

Temperament Assessment as Welfare Indicator in a Dog Training Unit

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Abstract. Temperament represents the genetic predisposition of an individual to manifest certain behaviors. In a dog training unit from the center of Romania was assessed the temperament of 20 dogs, divided into two subgroups: subgroup A, consisting of 10 females from breeding stock and subgroup B, consisting of 10 males used in various missions. Dogs were of different breeds: German Shepherd, Belgian Shepherd and Bloodhound. In order to establish the temperament of the studied dogs, in the first phase it was applied a scoring system used in Dog Foundation Trust shelters from UK, completed with dogs examination in individual pens by a foreign person in five different situations. For each situation a score was given from 1 to 6, obtaining eventually the average score, which reflects the welfare level. The second part of the test was the assessment made by a person familiar to the dogs. The study shows that dogs' temperament belonging to German Shepherd and Belgian Shepherd breeds housed in the long-term training center is friendly, calm. High percentage of phobias manifested in the studied group negatively affects dogs' welfare.

Keywords: welfare, temperament, dogs, assessment, score

INTRODUCTION

The notion of temperament refers to an individual genetic predisposition to exhibit certain behaviors (Cociu, 1999).

Along with the elements acquired through learning, temperament has a significant influence upon behavior throughout the entire life (Decun et al., 2004). Many scientific studies have stressed the influence of temperament on the agonistic behavior in dogs; basic patterns of this behavior type are unalterable features of dogs' genetic code.

Many dog breeds have been intentionally selected for different types of aggression (prey, territorial or protection aggression) and it is difficult to establish a hierarchy of races based on the agonistic behavior (Hubbrecht et al., 1995; Landsberg, 2004).

In order to prevent the manifestations of dogs' aggressive behavior there have been developed different systems for temperament assessing.

An accurate assessment of temperament involves two stages which provide complementary information, namely the assessment by a familiar person and the assessment by an unfamiliar one.

MATERIALS AND METHODS

Researches in the present paperwork focused on the temperament evaluation for 20 dogs, 10 females and 10 males, from a training unit in the center of the country.

Breeds distribution was: 14 dogs from German Shepherd breed (eight females and six males), 5 dogs from Belgian Shepherd breed (two females and three males) and 1 dog from Bloodhound breed (male).

The studied group was divided in two subgroups.

Subgroup A consists of 10 females belonging to the breeding stock, chosen either from puppies obtained and selected by mother's reproductive performance, or bought from kennels and selected by a special committee.

Subgroup B consists of 10 males – dogs belonging to the unit personnel, dogs used in tracking missions, patrolling, intervention, explosives detection, narcotics detection, mountain rescue etc.

Their behavior was assessed by using a scoring system currently applied to test dogs' behavior in the shelters of Dog Trust Foundation from UK, which was adapted to include all behavioral manifestations observed during a pilot study conducted on the group of dogs in discussion.

The first part of the test is performed by a foreign person who examines the dogs from individual pens in five different situations:

- A.** the examiner approaches the paddock;
- B.** the examiner stands in front of the paddock for a few minutes;
- C.** the examiner looks at the dog straight in the eye for 30 seconds;
- D.** the examiner calls the dog with a friendly tone;
- E.** the examiner gives the dog a reward.

For each of the above five cases, points were given from 1 to 6, then the average score was calculated (Bodnariu, 2009).

The second part of the test is performed by stockman who spent the most time with the dog and knows its behavior in different situations.

RESULTS AND DISCUSSION

The scoring system for assessing the temperament by an unfamiliar person is shown in table 1.

Tab. 1.

Scoring system for assessing temperament by an unfamiliar person

Score	Temperament	Behavior features
1	Friendly	Dog wag the tail, approaching and seek contact with the examiner
2	Calm	The dog peers at examiner, do not display aggressive behavior, but don't approach and don't seek contact with the examiner
3	Hyperactive	Dog runs, jumps, barks excessively to attract attention, but do not display aggressive behavior
4	Inactive	The dog did not show any interest for the examiner
5	Fearful	Dog is trying to hide, adopting a submissive position, keeping the ears and tail in low position, avoiding eye contact, lifting anterior limb, panting, trembling
6	Aggressive	Dog shows facial expression of aggression, barking, showing the teeth, takes a fixed position or quickly approaching to bite

The results obtained following the assessment of dogs' temperament in the studied group by an unfamiliar person are shown in table 2.

Tab. 2.

