

Short Report

Changes in children's negative attitudes towards dogs expressed in essays during a human-animal bond (HAB) education program—negative comments decreased as the children became acquainted with the dogs

MATOBA Miyoko and KAKINUMA Miki*

Nippon Veterinary and Life Science University

(Received July 1, 2009/Accepted August 19, 2009)

Abstract : Written comments by children who participated in a human-animal bond (HAB) education program are analyzed. An HAB education specialist, together with the schoolteacher administering the integrated study periods, planned the program. Twenty-eight fourth graders participated in the four-session program in which they encountered pet dogs, played with pet dogs, met working dogs, and planned games to play with pet dogs. The majority of the children did not express any negative feelings—but those who did mainly expressed them after the first session. Most of those children who gave negative comments had been bitten by other dogs at some time in the past or were allergic to them, and so had less contact with dogs in general. Negative comments were divided into three categories: psychological aversion, physiological reaction and physical aversive comments towards dogs. The results are discussed and ways to plan effective programs are given.

Key words : human animal bond program, dog, text analysis, dog bite injury

J. Anim. Edu. Ther. 1: 25–28, 2009

In Japan, over 5,500 dog bite incidents are reported every year (Ministry of Environment, 2007). Research into these dog attacks by the Council for the Protection of Animals in the Prime Minister's Office (2003) showed that household dogs were most frequently involved. The most frequently mentioned reasons for the dog bites were that the victims had been "reaching over to touch the dog," "trying to put the dog on a leash" and "playing with the dog." These incidents suggest that the attacks occurred because the dog owners did not understand dog behavior and/or the victims were not reading the dog's body language correctly.

Pediatricians have pointed out the need for public programs for children to reduce the risk of dog bites (i.e. Kahn et al., 2003; Schalamon et al., 2006), and various attempts have been made (Chapman et al., 2000, Samuels, 2005; Spiegel, 2000). Human-animal bond (HAB) education programs are popular as a method of teaching social skills and compassion, as well as pro-

moting awareness of dogs' body language, which can help prevent dog bites. However, the lack of scientific evaluation of such programs is often pointed out, and this means that not enough information is available on how to make sure these programs are effective (Arbor et al 2009).

Here, we report our brief findings on how children's adverse feelings towards dogs shifted over the course of an HAB program by analyzing their essays written after each session of the program.

The participants consisted of 28 4th-grade students (21 boys and 7 girls) of Sumaura Elementary School (a private school), in Kobe, Japan. In 1997, there was a series of cruel murders committed by a 14 years old boy in Kobe and educators and parents in this area were very much concerned and were looking for various ways, including HAB program, to nurture pro-social behavior in children.

*Correspondence to:kakinuma-miki@nvl.u.ac.jp (1-7-1, Kyonan-cho, Musashino-shi, Tokyo 180-8602, Japan)

The HAB program *Students Meet Domestic Dogs* was administered during the Period for Integrated Study. The program had two main purposes: enhancing pro-social behavior in children and promoting better understanding of dog behavior. The Period for Integrated Study was introduced in 2000 to nurture children's ability to learn and think independently. Its educational objectives are as follows: 1) students think and learn by themselves, 2) students acquire problem-solving skills, and 3) students to learn by work experience and volunteer activity. Children participated in four 90-minute sessions (Jan 20, Feb 10, Feb 17 and March 17, 2003) with dogs.

The HAB course was taught by the fourth grade teacher and a HAB education specialist, who is a certified dog instructor and a certified elementary school teacher.

All five dogs who were employed in the program were determined by a veterinarian to be in sufficient physical and psychological condition to participate in animal-assisted education (AAE) programs. In addition, the HAB instructor (who had extensive experience working with dogs in many settings, including various educational ones) closely monitored the dogs' stress levels throughout the program. Had any of the dogs displayed any stress reactions during a session, the session would have been discontinued. All of these dogs are pets of members of a volunteer group for animal-assisted

activities in the Kobe area; the dogs participated in the program with their owners present. These dogs were a golden retriever (♀, 5 years), mixed breed (♂, 5 years), dachshund (♀, 2 years), toy poodle (♀, 3 years), and bichon frise (♀, 5 years). The latter dog was the pet of the HAB education specialist.

The HAB specialist met with the schoolteacher to plan out a program (Table 1). The principle of the school checked the program plan. Parents of the students were informed of the contents and signed a consent form to allow their children to participate in the program. The teaching strategies are shown in Table 2. The program is divided into four sessions, with sub themes and sub goals set for each session (Table 3).

