-minute video.

Other materials used in class were posters from PETA and Internet, “The 10 Commandments from a Pet's Point of View” (Rawlinson, 2003) and pictures of various shelters in good and bad conditions. Two short videos related to euthanasia were played in class. One is “Kiss the Animals Goodbye” (Discoglamgrl, 2008.), which is a 5-minute clip from the documentary “The Power of Compassion”. (Anti-Cruelty Society of Chicago & Friedl, E., 1994) The video clip shows the real process of euthanizing animals at the shelter. The other one showed an inhumane way of killing animals by gas chamber.

The students were asked to complete a survey before the lesson started and then another survey at the end of the lesson. The purpose of these surveys was to:

- Explore Taiwanese grade 6 students’ pet experiences and their relationships with companion animals.
- Learn grade 6 students’ views on companion animals.
- Learn how/where the students acquire their companion animals and the reason why.
- Study how grade 6 students learn about animals. Find source(s) of their learning.
- Look into how parents’ views on animals affect students’ views.
- Examine how students’ pet experiences affect their views and attitudes toward animals.

- Evaluate the effects of a short/compact/intense humane education class on grade 6 students.

3.2.1 Designing the Survey

Before-Class Survey was classified into two types: Type A (See Appendix A) for non-pet owners and Type B (See Appendix B) for pet owners. Type A included people who have had pets before (but not current) and people who have never had pets before. The survey was designed by the author, to fit the purpose of the present study; however, some questions were borrowed from “Human/Pet Relationships Measure” (Siegel 1990) and “Pet Attitude inventory” (Wilson, Netting & New, 1987) in Anderson (2007). Unlike many other well-established scales and measures which contain only closed-ended questions, the author intended to leave the questions open instead of providing choices for students to check. Open-ended questions are harder to analyze and to quantify the data; however the author felt that by giving choices, it could possibly mislead students or restrain their thoughts. The aim of the present study is to probe what grade 6 students think, thus it is important to listen to what they have to say.

After-Class Survey (See Appendix C) was designed by the author and was answered by all the students, including pet owners and non-pet owners. The main purpose of after-class survey is to evaluate how much the students learned from the lesson. The survey also gave the students a chance to review and reinforce the concepts learned in class, to exercise their empathy, and to motivate them to brainstorm and come up with possible solutions for pet overpopulation crisis. Again, many questions were

open-ended to let the students express their thoughts freely. From a teacher's point of view, listening to what students say helps a teacher see where their "blind spots" are, and then a teacher can further tackle with those aspects that need to be stressed on.

3.2.2 Teaching the Lesson

Before the lesson started, posters were put on the blackboard and keywords were written both in English and Chinese on both sides of the blackboard. The computer, over-head projector and screen were all set. When the students walked in the classroom, they were asked to take any seat they liked. After the students were all seated, the instructor asked the students who currently have pets at home to raise hands, and they were given Type B survey (for pet owner). The other students who have had pets before or who have never had were asked to write survey Type A (for non-pet owner).

During the 20 minutes for the students to answer the survey, the instructor, co-teacher and two student helpers walked around the classroom to check on the students' progress and answered their questions. Some students had trouble understanding particular words or questions, and help was given to make sure that their problems were solved.

After 20 minutes, students were asked to stop writing. Their attention was directed to the screen. With slide 2, the difference between the term "companion animal" and "pet" was discussed. With slide 3 to 5, students were shown the diagrams of humans and animals, in which the students could clearly see the great similarity in body structure

between human and non-human, including bones, muscles and nervous system. With slide 5, the function of nervous system was reminded and reinforced (most students already know) so that the students can keep in mind that animals have abilities to feel pain and to suffer. Having realized the similarity, the students could readily understand that animals, just like humans, have their needs and feelings too. Drawing students' attention to the similarity of body parts in humans and animals was very convincing. The students felt more related to animals due to the similarity and they could better empathize with animals. The students became aware of animals' feelings, physically and emotionally. To help the students express feelings, words of positive and negative feelings were shown on slide 6. Questions were asked by the instructor about feelings of the students under certain circumstances, such as "How do you feel when someone steps on you or hits you?" Most students replied, "Feel hurt. Feel angry." Then the instructor encouraged the students to put themselves in the animals' place and try to express their feelings if they were the animals. As the class went on, the meaning of the word "empathy" was explained and the students were taught that "Empathy is the key to understanding what animals are feelings" (Teach Kind, 2012). Then, the students were directed to the worksheet of "Making Humane Choices" and discuss the "**Golden Rule**—Do unto others as you would have them do unto you" (Teach Kind). The students were encouraged to put the "Golden Rule" in their own words and in similar Chinese sayings "己所不欲勿施於人" which literally translated as: "(The thing that) you do not want, do not give it to/ put it on others" and "將心比心" ("compare heart with heart", which means to put oneself in another's place and to feel what he/she feels) To practice empathy, situation 2 on the worksheet, about "many people hurry past a bird with a broken wing who has fallen onto a busy sidewalk", was openly discussed. On

slide 7, “The Five Freedoms” of animals (developed in 1979 by the UK's Farm Animal Welfare Council) were introduced to the students. Following that, the class watched the video “Share the World” for 14 minutes (original total length is 28 minutes), covering the topics of “Introduction-Everyone Matters”, “The Amazing World of Animals” and “Animals Have Feelings”. After the video, the students were directed to the posters on the blackboard and slides 8 and 9. Deriving from the posters, concepts like “Adopt, never buy.” “Buying animals is killing animals” “Stand up for animals” were discussed. The term “puppy mill or puppy farm” was explained to the students that it is a place to mass produce animals for profits. “Buying is killing” was explained to students who did not see the indirect link between buying and killing. The students understood better after the instructor explained how a possible spot for an animal at any home could have been filled by an animal from the shelter (who will be euthanized if not adopted) when many people choose to buy one from pet stores or breeders.. Students then realized how their choices can have a great influence on an animal’s life. On slide 10 to 12, students saw pictures of animals at the shelter wanting a home and longing to be adopted. Having realized how pet shops or puppy mills produce massive animals for merchandise, and the consequence of animals at shelters who are not lucky enough to be adopted over a short period of time—be euthanized, it was very clear to the students that adopting is the wiser way to acquire a pet and to mostly likely “save a life.” The issue of “pet overpopulation” was brought up, and the word “overpopulation” was further explained, using the example of heavily populated Taipei City. To help the students understand why there are so many homeless dogs and cats, the co-teacher led a math calculation exercise, using “Companion Animal Overpopulation Math Sheet”. (Teach Kind) The students were shocked to see the total number they got after calculation and realized

how fast pet population grows. To help solve the problem, “spay and neuter” was necessary. An emphasis was made on how irresponsible ownership makes the problem of pet overpopulation even worse. Most students have never been to a shelter, and many students actually think (according what they were told by their parents or others) that shelter is a good place to surrender their pets and can be a “home” for their unwanted pets. To help them understand what a shelter can be like, pictures of various shelters were shown on slide 13 to 30, including two extreme contrasting examples. Students could see that animals benefit from a well-organized animal shelter (using the example of Richmond Animal Protection Society), which requires love, hard work and devotion from many volunteers. The students could also see that animals being kept in a shelter in an extreme bad condition were not enjoying their lives. Their suffering could be so great that it was almost better not to live. After showing the pictures, two short videos of “euthanasia” and “gas chamber” were played in class. After the videos, “The 10 Commandments from a Pet's Point of View” was read to the students and the students were asked fill the blanks on their worksheet. To close the lesson, the instructor shared the words from Professor Donald Broom with the students: “Everyone can do something (for animals) to make the world a better place.” (personal conversation, March 26, 2012) The students were encouraged to “get up and do something”—do not underestimate one’s power to make even the slightest change, pass the message, spread the words, be aware and make the better choice for all living beings—including humans and non-humans. After the lesson, students were asked to turn to the back of the previous survey and did the After-Class Survey, which was an evaluation of what the students learned from the lesson.

It was the author's observation that most students were highly focused in class. They showed enthusiasm in learning the topics and participated very well in open discussions. They were willing to raise hands to share their thoughts. Even though the students were assigned to this class (they did not voluntarily sign up for the class out of personal interest), they showed relatively high interest in the topic and materials taught in class. The variety of the activities and media used in class helped maintain students' attention. Among all the teaching materials, video provided the most powerful stimulus. During the short videos of "euthanasia" and "gas chamber", many students showed strong emotional feedbacks, such as exclamations and tearful eyes.

3.3 Results and Discussion

From the background information, we learned that among the 107 participants, there were 72 participants who reported to be type A (non-pet owner, including people who have never had pets before and people have had pets before) and 35 participants reported to be type B—current pet owner (1 student who answered type B survey but indicated having had no pet was later categorized into group A; same thing happened to another student who answered Type A survey by mistake was later categorized into group B) Among non-pet owners, there were 36 boys and 35 girls. Among current pet owners, there were 15 boys and 21 girls. It was suggested that the ratio of non-pet owners and pet owners were close to 2:1 (71 and 36 students), with no significant gender difference. An interesting ratio of close to 1:1:1 (people who have had no pets before: past pet owner: current pet owner) was accidentally found, with the actual number of people being 36, 35 and 36. To avoid confusion, in the following discussion

and figures, “N”, which stands for “no pet experience” will be used to represent students who have never had a pet; “P”, which stands for “past pet owner” represents students who have had pets before, but not at the moment. “C”, which stands for “current pet owner” indicates students who currently own pets, regardless of past pet ownership. Please see Table 1 for further clarification.

Table 1 Before-Class Survey Labeling and Grouping		
Questionnaire Type	Grouping	Definition
A	N	No pet experience: students who have never had any pet before
	P	Past pet owner: students who have had pets before (but have no pet now)
B	C	Current pet owner: students who have pets now (they might be owning pets for the first time in life or not the first time)

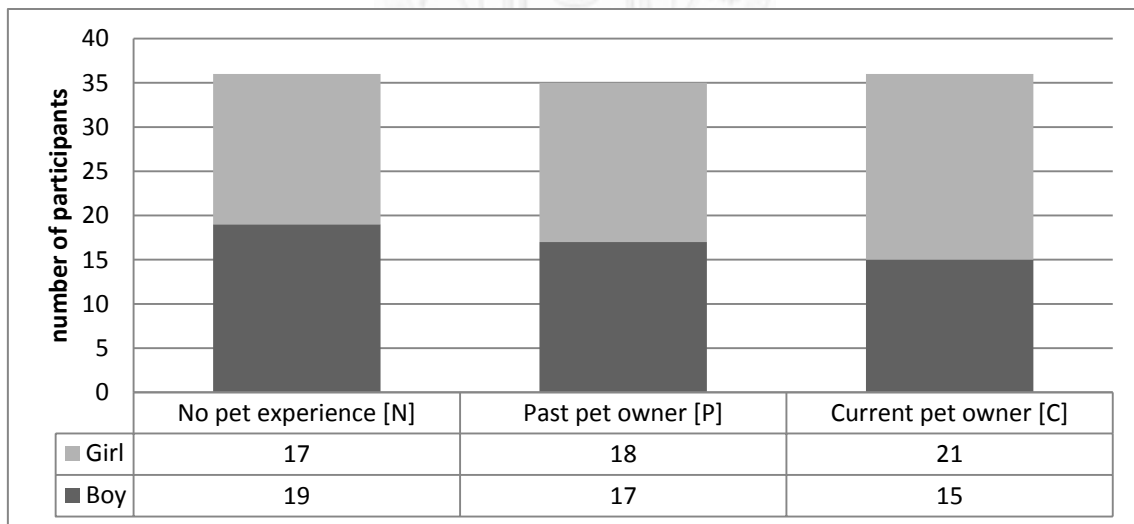


Figure 3. Pet-Owning Experience and Gender Distribution

Figure 3 shows the number of boys and girls in the groups of N (no pet experience), P (past pet owner) and C (current pet owner). The number of boys and girls were similar

in N and C groups, while there were more girls than boys who currently own pets.

康橋	11	麗林	2	華興	1	光仁	1	古亭	1
敦化	9	健康	2	聖心	1	松山	1	大湖	1
仁愛	6	國北教 大附小	2	再興	1	長安	1	東新	1
龍安	5	成德	2	秀朗	1	成功	1	文德	1
光復	5	明湖	2	及人	1	永安	1	民族	1
育才	5	博愛	1	懷生	1	復興 (市立)	1	重陽	1
東門	4	國語	1	莒光	1	修德	1		
新民	3	西松	2	吉林	1	金華	1		
東湖	3	民生	2	福星	1	Froebel	1		
建安	3	中山	2	民生	1	新埔	1		
立人	3	福德	1	市立教 大附小	1	雙蓮	1		

Table 2 shows the original school where the students currently attend, with the number of students from each school. The schools are listed in descending order according to the number of students. The schools that had the most participants were Kang Qiao (Private, 11), Dun Hua (Municipal, 9), and Ren Ai (Municipal, 6).

Questions on Type A and B are similar, if not exactly the same. The only difference was the use of past tense or present tense in the phrases of the questions. General notes for data acquisition were described here:

- The information given by the students was discarded when the answers clearly

seemed to be an error due to student's misunderstanding or misinterpretation.

- The students were clearly asked to indicate “N/A: not applicable” when the situation described in the question did not apply to the students. Questions that left unanswered without indicating “N/A” were not included in the analysis. Students could have skipped the question by accident, did not understand the question or did not finish answering all the questions in time.
- Comments from students which were shown in this study were kept original. Slight changes were made for lexical reasons. Comments in Chinese were translated into English by the author.

3.3.1 Before-Class Survey

Type A Question 1: Did you have pet before and what kind of pet was it?

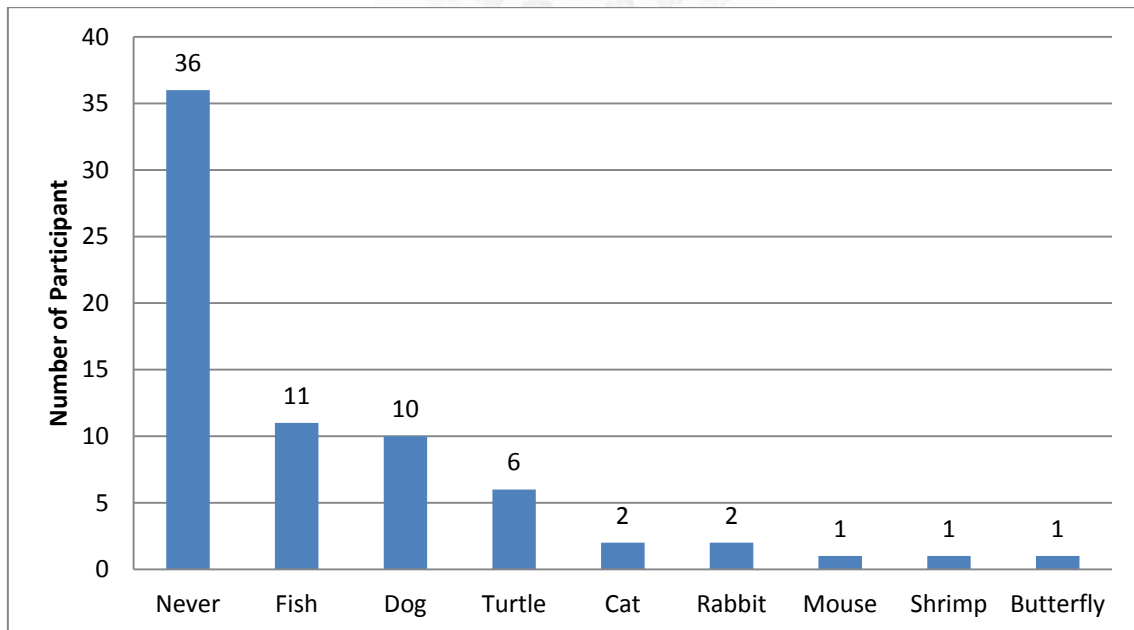


Figure 4. Type of Animal Owned [All Non-Pet Owners, A=N+P]

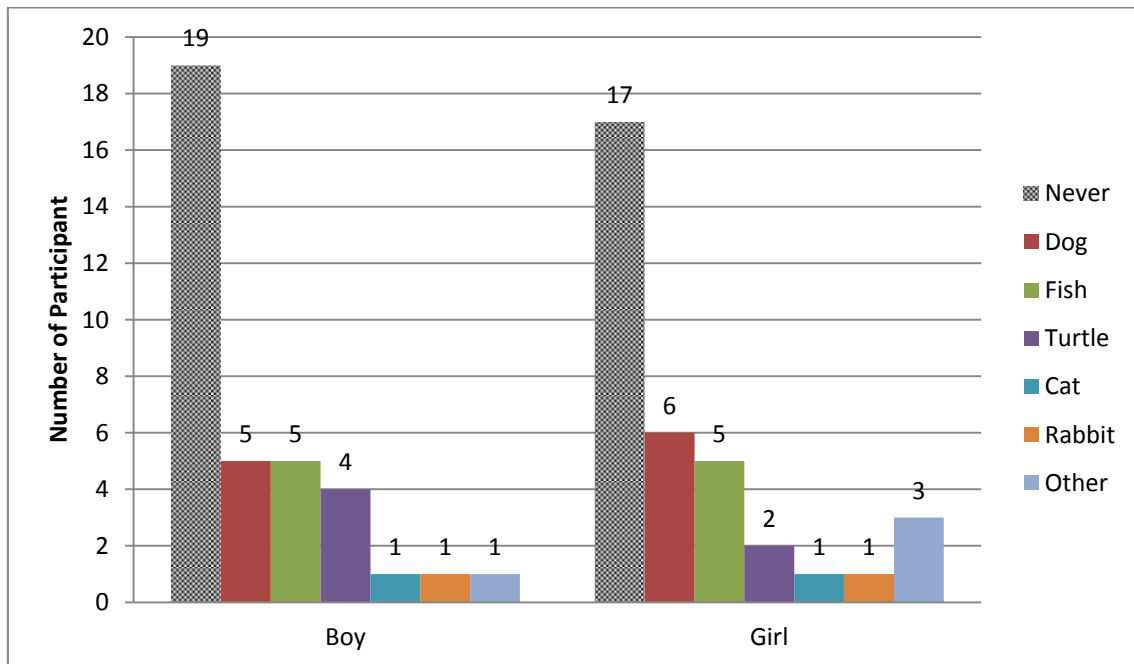


Figure 5. Type of Animal Owned in Relation to Gender

It is noticed that the number of students and types of animals owned in the past were similar between the boys and girls. There was no clear preference of animal type between the two genders. Half of the students who answered Type A Survey have owned pets in the past but do not own any right now, while half of the participants have never had pets before. Among the different kinds of pets owned, fish (which requires minimum care) and dogs are most common. While Perri (2009) reported 35.5% of households own a cat (with 1.76 cats per household) and 32.3% of households own a dog (with 1.38 dogs per household) in Canada, a much lower pet ownership of dogs and cats was observed here. The big gap of pet ownership between Canada and Taiwan can be understood due to lack of space and heavy population in Taiwan, especially in a highly urbanized city like Taipei. The old Chinese tradition of preferring dogs to cats was perhaps still in effect even though it should have been largely faded out in a modern

society. It is commonly known that “cat” is not included in the Chinese Zodiac, which is represented by twelve animals. In Taiwan, there were superstitions about cats that they bring bad luck, especially black cats. However, further study can certainly be done to explore the reasons why dog ownership is much higher than cat ownership in Taipei today, despite the fact that dogs are much more active and require much more space than cats. Meanwhile, whether sufficient space provided by the dog owners in Taipei to satisfy dogs’ freedom to express their normal behavior or not is a concern.

Type B Question 1: What kinds of pets do you have now? How many?

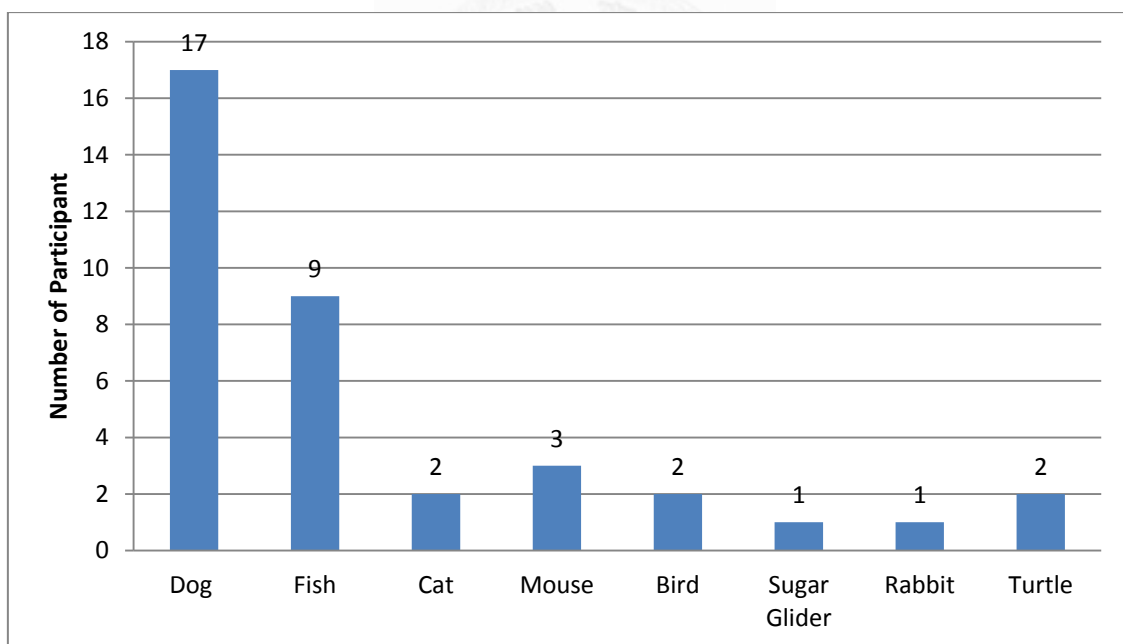


Figure 6. Type of Animal Owning [Current Pet Owner]

Some current pet owners reported having multiple pets (of one kind or multiple kinds), varying from 2 to 4 dogs, dog and many fish, multiple kinds of animals (dog, mouse, and turtle), many parrots and many rabbits. The numbers shown in Figure 6 are

the count of students who reported having such kind of animal. Again, as observed in the types of animals owned by past pet owners, dogs are way more popular than cats as companion animals for current pet owners as well.

Type A Question 2: What was your reason(s) for having a pet?

The reasons of having a pet entered by the past pet owners are as follows. The number in the bracket indicated the number of participates who wrote the same or similar reason:

- **Gift/Reward (10)**
- Family pet/ family member likes animals (6)
- Love/Like animals (5)
- Take care of animals (3), Animals are cute (3)
- To play with (2), Company/Friends (2), Utility reason (Catch the mice, feed other pet) (2), Fun/Entertainment (2)
- Attain good experience (1), Develop responsibility (1), Teacher's request (1), Unknown (1)

The labeling and categorization of the reasons might seem interrelated and overlapped. For example, "To play with" pets can increase "Fun/Entertainment" because pets are good "Company/Friends". However, the author sought to keep the students' original word choice because it truly reflected what the students had in mind.

It is noticed that the most common reason to have a pet was to receive the animal

as a gift or reward. Having got such an answer from past pet owners, we can see that receiving animals as gifts or rewards certainly did not encourage the participants to continue their pet ownership (since they do not own pets now). During the time of their pet ownership, whether they were good owners or not remained in question. For the benefits of humans and animals alike, giving an animal to people as a gift or reward should be avoided unless the recipient exhibits strong will and interest in having one.

Type B Question 2: What is your reason(s) for having a pet?

Similar to the previous question for non-pet owners, the reasons for having a pet were also answered by current pet owners. The number in the bracket indicated the number of participants who wrote the same or similar reason:

- **Keep company** (9)
- Animals are cute/beautiful (7)
- Gift (6)
- Love/Like animals (4)
- Animals make me happy/make me laugh (3)
- Family member likes animals (2), Develop responsibility (2), Interest (2)
- Curiosity (1)

It is noticed that providing company is considered the most important and valuable attribute of having pets by current pet owners. Overall, current pet owners seem to appreciate animals more as “animals”, not as “gifts” or just “some family member’s belongings.”

Type B Question 3: How long have you had your pet(s)?

The length of the pet ownership reported by current pet owners was as follows.

- Less than 1 year (6)
- 1 to 2 years (8)
- 2 to 3 years (6)
- 3 to 4 years (3)
- 4 to 5 years (3)
- 5 years and longer (8)
- 10 years (1)

Long commitment to pets is not rare according to the numbers. The students who reported long pet ownership were mostly dog owners.

Type A Question 3 / Type B Question 4:

Where did you get this pet? What was the source of this pet?

For the 36 students who have never had a pet before, they were asked to write “N/A-not applicable” for answer, among the 36 participants who have had pet before; the sources of their pets are shown in Figure 7. The sources of current pet owners are shown in Figure 8. We can see from the data that acquiring pets from pet shops is very common. Although pet shop might be the only place to acquire turtle, bird, mouse, rabbit and other small animals in Taipei, people do have the choice of adopting dogs

from local animal shelters. It is suggested by the finding here that concept of “adopting instead of buying” needs to be further advocated and promoted. Interestingly, according to 2 past cat owners and 2 current cat owners, the cats they had/have were 1 stray, 1 given by an acquaintance, 2 from adoption. There was none purchased. While purchasing animals from any source should not be encouraged, it seems that people are more willing to spend money on (acquiring or even providing care for) dogs than cats here. More and more people send their dogs to “pet spa” or pet beauty salon” for bath and haircut. On a general note, the author discarded the information that seemed to be an error due to student’s misunderstanding or English inability. Also, some students indicated the source for more than 1 pet. As a result, the number of data may exceed the number of students or it may be inferior.

