



RESEARCH

Evaluation of young and adult dogs' reactivity

E. Sforzini^a, M. Michelazzi^b, E. Spada^c, C. Ricci^c, C. Carenzi^b,
S. Milani^c, F. Luzi^b, M. Verga^b

^a*Veterinario Libero Professionista, Socio AISEAB, Broni, Italy;*

^b*Dipartimento di Scienze Animal DSA – Sezione di Zootecnica Veterinaria, Università degli Studi, Milano, – Italy; and*

^c*Istituto di Statistica Medica e Biometria GAM – Facoltà di Medicina e Chirurgia, Università degli Studi, Milano, Italy.*

KEYWORDS:

puppy;
adult subject;
German shepherd dog;
behavioral test;
reactivity

Abstract Many authors have tested puppies' behavior early to detect adult behavioral disorders. Our pilot study aims to investigate puppies' reactivity toward tolerance of new situations and the consistency of behavior between puppy and adult dog. Seven tests (tunnel, direct looking, sudden noise, retrieving buster-ball, problem solving, bowl removal, and approaching) were used to evaluate the reactivity of 32 German shepherd dogs at 5, 7, and 9 months of age. Among these dogs, 17 were chosen by physical and behavioral traits to continue the training program up to adulthood (choice group) and administered the same tests at the age of 2 years. Through the observation of behaviors, the tests aim to assess sociality, exploratory and retrieving tendency, learning ability, playing aptitude, and tendency toward offensive aggression. The behaviors were ranked by degree of reactivity, and ranks were used as scores. The effects of gender and group on the 5- to 9-month reactivity profiles of all the puppies were estimated with a repeated-measures model. In the choice group, the behavior changes from 9 to 24 months and their dependence on gender were estimated with an analogous model. All puppies became more self-confident between 5 and 9 months. At 9 months, behavior was slightly better in males and in the choice group. Between 9 and 24 months, self-confidence, attentiveness, and ability to solve problems and retrieve objects improved, whereas playfulness decrease. Behaviors at 9 and 24 months showed very low variability, which indicated their very high similarity.

© 2009 Elsevier Inc. All rights reserved.

Introduction

The social interaction between mother and offspring during weaning has significant effects on subsequent pup behavior (Wilsson, 1985). Normally a dog's behavior, socialization in particular, is influenced by genetic aspects and environmental features (Scott and Fuller, 1965). In

fact, a puppy's early environment may have a profound effect on its future behavior. Appropriate socialization and habituation during the early weeks of life is essential for the lifelong well-being of dogs. For this reason, is very important to expose puppies to a wide range of environmental and social stimuli (different types of people, animals, noises, and situations) to avoid deficiencies in socialization with humans or the development of some behavioral problems like fears, phobias, aggressiveness, and anxiety. Selecting puppies with well-balanced behavior may help to prevent behavior problems or training failures in the future.

Address for reprint requests and correspondence: Fabio Luzi, Dipartimento di Scienze Animali DSA – Facoltà di Medicina Veterinaria, Università degli Studi, via G. Celoria, 10, 20133 Milano, Italy.

E-mail: fabio.luzi@unimi.it

The meaning of “temperament” in its general sense is difficult to define. Concerning fearfulness in potential guide dogs, *Goddard and Beilharz (1985)* found Labrador retrievers to be less fearful than German shepherd dogs, which were also more fearful than other breeds. According to *Mackenzie et al. (1986)*, the effects of early experience may be important, particularly since dogs would have been “walked” in very different situations and would have experienced varying environments. More encouraging data for inherited traits in army dogs have been produced by *Falt et al. (1982, cited by Mackenzie et al., 1986)*. These data were based on tests performed on 8-week-old German shepherd puppies.