After each session, students were required to write short comments on the session. Since young children do not respond well to general questionnaire, we have used these comments to see children's reaction to the program. These comments were analyzed by Trustia 2 (Just. Systems, Tokushima, Japan), a text mining software which is used to analyze comments and contents of interviews in psychological researches. The students wrote a total of 106 comments. The average number of words per comment was 316, ranging from 93 to 427 words. Twenty-eight sentences were written about the program, 23 positive and 1 negative. The positive comments mentioned how much they enjoyed meeting the dogs, while the negative one mentioned how sad they

Table 1 Pre-arrangement with the school teacher

	Contents
Step 1	Providing an explanation about the behavior of pet dogs to the classroom teacher
Step 2	Proposing the lesson plan with pet dog as educational materials
Step 3	Set the goal of the lesson with teacher
Step 4	Help the teacher create the actual lesson plan
Step 5	Coordinating pet dogs used in the lesson and evaluates pet partners, then introduces pet partners to the teacher

Table 2 Teaching strategy

	Contents
Step 1	Require students to keep quiet while observing dog behavior
Step 2	Teach how to observe dog behavior
Step 3	Ask students what they discovered by observation
Step 4	Require students to think about non-verbal communication with dogs
Step 5	Ask students to interact with dogs
Step 6	Expose students to pet dog and hearing dog
Step 7	Remind students to thank working dog
Step 8	Help students play games with the dogs

were that the program had ended. There were 110 sentences referring to dogs, with 54 positive and 7 negative ones. The positive comments noted the dog's features, gentleness or cleverness, while the negative ones concerned the fear of dogs and negative feelings about dog saliva.

Besides the general negative comments and allergies mentioned above, the authors looked for other aversive physiological and psychological reactions. There were 19 negative comments by 8 (5 male and 3 female) students. Aversive reactions are categorized in three: psychological aversion such as fear, physical aversion such as sliminess, physiological reactions such as allergic reactions, and psychosomatic symptoms (Fig 1). The number of negative comments decreased after the first session (Fig. 2).

Of the 28 students, 2 male students reported earlier incidences of dog bites injuries and their fear towards dogs in general. Four (3 male and 1 female) reported being allergic to dogs and of those, 3 indicated a fear towards dogs, and 2 reported eye irritation during the session. One male student reported sickness with no known cause prior to session 1 and 2, and joined the class later with no physiological trouble—indicating that it may have been a psychosomatic symptom caused by a fear of dogs. He was one of the dog bite victims and expressed a strong fear of dogs. Two males, one who had experienced a bite incident and one with an allergy, reported a physical aversion to the slimy saliva of dogs. Two female students reported a general fear in relation to barking, biting and dogs getting out of control, but did not mention any particular previous

incidents involving dogs.

Of the 8 students who gave aversive comments, 4 of them mentioned their fear towards dogs after the first session, 1 after the second, 1 after the third and 1 after the last session. Five of them mentioned some