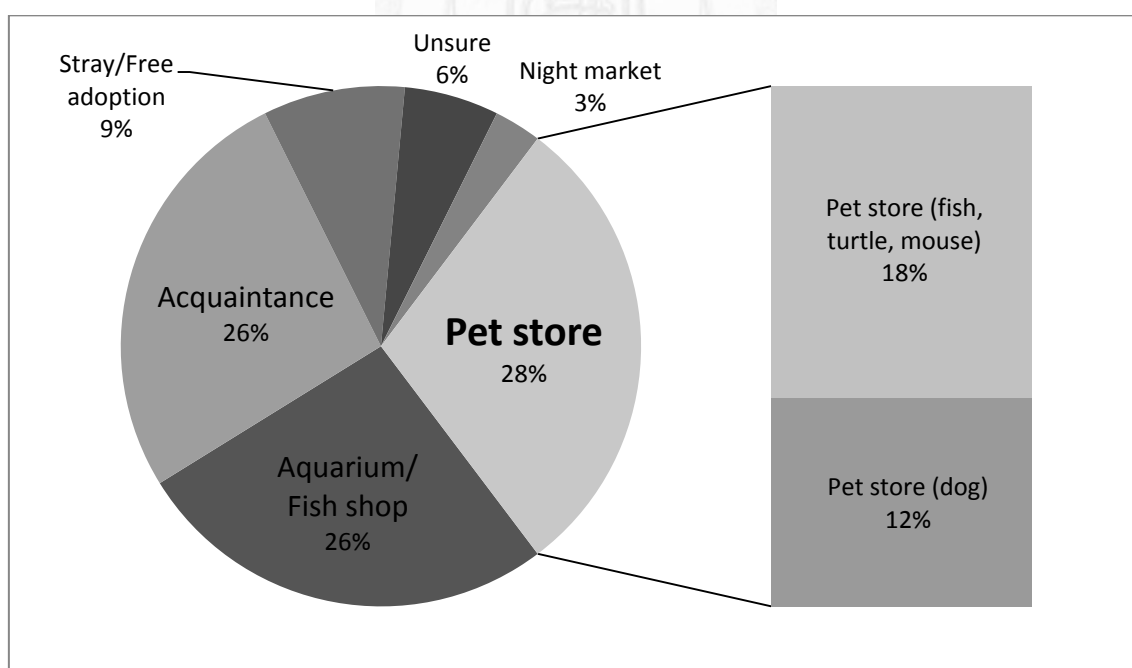


Figure 7. Pet Source of Past Pet-Owner

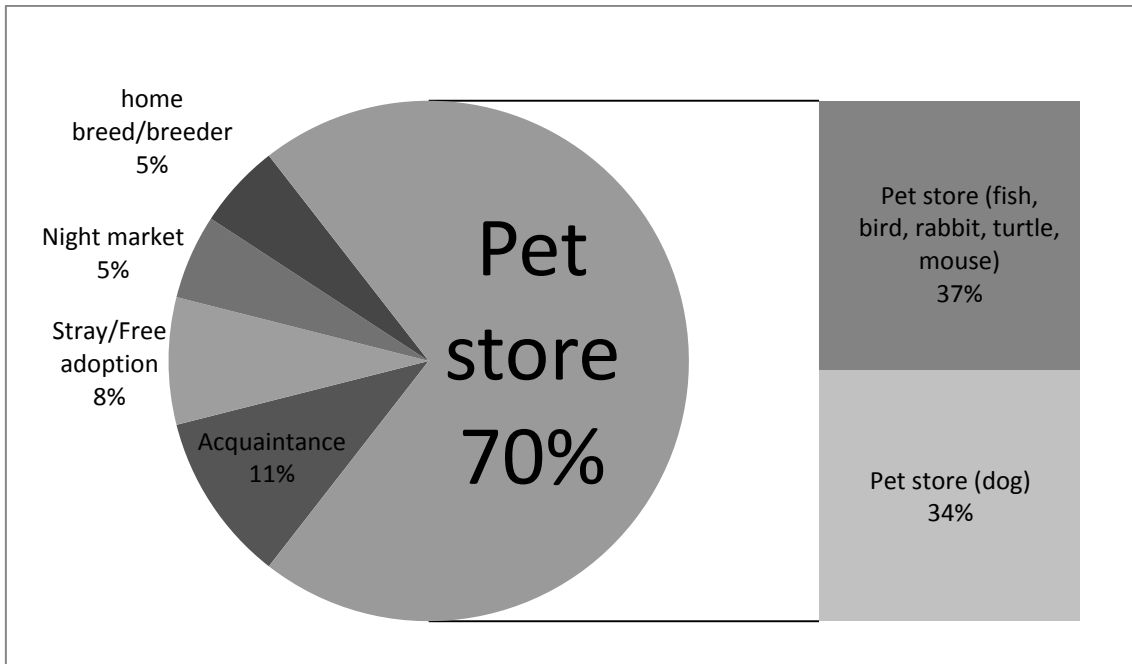


Figure 8. Pet Source of Current Pet-Owner

Type A Question 4: What happened to your first pet?

The answers from past pet owners were:

- died (23)
- gave away (3)
- released (3, referred to fish, turtle, butterfly)
- lost (2)
- returned (2)

Type B Question 5: If this is not your first pet, what was your first pet and what happened to it?

The answers from current pet owners were:

- The pet that I have now is my first pet (14)
- died (14)
- lost (4)
- gave away (1)
- stolen (1)

From the data, we learned that one-third of the total students experienced pet loss at the age of 12. The reason that caused their pets' death was not discussed in this study. However, proper education on how to better take care of their pets and how to cope with pet loss are recommended.

Type A Question 5 / Type B Question 6:
When did you first have responsibility for the care of the pet and what animal was it?

For past pet owners:

The age they first had responsibility for the care of the pet: 4(1), 5(2), 6(2), 7(5), 8(2), 9(2), 10(3), 11(2)

The type of animals they first had responsibility for the care of: fish (11), dog (7), turtle (6), rabbit (1), mouse (1), butterfly (1)

For current pet owners:

The age they first had responsibility for the care of the pet: 3(1), 4(1), 5(2), 6(3), 7(1), 8(1), 9(4), 10(2), 11(2)

The type of animals they first had responsibility for the care of: fish (6), dog (8),

mouse (2), bird (2), turtle (1), cat (1)

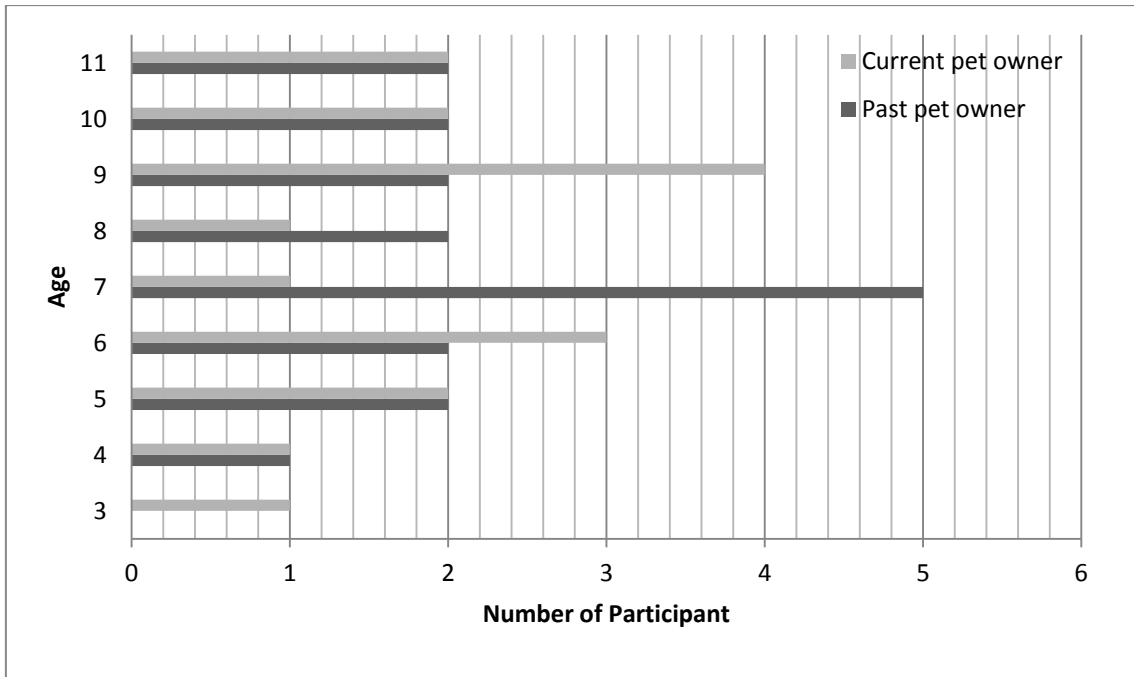


Figure. 9 “When did you first have responsibility for the care of the pet?”

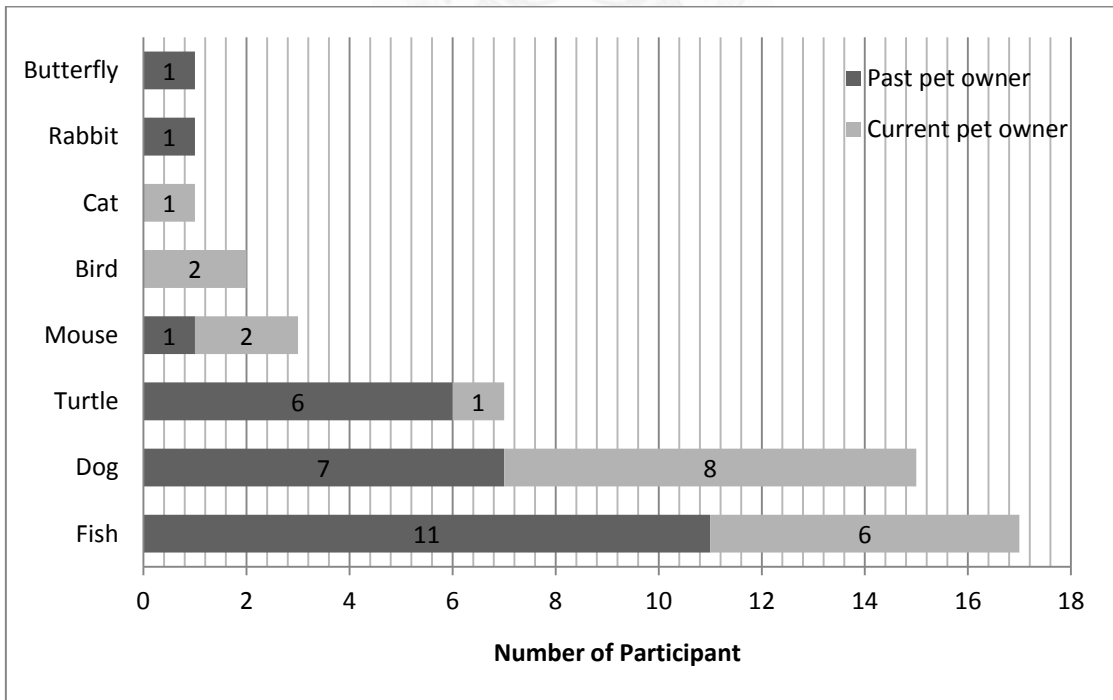


Figure 10. Type of Animal Student First Have/Had Responsibility for the Care

Students started taking responsibly for the care of animals at very young age (Figure 9). Such young children cannot be expected to know how to properly care for an animal, even for animals that require little attention. Notice that children can start taking care for animals at the age of 3 to 5 while elementary school education starts at age 7. Thus, the responsibility to educate and guide young children to properly take care of animals should be on parents or caretakers, if not kindergarten teachers. The animals that the students first had responsibility to take care were mostly turtle and fish, which require less care. Since dog ownership is relatively high (compared to other animals) in Taipei, a high percentage of pet owners (either past or current) started taking care of dogs at young ages. Pet care education, especially about the care of these animals should be enforced to benefit and improve the quality of life for both pet owners and animals.

Type A Question 6: How attached were you to your pet?

Type B Question 7: How attached are you to your pet?

Very attached Attached Not very attached

Figure 7 shows past and current pet owners' level of attachment to their pets. In average, the owners' attachment to the pets was very high. The animals of the owners who indicated low attachment to were fish (3), mouse (1), butterfly (1), cat (1), and dog (1).

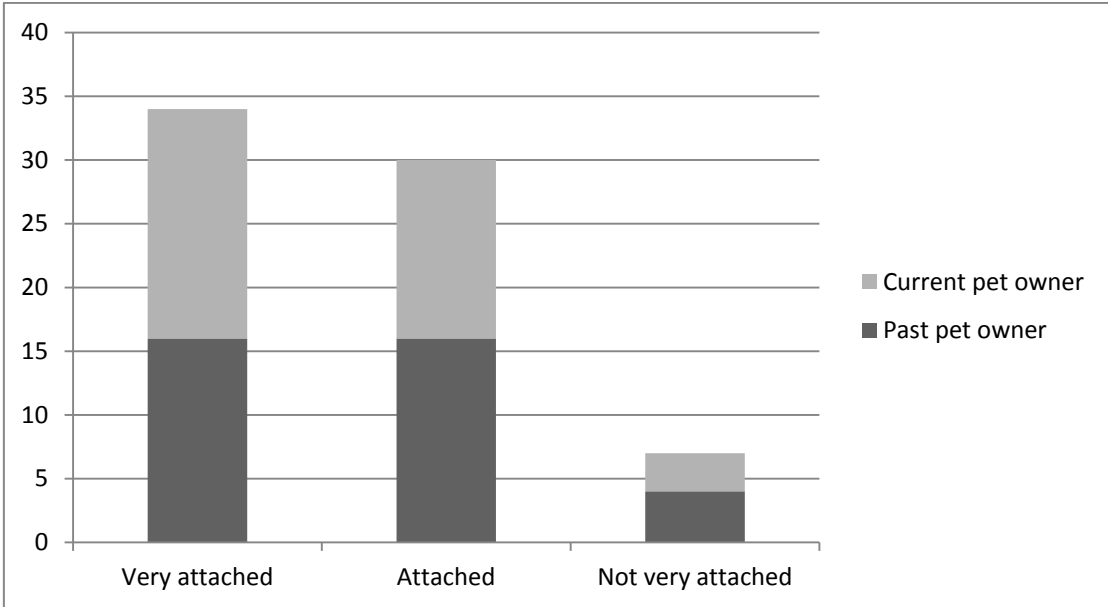


Figure 11. Pet Owner's Level of Attachment to the Pet

Type B Question 8: Who usually takes the most care of this pet?

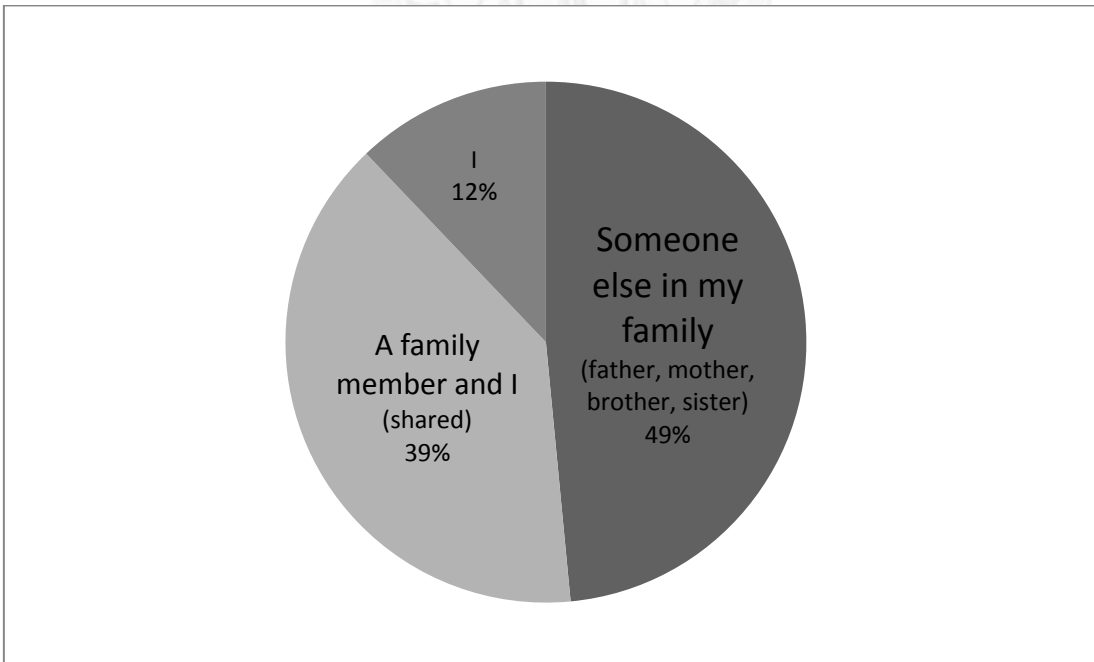


Figure 12. Main Caretaker of the Pet

From Figure 12, we can see that among the current pet owners, only 12% reported to be the main caretaker of the animal. As high as 49% of current pet owners reported that the main caretaker is someone else in the family. As the author mentioned in the previous chapter, many parents simply acquire pets for the children but do not teach children how to take care of animals, let them or ask them to take responsibility in the care of the animals. Children learn to nurture from hands-on experience, and they need to be given opportunities to practice (with adults' guidance) and take responsibility. Parent education might help parents realize the important link between "doing" and "learning."

Type B Question 9: How much time do you spend doing something with or for your pet every day?

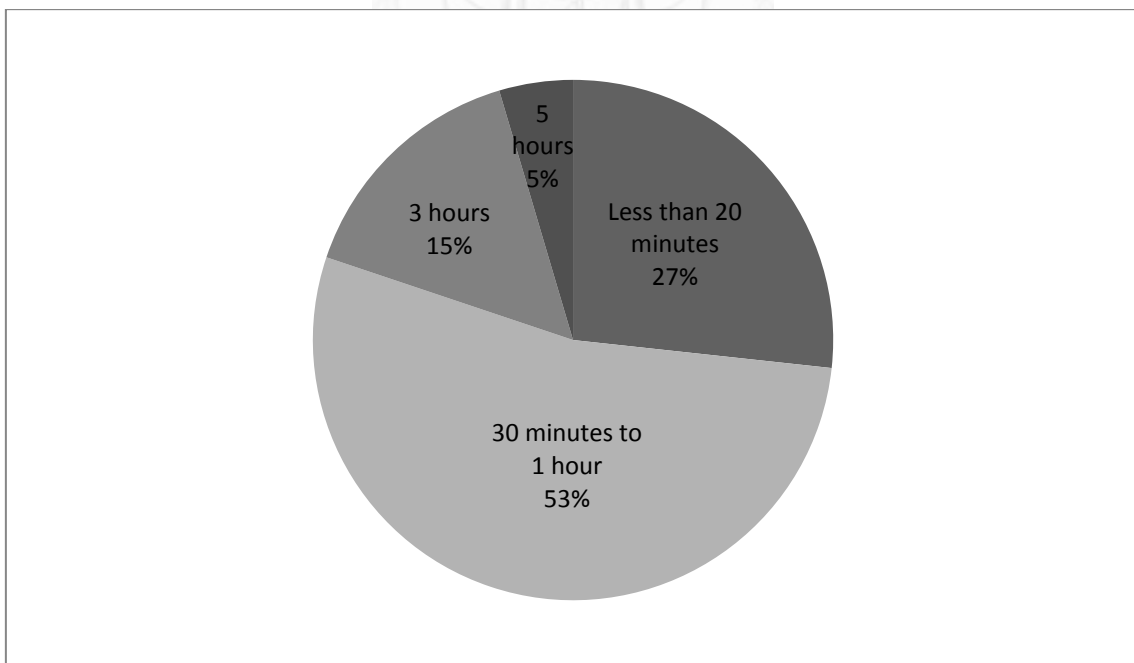


Figure 13. The Amount of Time Spent with Pet/ for Pet Every Day

From Figure 13, we see that 53% of pet owners spent 30 minutes to an hour, 27% pet owners spent less than 20 minutes, while 20% of pet owners spent more than 3 hours every day doing something with or for their pets.

Type B Question 10: How do you feel when you are with your pets?

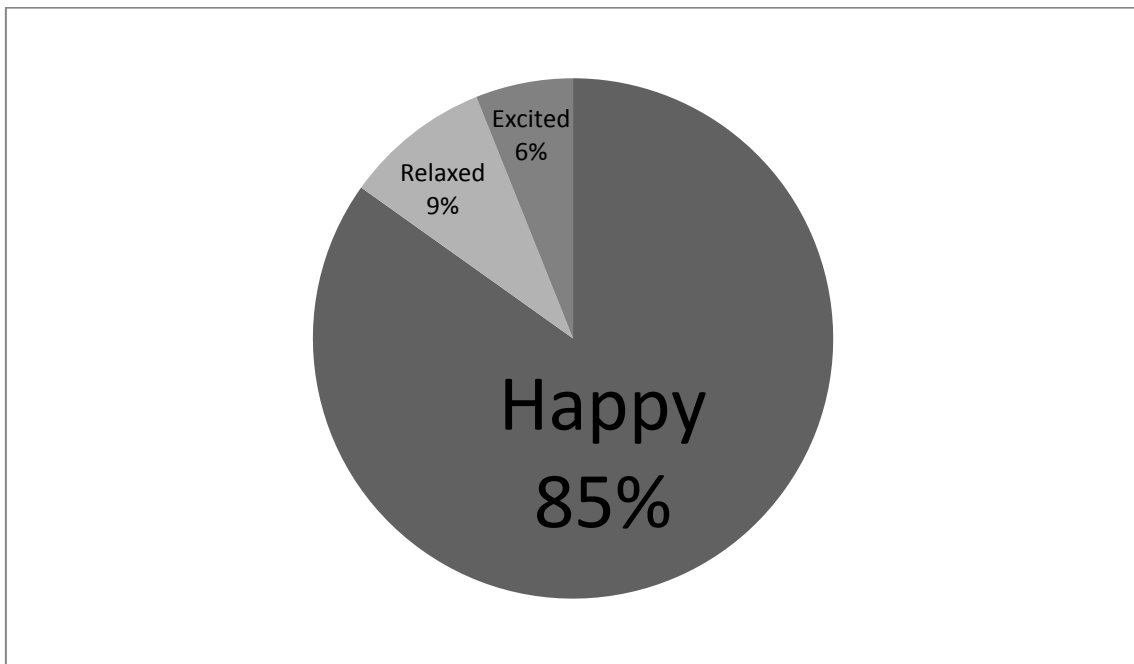


Figure 14. Feeling When Being with Pet

Figure 14 shows that the majority of pet owners feel happy when they are with their pets, while others feel relaxed or excited when they are with pets.

Type A Question 7: Was owning your pet a burden and why?

Type B Question 11: Is owning your pet a burden and why?

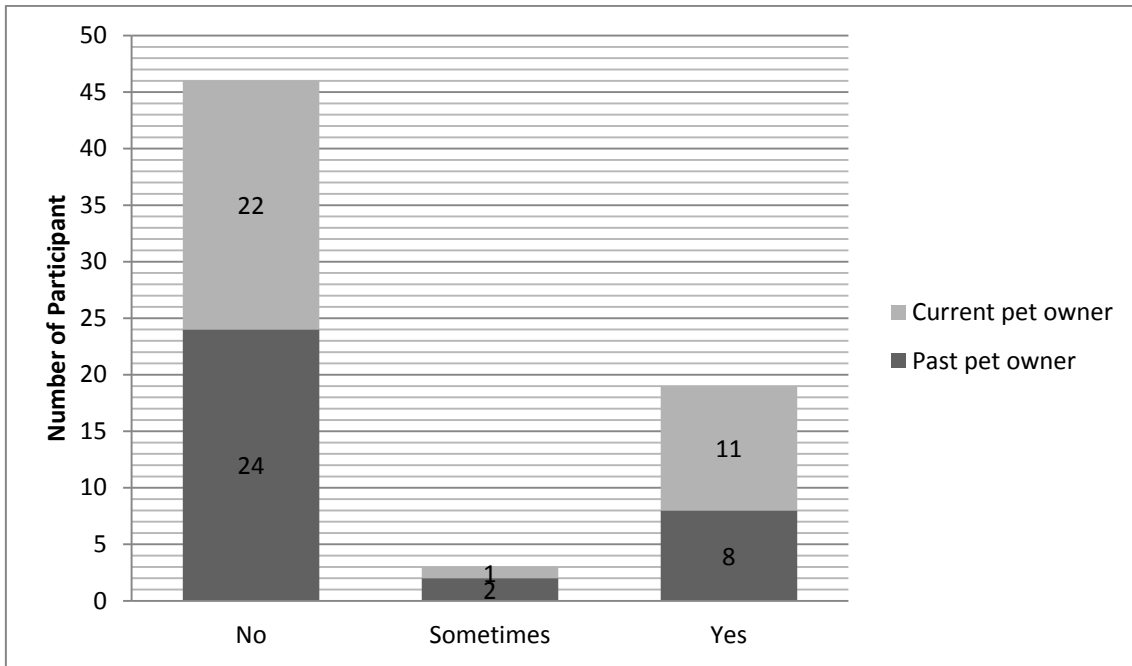


Figure 15. Owning My Pet Was/Is a Burden

We see from Figure 15 that no matter for current or past pet owners, owning pets is/was not a burden in large part, with the common reasons being: “Because I love my pet.”, “Because my pet requires little care.”, “Because my mom did all the work.” People who answered “yes” think that pets are burden because of “clean up/chore”, “damage caused by pet”, “noise”, “lack of time”, “lack of space”, and “allergy”. In addition, there were two students indicated having concerns for their animals’ wellbeing as a burden, an emotional one.

Type A Question 8: What are the reasons for NOT having pets now?

