



Original Contribution

PREDICTION OF THE BEHAVIOUR OF PUPPIES USING TESTS WITH REGARD TO THEIR HUMANE TREATMENT AND WELFARE

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ABSTRACT

Eight puppies were submitted to the Open-Field test, with regard to typization of their nervous system type and formation of their future behaviour. The purpose of the study was to avoid unexpected and stressful situations during their education that is a demonstration of humane attitude towards this animal species. It is shown that the tests with dogs during the period of their socialization are absolutely necessary in order to save needless stress during the education and also evidence attempts to observe welfare requirements.

Key words: nervous system, behaviour, humane attitude, dogs.

INTRODUCTION

The humane attitude to animals, particularly dogs, has always been an important issue in veterinary science. It highly determines whether the animal will be able to become accustomed to its environment (1, 2). The British Federation of Animal Protection and Welfare gives a precise definition with this regard. If five elements: lack of thirst and hunger, lack of discomfort, lack of pain, injury or disease, possibility of expressing a normal behaviour and lack of fear, anxiety and depression are present throughout the rearing of animals, therefore there is a humane attitude towards them (3).

Many factors influence the adaptation, the behaviour and welfare, including the humane attitude, of dogs. If these factors lead to impaired relationship between adaptation, behaviour and welfare depending on their nature, strength and duration, the ethologists call them stressors (3, 4, 5).

The role of man here is very important. It is known that the different dog breeds are used for different purposes (6). In order to understand and predict the behaviour of the adult dog, it is necessary to test it between the 3rd week and the 3rd month of life with regard to its successful acclimatization. This is what is called period of socialization and its mostly depends on the nervous system type of the puppy (7). According to this author, the role of nervous system in the relationship between nervous system type-socialization-behavioural type is primary, regardless of the environmental effects (4, 5, 7). That is why each dog should be tested for its nervous system type in order to predict its future behaviour. This way, the man should be aware of the necessary approach to the respective animal, providing a proper and adequate education, avoiding stressful situations, thus exhibiting a humane attitude and ensuring the welfare of the animal (9). When the investigator determines the nervous system type of the dog, he could easily guide its development to a specific type of behaviour with the aim of using the animal for various social purposes (8, 9).

In the cynological practice, various tests are used (test of Toman, Queinnec, bait test etc.) In the available literature however, we did not

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found adequate information as to the application of the Open-Field test. That is why, the aim of the present study was to characterize the nervous system type of Beagle and Basset puppies with regard to their proper socialization and prediction of their behaviour by means of a test from the point of view of the humane attitude, respectively animal welfare.

MATERIAL AND METHODS

The experiment was performed in December 2008 within two days. The behaviour of 8 dogs at the age of 6 weeks, in possession of a private owner, 4 Beagles and 4 Bassets was investigated. The following behavioural traits were monitored: curiosity, activity, emotional reactivity, trust, vocalization.

The Open-Field test required an empty area of 10 m², unfamiliar to the dog, where the behaviour of each dog was followed out for 20 minutes, two times. First, the behaviour of the dog was recorder in a completely empty room for 10 minutes (phase A), then in the middle of the room we put a round coloured box that bleated when rotated and the behaviour was

observed for another 10 minutes (phase B). The puppies were numbered as followed:

- Beagles – No. No. 1, 2, 3, 4;
- Bassets – No. No. 5, 6, 7, 8.

The experimental design was consistent with the Normative regulations for Animal Protection and Animal Welfare as well as with the zoohygienic standards for this type of dogs. When describing the behaviour of studied dogs, we took into consideration that **canine temperament types were four and correspond to the four human nervous system types as followed:**

- **Sanguine human - canine type L: strong, leader, calm;**
- **Choleric human – canine type F: strong, agitated, obedient**
- **Phlegmatic human – canine type G: weak, agitated, slow**
- **Melancholic human – canine type A: weak, insensitive, sometimes prone to aggression**

RESULTS AND DISCUSSION

The results are shown in **Table 1**.

Table 1. Typization by means of testing the nervous system type of puppies

| Puppies | Nervous system types | | | |
|---------|----------------------|---|----|----|
| | L | F | G | A |
| 1 | | | | + |
| 2 | | + | | |
| 3 | + | | | |
| 4 | | | | + |
| 5 | | + | | |
| 6 | | | +? | +? |
| 7 | + | | | |
| 8 | | | +? | +? |

Puppies No. 1 (male) and No. 4 (also male) demonstrated fear, anxiety and suspicion during phase A. They stayed all the time in the

corner of the room and showed neither emotional reaction, nor any activity. They moaned quietly, i.e. vocalized for 3 minutes.

A similar behaviour was exhibited throughout phase B as well. This allowed us to classify them as belonging to the temperament **type A** (asocial, melancholic, weak). Similar puppies from this breed require a very long, hard and patient education with regard of their use mostly as companion dogs.