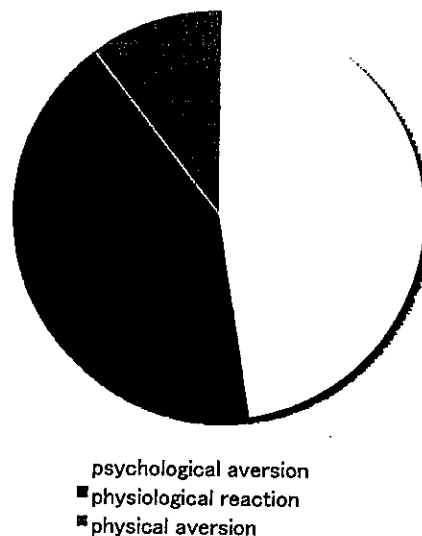


Fig. 1 Types of negative comments

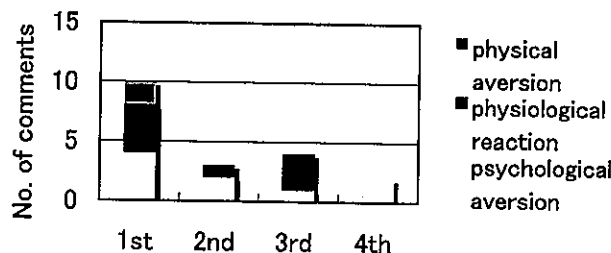


Fig. 2 Negative comments after each session

Table 3 Contents of the program

	Theme	Goals
Session 1	Understanding pet dog behavior	1. Learning about non-verbal communication through observing dog's behavior. 2. Nurture students to have kindness toward pet dogs and animals familiar to them through playing games with pet dogs.
Session 2	Playing with pet dogs	1. Learning about non-verbal communication through playing with pet dog. 2. Nurture students to have kindness toward pet dogs and animals familiar to them through playing games with pet dogs.
Session 3	Meeting service dogs	1. Learning about working dog for human. 2. Understand hearing-impaired person and hearing dog.
Session 4	Planning games to play with pet dogs	1. Students think and learn by themselves. 2. Students plan games to play with pet dogs.

kind of aversive feelings after the first session, but two waited until the after the third session to mention their previous fear or allergy, and one “confessed” after all the sessions had ended to having had an initial fear at the beginning of the program. There were no sex differences in either number of negative comments or bite incidents.

Our results show that for the majority of children, a session with a skilled instructor and well-trained dogs would promote the better understanding of dogs and would and nurture positive attitudes in children. However, those who did not have much contact with dogs due to allergies or who had fearful experiences would need more than one session to build a better relationship. Those who expressed negative feelings were fearful, but they expressed less fear in the second session. Some students were less expressive at the beginning, but as they got used to having dogs in the room and interacting with them they wrote about their previous fear towards dogs and indicated that they had overcome this fear.

These children with negative feelings should be the core targets of HAB and bite prevention programs. Such programs could help eliminate their unnecessary fear and help them to understand that dogs can be good companions.

We would like to express our gratitude to the stu-

dents and teachers of Suma Elementary School and to the dogs and AAE volunteers for making this study possible.

References

- Arbour, R., Signal, T. and Taylor, N. 2009. Teaching kindness: the promise of humane education. *Society and Animals*, 17, 136-148.
- Chapman, S., Cornwall, J., Righetti, J. and Sung, L. 2000. Preventing dog bites in children: randomised controlled trial of an educational intervention. *British Medical Journal*, 320: 1512-1513.
- Council for Protection of Animal in the Prime Minister's Office. 2003. <http://www.sorifu.go.jp/council/kanri/animal/32.html>.
- Kahn, A., Bauche, P., Lamoureux, J. 2003. Child victims of dog bites treated in emergency departments: a prospective survey. *European J. of Pediatrics*, 162, 254-258.
- Ministry of Environment. http://www.env.go.jp/council/14/animal/y140-24/mat02_2.pdf.
- Samuels, W.E. 2005. Effective dog bite prevention programs. *The Puckrat*, 75, 1-2.
- Schalamon, J., Ainoedhofer, H., Singer, G., Petnehazy, T., Mayr, J., Kiss, K., and Höllwarth, M.E. 2006. Analysis of dog bites in children who are younger than 17 years, *Pediatric*, 117, 374-379.
- Spiegel, I. B. 2000. A pilot study to evaluate an elementary school-based dog bite prevention program, *Anthrozoos*, 13, 164-173.

総合的な学習の時間を使った HAB プログラムの試み：感想文から考える子どもの犬に対する恐怖心の軽減過程

的場美芳子・柿沼美紀

日本獣医生命科学大学

(平成 21 年 7 月 1 日受付 / 平成 21 年 8 月 19 日受理)

要約：HAB プログラムに参加した児童の感想文の分析から、犬に対する恐怖心や否定感の減少過程について検討した。小学 4 年生児童 28 名を対象に総合的な学習の時間を用いて犬に親しむプログラムを実施。「犬と仲良くなろう」「犬と遊ぼう」「介助犬について学ぼう」「犬のためにゲームを考えよう」という 4 回の企画で実施。担当は学級担任と Human animal bond (HAB) 専門家が行った。毎回終了後に書かれた感想文の分析では、多くの児童が犬に対して肯定的であったが、一部は犬に対する恐怖心や否定感を記述していた。咬傷事故の被害者、犬アレルギー保持者などに否定的な記述が見られた。否定的な記述は回を重ねると減少。内容は心理的な恐怖心、アレルギー反応などの身体的反応、唾液に対する物理的な嫌悪感などに分類された。

キーワード：human animal bond, 犬, 文章分析, 咬傷事故