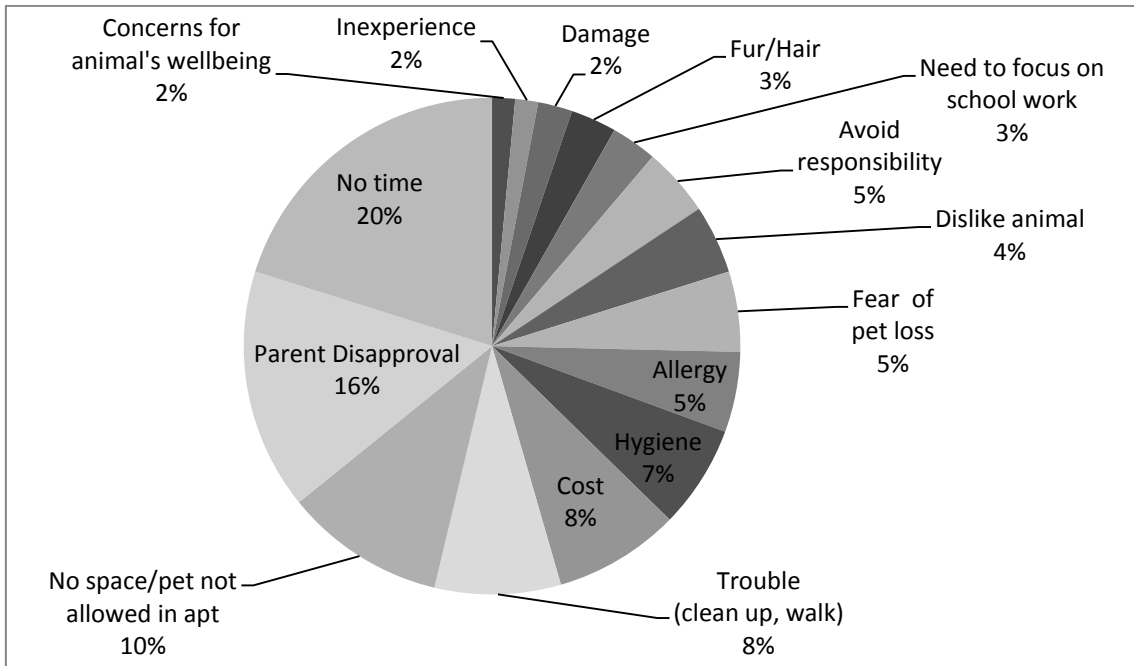


Figure 16. Reasons for NOT Having a Pet Now (Non-Pet Owner)

The reasons for non-pet owners to NOT have a pet now are shown in Figure 16. There are various reasons, but the biggest reasons were “no time for pets” and “parent disapproval.”

Type A Question 9: Do you have any reason(s) for getting a pet in the near future?

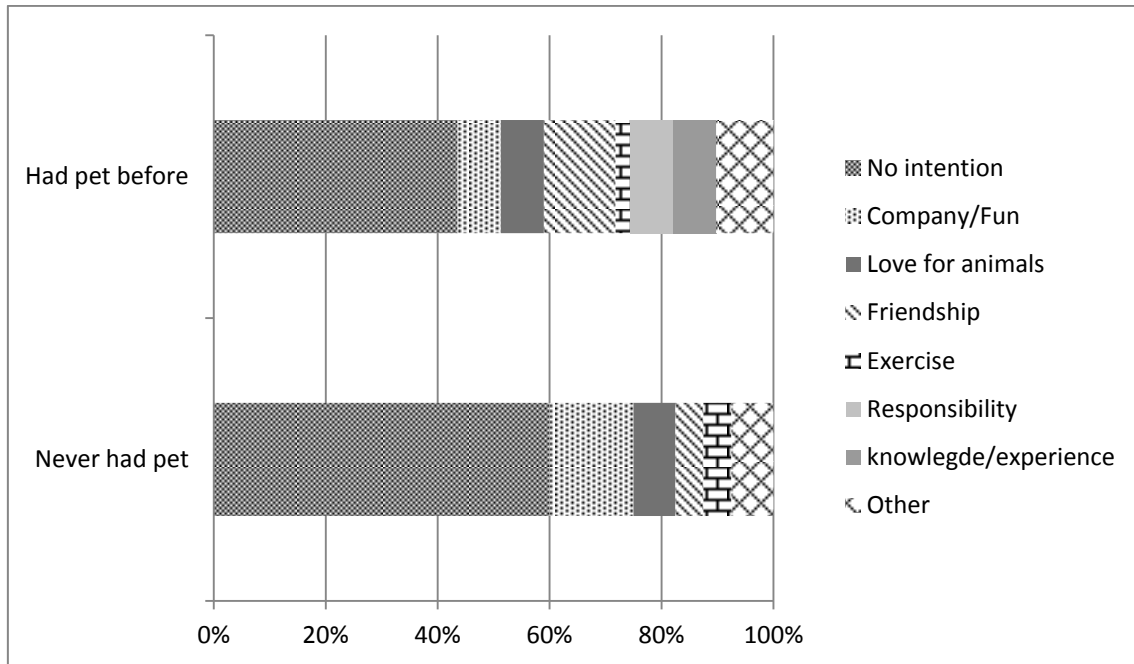


Figure 17. Intention/Reasons for Getting Pets in the Near Future (Non-Pet Owner)

As Figure 17 shows, the students who have never had pets before showed less interest and intention in getting a pet in the near future, and they also had less possible reasons to get a pet when compared to students who have had pet before. Students who had previous pet experience listed “gaining knowledge and experience”, “learning responsibility” as good reasons to get pets; however those reasons were not considered as good reasons by students who have never had pets before. Other reasons include “to guard home”, “make me happy”, and “animals are cute”.

Type B Question 12: List three good things about having a pet.

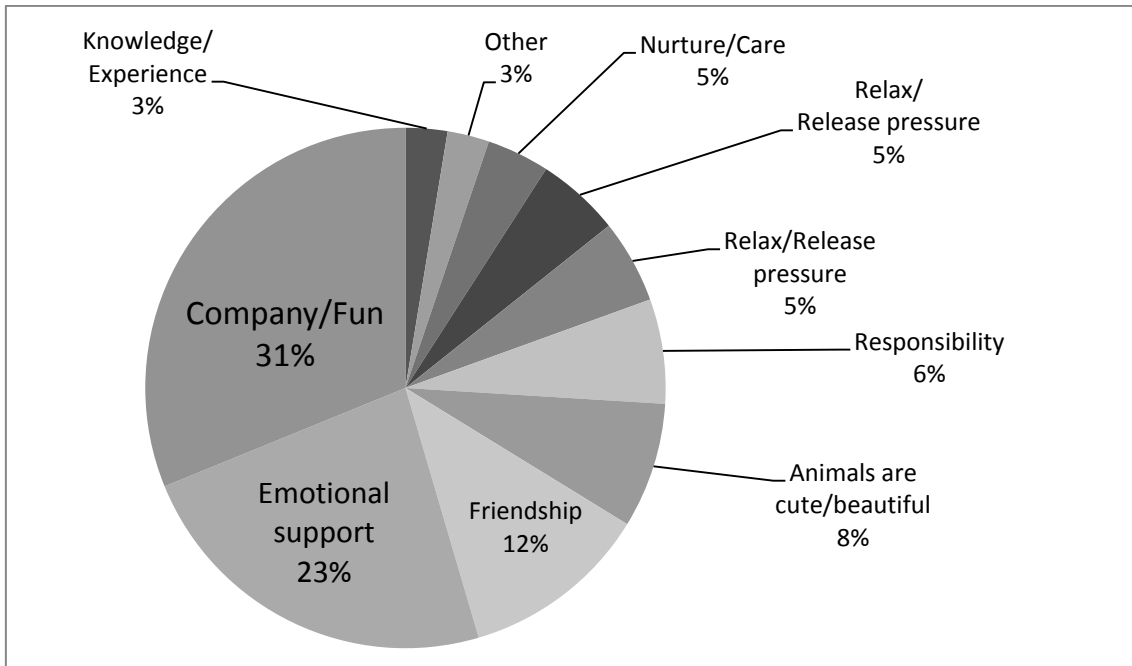


Figure 18. Goods Reasons for Having a Pet (Current Pet-Owners)

Figure 18 shows the good reasons to have pets from the current pet owners' points of view. We can see that children appreciate the company, emotional support and friendship provided by their companion animals. Comments like, "My pet makes me happy", "My pet makes me feel better when I am sad" are common. "Other" reasons include "to guard house" and "to show my pet to others". There were animal-centered reasons, such as "providing an animal a home" and "sustaining its life otherwise it will die", but such comments were few.

Type A Question 10 / Type B Question 13:

What do you think of "animals"?

This question was answered by all the participants. Figure 19 shows how the participants think of "animals" in relation to their pet experiences. The label "Positive"

include people who use only positive words to describe animals, with the word choices of “good, cute, adorable, innocent, smart, incredible, helpful, beautiful, friendly, lovely, amazing, loyal” and such. The label “Neutral” include people who mentioned both positive and negative sides of animals, such as “some animals are dangerous, others are cute”, “some animals are quiet, some are noisy”, “animals are different”, and comments that focused more on the variety and diversity of animals. Item “Negative” include comments that use negative words only, such as “trouble, scary, dirty, noisy” and such. Specific descriptions of animals are under “other” and are further explained in the next paragraph. Comments from students shown in this study were kept original. Slight changes were made due to lexical reasons. Comments in Chinese were translated into English by the author.

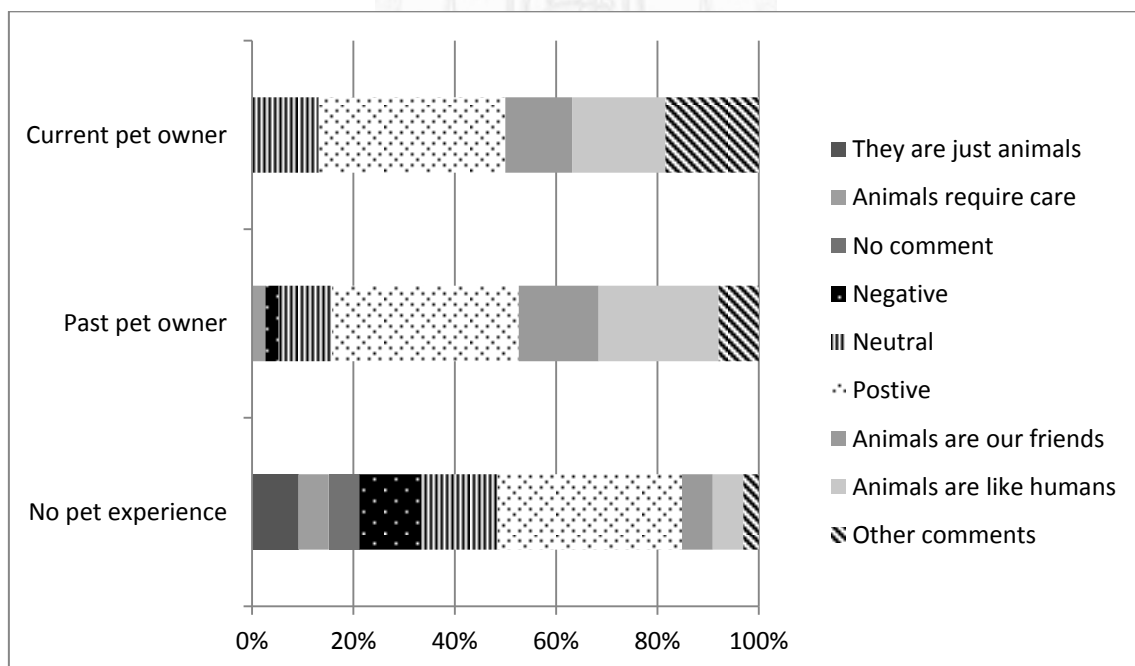


Figure 19. Views and Thoughts about “Animals”

Figure 19 shows that even though we received lots of positive comments from

people have no pet experience, this group of people seems to have much less to say about animals (including no comments) than the other two groups. More people in this group tend to think of animals as “just animals”—“they are a thing that can move”, and more negative comments were received. “Other comment” referred to a comment like “animals are our food”.

Comments from past and current pet owners are more similar, compared to the comments from people have no pet experience. A very clear difference can be seen here that a lot more comments were made by past and current pet owners to point out the similarity between humans and non-humans and the respect humans should pay to non-humans. Under the label of “Animals are like humans”, there are comments like “animals are like us”, “animals have souls just like any of us; they deserve better treatment and respect”, “humans are animals too”, “animals are creatures just like us”, “animals are all lives, if we can’t kill people, we can’t kill animals either”, “animals are very similar to us”, “animals’ lives are very precious”, and “we need to treat animals well because we are animals too”

“Other comments” from past pet owners were: “Humans are killing lots of animals”, “Animals are part of our lives”, “I love animals and I want to learn more about them.” There are clearly more specific thoughts and views about animals from current pet owners, under “Other comments” there were: “I think animals feel upset about what humans did to them”, “animals have feelings and they can also communicate”, “animals want a warm family”, “animals are unique creatures that cannot be reproduced by human”, “I want to know what the animals are thinking” and

“I think animals should be treated equally as humans. We can’t do cruel things to animals. I believe the world will be more peaceful if everyone shares the same thought.”

Type A Question 11 / Type B Question 14:

Where do you learn about animals?

From Parents Teachers TV Animals Others_____

This question was answered by every participant. They were given choices of “Parents”, “Teachers”, “TV”, “Animals”, and were asked to specify sources if the box “Others” was checked. The participants had the choice of checking one or multiple items. The information showed that students learn about animals from TV programs the most; parents and teachers have the same influence on students’ learning. The result pointed out that production of good educational television programs, such as Animal Planet, is crucial in helping students learn about animals, especially for children who grow up in highly urbanized cities. The result also served as a reminder that teacher and parent involvement are essential since both parties are major sources of students’ learning. Proper training and education should be provided to teachers and parents to equip them with knowledge regarding to animals to pass on to their students/children. Interestingly, even though many students indicated “teachers” as their learning sources about animals in this question, a lot of them answered “no” in the next question. The discrepancy here was perhaps due to the different nature and content of the lessons. “Learning about animals” which refers to “general knowledge about any kind of animals” does not necessarily include “how to treat animals, how to take care of animals and show respect for all living beings.” Another possible reason was that, the “teachers” the students referred to in this question were not “school teachers” in the next question.

More than one-third of the participants learned about animals from “animals.” Other learning sources listed by the participants were printed materials such as books, journals and pamphlets; places where they can meet animals such as zoos and pet stores; animal specialists like veterinarians; online resources and friends.

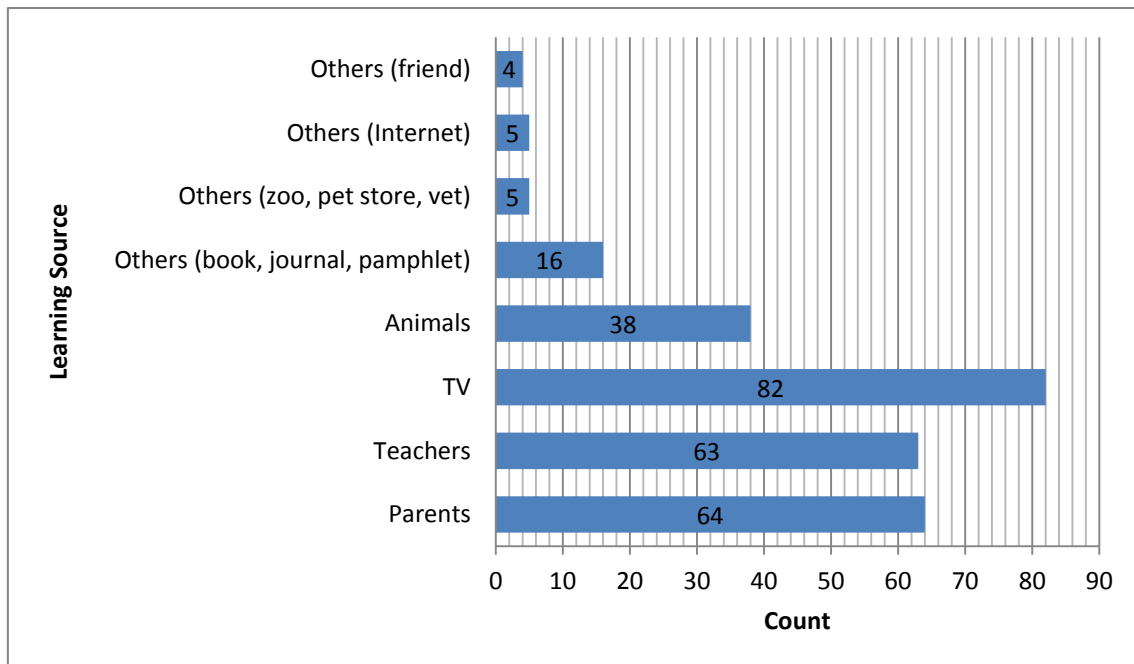


Figure 20. Animal-Related Knowledge Learning Source

Type A Question 12 / Type B Question 15:

Have you learned how to treat/take care of animals from school teachers?

If yes, what subject and how often?

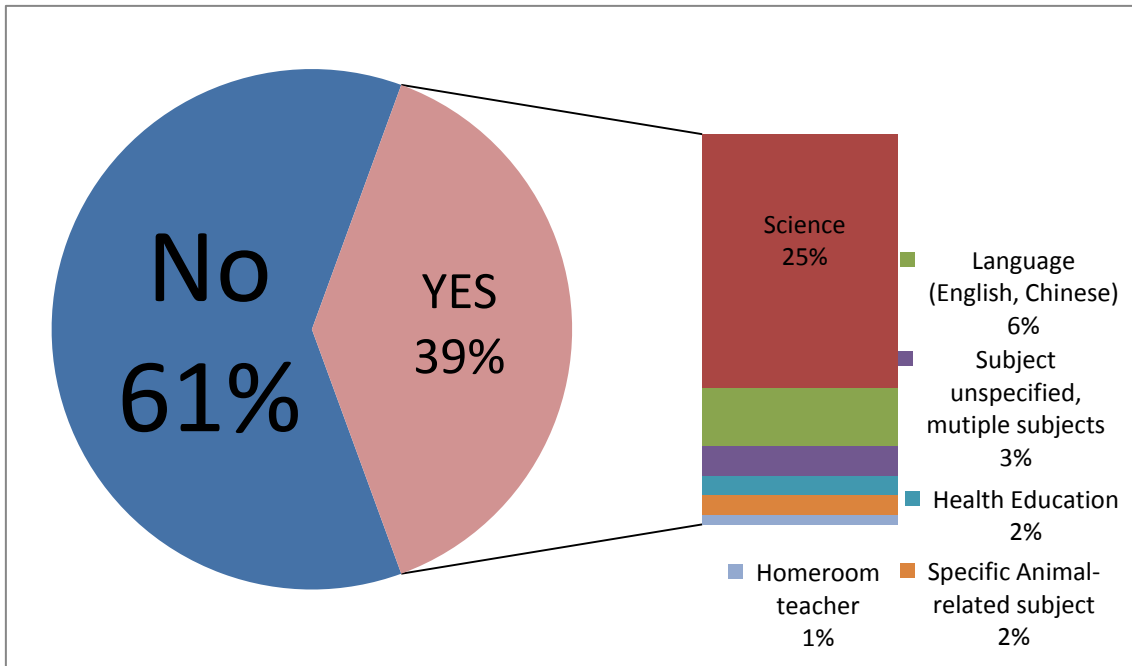


Figure 21. I Have Learned How to Treat/Take Care of Animals from School Teachers and the Subject I Learned it from

The answers from the students here clearly showed a serious lack of education in teaching how to treat and take care of animals at school. Only 2 students out of 107 students indicated that there is a specific class offered at their schools to teach students about humane treatments towards animals. As mentioned in the discussion of the previous question, the concern we had here was that even the students who answered “Yes—in Science class” in this question could possibly mean they learned “about animals”, however not necessarily about “care and treatment for animals”. The information students gave on the frequency of the animal-related class at school was not reliable since many of the students wrote the frequency of certain class (such as science class, 2-3 times a week) instead of actually indicating the frequency of science class which teaches about care of animals. This question can be better designed and clearly

stated in the future in order to get more specific answers. However, most students who understood the question well emphasized the low frequency of animal care-related class at school.

Type A Question 13 / Type B Question 16:

What do your parents think about animals? Do they love animals? Does it affect you?

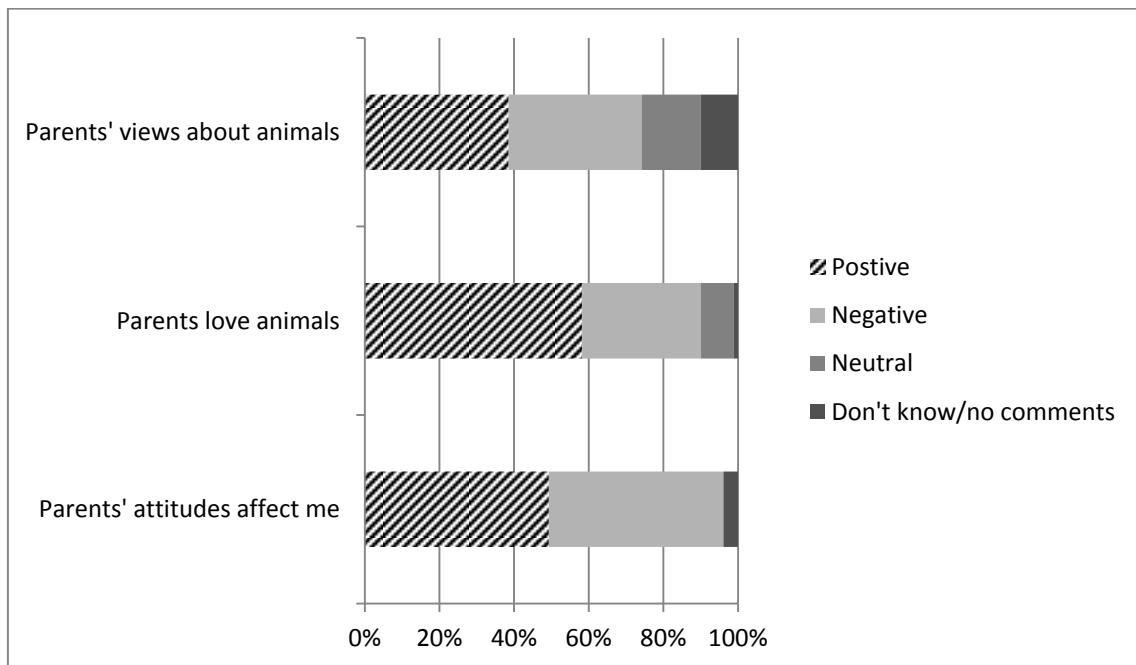


Figure 22. Parent's Views About Animals/ Parents Love Animals/Parent's Influence

Half of the participants believed that their parents hold positive views of animals while half of them believed that their parents hold negative views of animals. Slightly more participants believed that their parents love animals than those who believed their parents do not. This question was not about what their parents really think. What their parents really think may not be what the students perceive, thus the answers from the students do not necessarily reflect their parents' attitudes about animals. However,

parents' behavior towards animals and verbal comments about animals, which are observed and taken into account by their children, can "project" parents' attitudes towards animals. Parents are the first and best role models for their children. Parents should be advised that even if they are not close to animals for any reason, they should still give their children a chance to get in touch with animals instead of depriving their children of opportunities to love animals. Interestingly, the author found that students who believed that their parents love animals seemed to agree more with their parents' attitudes by indicating that their parents' positive attitudes towards animals affect them. Meanwhile, the students who believed that their parents do not like animals tend to disagree with their parents' views by indicating that their parents' negative attitudes towards animals do not affect them. On a side note, A few students pointed out that their parents love animals but they do not want an animal at home due to the hassles.