Other authors have tested puppy behavior to detect adult behavioral disorders (*van der Borg et al., 1991*) and aggressiveness (*Netto and Planta, 1997*). Behavioral tests are a common approach in animal personality research. The advantages of this method are the possibility to study an animal’s responses to environmental challenges and to control the situation. *Scott and Fuller (1965)* developed many tests for puppies and young dogs (from birth to 1 year old) with the aim of describing behavioral, genetic, or developmental differences in dog breeds. *Goddard and Beilharz (1985)* described some behavioral tests for guide dogs 1 to 4 months old used to predict the same puppies’ behavior (such as fear, reactivity, and learning ability) in the adult dogs. Pet owners and practitioners working with dogs have long recognized that temperament is important because it influences the dog’s behavior and response to its environment. The purpose of this research was also to identify some puppy tests that will predict adult dog behavior. This kind of test could find a wide variety of practical applications, from the selection of working dogs of the “Guardia di Finanza” to the selection of dogs that can be trained and employed in other fields, as guide dogs, hearing dogs, and therapy dogs. In fact, the outcome of every therapeutic project depends on the introduction of an appropriate animal in a suitable environment. Animals should be free from disease, of good temperament, and of reasonably predictable behavior (*McCune et al., 1995*). From a clinical point of view, behavioral tests on puppies could also be a useful tool in the early identification of some disorders in dog behavior such as aggressiveness, fear, and anxiety. All of these behavioral disorders have a multifactorial etiology with a genetic basis and some environmental factors (stimuli and earlier experiences). Sometimes dogs display behavioral disorders that endanger their bond with man. Prevention of behavioral problems is useful to ensure the success of the human–animal bond, avoiding the onset of stressful experiences and encouraging positive effects for both the human and the animal. The use of behavioral tests could also be relevant to shelters and rescue organizations to identify future behavioral problems (such as aggression) that are the most common reasons for relinquishment of a dog to an animal shelter (*Shore, 2005*). Our pilot study aims to investigate German shepherd puppies’ reactivity toward new situations and the consistency of behavior between puppyhood and adulthood.

The word “reactivity” translates dogs’ responses to different stimuli, especially with regard to intensity and length of the response, the time of the reaction, and the time needed for the dog to regain homeostasis. Behaviors that can be analyzed to evaluate the reactivity level of a dog are alertness, motor activity, vocalizations, stereotypies, and so on (*Overall, 1997*).

Materials and methods

The reactivity of 32 dogs was evaluated for predictive purposes, using behavioral tests at 5, 7, and 9 months of age. Among these 32 dogs, 17 were chosen to continue in the training program up to 24 months (chosen group), and the remaining dogs were disqualified from training (discarded group). The dogs in the choice group were administered the same behavioral tests at the age of 2 years, in the Guardia di Finanza Dog Unit.

Experimental conditions

German shepherd dogs ($n = 32$) from 5 litters born in spring 2002 were analyzed. Each litter was assigned to the same trainer during the entire experimental period (familiar person). During the week before whelping, females were allocated to special boxes for whelping and nursing. These whelping boxes (dimensions 2 x 2 m) were made of brick, the surfaces were covered with washable material, and they were coupled with an uncovered outbuilding of the same dimension and enclosed with a galvanized iron fence. Inside the box there was a wooden platform (dimension 170 x 170 x 35 cm) and an infrared lamp. These boxes were located in a kennel containing other puppies and adult dogs. Each bitch was assigned to a trainer who worked with selected puppies from weaning to training. Weaning started about the fourth week of age, was performed with a weaning feed, and lasted about 10 days. During weaning, the bitches ate the same food as the puppies to avoid nutritional problems for the puppies. During this period, puppies and bitches were kept together to guarantee consistent intraspecific interactions for the puppies. At about 8 weeks of age, the puppies were completely weaned and separated from the bitch; the trainer became the only benchmark (reference).

Trials were performed at the Centro Addestramento Cinofili – Guardia di Finanza - Intimiano, from June to July 2004. Seventeen German shepherd dogs (6 males, 11 females) from 5 litters whelped in 2002 were evaluated using behavioral tests. These dogs were evaluated with the same tests at the age of 5, 7, and 9 months.

Behavioral tests

Dogs were administered 7 behavioral tests. Tests were continuously videorecorded with a digital camcorder

Download English Version:

<https://daneshyari.com/en/article/2399754>

Download Persian Version:

<https://daneshyari.com/article/2399754>

[Daneshyari.com](https://daneshyari.com)