Dogs No. 2 (female) and No. 3 (male) conducted themselves differently from the other of the breed. In the beginning, they walked intensively, exploring the empty room for 3 minutes (phase A) and after understanding that there was nothing interesting, stayed in the middle of the room during the remaining 7 minutes, moving a little and moaning, i.e. they exhibited curiosity from the very beginning of phase A.

Their behaviour during phase B was even more interesting. Puppy No. 2 approached cautiously but rapidly (within 5 s) to the painted round box. It was active, skeptical and a little nervous. It did not vocalize but apparently was impatient to reach the object. As a whole, we observed uncertainty, prudence and curiosity all the time. The behaviour of puppy No. 2 allowed us to put it in the group of dogs with temperament **type F** because of its curiosity, prudence and a bit of anxiety. Such an animal is able to become a loyal companion. Its education however is not entirely undisturbed and is more prolonged because of the nervousness. The obtained results are permanent and successful.

Puppy No. 3 approached rapidly the box, touched it, showed a definite interest towards it as well as confidence (it did not shiver). A quiet moaning was also heard. All the time, the animal exhibited activity, interest and curiosity. It explored the object, was agitated and impatient. It was also calmer as compared to puppy No. 2. Therefore, we classified it as belonging to the temperament **type L**, i.e. sanguine temperament. The education of such dogs is tranquil, shorter and requires less efforts compared to representative of type F. Nevertheless, these two Beagles are appropriate for companion dogs and their education should be directed to development of friendliness, viability and loyalty.

Puppy No. 5 (male Basset) demonstrated an interesting but a rather contradictory behaviour during phase A. During the first 4 minutes it stayed motionless and turned its head. During the next 6 minutes, it walked actively in all directions, i.e. manifested curiosity and interest to the environment. To summarize, the animal was firstly stupefied for a relatively long time

(4 min) from the unknown place, i.e. was frightened, but then calmed down and explored the area without any panic. The behavioural traits of this puppy are initial fear, curiosity and confidence. When the already familiar environment changed when we placed the painted round box in the middle of the room, it actively walked towards the object, without any fear, showed clearly its curiosity and confidence, even tried to rotate it upside down but did not succeed to do so. The behaviour of this dog allowed us to categorize its temperament as **type F** (choleric) because of the initial confusion during phase A.

Dogs No. 6 (female) and No. 8 (female) demonstrated panic, fear and anxiety during phase A of the test and stayed motionless in one corner of room all the time.

During phase B however, things were different. During the first 2 minutes, both dogs were confused, afterwards showed an insignificant interest to the box and slowly moved in its direction. By the end of the test, having reached the objects, they tried to touch it (interest, curiosity). It could be certainly said that both puppies were fearful, unquiet and doubtful, but only in some situations. When an object was present, which was not interpreted as a stressor, both showed a weak interest and curiosity, i.e. they were no longer scared. Despite the clear behavioural pattern of these puppies, the determination of their temperament type was very difficult. We consider that they possessed traits of both **type A** and **type G** temperaments. According to [7] the temperament type is determined only by testing, but it could be one out of types L, F, G and A, and a **mixed** temperament type is encountered very rarely. Therefore, our observations do not contradict to the view of the author. Nevertheless, the education of these puppies will be difficult, long and with many efforts, with regard to their utilization as companion or hunting dogs.

Dog No. 7 (male) exhibited amazement during phase A, staying in the middle of the room, but it was calm and did not shiver. This lasted only for one minute, and then the animal walked actively around the walls of the room, sniffing and vocalizing quietly. Up to the end of the test it showed serenity and confidence to the environment, exploring it.

During phase B the dog showed more courage, as seeing the box, it walked rapidly in its direction, touched it and even succeeded to turn it upside down. Hearing then the sudden

bleat, he stayed amazed for few seconds and then continued to play with the box.

The behaviour of this puppy showed courage, activity, curiosity, faith and confidence, a behaviour of a true leader. Thus, we put it in the category of **type L** temperament. It promised an easy and rapid training and has the potential to become a perfect hunting or companion dog. In its education, no stressful or unexpected situations were anticipated.

By applying the Open-Field test, we managed to learn that the exact categorization of the temperament type of dogs was possible in 75% of cases with regard to their successful socialization, proper training and formation of a definite behavioural pattern. Such an investigation allowed eliminating environmental factors that are stressful to dogs with regard to their welfare and the humane attitude towards them.

In 25% of cases, the Open-Field test failed to determine exactly the precise type of the nervous system. Nevertheless we recommend its application as it is easy, appropriate and it could rapidly determine the temperament type of puppies – an important issue for the formation of their future behaviour.

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