3.3.2 After-Class Survey

**Question 1: Did the lesson today change the ways you think about animals?
How?**

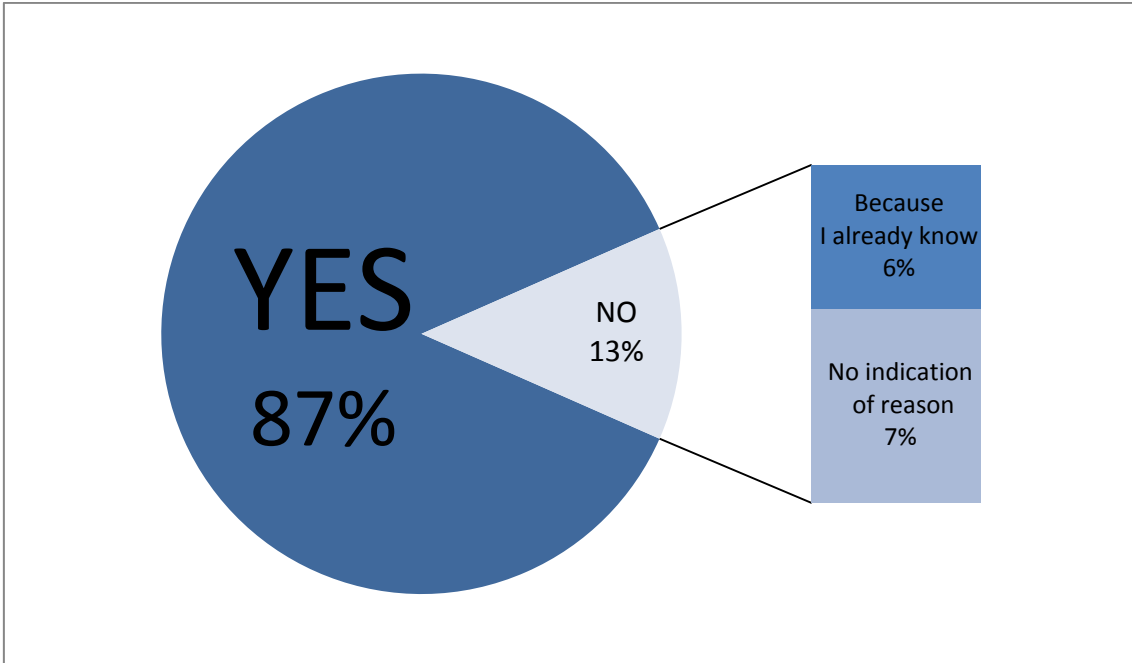


Figure 23. Effectiveness of the Lesson (from All Students)

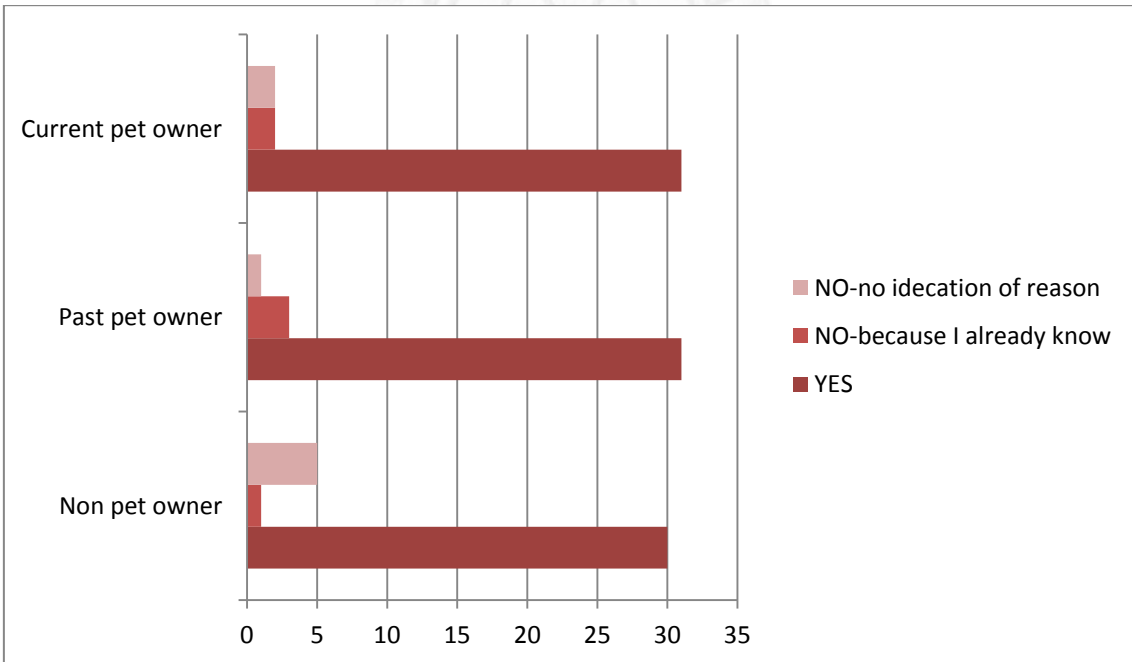


Figure 24. Effectiveness of the Lesson (In Relationship to Pet Ownership)

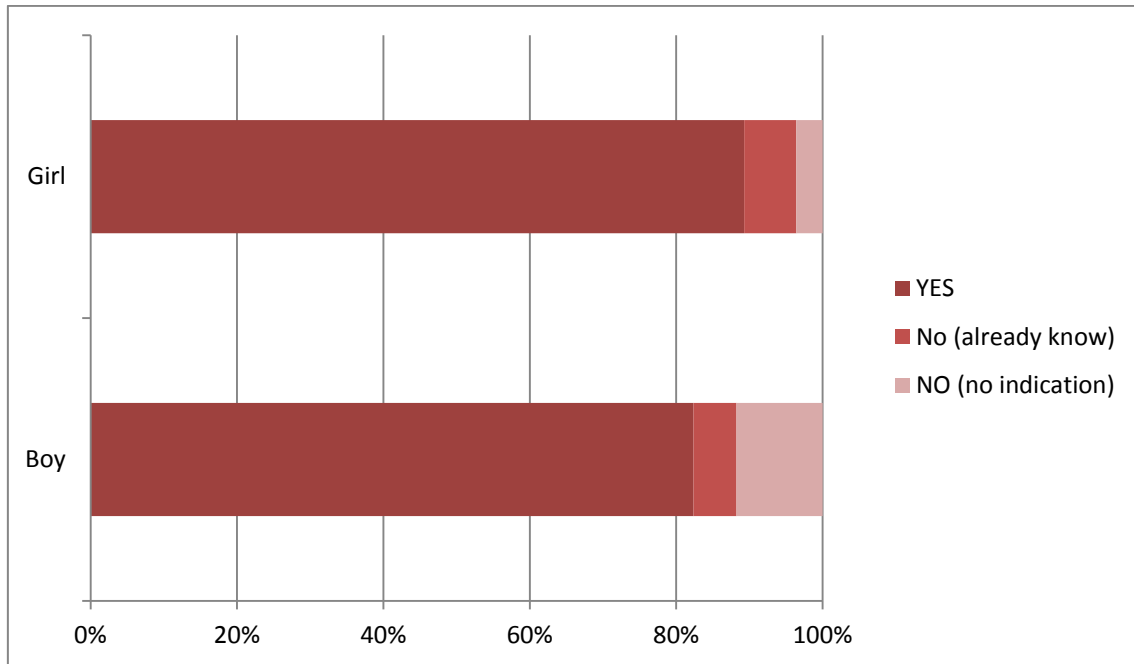


Figure 25. Effectiveness of the Lesson (In Relationship to Gender)

From Figure 23 we can see that the lesson, even though short, was considered effective by 87% of the students. It should be noted that 6 people among the 14 people who answered “No” stressed that the lesson “did not change” their ways of thinking about animals because they had already learned similar concepts before and they had already been holding humane attitudes toward animals. Comments such as “No—because I already think about animals this way”, “No—because I am already an animal lover” and “No—because what I think about animals is what I see (in class) today” were made. We can see from the students’ comments that the lesson did enhance their knowledge about animals and humane attitudes toward animals in many different ways as their words served as “testimonials”. Here are some examples of what students learned in this class: “If you can’t promise to take care of the pet, don’t buy it”, “Now I know animals are similar to humans”, “The lesson let me know animals can feel too!” , “Animals are in much more miserable condition than I thought”, “We must be

responsible owners”, “I think we should stop killing dogs and cats”, “I didn’t know that there are so many similarities between humans and other animals”, “we need to care about how animals feel”, “I will treat animals better”, “the lesson (today) changed me a lot”, “I know (now) that animals can feel pain and suffer”, “It (the lesson) made me look at this problem very seriously”, “I always knew that animals weren’t treated right, but I never knew it was that serious”, “The lesson made me love animals more and know how to respect them”, “I don’t want to buy animals anymore”, “Now I know animals have feelings. Before, I thought animals don’t have any feeling”, “I think I won’t buy a pet from pet shop anymore”, “I think we need to treat animals the way we treat each other”, “We need to love animals because all lives are precious”, and “Before, I think some animals are very scary but after today, I think in fact humans are the scariest!”

It was observed that students generally are not aware of what really happens at shelters. As the author previously mentioned, many people (including adults) either think naively that shelters can be homes for their unwanted pets, or somehow convinced themselves that shelters can be homes for their pets to avoid guiltiness in abandoning their animals. They believe that pets can stay there until they are adopted. Of course there are people who know exactly what happen at shelters but still surrender their pets to shelters (so they do not “see” or “know” what happens after). In other words, they do not have to be “direct killers” of their pets. From the students’ comments, we can see that the lesson changed some students’ views about shelters. Comments like “it changed the ways I think about ‘shelters’!”, “I thought shelters are good but they are not”, “I didn’t know animals will be killed when they stay (at a shelter) too long” were common.

It also came to the author's notice that many (12) students commented on the strong impact the short videos had on them. They made comments like, "The short movie about pet made me change my mind about pet", "The two movies changed the ways I think", and "The teacher showed us a movie that shocked me". It can be clearly seen that videos are very convincing and powerful educational tools. Some people might consider it too cruel to show students movies about killing animals, but it is important for the students to know the truth in order to make informed decisions. "To see is to believe," seeing the "actions" done leaves much stronger impression on students than "words" spoken.

The lesson was considered effective by all students, regardless of their pet experience. However, from Figure 24, we can see that there were more students in "N" group (who have had no pets before) answered "No" with no further explanation, which can be interpreted as a sign of low interest in the topic of animals. From Figure 25, it is observed that the lesson was slightly more effective towards the girls than boys. The boys showed slightly less interest in this topic than the girls.

Question 2: If you or people around you want a pet, where would you tell them to go?

Pet Shop Breeder/Puppy Mills Shelter or Animal protection groups Other _____

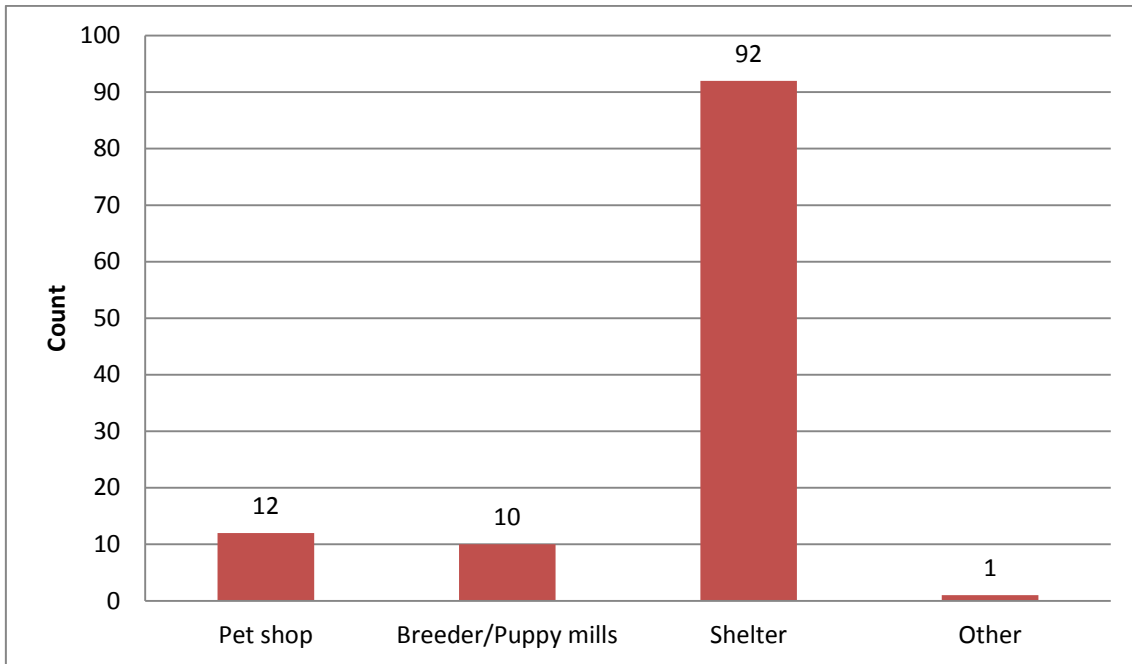


Figure 26. Possible Source for Future Pets

Figure 26 illustrates the students' possible sources for future pets. The students had the free choice of picking one or multiple items listed. All the possible sources that all the students entered were included in the analysis. People who chose "pet store" or "breeder" largely listed "shelter" as well, while the majority of students listed only "shelter" as the sole source for a future pet. "Other" refers to "friend" as possible source for future pets.

Question 3: If you have a dog/cat now, would you (tell your parents to) spay/neuter him/her?

Absolutely yes Maybe No, because _____

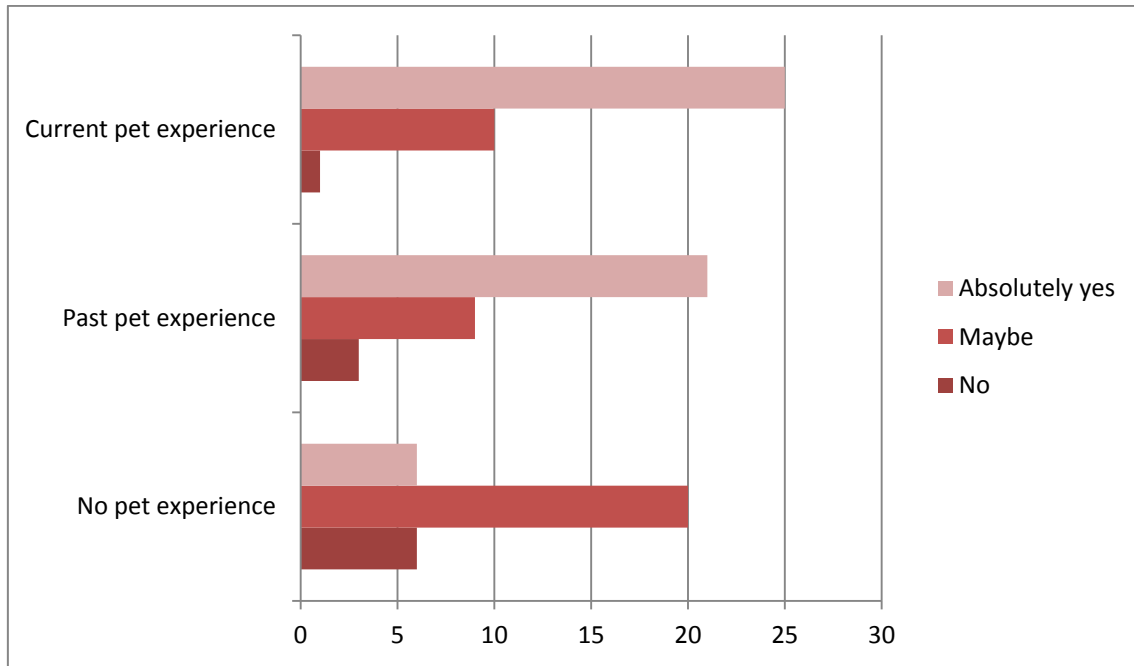


Figure 27. Willingness to Spay/Neuter a Pet

It was noticed that even though the word “spay/neuter” was explained in class and Chinese translation was written on the board, it seemed to the author that quite a few students did not understand the word, judging from the mismatching answer they gave. For example an answer like, “No—because one animal is enough”. In such case, the data was discarded. It is very interesting to see that, a great number of students who have never had a pet before held uncertain attitude about spaying/neutering and more students in this group were against spaying/neutering compared to the other two groups. This finding shows that people who have never had pet before obviously have less idea about the amount of work and commitment needed in keeping companion animals, finding homes for animals, and taking responsibility than people in other two groups. In other words, they do not realize the seriousness in pet overpopulation problem even though there was nothing “wrong” in the way they think. Among the people who answered “No” for spaying/neutering, common reasons were “Because

spaying/neutering hurts animal”, “It (Spaying/neutering) is cruel”, others were “Because it (giving birth to its young) is animal’s freedom”, “Because puppies are cute”, and “Because I want my pets to have babies”.

Question 4: In your opinion, how can we solve the problem of “pet overpopulation”?

This question was an open-ended question that intended to let the students use their creative thinking and come up with their own solutions. What they think is feasible might not really work in reality. The possible solutions recommended by the students are listed below according to the ranking. Many of them suggested more than one solution. The number in the bracket refers to the number of the students who mentioned such solution in their answers.

- Neuter/Spay (43): including answers like “separate male and female animals” and “acquire animals of same sex”.
- Adopt (23)
- Do not abandon/Be responsible owner (12)
- Educate people (8): educate people to be responsible owners, promote adoption
- Build more shelters (7): build shelters/zoos/forest for animals, build no-kill shelters
- Find a home for pets (6)
- Don’t buy (5): This was separated from “adopt” since “stop buying” does not necessarily imply “adopting”.
- Give away (5): This was separated from “Find a home for pets” because of the subtle difference in the sense of responsibility. Giving away a pet is less

responsible than finding a home for a pet.

- Send animals to other country (4)
- Regulation (4)
- Release animals into nature/set free (3)
- Stop puppy mill (3)
- Killing (2)

Here are some interesting comments that can help us see what six graders have in mind: “My English teacher has a lot of cats. She goes around and takes stray cats home. I think if everyone is like my teacher, there won’t be pet overpopulation problem”, “The government can build a shelter that allows animals to live and the funding can come from people’s donation”, “We can give everyone an animal for free”, “We can go on street and tell people about animal shelters and beg them to donate”, “We can build a forest, a zoo for animals to live”, “Sign a contract when buying or adopting an animal; the owner who abandons the animal will be fined”, “We can send them to other countries because they are much bigger than Taiwan; more space for animals”, and “If I were the president, I will give orders to make everyone take care of animals”.

Question 5: Whenever you decide to get a pet, you promise that you will be a Responsible Owner and NEVER abandon your animal friend.
 Absolutely yes Maybe No, because _____

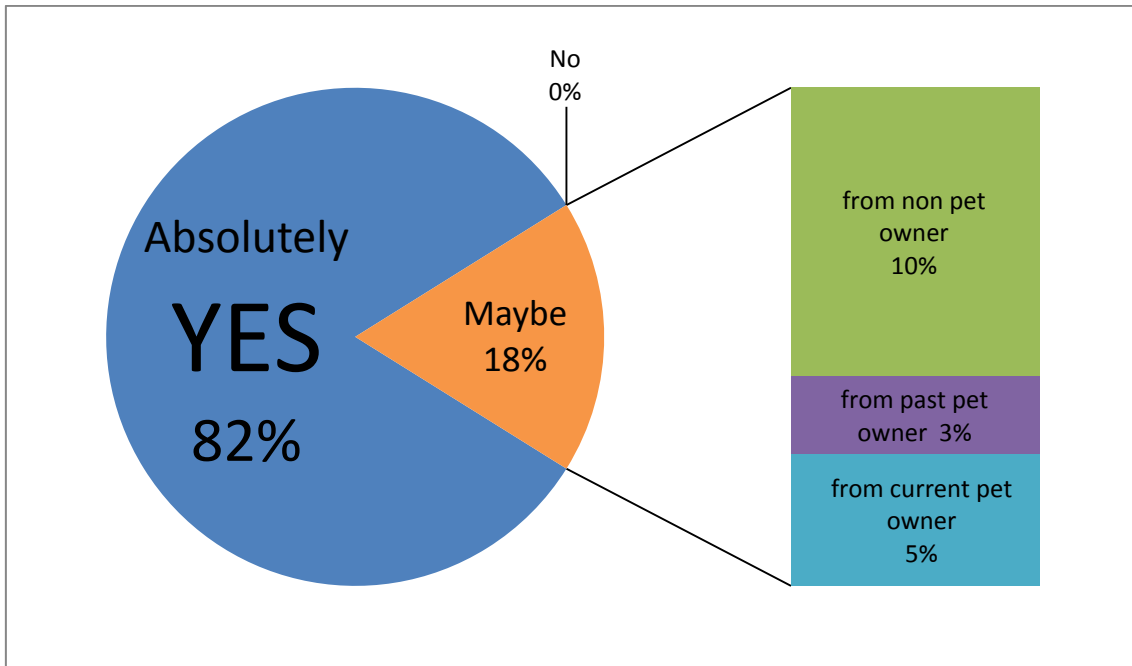


Figure 28. Determination for Responsible Pet Ownership

After the lesson, 82% of the participants realized the importance of responsible ownership and demonstrated strong will to become one. In accordance with the result of Question 3, among the students who answered “Maybe” for this question, there were more students from “N” group than the other two groups. Nobody answered “No” for this question.

Question 6: Whenever you don’t know how to treat an animal, just think of the *Golden Rule*: _____

The question was designed to reinforce what the students learned in the lesson. The Golden Rule is an important tool that students can always keep in mind when treating animals, especially when they do not know what to do with an animal. Of course animals and humans have different needs and behaviors, but learning to be an empathic

person is always a good start. Students were asked to express the concept in their own words or in Chinese. 80% of the students answered correctly. 12% of the students wrote positive comments about animals but the comments were unrelated to empathy. 8% of the students did not answer the question, possibly as a result of insufficient English ability.

Question 7: Here are some cases to practice your empathy. How would you feel if you were.....

- A hen crowded in a battery cage:**
- A calf separated from your mommy:**
- A frog waiting to be dissected in a science class:**
- A rabbit locked in a cage in a lab to be experimented on:**
- A pig waiting to be slaughtered:**
- A raccoon that is skinned alive for its fur:**

This question was designed for the students to exercise their empathy, to put themselves in the animals' places and try to understand how the animals feel. Students were asked to describe their feelings if they were the animals in the scenarios given. Also, the awful conditions of the animals in this question serve to remind the students that a lot of animals on this planet suffering from humans' exploitation and are in pain. A lot of descriptive words for negative feelings were used by the students, such as "helpless, upset, terrible, lonely, sad, angry, furious, nervous, afraid, hurt, scared, painful, uncomfortable, terrified, frightened, hateful, desperate, miserable, hopeless, want to escape, hurts so much that I want to die, and so forth. While word selections were different which requires no discussion, 100% of the students showed empathy for the animals in the described situations. One interesting comment to share here for the

scenario of “A raccoon that is skinned alive for its fur”—”I feel angry because my skin is MINE!”

Question 8: Animals can feel pain and suffer just like we do, but they can't speak for themselves. What can you do to help them in any possible way?

This question was an open-ended question. The students were free to express their thoughts in their own words. Their comments were carefully read and examined by the author, and put into the following categories.

- Treat animals well/Love animals/Take good care of them (36)
- Educate people/Campaign (by spreading facts, making posters, setting website...) (36)
- Save/protect animals, find help for them, do not kill them, help them escape (24)
- Empathize with animals (22)
- Seek veterinary/professional care (22)
- Seek to understand animals (observe, learn animal behaviors, listen to/talk to animals) (17)
- Adopt animals from shelters (16)
- Do not abuse (hit, kick) animals (7)
- Never abandon animals (6)
- Provide emotional support (look in the eye, hug, spirit connection) (6)
- Find home for animals (4)
- Be a vegetarian (4)
- Establish shelter/animal protection organization/foundation (3)

- Seek support from the government (3)
- Do not buy animals (2)
- Make donation to shelters (1)

Examples of comments: “I will tell people about the sufferings of animals”, “I can gather the people who want to protect animals and collect everyone’s opinions”, “Use old or sick animals to experiment on”, and “Send videos of animal suffering to everyone”.

Question 9: Would you like to know more about animals and what you can do for them?

Absolutely yes Maybe No, because _____

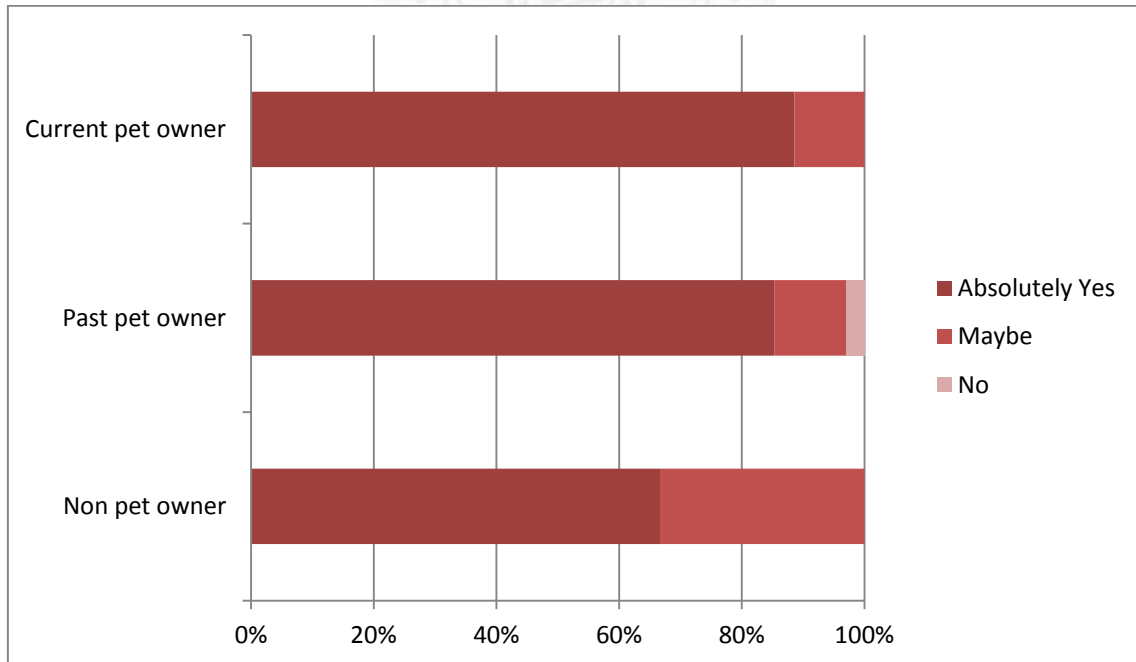


Figure 29. Students’ Interest in Learning More about Animals & What Can Be Done for Them

Again, similar to the results of Question 3 and 5, students who have never had a pet before showed more uncertainty about learning more, which means they have less interest in animals than other two groups of people. There was only one student who indicated “no interest”, and the reason was “because the videos shown in class were disturbing to me”.

Question 10: If yes, from

School teachers Parents Books TV Others: _____

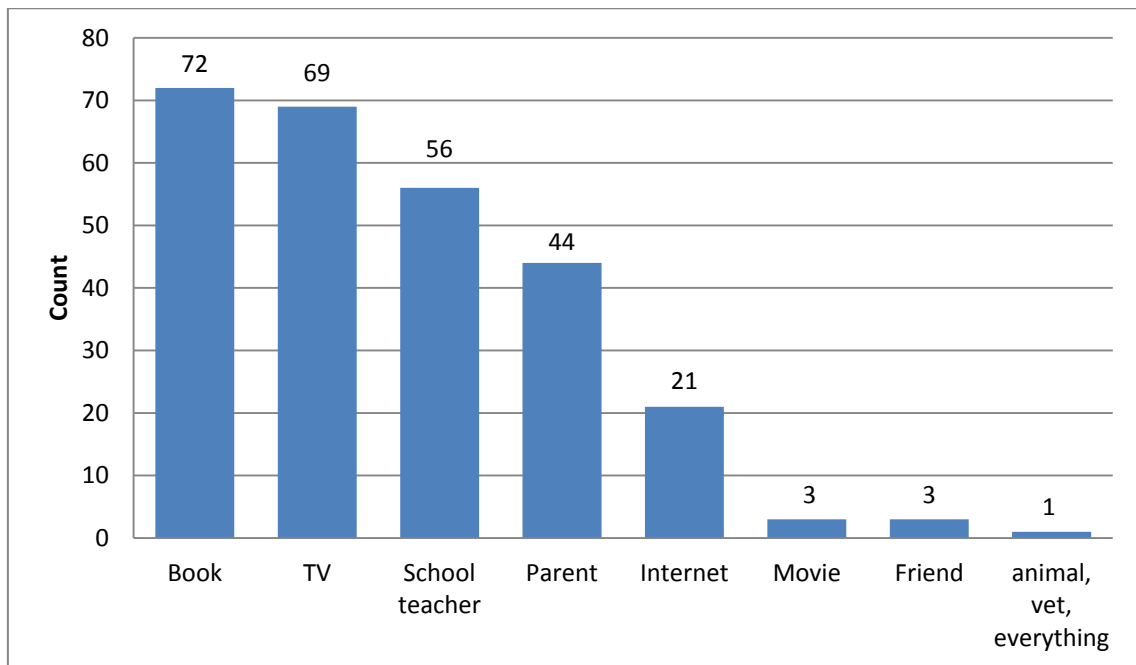


Figure 30. Students' Ideal Learning Sources of Animals

From Figure 30, we can see that students' favorite learning sources of animals are book and TV, which they can do in their leisure time. Good TV programs and printed materials should be made to satisfy students' need and desire to learn about animals. The influence from school teachers and parents are also very important since they were highly recognized by the students as ideal sources. Internet was considered a good

learning source too. This finding helps humane educators in choosing the media which work most efficiently towards students at this age level. This finding also confirmed that, in order to educate the next generation to respect all lives and to raise awareness about humane treatments of animals, the involvement and contribution from school teachers and parents are necessary.



Chapter Four

Topic II: Elementary School Teachers' Empathy towards Animals and Attitudes towards Humane Education at School

4.1 Setting and Participants

The participants of the current study were the elementary school teachers at Taipei Fuhsing Private School. There were a total of 97 teachers, 77 female and 20 male teachers, including 35 homeroom teachers of grade 1 to 6 and subject teachers. The detailed information about the participants in regarding to age group, education background, years of teaching experience, and teaching subjects were shown in Table 3 to 6.

Age Group	Number
21-30	27
31-40	29
41-50	13
51-60	18
61-70	10

Education Background	Number
College	7
Bachelor	50
Master	40
Doctor	0

Years of Teaching Experience	Number
Less than 5 years	22
5 to less than 10 years	25
10 to less than 15 years	13
15 to less than 20 years	3
20 to less than 25 years	5
25 to less than 30 years	5
30 to less than 35 years	3
35 to less than 40 years	8
40 years or more	8
Did not specify	5

Teaching Subjects	Number
Homeroom (also teach Mandarin and Math)	35
Mandarin	2
Science	5
Social Studies	4
Multiple	5
English	10
Music	8
Art	6
PE	10
Other	12

4.2 Materials and Methods

All the participants were asked to complete two questionnaires. The first one was the Animal Empathy Scale developed by Elizabeth Paul (Paul 2000), and the second one was a survey designed by the author. The purpose of the study was to know how empathic the elementary school teachers are towards the animals, and to know their views and attitudes about teaching humane attitudes towards animals to students at school.

4.3 Results and Discussion

4.3.1 Animal Empathy Scale

There was a total of 22 items in the Animal Empathy Scale (See Appendix F); among the items, 11 represented empathic feelings (Item 3, 5, 7, 9, 10, 13, 15, 17, 18, 21, 22) while the other 11 represented unempathic feelings (Item 1, 2, 4, 6, 8, 11, 12, 14, 16, 19, 20). On the Animal Empathy Scale, the average score from 97 teachers was 24.5 points if using the scoring system of -4 to 4 points for each item answered (-4: least empathic, 4 most empathic); and the average score was 134.5 if using the scoring system of 1 to 9 points for each item answered. (1: least empathic, 9: most empathic) The possible score range for the -4 to 4 system was the lowest possible score of -88 to highest possible score of 88 points. For 1 to 9 system, the possible score range was the lowest possible score of 22 to the highest possible score of 198 points. As the result suggested, in average, the elementary school teachers were relatively (although not very

much) empathic towards animals. Using the scoring system of -4 to 4 system, the possible score range was equally divided into 8 segments which represent 8 different levels of empathy towards animals (See Table 7). Figure 27 shows the distribution of levels of empathy from all the participants, categorized by the total score using -4 to 4 system. We can see that 38% of the teachers scored between 0 to 22 (Level 5), 27% of the teachers scored between 22 to 44 points (Level 6), while 21% of teachers scored between 22 to 44 points (Level 7).

Total Score	-88 to -67	-66 to -45	-44 to -23	-22 to -1	0 to 21	22 to 43	44 to 65	66 to 88	
Level	1	2	3	4	5	6	7	8	
	← least empathic					most empathic →			

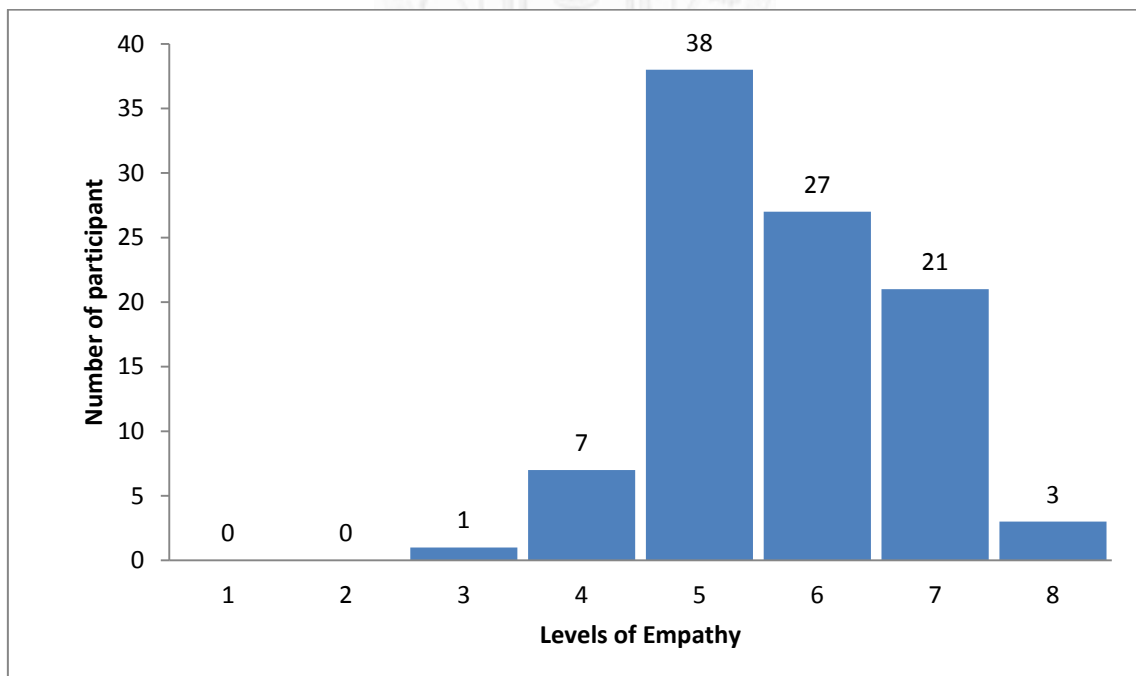


Figure 31. Elementary School Teachers' Levels of Empathy towards Animals

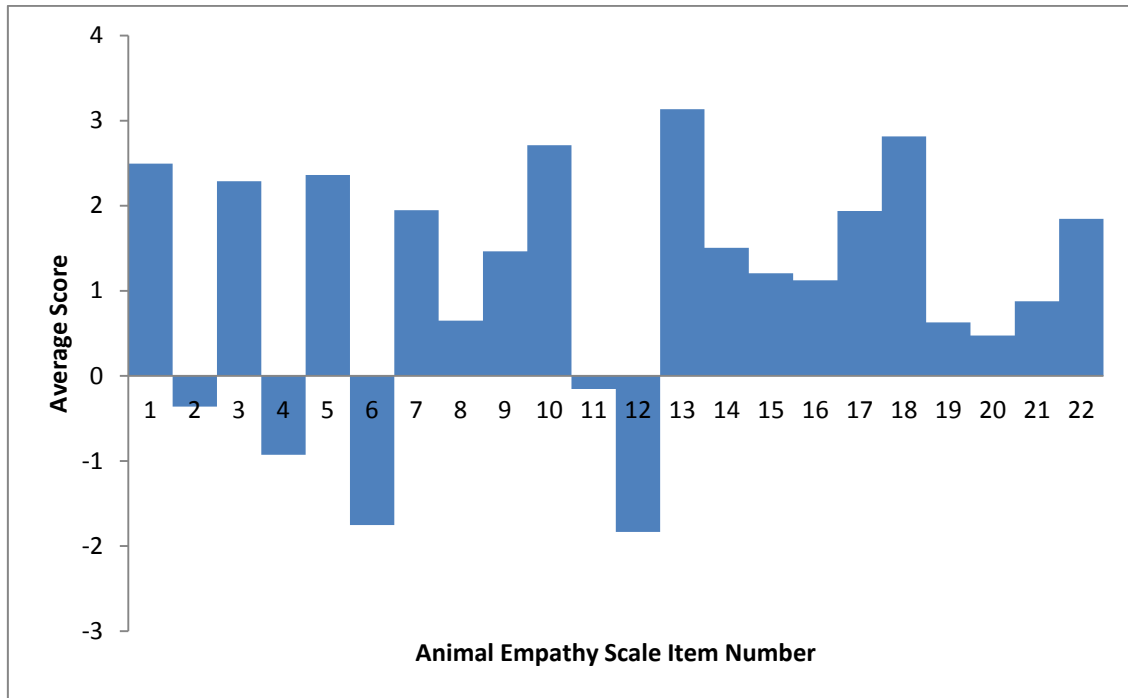


Figure 32. Average Score on Each Item in Animal Empathy Scale

Figure 32 shows the average score on each item in the scale. There were a few items that received much higher or lower average scores than the other items which caught the author's attention and deserved to be discussed. While Animal Empathy Scale is a well-established scale and the result of the present study was still reliable, it was originally designed for Western participants. It was the author's hypothesis that the differences in the culture and custom of Chinese society might have influenced the scoring in some items to some degree, especially the items which were related to expressing emotions in front of others, such as item 8 (People who cuddle and kiss their pets in public annoy me), 12 (Many people are over affectionate towards their pets), 14 (It is silly to become too attached to one's pets), 16 (Sometimes I am amazed how upset people get when an old pet dies) and 19 (People often make too much of the feelings and sensitivities of animals). In Asian countries in general, it is considered inappropriate

or somewhat silly to show emotions in front of others or even worse—in public, especially the emotion of love. Not just for animals, couples kissing and hugging in public is considered absurd, especially by older generations. Teachers are particularly “sensitive” in this aspect because they teach “proper” manners and behaviors.

The lack of space and heavy population in Taipei also resulted in “seemingly unempathic” answers on item 4. People live so close to each other that noise is considered a very serious problem and offense. The low-frequency noise of air conditioner at one apartment unit can bother the neighbors in the same building and other buildings around, let alone dog barking.

Considering the factors above, it was recommended by the author that a scale that is tailored to Asian culture and custom could be developed in the future to better measure Asians’ empathic attitudes toward animals.

It is also interesting to see that the common qualities of teachers’ personality stand out in this scale. For example, item 13 showed teachers’ strong sense of justice. Item 6 showed teachers’ high demand on discipline. Teachers tend to be more judgmental than other professions because they need to tell right from wrong in order to mend students’ behaviors.

Also, some participants showed obvious sign of getting confused by the constant switching of empathic and unempathic statements from one item to the next. The negatives used in the statements further increased cognitive load. Although the author

believed that the design was intended to prevent the participants from predicting the “correct answer”. However, when the participants rushed to finish the questionnaire, it happened that some people did not really read and think very carefully.

The author would like to point out that although previous studies have shown evidence of association between gender and empathy, gender different was not analyzed in this study because the amount of female participants were much larger than males (77: 20), therefore a comparison between the two sexes was not appropriate due to the big difference in sample numbers.

Previous study also indicated that age was related to empathy and this study offer basic support for such notion, even though an exception was observed in the age group of 41 to 50 years old, which scored higher than the age group of 31 to 40. The number of participants in age group 41 to 50 was significantly fewer than the number of participants in age group 31 to 40 (13: 29) and there were 3 participants among the 13 41-50 years old teachers scored over 60 points (total score, -4 to 4 points system), and the high score they received brought the average up. Figure 33 illustrates the relation between age and empathy.

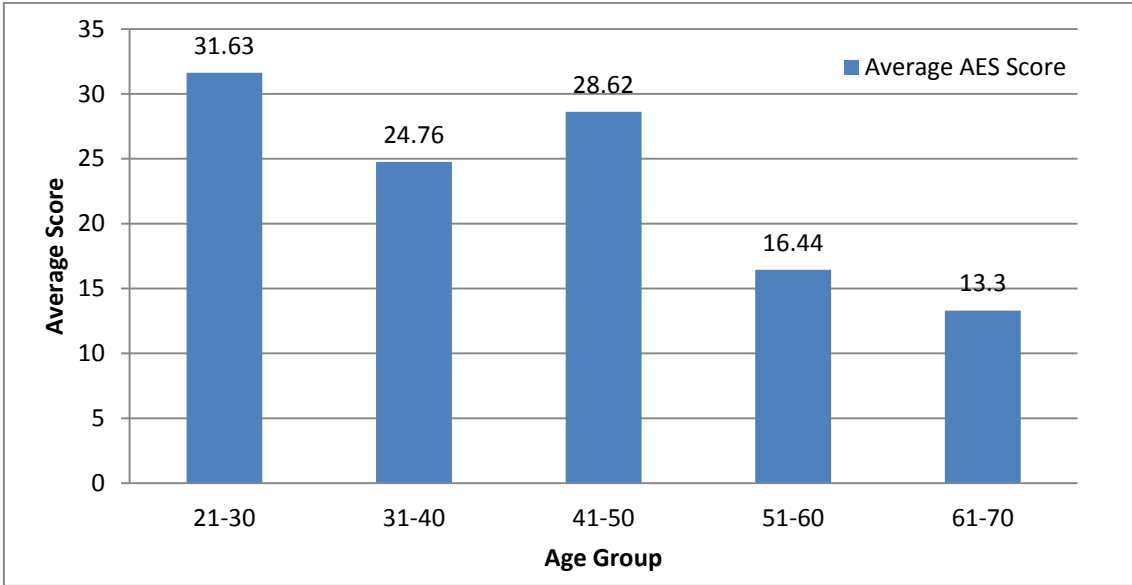


Figure 33. Average AES Score in Different Age Groups

Figure 34 shows the number of participants categorized by their highest degree earned and the average score of each group to see if there is a relation between education background and empathy. No direct link was found here.

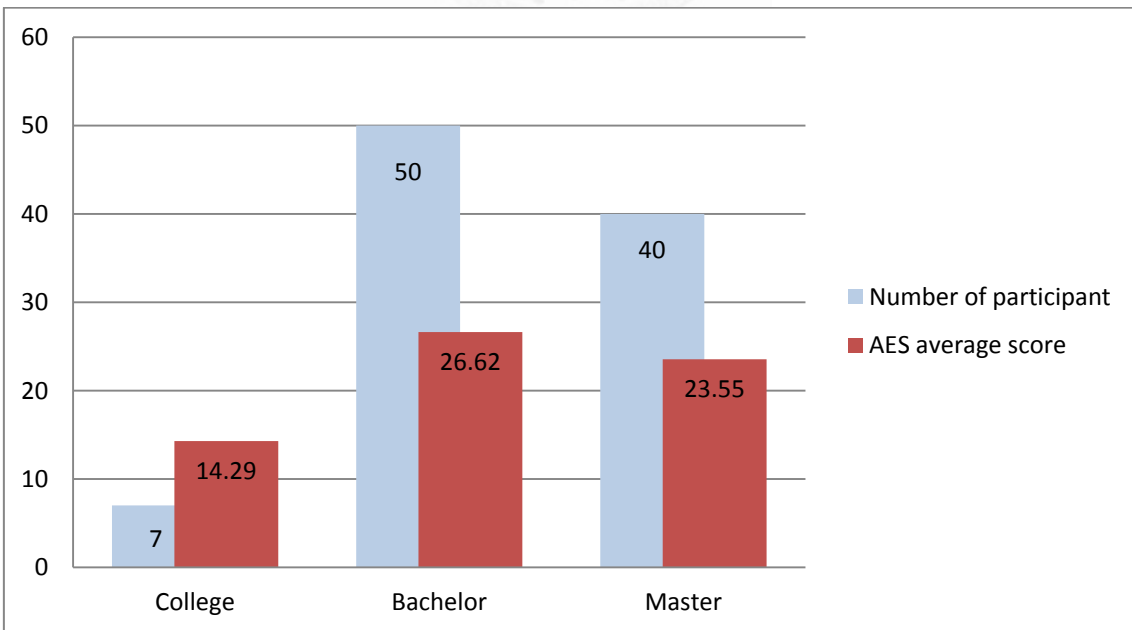


Figure 34. Education Background of the Participants and AES Average Score

4.3.2 Survey for Current Elementary School Teachers in Taipei City on the Humane Education Implementation at School Today and Future Directions

Question 1: Do you have pet now?

Question 2: What type of animal is it?

Question 3: How attached are you to your pet?

Question 4: Did you have pet in childhood?

Question 5: What type of animal was it? (Name the most attached one)

Question 6: How attached were you to your pet? (Name the most attached one)

Question 1 to 6 of the Survey asked about the participant's pet ownership in childhood and present time, levels of attachment to the pets, and the types of animal owned/owning. Figure 35 and 36 show the relation between pet ownership in childhood, current pet ownership, degree of attachment to the pets and AES score. There were four degrees of attachment: "very attached", "attached", "barely attached", "not attached at all" provided for participants' choice. The definition of the word "attached" is: "feeling or showing love and affection mutually, between the owner and the pet". Since there were very few people reported to be "barely attached" and "not attached at all", in the following figures the two groups were merged. Also, there were some participants who only reported having pets in childhood or now, however did not specify what type of animals they had/have and the level of attachment, in the following figures they were put in a separate group as "unknown".

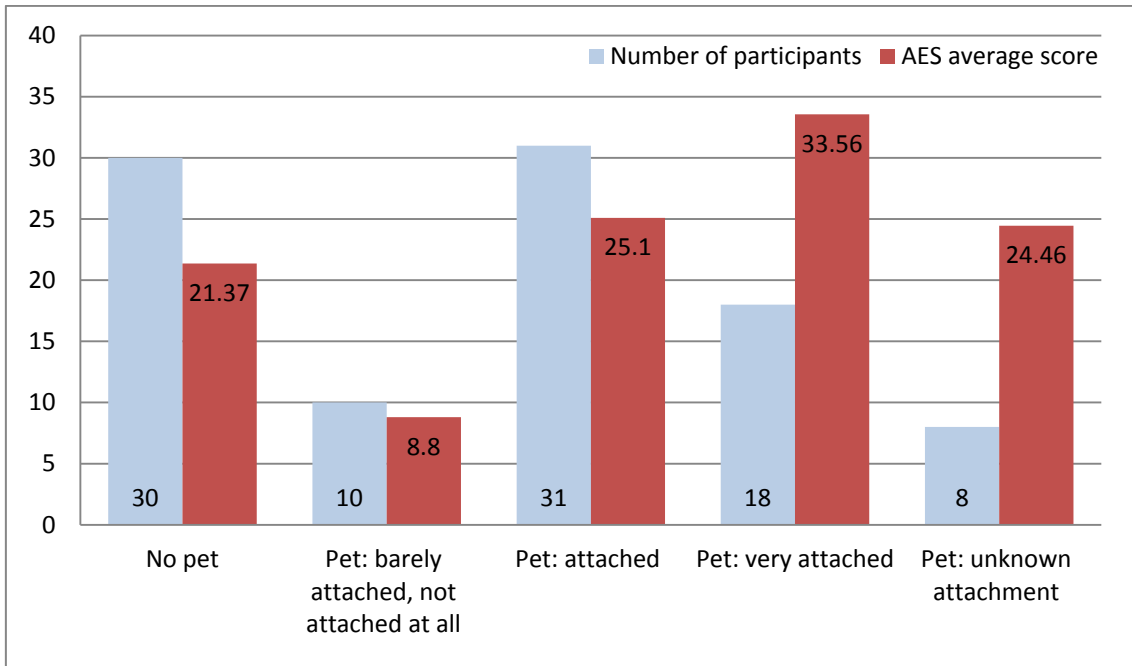


Figure 35. Pet Ownership in Childhood/Level of Attachment/Number of Participants/
AES Average Score

The AES average score of people who had no pet in childhood was 21.37, and the average score of people who reported having pets in childhood (including all levels of attachment to the pet) was 25.85. This finding shows the correlation between pet ownership in childhood and empathy towards animals. We can see that degree of attachment to pets is positively related to owner’s empathic attitudes towards animals. The participants who were “very attached” to their pets in childhood scored higher than the participants who were “attached” to their pets in childhood. However, Figure 35 also reveals an interesting finding that people who reported to be “barely attached” or “not attached at all” to their pets scored significantly lower than the others, even much lower than people who had no pet in childhood. We learned from this finding that “quality” of pet experience has a great impact on attitudes towards animals. “Bad” pet experience could leave a bad impression about animals and had life-long negative influence on the

pet owners' attitudes toward animals. One of the participants made a note on the survey that the sad memories of seeing how badly the pet dog in the family was treated in her childhood had left her an imperishable trauma, which has made her stay away from animals since.

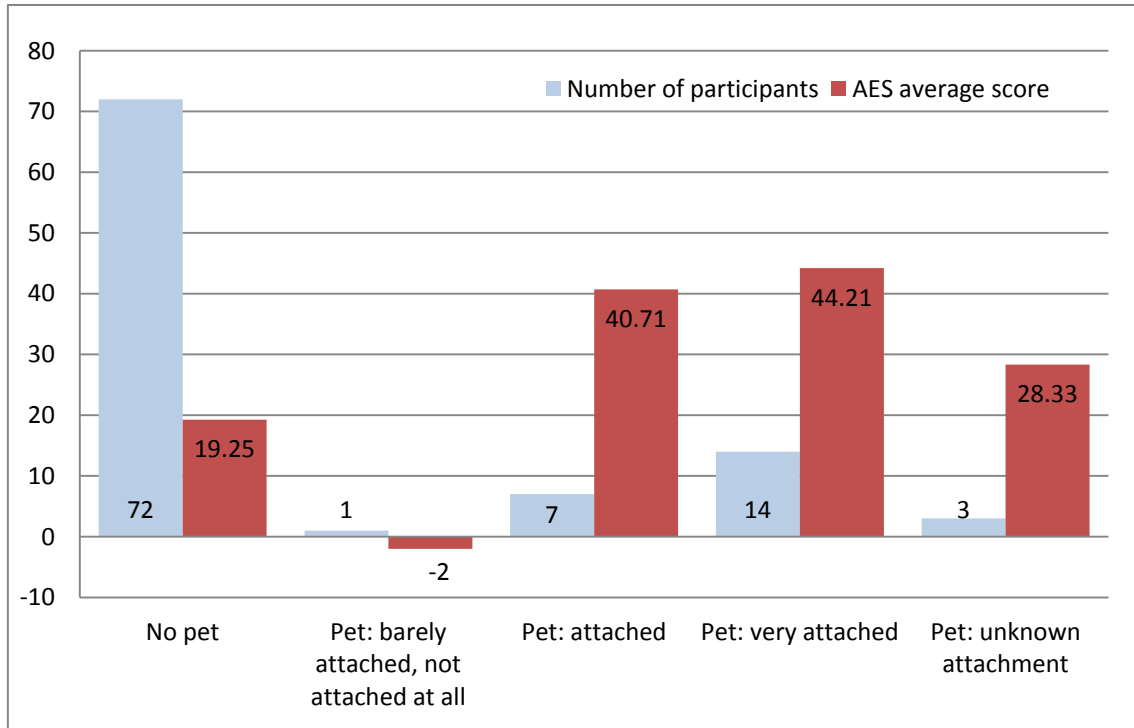


Figure 36. Current Pet Ownership/Levels of Attachment/Number of Participants/
AES Average Score

From Figure 36, we can see that current pet ownership was significantly associated with higher empathy towards animals, with the only one exception which reported to be “not attached at all” to the pet (which was fish in this case). In accordance with the finding is the previous question, degree of attachment to pets is positively related to owner’s empathic attitudes towards animals. The participants who are “very attached” to their pets now scored higher than the participants who are “attached” to their pets

now. Even though there was only one participant who reported to be “not attached at all” to pet in this question, It is possible to see the connection between low degree of attachment and low empathy towards animals, just like what we found in the previous discussion.

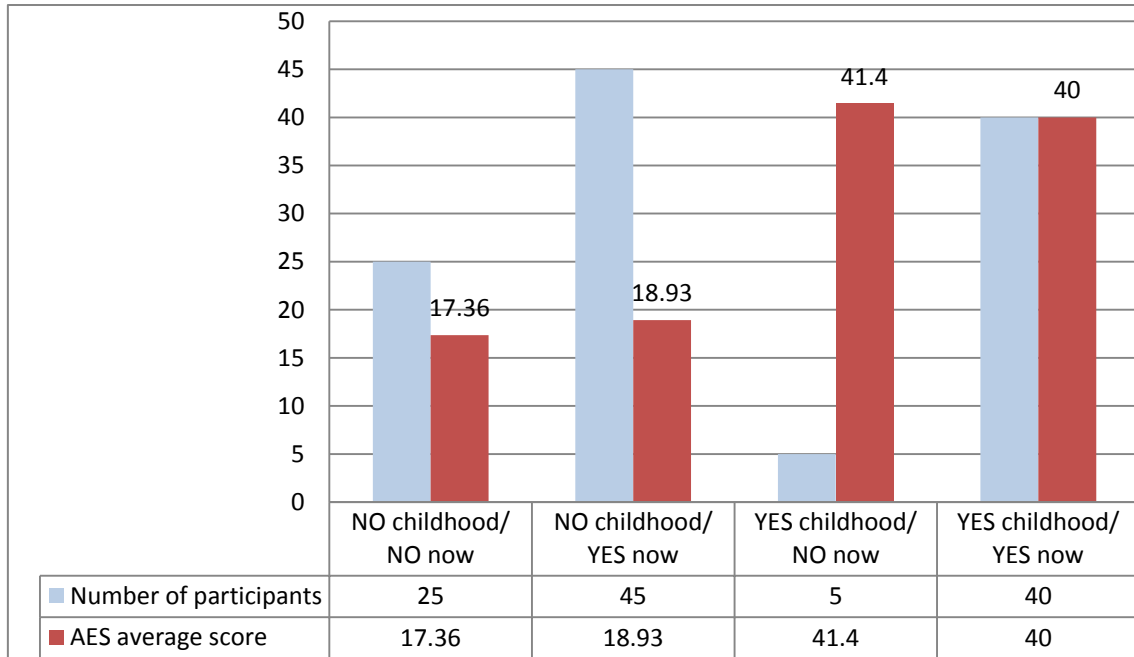


Figure 37. Cross Analysis on Childhood Pet Ownership and Current Pet Ownership

After comparing Figure 35 and 36, we found that the average AES score of current pet owners who are attached or very attached to their pets (40.71, 44.21) were much higher than the average AES score of childhood pet owners who were attached or very attached to their pets (25.1, 33.56). The numbers gave us an impression that perhaps current (adult) pet ownership encouraged owners’ empathic attitudes towards animals more than childhood pet ownership. Surprisingly, a cross analysis on childhood and current pet ownership suggested a different result. Figure 37 shows a cross analysis on the influence of pet ownership in childhood and current pet ownership. The data was

categorized into 4 groups: No pet in childhood/No pet now, No pet in childhood/Owning pet now, Owned pet in childhood/ No pet now, Owned pet in childhood/Owning pet now. The AES average score of the people who had pets in childhood but have no pet now was the highest among the 4 groups (41.4). The AES average score of people who had pets in childhood and have pets now was very close to the previous group (40). These two groups of people all had pets in childhood. The 3rd highest AES average score was found in the group of people who had no pets in childhood but have pets now, however the score was much lower than the first 2 groups (18.93). Lastly, the AES average score of the people who had no pets in childhood and no pets now was the lowest, however only slightly lower than the previous group (17.36).

The important finding here pointed out that the pet experience in childhood had a much greater influence on people's attitudes towards animals in adulthood than current pet ownership. The finding also serves as evidence that education and intervention in early stage of development is more effective and influential than adult education, and the influence from childhood prolongs into adulthood and possibly stays for a life time.

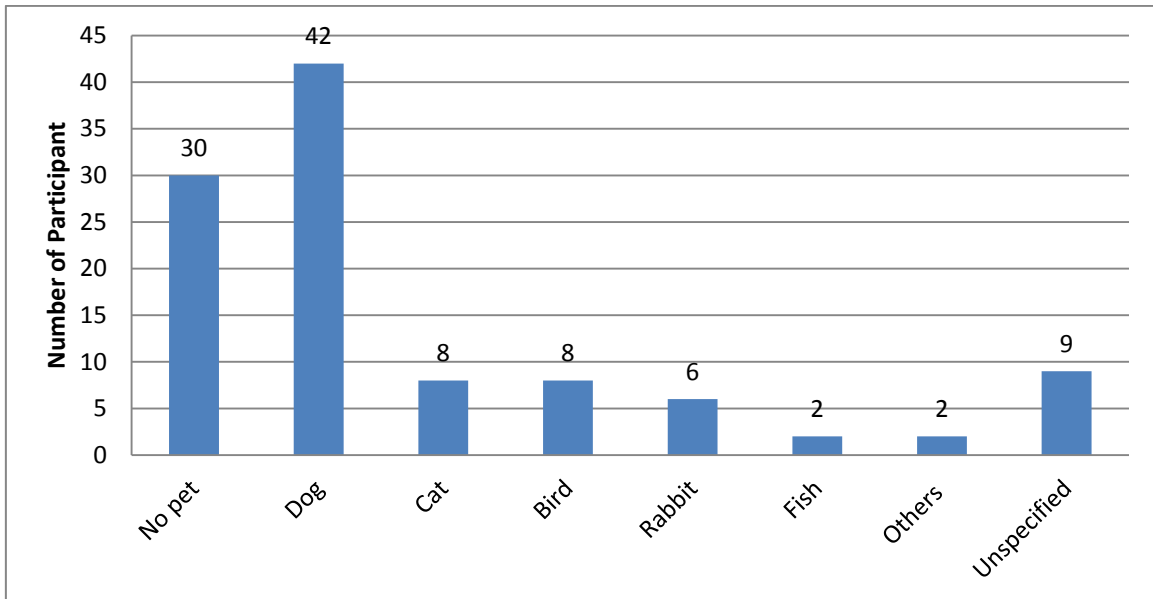


Figure 38. Type of Animal Owned in Childhood

Figure 38 shows the types of animals that the participants reported owning in childhood; more than 1 type of animal could be possibly owned by a participant. The pet owning rate in childhood was 69%. The most-owned type of animal was “dog”, and the second most-owned type of animal were “cat” and “bird”, but much lower than dog. This finding was consistent with the finding in the previous chapter. “Others” refers to chicken, goose and silkworm.

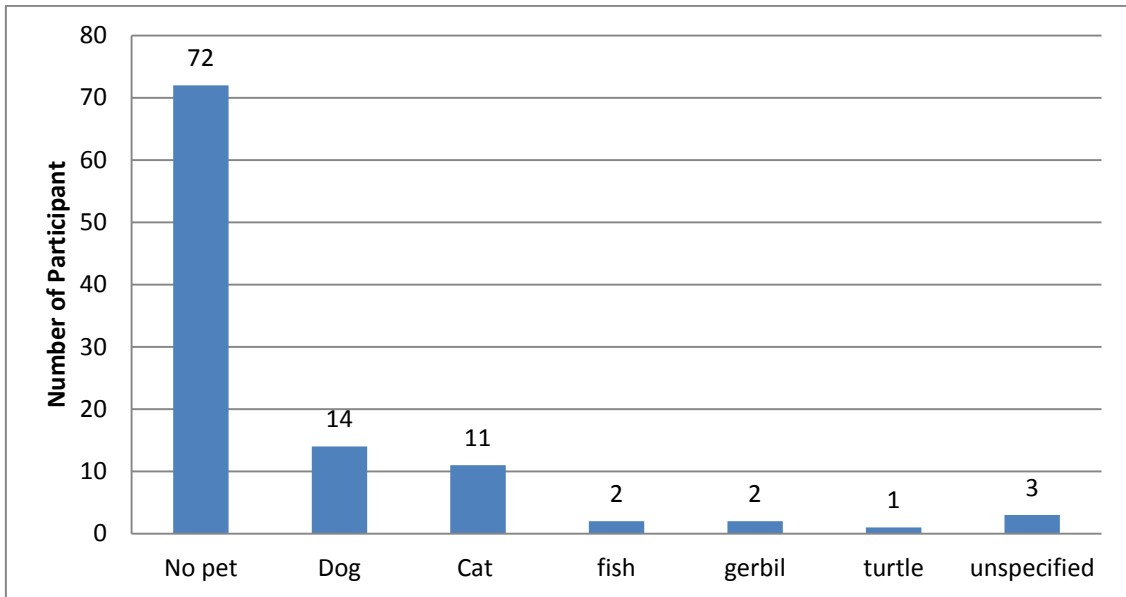


Figure 39. Types of Animals Owning

Figure 39 shows that current pet owning rate was 25.8%, which was much lower than the pet owning rate of 69% in childhood. This could be the result of child-raising and work. It was interesting to see that the cat ownership in adulthood was much closer to dog ownership than in childhood; again it could be the result of changes in life style. Cats require less time and care than dogs, and they are more content with small space, which make them perfect company for busy professionals.

**Question 7: In your opinion, other than providing knowledge, how much influence does the school education have on a student' personality, character and temperament?
 (For the majority of students, special case excluded)
 Please use number -4 to 4 to indicate the amount of influence
 (-4: No influence at all, 0: Neutral, 4: Great influence)**

The average rating for the influence from school education on a student's personality, character and temperament was 2.51% (possible range: -4 to 4) rated by all the participants, which means the teachers are relatively confident and positive in this aspect. Figure 38 and 39 show the average rating in relation to different age groups and years of teaching experience. There was no significant difference found between the groups; however, elder and most experienced teachers seemed to be more confident than younger and less-as-experienced teachers, while youngest and relatively new “beginner teachers” seemed to be more positive than the teachers in the middle stage of career and age. The data from the 5 teachers who did not specify their years of teaching experience was excluded from the analysis.

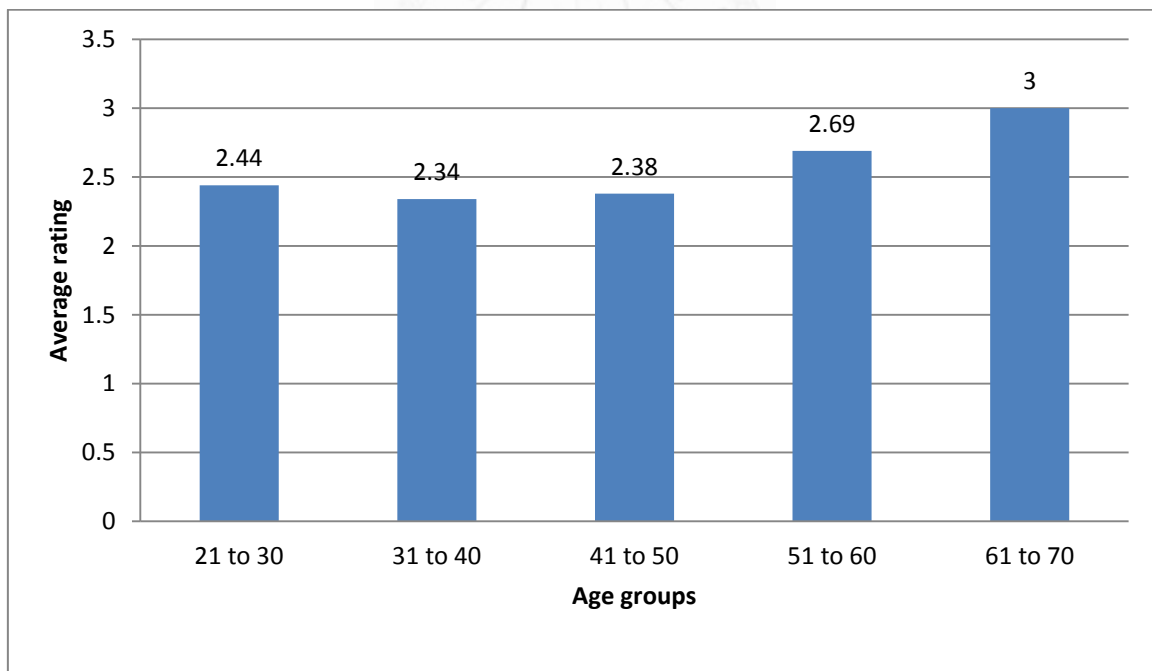


Figure 40. Average Rating vs. Age Groups

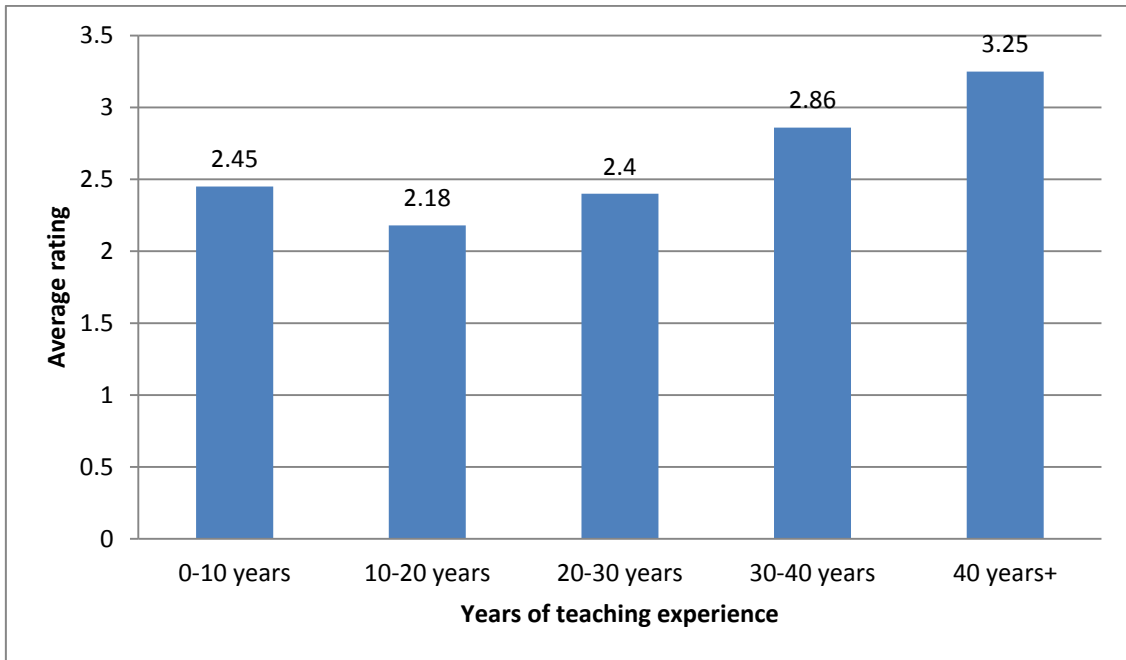


Figure 41. Average Rating vs. Years of Experience

Question 8: In your opinion, what is the best age of the student to cultivate empathy (so that he/she can learn to put him/herself in other people's places and experience the feelings of others)?

Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6

The majority of participants picked one particular grade, and some picked two grades, while a few participants picked multiple grades. The numbers in Figure 42 represent the total count of each grade. We can see that, according to the teachers' opinions, when it comes to cultivate empathy, the younger the students are, the better it is. The teachers' opinions provide valuable information for humane educators since the teachers participated in this study have been in close touch with elementary students. Among them, 45 teachers have been working with children for more than 10 years. This finding is helpful in deciding the timing of implementing humane education, which instills kindness and thoughtfulness in students.

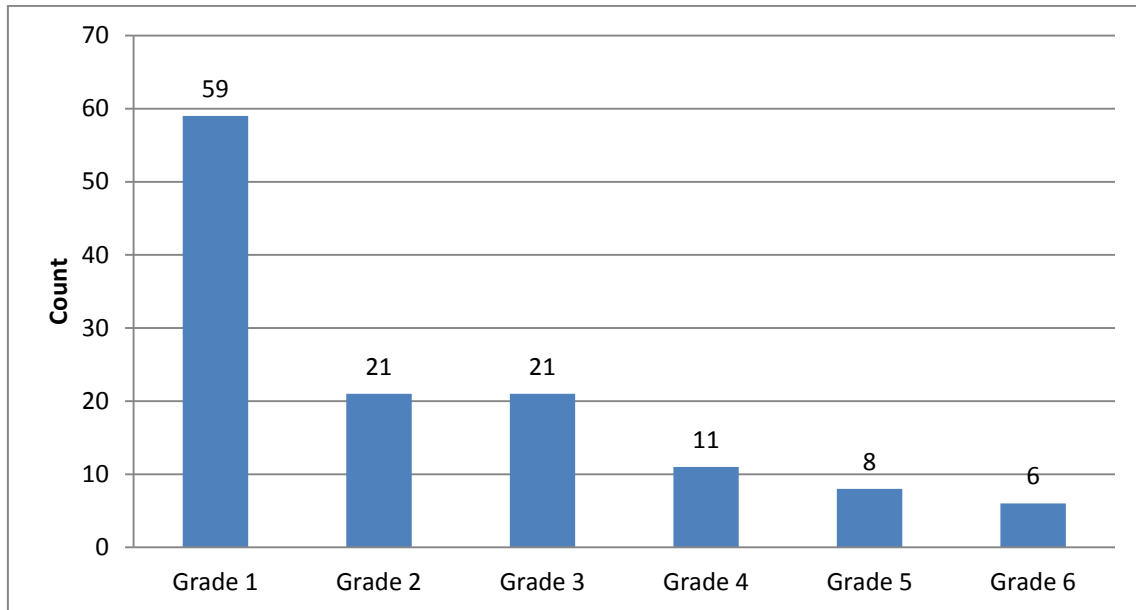


Figure 42. The Best Age to Educate Empathy

**Question 9: In your opinion, do you agree that people who can empathize with animals show more empathy for humans?
Please use number -4 to 4 to show your degree of agreement.
(-4: Strongly disagree, 0: Neutral, 4: Strongly agree)**

The question was intended to ask the elementary teachers about their views, judging from their years of teaching experience, on the generalization of animal-oriented empathy and human-oriented empathy, whether or not the teachers see any correlation or linkage between the two. The teachers showed a relative high level of agreement, with an average rating of 2.44 (possible range: -4 to 4), that empathy towards animals and humans are positively related. Among the 97 participants, only 6 participants rated negatively, 15 participants showed neutral view while 76 participants showed different degrees of agreement on this notion.

Question 10: In your opinion, who should be responsible in teaching the next generation the importance of loving and protecting animals?

- Government Animal protection group Parents
Teacher Others_____ (Multiple responses welcomed)

Figure 43 reveals the total count received from the 97 participants. The result showed that teachers think parents are supposed to be the most responsible in teaching their children how to love and take care of animals, teachers are the second, government the third, animal protection group the fourth. Among “others” who should also be responsible in educating young generations about animals, general public, mass media, veterinarians and pet shop were listed by the teachers.

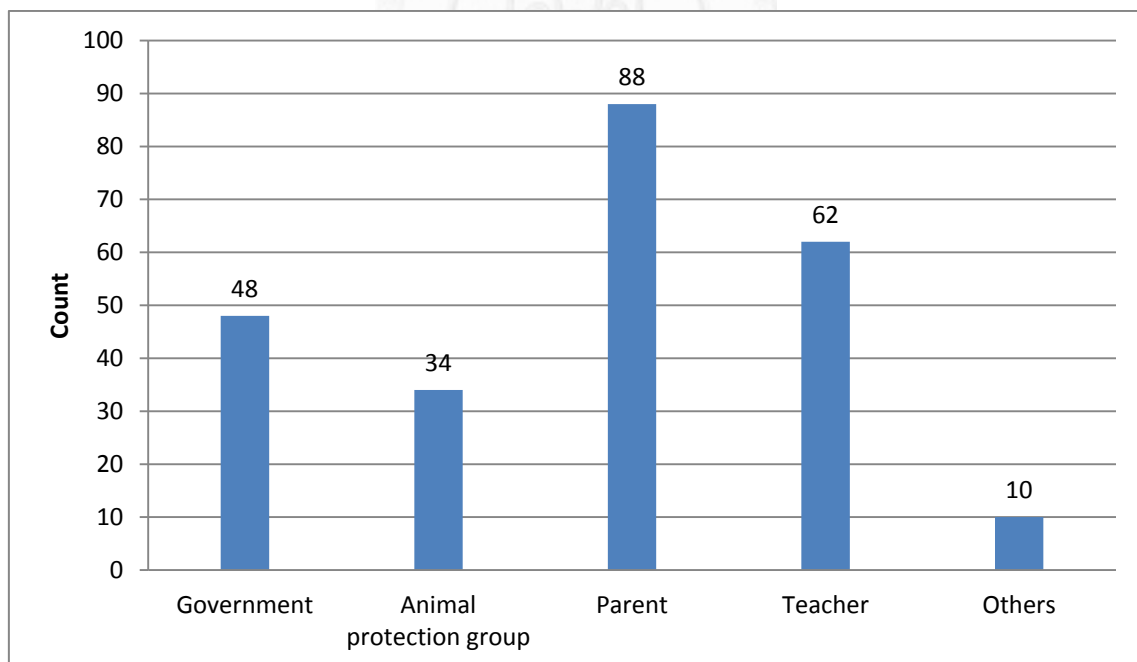


Figure 43. Animal Education Responsibility Holder

Question 11: In your opinion, what is/are the proper source(s) for the next generation to learn to love, to protect and to take care of animals?

School Family Zoo TV program Others_____

(Multiple responses welcomed)

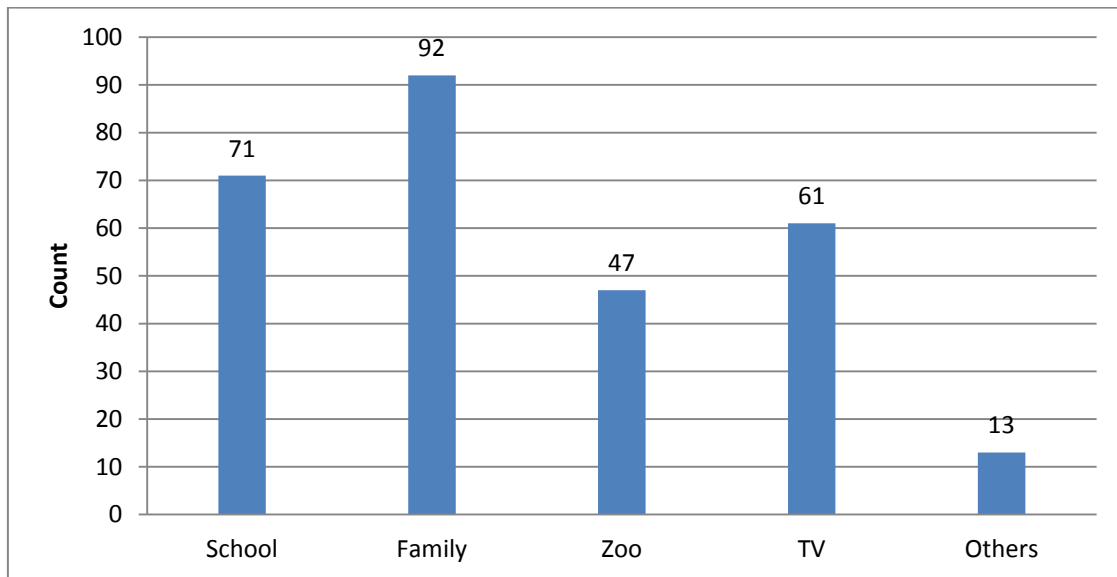


Figure 44. Proper Learning Source

The finding in this question was similar to the previous question. Teachers think that students should learn about humane treatment of animals more from their families than from school. It was noticed by the author that in Question 10, there were 34 teachers selected the other options provided but excluded “teacher”. Same situation in Question 11, 26 teachers selected the other options provided but excluded “school”. By doing so, the teachers conveyed a message that they think teachers and school should be excluded from humane education on animal welfare issues. Among the “other” proper sources for students to learn, museum, religious places such as church, printed materials such as books, newspaper and journals were on the list.

Question 12: Some elementary schools in the United States and Japan keep resident pet in their classrooms in order to enable the students to get in touch with animals and learn knowledge and experience from daily care. Would you agree to keep resident pet in your class?

**Please use number -4 to 4 to show your degree of agreement.
(-4: Strongly disagree, 0: Neutral, 4: Strongly agree)**

Question 13: What is/are your reason(s) for agreeing?

(Multiple responses welcomed)

- Teach responsibility**
- Learn the spirit of teamwork**
- Learn to love and nurture**
- Cultivate empathy**
- Learn knowledge about animals**
- Learn hands-on experience in animal care**
- Other reasons (please specify)**

Question 14: What is/are your reason(s) for disagreeing?

(Multiple responses welcomed)

- Not good for the animal**
- No valuable lesson provided**
- Increase teacher's burden**
- Tend to cause trouble and argument**
- Parents disagree**
- Other reasons (please specify)**

The average degree of agreement in keeping resident pet in classroom was 0.009 (possible range: -4 to 4) which means that the teachers hold a neutral view on keeping resident pet in classroom, with 31 participants showed various degrees of disagreement, 29 participants neutral, and 37 participants showed various degrees of agreement.

Figure 45 shows the reasons for agreeing, while Figure 46 shows the reasons for disagreeing. The numbers in both figures represent the total count. The teachers recognized the benefits of keeping pets in classroom. Among the possible benefits, “Learn to love and nurture” and “Teach responsibility” were most agreed by the teachers. However, even though the advantages of keeping resident pet were clearly seen, there were disadvantages, possible trouble and hazard too. Among all the possible reasons for disagreeing, “Tend to cause trouble or argument” was most chosen, while the teachers showed fairly equal concerns about the issues “Increase teacher’s burden”, “Not good for the animals”, and “Parents disagree”. Among other reasons of disagreeing, allergy and health concerns (germs, disease, flea) were most mentioned by the teachers, distraction (steal students’ attention from studies, animals making noise during class), lack of room, concerns for animal welfare (where do the animal go when the year school ends?) and concerns for students’ mood swings caused by possible pet loss were named by the teachers.

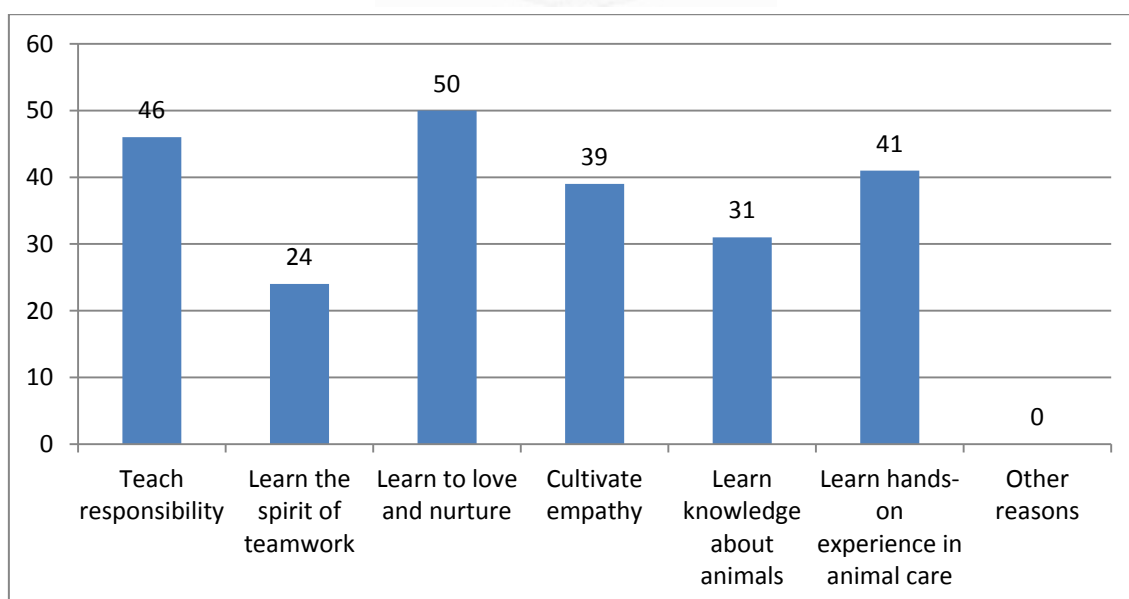


Figure 45. Reasons of Agreeing to Keep Resident Pet in Classroom

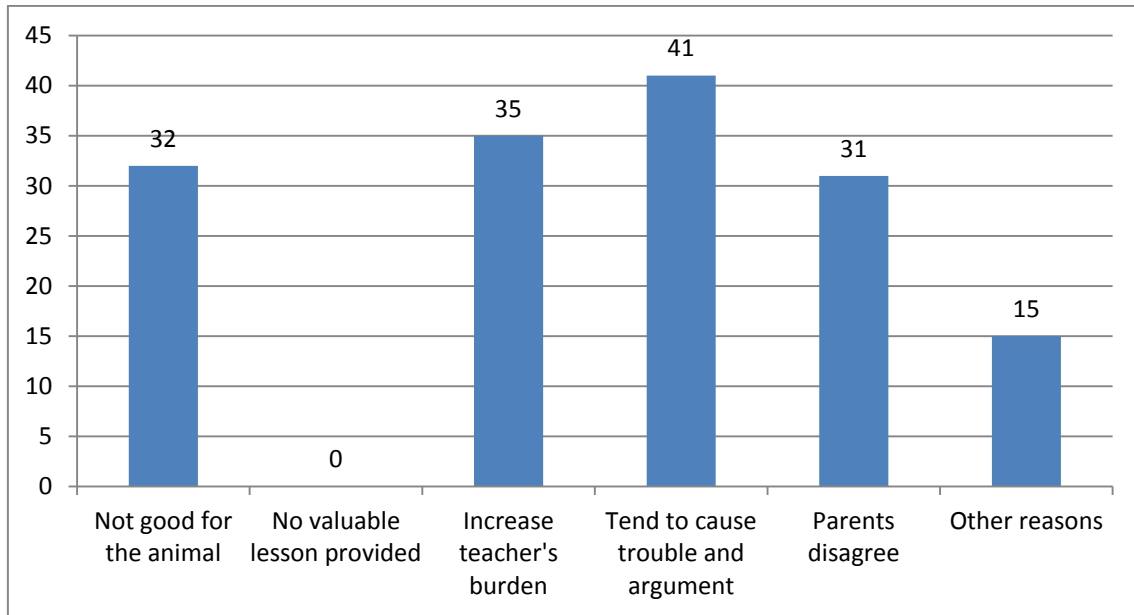


Figure 46. Reasons of Disagreeing to Keep Resident Pet in Classroom

Question 15: In the curriculum, teaching content and activities of the subject you currently teach, does it include or cover the concept of showing respect for all living beings and humane treatment of animals?

1. There is none in the textbook or curriculum, so I do not teach.
2. There is some in the textbook or curriculum, but is not mentioned in class.
3. When it occasionally appears in the textbook or curriculum, it is mentioned in class.
4. There is none in the textbook or curriculum, but I seek chances in class to mention it.
5. Other situation (Please specify)

Among the choices provided, 7 participants chose #1 for answer, 2 participants chose Choice #2, 66 participants chose #3 and 30 participants chose #4. There were 5 participants named other situations, such as teaching students from the news (when

there is animal-related news reported on TV or Internet) and giving reminders randomly on such issues during daily life. The result pointed out that in the current curriculum, humane education is not taught on regular basis and there is scarce material in current textbooks or curriculum. Since humane education is not part of mandatory or compulsory education, it relies largely on the teachers whether to teach it or not. As a result, some students might not have any chance to receive humane education at all. Possible solutions are explored in the following questions and discussed accordingly.

Question 16: Are you willing to use your class time to teach students about humane treatment of animals?

Please use number -4 to 4 to show your degree of willingness.

The average score on the willingness to teach humane treatment of animals in the participant's class time was 2.08 (possible range: -4 to 4), which shows relatively high degree of willingness. Figure 47 shows an interesting correlation between the teachers' empathy towards animal and their degrees of willingness to teach humane treatment of animals in class. The participants were categorized into three groups (degree 0 and under, 1 and 2, 3 and 4) according to their degrees of willingness in teaching humane treatment of animals in class, and the AES average scores of each group were shown. We can see that the teachers who were more empathic towards animals showed higher degree of willingness in carrying out humane education and to pass on humane attitudes towards animals to their students.



Figure 47. Willingness to Teach Humane Treatment of Animals in Relation to AES Average Score

Question 17: What do you think the possible reason(s) could be for the teacher who shows low willingness in teaching humane treatment of animals in his/her class time?

(All participants are invited to answer regardless of what your answer is for the previous question.)

(Multiple responses welcomed)

- 1. The teacher is not an animal lover.**
- 2. Teaching such topic is not in the teacher's job duty.**
- 3. Preparing animal-related lessons increases the teacher's workload.**
- 4. There is time limit in class. There is not enough time to cover all the materials.**
- 5. Main-subject teachers always have the pressure of finishing teaching certain amount of materials within limited period of time.**
- 6. The school authority will not be happy to see it happen.**
- 7. The parents will not be happy to see it happen.**

8. Other reason (please specify)

Question 17 was designed to explore the possible reasons that might cause a teacher's low willingness in teaching humane treatment of animals. The teacher's personal intention might not be the main or only issue to consider. The question asked the teachers to comment from a third person's point of view, so that they felt more at ease to speak their mind. As mentioned in Chapter One of this study, in Taiwan, subjects like language (Mandarin, English) and mathematics are considered as "main subjects" because they weigh more academically than other subjects. Science and social studies are the second important, while art, music and PE have little academic strength. The three section tests in a semester set the timelines, and the teachers who teach main subjects are responsible (and often time under pressure) for covering all the materials that are tested. There are often lots of materials to be taught and not enough time, so sometimes teachers have to "cram" or even "borrow" classes from teachers of subjects that are not "tested" such as art, music and PE. Since humane education is not going to be tested or in any way help the students gain success academically, using precious class time to teach such materials might not be what the school authority or parents would like to see. Figure 48 shows the possible reasons of low willingness, selected by all the participants. While all the possible reason listed by the author were considered possible by part of participants, Choice #4 (Time limit in class) and Choice #5 (Main-subject teachers always have pressure in finishing teaching certain amount of materials) were considered most true among all the possible problems and challenges in carrying out humane education at school. There was a comment given by a participant showing concern for the quality of humane education, if it were to be taught by current teachers. Teachers very possibly hold drastically different views on animals, humane

education and related topics, and such discrepancies (and possible “wrong” concepts) brought by individual teacher might mislead students.

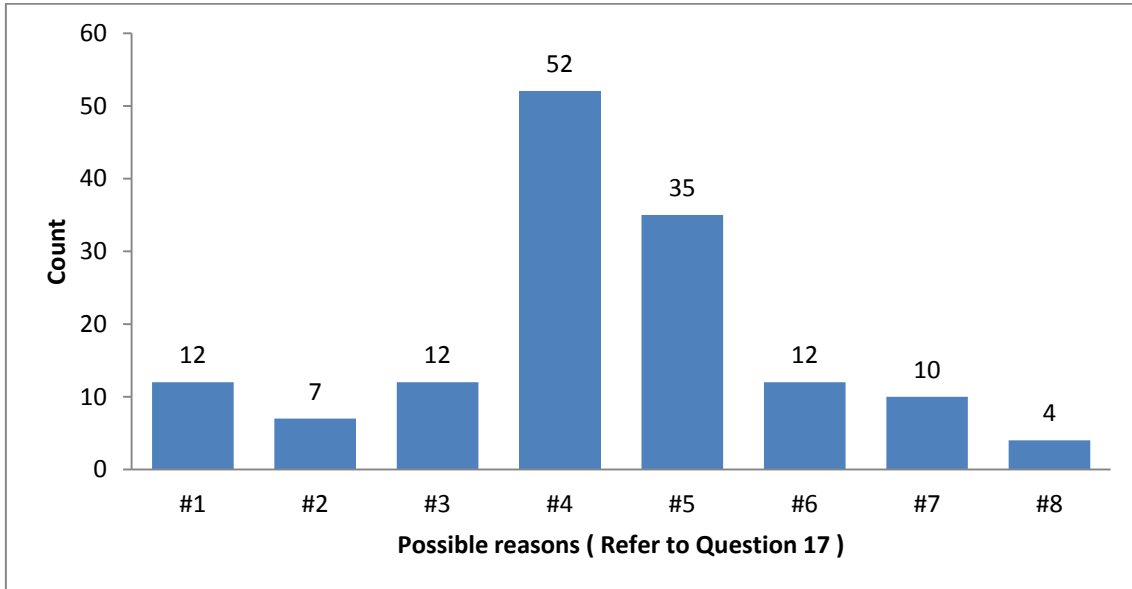


Figure 48. Possible Reasons of Low Willingness in Carrying Out Humane Education

Question 18: Would you agree that humane education (including animal-protection education and others) should be included in the formal and regular curriculum of elementary school education, with an increase in teaching materials and fixed (instead of random and flexible) hours of instruction time? Please use number -4 to 4 to show your degree of agreement.

The average score of the teacher’s support in including humane education in the formal and regular curriculum of elementary school education, with an increase in teaching materials and fixed (instead of random and flexible) hours of instruction time was 1.5 (possible range: -4 to 4), which means the teachers somewhat agreed. Consistent with the finding from Question 16, the support level received from the

teachers on this issue was positively related to their empathy towards animals. The participants were categorized into three groups (degree 0 and under, 1 and 2, 3 and 4) according to their degree of support on this issue, and the AES average scores of each group were shown respectively.

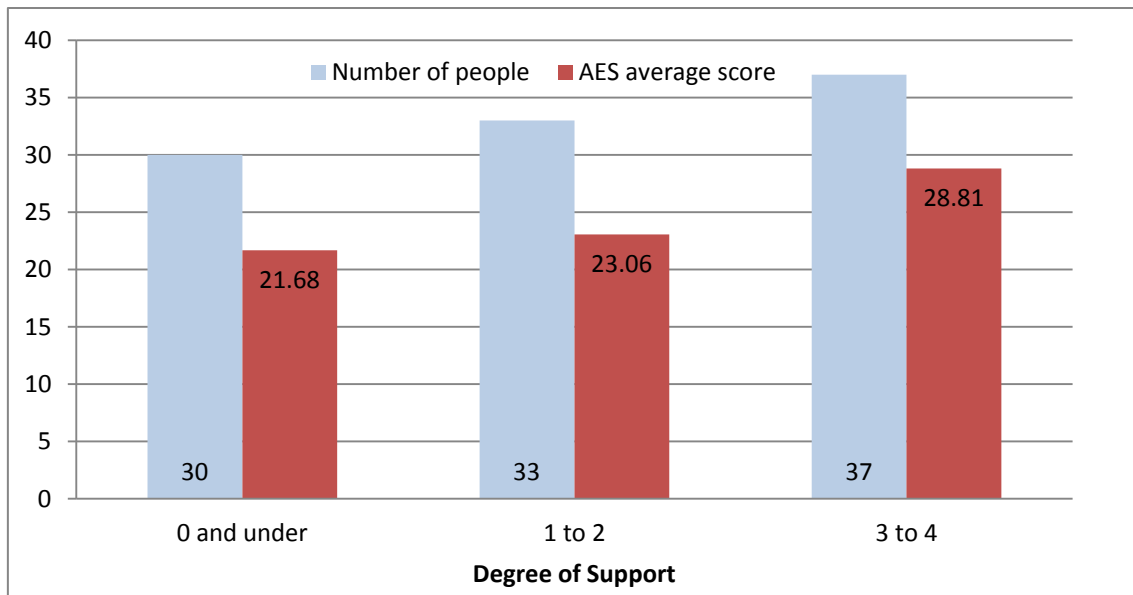


Figure 49. Level of Support in Relation to AES Average Score

Question 19: If advocates were to assert the need for humane education as described in the previous question, what kind of difficulties and obstacles can you foresee that might be encountered? (Multiple responses welcomed)

- 1. Students' current study loads as well as their school hours have reached the maximum. There is no room for increase.**
- 2. Teachers' workload and job duty will be increased.**
- 3. Humane education is not required for/ tested in school entrance exams, therefore it is difficult to receive support from school authority.**

4. Humane education is not required for/ tested in school entrance exams, therefore it is difficult to receive support from parents.

Figure 50 shows the possible challenges that might be encountered selected by the participants, with the number indicating the number of votes received. According to Figure 50, all the possible obstacles listed by the author were all considered true by the participants. We can see that the workloads for students and teachers at elementary school are already very heavy (as described in Choice #1 and #2) at the moment that room for humane education seems very little if changes are not made.

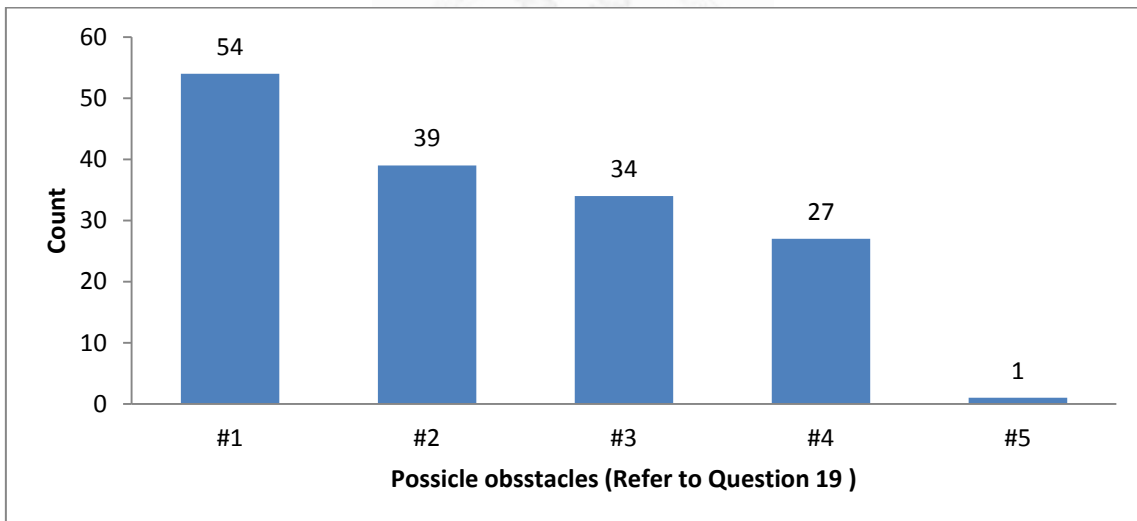


Figure 50. Possible Difficulties and Obstacles

Question 20: In your opinion, what would be the most appropriate way(s) to promote and advocate humane education (including animal-protection education and others)?

- 1. Humane education should become an independent subject at**

elementary school and humane educator should be hired to teach such subject.

2. Humane education should be integrated into all current subjects and to be taught by current teachers of all subjects.
3. The school should invite visiting speakers and humane educators to give speeches or lessons at school (“one shot” humane education).
4. Make students watch animal-related film/movie/documentary together at school.
5. Pass around printed materials for students to read.
6. Put up posters in classrooms and bulletins.
7. Arrange fieldtrips to the zoo or other places.
8. Other (Please specify)

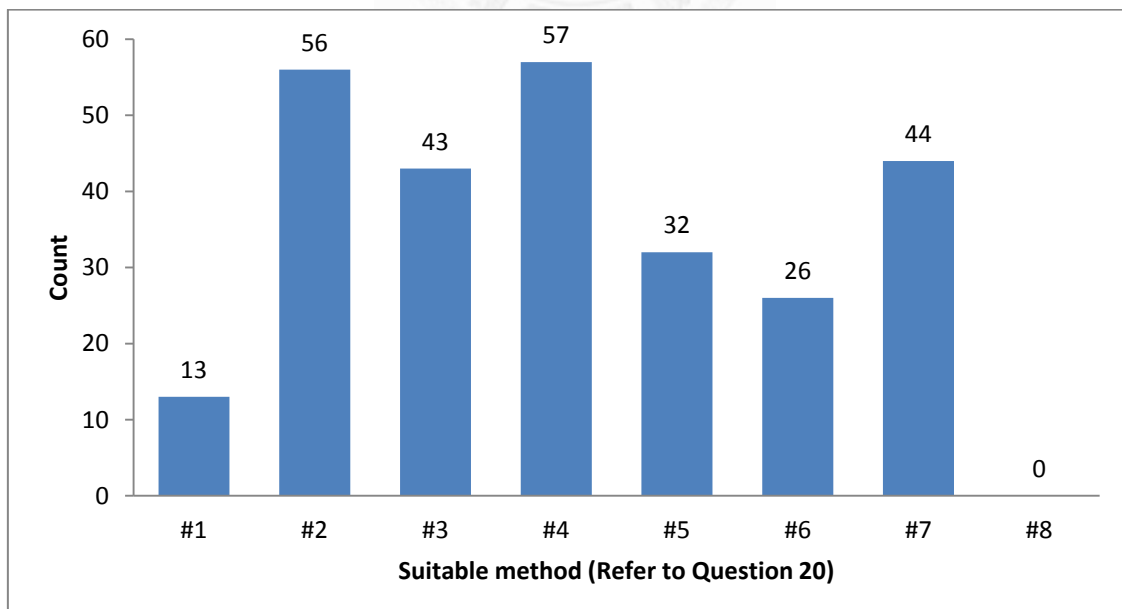


Figure 51. Suitable Methods to Promote Humane Education

Among all the possible methods suggested by the author, Choice #4 (Make students watch animal-related film/movie/documentary together at school) and Choice #2 (Humane education should be integrated into all current subjects and to be taught by current teachers of all subjects) were considered to be the most suitable methods. Choice #7 (Arrange fieldtrips to the zoo or other places) and Choice #3 (The school should invite visiting speakers and humane educators to give speeches or lessons at school -“one shot” humane education) were popular choices. Choice #1 (Humane education should become an independent subject at elementary school and humane educator should be hired to teach such subject), which would be the most ideal from the views of humane educators, was only supported by 1 teacher in this study. No other suitable method was suggested by any participant.

Question 21: In your opinion, what would be the most appropriate frequency of humane education-centered class?

- 1 lesson per semester
- 1 lesson per ½ semester
- 1 lesson per month
- 1 lesson per week
- Other

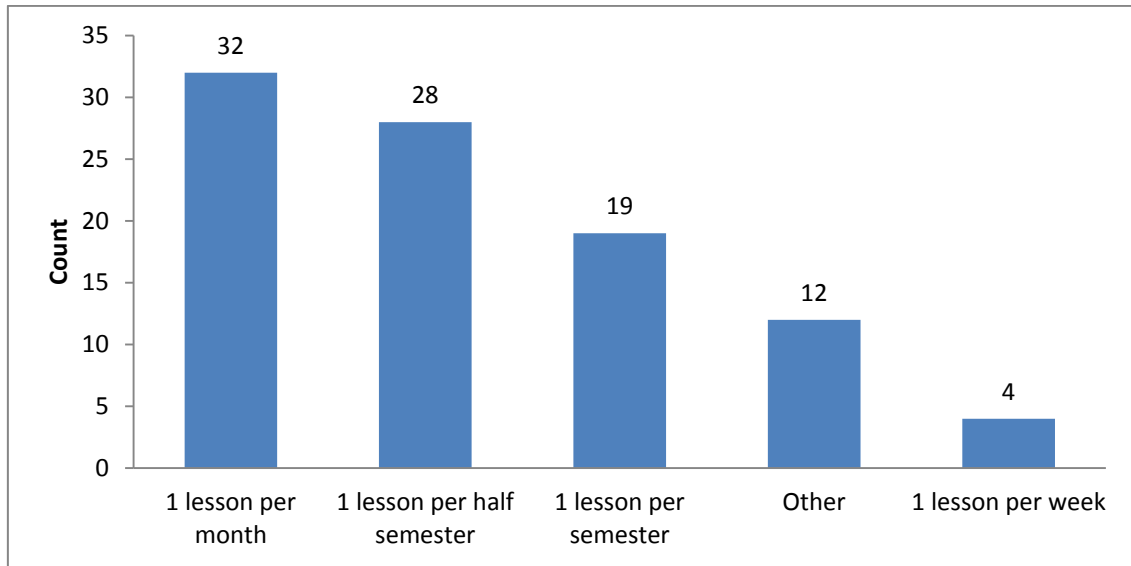


Figure 52. Proper Frequency for Humane Education-Centered Class

According to Figure 52, one lesson per month was considered the most appropriate frequency of humane education-centered class by 32 participants. One lesson per half semester (two lessons per semester) was considered suitable by 28 participants. The participants who selected “Other” mostly argued that no “extra” and “set” time and class need to be arranged; some of them were the supporters of integrating humane education into other subjects, while some of them think it should be taught whenever a suitable chance coming up (flexible) instead of assigning specific time slot for such class.

Question 22: Have you heard of or participated in any “teacher training program” offered by the Bureau of Animal Protection in Taipei City or any animal protection groups?

I have participated.

I have heard of one but have not participated in one.

I have neither heard of one nor participated in one.

Question 23: If there is animal-related training or program, would you like to participate?

Please use number -4 to 4 to show your level of interest.

From the participants' answers on Question 22, more effort on publicity of such event is recommended since the majority (76 out of 97) of participants have neither heard of one nor participated in one. 18 participants reported having heard of one, while only 1 participant reported having attended one. As for the interest of attending one, the average score was 0 (range from -4 to 4). Although this result was largely due to the busy life style, lack of leisure time and heavy workload of teachers, it was still positively related to participants' empathy toward animals. Figure 52 illustrates such finding.

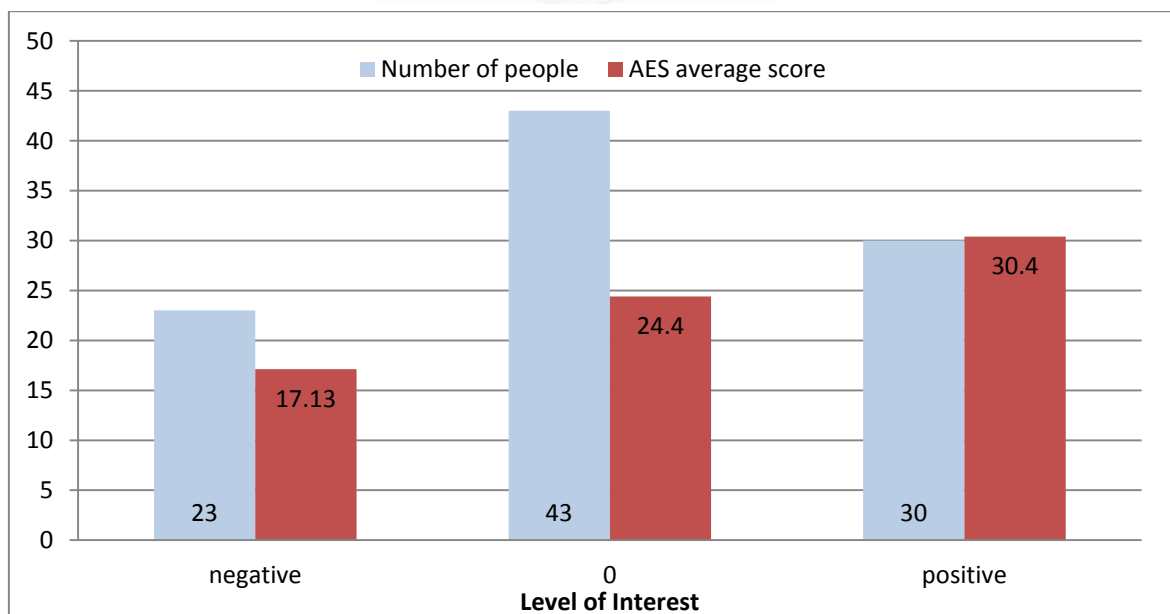


Figure 53. Interest in Attending Training/Seminar about Animals

Chapter Five

Conclusion

Both the student participants and teacher participants in the present study represent the higher middle class in the society of Taiwan. One of the characters of this class is to place a high value on education. Parents are often holders of the highest degrees, and they strive to provide the best education for their children. By sending their children to private schools and renowned public schools, parents expect their children to learn well. Teachers in Taipei City are hired through strict selection, and they work hard to offer teaching of excellent quality to students. Most of the students are well-disciplined, and they study hard to meet the expectation of themselves and their parents'. In a decade or two, these students will very likely be the most influential group of people in the society, such as politicians, educators, lawyers, doctors, corporate executives, business owners, and other professionals. They can be major policy makers, decision makers and change makers.

The previous generations did not have the luxury of keeping animals as pets, because a lot of families already had difficulty raising children and supporting their own living, let alone supporting animals'. When the author was a child, the economy was much better and keeping pets became possible for most families. However, as mentioned in Chapter 2, having no guidance from parents (since they did not have pet experience) and school teachers, pet keeping was not always successful. Nevertheless, the company provided by pets and experience gained from taking care of pets were invaluable.

From the first part of the study, we see great effectiveness of a single one-hour humane education class. The students showed enthusiasm in class, and in just an hour, they had readily absorbed the key concepts taught in class. The students who have pets enjoy the company and friendship provided by their animal friends. The students feel happy and relaxed when they are with their pets. Pet experience helps the students to be more knowledgeable about animals, more responsible and thoughtful, more empathic towards animals, and more interested and motivated in learning more about animals. However, they can learn to take more responsibility in the care of animals.

Parents' involvement is crucial; however, parents might not have the "right" attitude and knowledge about animals and they are not trained to teach. Parents need to be educated to realize the importance of companion animals to their children, to know better how to take care of animals and to share knowledge and experience with children, to guide their children to learning sources if they themselves cannot provide sufficient knowledge for children, to encourage their children to be a kind person instead of a study machine, to give their children a chance to love animals even if they themselves do not, to give responsibility to and place trust in children for the care of animals, to allow time for children to be with animals and learn about animals (perhaps by reading, watching television programs or browsing Internet—the students' ideal learning sources other than parents and teachers, as discussed in Chapter 3) instead of rushing them to studies, to spend more time taking children to places where they can meet animals in Nature instead of sending them to all sorts of cram schools.

According to the students, the educational input from the school teachers in this aspect is limited. Students learn about animals (different kinds and species, body parts

and structure, habitats, behaviors and such) in science class, but not necessarily about how to take care of, to empathize with, to love, and to show respect for all animals. The lack of teaching materials of such topic and low frequency of such class was confirmed by the teachers in the second part of the study.

From the second part of the study, we see a strong positive correlation between pet ownership and empathy towards animals from the teacher participants. Pet ownership in childhood in particular affects one's empathic attitudes towards animals, while "good" pet experience (close relationship, high pet attachment) significantly promotes one's empathic attitudes towards animals, "bad" pet experience (remote relationship, traumatized experience, low pet attachment) results in the opposite effect. The teachers who are more empathic towards animals are more willing to implement humane education at school, show more support in including humane education into curriculum, and show more interest in attending seminars and attaining animal-related knowledge and professional skills. The teachers are confident about school education that it can shape students' personality and characters, and in their opinions, the best age to cultivate empathy is grade one (6-7 years old). Since humane education is not mandatory in elementary school education, some teachers think that parents should be the ones to teach their children kindness towards animals. What happens then is that, students end up learning nothing from either parents or school teachers because both parties expect the other party to teach. Input from both parties are equally important in students' minds (as discussed in Chapter 3), thus efforts from both sides of teachers and parents are necessary. To implement humane education at school within the current education scheme, the best way is to incorporate and integrate humane education into all

subjects (not just science) and to be taught by current teachers of all subjects. This way, students get to be frequently exposed to humane education without adding extra class, subject, or study load (since there is no room, as discussed in Chapter 4). Of course, teachers need to receive trainings on how to integrate humane education into their subjects, how to teach, and most importantly, to be creative and innovative in designing lessons. After all, current teachers are not humane educators, as a supplement, it is recommended to invite specialist, visiting speakers or instructors to give speeches or one-time humane education class on certain topics.

Gathering the information found in the study and personal experience (see Chapter 2), the frequency and intensity of humane education should be strongest in lower grades, less strong in grade 3 and 4, and least strong in grade 5 and 6. However, it should be implemented throughout students' elementary schooling. This plan would work well in the current education scheme because students in lower grades have relatively lower academic pressure than higher grades. In order to achieve the best result, we need to be aware that different grades require different teaching materials and strategies, activities, communication and presentation skills, teaching tools (videos being the most powerful and convincing as discussed in Chapter 3), and even teacher's age (better be under 50 year old and younger, see Chapter 4) personality (passionate about animals) and teaching styles.

Many challenges and difficulties in implementing humane education at school as discussed in Chapter 4 require a bigger change, a "revolution" even, to overturn the current education system and educational culture of valuing academic abilities above

any other ability, and to shift the focus of the current learning objectives. There are some questions worth pondering: What is the most important thing for a human being to learn in life? Learn languages, advanced math skills or learn to be kind? What is good education? Is it an education that solely focuses on sending students to Ivy League colleges? The question should not be: “Do we have room for humane education?” Instead, “Can we make room for humane education?”

With the low birth rate and fewer children, there is competition between schools to encourage students to enroll. Most schools advertise themselves with students’ abilities and achievements in all subjects. People often say, “Learning is like a race, do not lose the game at the starting point.” The author sincerely hopes that, the present study can help parents and teachers see the immediate importance of humane education, especially at the early stage of children’s development. While parents and teachers strive to make their children remember as many English words and Chinese characters as possible, same efforts should be made in educating their children to be “good” human beings—respect for all lives, reverence for the environment, and learn to live in peace with one another (including “human animals” and “non-human animals”). Children today will be parents or possibly teachers tomorrow. With an education that not only helps them achieve their personal success but also instills kindness and compassion in them, we can envision a more balanced and harmonious relationship between “human animals” and “non-human animals” in the near future.

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APPENDIX A: Before-Class Survey (Type A: Non-Pet Owner)

This questionnaire has been designed to find out about your experiences with companion animals, about the pets you own now, and about your attitudes towards them. There are no right or wrong answers. Please answer ALL the questions as honestly as you can.

1. Name: (English) _____ (Chinese) _____
2. School: _____ Class: _____ Age: _____
3. Sex: Male Female

1. Did you have pet before and what kind of pet was it?

2. What was your reason(s) for having a pet?

3. Where did you get this pet? What was the source of this pet?

4. What happened to your first pet?

5. When did you first have responsibility for the care of the pet and what animal was it?

6. How attached were you to your pet? Very attached Attached Not very attached

7. Was owning your pet a burden and why?

8. What are the reasons for not having pets now?

9. Do you have any reason(s) for getting a pet in the near future?

10. What do you think of “animals”?

11. Where do you learn about animals?

From Parents Teachers TV Animals Others _____

12. Have you learned how to treat/take care of animals from school teachers? If yes, what subject and how often?

13. What do your parents think about animals? Do they love animals? Do their attitude(s) towards animals affect you?

APPENDIX B: Before-Class Survey (Type B: Pet Owner)

This questionnaire has been designed to find out about your experiences with companion animals, about the pets you own now, and about your attitudes towards them. There is no right or wrong answer. Please answer ALL the questions as honestly as you can.

4. Name: (English) _____ (Chinese) _____
5. School: _____ Class: _____ Age: _____
6. Sex: Male Female
-

1. What kinds of pets do you have now? How many?

2. What is your reason(s) for having a pet?

3. How long have you had your pet(s)?

4. Where did you get this pet? What was the source of this pet?

5. If this is not your first pet, what was your first pet and what happened to it?

6. When did you first have responsibility for the care of the pet and what animal was it?

7. How attached are you to your pet? Very attached Attached Not very attached

8. Who usually takes the most care of this pet? _____

9. How much time do you spend doing something with or for your pet every day? _____

10. How do you feel when you are with your pets? _____

11. Is owning your pet a burden and why?

12. List three good things about having a pet.

13. What do you think of “animals”?

14. Where do you learn about animals?

From Parents Teachers TV Animals Others _____

15. Have you learned how to treat/take care of animals from school teachers? If yes, what subject and how often?

16. What do your parents think about animals? Do they love animals? Does it affect you?

We hope that you enjoyed today’s lesson and learned something from it.

1. Did the lesson today change the ways you think about animals? How?

2. If you or people around you want a pet, where would you tell them to go?

Pet Shop Breeder/Puppy Mills Shelter or Animal protection groups Other_____

3. If you have a dog/cat now, would you (tell your parents to) spay/neuter him/her?

Absolutely yes Maybe No, because_____

4. In your opinion, how can we solve the problem of “pet overpopulation”?

5 Whenever you decide to get a pet, you promise that you will be a **Responsible Owner** and **NEVER** abandon your animal friend.

Absolutely yes Maybe No, because_____

6. Whenever you don’t know how to treat an animal, just think of the **Golden Rule**:

7. Here are some cases to practice your empathy. How would you feel if you were....

A hen crowded in a battery cage:_____

A calf separated from your mommy: _____

A frog waiting to be dissected in a science class: _____

A rabbit locked in a cage in a lab to be experimented on: _____

A pig waiting to be slaughtered: _____

A raccoon that is skinned alive for its fur: _____

8. Animals can feel pain and suffer just like we do, but they can’t speak for themselves. What can you do to help them in any possible way?

.

9. Would you like to know more about animals and what you can do for them?

Absolutely yes Maybe No, because_____

10. If yes, from

School teachers Parents Books TV Others:_____

**Thank you for your participation! Please share what you learn today with your family and friends!
Everyone can do something to make the world a better place!**

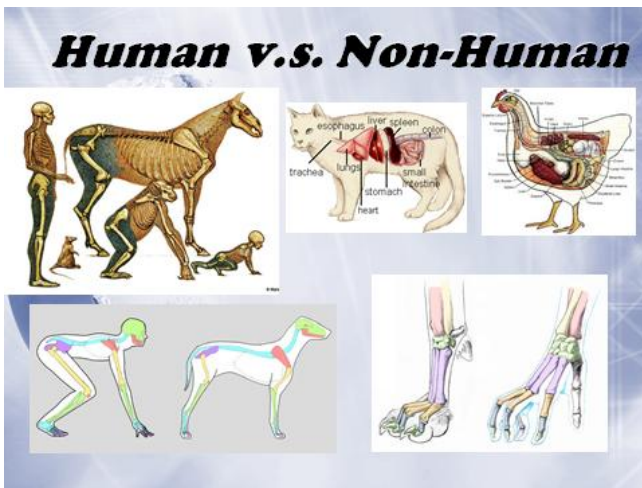


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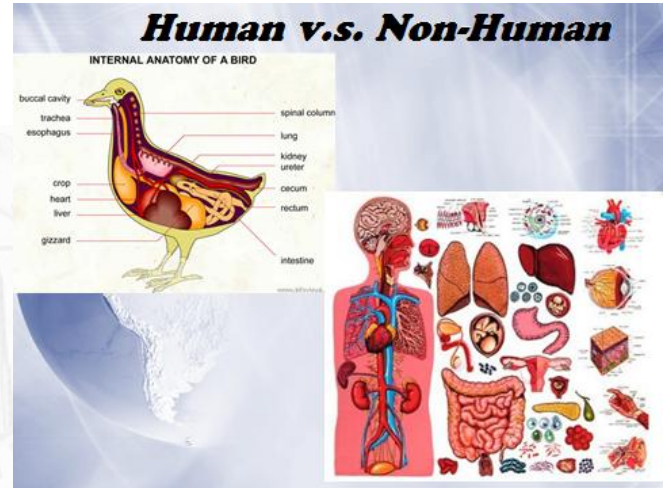


Companion: a **friend** who is frequently in the company of another
 Pet: An animal kept for amusement or companionship.

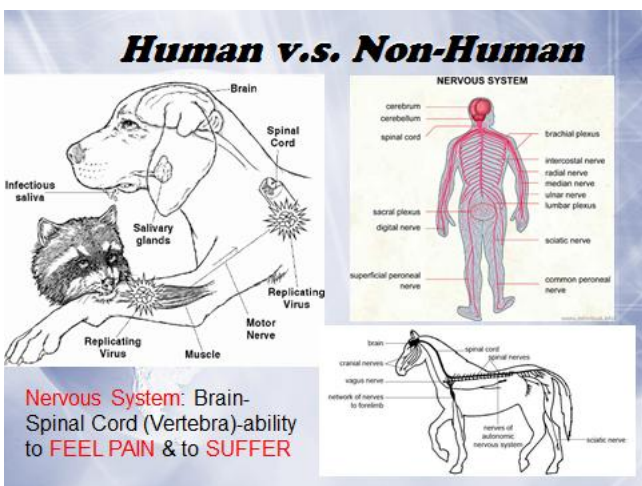
2



3



4



Nervous System: Brain-Spinal Cord (Vertebra)-ability to **FEEL PAIN** & to **SUFFER**

5



Pleasant Feelings: happy; confident; free; satisfied; joyous; thankful; important; cheerful; courageous; energetic, spirited; wonderful; peaceful; comfortable; encouraged; relaxed; loving; warm; loved; excited; hopeful; secure; lucky; calm; confident; safe

Difficult/Unpleasant Feelings: angry; irritated; annoyed; upset; hateful; lousy; disappointed; guilty; uncertain; inferior; terrible; bad; lost; uneasy; unsure; tense; despair; distressed; tragic; afraid; helpless; confused; hurt; fearful; terrified; anxious; panic, nervous, scared, worried, frightened; rejected; sorrow; lonely; tired; hostile; ashamed; discouraged; empty; bitter; aggressive; distrustful; pathetic; weary; timid

6

The Five Freedoms=Basic Needs

Anyone responsible for looking after animals should try to give them the five freedoms:

- 1. **Freedom from Hunger and Thirst** - by ready access to fresh water and a diet to maintain full health and vigour.
- 2. **Freedom from Discomfort** - by providing an appropriate environment including shelter and a comfortable resting area.
- 3. **Freedom from Pain, Injury or Disease** - by prevention or rapid diagnosis and treatment.
- 4. **Freedom to Express Normal Behaviour** - by providing sufficient space, proper facilities and company of the animal's own kind.
- 5. **Freedom from Fear and Distress** - by ensuring conditions and treatment which avoid mental suffering.

7

JUSTIN BIEBER
for PETA

ANIMALS CAN MAKE
U SMILE

ADOPT FROM YOUR LOCAL SHELTER.

**Adopt,
DON'T BUY**

BUYING ANIMALS IS KILLING ANIMALS.
Save a homeless dog or cat—always adopt and never buy.

Kellan Lutz
and Kyla for
PETA

8

Be an Angel:
Adopt a Homeless Dog

ADOPT DOGS.
DON'T BUY

罗志祥 Bobby for PETA

每当从宠物店买狗
就有一只收容所的狗失去温暖的家

9

Would you take me home?

10

Where is my home?

He's waiting for a new home.
He's waiting for you.

When you are ready to adopt your next pet, won't you please consider adopting from an animal control facility or SPCA? These organizations have hundreds of loving, healthy beauties just waiting for a forever home with you. In many cases, if the shelter is funded, these loved ones days may be numbered due to space restrictions.

Please, show some love.
Adopt a shelter pet.

11

Can you find me a home and save my life?

12

**Richmond Animal Protection Society
in Vancouver, Canada**



13

Richmond Animal Protection Society



Thrift Store: A shop that sells used articles, especially clothing, as to benefit a charitable organization

14

Richmond Animal Protection Society



You can make a difference in their lives.
WE NEED YOU at Richmond City Shelter to help care for cats.
Come on out and join our team-You'll be happy YOU DID IT!

15

Richmond Animal Protection Society



Richmond City Shelter: Rodent and Rabbit Area

16

Richmond Animal Protection Society



17

Richmond Animal Protection Society



18



25



26



27



28



29



30

APPENDIX E: Notice to the Survey Participant

親愛的老師：

感謝您對於教育的奉獻！在這裡向您致上最高的誠意：老師您辛苦了！

這一段時間的教學經驗，讓詠晴體會到教育的重要性及對下一代的影響。因此，在我的碩士論文中，希望能夠針對台北市的國小學生在學校裡所接觸到的人道教育及動物保護教育，做一個現狀及未來方向的研究探討。

本問卷為匿名，也不會針對個人意見作分析。共分為兩大部份。第一個問卷為「動物同理心量表」，是由英國學者 Elizabeth Paul 所創製。請您填寫時，務必用直覺反應填答即可，請不要深慮。

第二個問卷主要是希望能夠知道您本身的養寵物的經驗，以及最重要的：藉助您的力量，了解目前人道及動物保護教育的施行現狀和您寶貴的看法。為了能夠真正反應出現任老師們的想法，以及求資料的可信度，請您依照您最直接的想法來回答。為了節省您填寫的時間，詠晴盡量列舉出選項以供勾選。但是難免有不夠詳盡之處，還麻煩老師在「其他」的選項中寫出您的意見。

詠晴非常地感謝您在教學繁忙之餘，能夠抽空填寫本問卷。若是老師您有任何的疑問或是需求，請麻煩跟我聯繫。再次感謝您的協助與配合！

晚輩 楊詠晴敬上 ching1102@hotmail.com
國立臺灣大學獸醫專業學院碩士班動物福利組
指導教授：費昌勇教授

APPENDIX F: The Animal Empathy Scale

The Animal Empathy Scale 動物同理心量表 by Elizabeth S. Paul/ Translated by Jeanne Yang

	請圈選出一個數字以表示您對以下敘述的同意程度。同意程度愈大，往左圈選數字愈大。不同意程度愈大，往右圈選數字愈大。	←非常同意 Agree	非常不同意→ Disagree
1.	So long as they're warm and well fed, I don't think zoo animals mind being kept in cages. 只要能夠保暖及吃飽，我想動物園的動物不會介意被關在籠子裡。	4-3-2-1-0-1-2-3-4	
2.	Often cats will meow and pester for food even when they are not really hungry. 貓咪即使並不是真的餓了，也時常會喵喵叫吵著要食物吃。	4-3-2-1-0-1-2-3-4	
3.	It upsets me to see animals being chased and killed by lions in wildlife programs on TV. 在電視的野生動物節目中看到動物被獅子追趕而獵殺的景象，會讓我心情不佳。	4-3-2-1-0-1-2-3-4	
4.	I get annoyed by dogs that howl and bark when they are left alone. 因為落單而哭嚎吠叫的狗讓我心煩。	4-3-2-1-0-1-2-3-4	
5.	Sad films about animals often leave me with a lump in my throat. 看到關於動物的傷心影片會讓我哽咽難過。	4-3-2-1-0-1-2-3-4	
6.	Animals deserve to be told off when they're not behaving properly. 當動物們不守規矩時，是應該要被斥責的。	4-3-2-1-0-1-2-3-4	
7.	It makes me sad to see an animal on its own in a cage. 我看到動物獨自被關在籠子裡會感到難過。	4-3-2-1-0-1-2-3-4	
8.	People who cuddle and kiss their pets in public annoy me. 我看到人們在公眾場所對他們的寵物又親又抱的會覺得反感。	4-3-2-1-0-1-2-3-4	
9.	A friendly purring cat almost always cheers me up. 一隻友善地呼嚕呼嚕叫的貓總是會讓我感到快樂。	4-3-2-1-0-1-2-3-4	
10.	It upsets me when I see helpless old animals. 當我看到年老無助的動物會感到難過。	4-3-2-1-0-1-2-3-4	
11.	Dogs sometimes whine and whimper for no real reason. 狗有時候會莫名其妙地嗚嗚哀叫。	4-3-2-1-0-1-2-3-4	
12.	Many people are over affectionate towards their pets. 許多人對他們的寵物用情過度。	4-3-2-1-0-1-2-3-4	
13.	I get very angry when I see animals being ill treated. 我看到動物被虐待會感到非常憤怒。	4-3-2-1-0-1-2-3-4	
14.	It is silly to become too attached to one's pets. 我覺得與寵物間感情過於親密是愚蠢的。	4-3-2-1-0-1-2-3-4	
15.	Pets have a great influence on my moods. 寵物對我的心情有很大的影響。	4-3-2-1-0-1-2-3-4	
16.	Sometimes I am amazed how upset people get when an old pet dies. 有時候我很訝異人們會因年老寵物過世而如此難過。	4-3-2-1-0-1-2-3-4	
17.	I enjoy feeding scraps of food to the birds. 我餵小鳥食物碎屑吃，感覺樂在其中。	4-3-2-1-0-1-2-3-4	
18.	Seeing animals in pain upsets me. 看到痛苦中的動物讓我難過。	4-3-2-1-0-1-2-3-4	
19.	People often make too much of the feelings and sensitivities of animals. 人們對動物的情感及感受力時常言過其實、小題大作。	4-3-2-1-0-1-2-3-4	
20.	I find it irritating when dogs try to greet me by jumping up and licking me. 狗跳到我身上、舔我來迎接我，會讓我感到不愉快。	4-3-2-1-0-1-2-3-4	
21.	I would always try to help when I saw a dog or puppy that seemed to be lost. 當我看到一隻看似迷路的小狗，我總會試著幫助他。	4-3-2-1-0-1-2-3-4	
22.	I hate to see birds in cages where there is no room for them to fly about. 我非常不願意見到小鳥被關在無法飛動的小籠子裡。	4-3-2-1-0-1-2-3-4	

台北市現職國小教師對人道及動物保護教育 在小學的施行現況及未來方向之意見調查

*請在合適的方格中打勾，視您的情況及意見可複選。為了節省您填寫的時間，本問卷盡量將可能選項列出以供勾選。但是有不詳盡之處，麻煩您在「其他」的選項中寫下您的回答。您的寶貴意見將幫助本問卷調查結果更加完整。為了能夠真正反應出老師們的想法，請您依照您最直接的想法來回答。

年齡： 21-30 31-40 41-50 51-60 61-70 歲

教育背景：專科 學士 碩士 博士 其他_____

教學資歷：_____年

任教科目（可複選）：導師 國語 數學 自然 社會 英語 音樂 美術 其他_____

任教年級（可複選）： 1年級 2年級 3年級 4年級 5年級 6年級

1. 目前是否有養寵物？有 無（請跳到第4題）
2. 是什麼動物？狗 貓 兔 鳥 其他_____
3. 您與您的寵物有多親近？非常親近 算是親近 不算親近 非常不親近
4. 您小時候是否有養寵物？有 無（請跳到第7題）
5. 您小時候的寵物中，與您最親近的是什麼動物？狗 貓 兔 鳥 其他_____
6. 您小時候與您的寵物有多親近？（請舉出其中最親近的）
非常親近 算是親近 不算親近 非常不親近
7. 您認為學校的教育除了教導學生知識之外，對於學生的人格、個性及性情有多大影響力？（就大多數學生而言）。請用-4到4來表示您認為的影響力程度：
 -4（非常沒有影響） -3 -2 -1 0（中立） 1 2 3 4（非常有影響）
8. 您認為培養學生同理心（能設身處地為他人著想、能夠對他人的苦痛感同身受的心）的最佳年級為？
 1年級 2年級 3年級 4年級 5年級 6年級
9. 您認為一個能夠為動物設身處地著想的人，會更能為人設身處地著想嗎？請用-4到4來表示您贊同的程度。
 -4（非常不贊同） -3 -2 -1 0（中立） 1 2 3 4（非常贊同）
10. 您覺得下一代愛護動物的觀念，應該由誰來擔當教導的責任？
政府 動物保護團體 家長 教師 其他(可列多項)_____
11. 您覺得下一代應該從哪裡學習愛護動物的觀念？
學校 家庭 動物園 電視頻道 其他(可列多項)_____
12. 美國與日本部分小學，會在教室養寵物，目的在讓學生接觸動物及從日常照料中獲取經驗及知識。您贊成在您的班上實行嗎？請用-4到4來表示您的贊成/不贊成程度
（傾向贊成者請答第13題，傾向不贊成者請答第14題）
 -4（非常不贊成） -3 -2 -1 0（中立） 1 2 3 4（非常贊成）
13. 您贊成的原因（可複選）：培養責任感 培養團體合作精神 培養愛心 培養同理心
獲取動物知識 獲取照顧動物經驗 其他(可列多項)_____

14. 您不贊成的原因 (可複選): 對動物本身不好 沒有學習價值 增加老師負擔 易生糾紛事端 會有家長反對 其他 (可列多項) _____
15. 在您目前所任教科目的教材內容及教學活動中, 是否有含括或提到尊重生命愛護動物的概念?
按照教材, 完全沒有 教材內有, 但不會在課堂上提起 教材中偶爾有時就會提起 教材中沒有, 但是會自行導入提及 其他情形 _____
16. 您願意利用您目前的授課時間, 教導學生保護動物的概念嗎?
 請用-4 到 4 來表示您的意願程度。
 -4 (非常不願意) -3 -2 -1 0 (中立) 1 2 3 4 (非常願意)
17. (繼上題)低意願者的可能原因 (可複選): ※上題表示願意者也請作答。
個人並非動物愛好者 非職責所在 增加備課負擔 課堂時間有限 正課有進度壓力
非校方所樂見 非家長所樂見 學生沒興趣 其他 _____
18. 您贊成將人道教育及動物保護教育編納入國小正式教程, 增加教材及固定教學時數嗎?
 -4 (非常不贊成) -3 -2 -1 0 (中立) 1 2 3 4 (非常贊成)
19. 若主張將人道教育及動物保護教育編入國小教程, 您可預見會產生的問題及阻力? (可複選)
學生在校課業及上課時數已屆飽和, 難以再增
恐將加重老師的工作負荷及職責
人道教育及動物保護教育並非升學考試所需, 難得到校方支持
人道教育及動物保護教育並非升學考試所需, 家長可能反對
其他 _____
20. 依您之見, 以下宣導人道教育及動物保護教育的方法, 何者較為適宜? (可複選)
應該在國小有獨立科目及專門的任課教師
將觀念融入各科教學, 由現任各科老師擔任教學
聘請講者或人道教育學家到學校做一次性的講授 安排全體看動物相關影片
發給學生宣導資料以供閱讀 在校內及班級張貼海報 安排校外教學至動物園等
其他 _____
21. 您覺得以下授課頻率及時數, 何者最為適宜?
1 節課/1 學期 1 節課/半學期 1 節課/1 個月 1 節課/1 週 其他 _____
22. 您有參加或聽說過台北市動物保護處及動保團體所舉辦的「種子教師培訓課程」嗎?
參加過 聽說過但沒參加過 沒聽說過也沒參加過
23. 若有相關課程, 您是否有興趣參加? 請用-4 到 4 來表示您的意願程度。
 -4 (非常不願意) -3 -2 -1 0 (中立) 1 2 3 4 (非常願意)

本問卷到此結束。非常感謝您的回答! 若是您有其他的意見和建議, 請您在此留言。
 您的想法對我們是非常寶貴重要的!