The dog temperament assessment by an unfamiliar person

No.	Dog name	A	B	C	D	E	Average score
1	Nija	3	2	2	3	3	2.6
2	Noba	3	4	2	2	2	2.6
3	Nipa	5	5	5	5	5	5
4	Naia	1	1	2	1	3	1.6
5	Noca	1	1	2	3	3	2
6	Naka	1	2	1	3	3	2
7	Noxa	1	1	1	1	3	1.4
8	Neza	2	1	1	2	3	1.8
9	Naca	1	1	1	1	3	1.4
10	Naba	1	1	1	1	3	1.4
11	Far	2	1	2	2	1	1.6
12	Nabaru	1	2	2	4	3	2.4
13	Nacazu	3	3	3	3	3	3
14	Gid	1	1	2	1	2	1.4
15	Nay	6	3	3	6	6	4.8
16	Geb	6	2	2	6	1	3.4
17	Gif	6	3	2	6	1	3.6
18	Man	6	6	6	6	6	6
19	Gibag	4	2	2	2	1	2.2
20	Dogu	6	2	2	6	6	4.4

In situation A (the examiner approaches the paddock) it was found that most of the dogs were rated as *friendly* (n = 8), 2 were rated as *calm*; 3 were described as *hyperactives*, an individual as *inactive*, an individual as *fearful* and 5 as *aggressives*.

In situation B (the examiner stands in front of the paddock for a few minutes) it was found again that most of the dogs were rated as *friendly* (n = 8), 6 were rated as *calm*, 3 as *hyperactives* and the ratings *inactive*, *fearful* and *aggressive* corresponding each to one dog.

In situation C (the examiner looks at the dog straight in the eye for 30 seconds), most of the dogs could be qualified as *calm* (n = 11), 5 as *friendly*, 2 as *hyperactive*, one dog as *fearful* and one as *aggressive*. Any of the dogs is rated as *inactive*.

In situation D (the examiner calls the dog with a friendly tone), the majority was characterized as *friendly* (n = 5) and *aggressive* (n=5), 4 dogs were rated as *calm*, 4 as *hyperactive*, one as *inactive* and one as *fearful*.

In situation E (the examiner gives the dog a reward), most of the dogs were *hyperactive* (n = 10), 4 were rated as *friendly*, when receiving the reward 2 were *calm*, one *fearful* and 3 manifested *aggressive* behavior. None of the dogs could be qualified as *inactive*.

The results of the assessment by a familiar person are presented below. Stockmen completed sheets similar to one in table 3.

Sheet for temperament assessing by an unfamiliar person

Date: Age:	Dog name:	Sex: male/female
Complete the blank spaces or check the correct variant.		
1. What is the dog behavior within the shelter? a. calm b. inactive c. hyperactive Details about dog behavior		
2. How the dog behaves in a new environment? a. is curious b. is fearful c. is hyperactive Details about dog behavior		
3. How the dog behaves when receiving the food? a. Eating normally b. Do not eat all the food c. Became hyperactive when seeing the food (jumps, barks) Details about dog behavior		
4. How the dog behaves when receiving rewards? a. ignores the rewards b. pull the reward out of examiner hands c. defending the reward d. trying to hide or to bury the reward e. eating the reward calmly f. chewing the reward in haste. Details about dog behavior		
5. How the dog behaves in the presence of toys? a. ignores the toys b. smells the toys c. plays with toys d. defends the toys Details about dog behavior		
6. How the dog behaves when it is walked on leash by unfamiliar person? a. Calm b. fearful c. aggressive Details about dog behavior		
7. How the dog behaves when is restrained by unfamiliar person? a. Calm b. fearful c. aggressive Details about dog behavior		
8. How the dog behaves when is clasped by unfamiliar person? a. Calm b. fearful c. aggressive Details about dog behavior		
9. How the dog behaves in the presence of an unfamiliar person? a. friendly from the first moment b. friendly, but seek the unfamiliar person attention excessively c. friendly after several meetings with the person d. aggressive when seeing an unfamiliar person e. aggressive when the unfamiliar person approaching f. fearful when seeing an unfamiliar person g. fearful when the unfamiliar person approaching Details about dog behavior		

The records in the sheets completed by stockmen (table 3) showed that most dogs have *hyperactive behavior* in the shelter (n = 9). Similar, a high percentage of dogs were considered *calm* by stockmen (n = 8). Two of the dogs were considered *inactive*.

Regarding the behavior in a new, unfamiliar environment, it was found that most dogs are *curious* (n = 9) and an almost equal percentage showed *fear* (n = 6) or *hyperactivity* (n = 5).

The sheets completed by stockmen reveal that in the presence of food and toys no dog showed possession *aggression*, all dogs allowing the raising of toys and food pots. Nevertheless, in the presence of reward, four dogs showed *aggression* by defending it, without trying to eat it.

Most dogs had normal feeding behavior, eight of them became *hyperactive* in the presence of food, which indicates that these dogs were highly motivated by the food and present the risk to become aggressive to strangers. One of the dogs had decreased appetite, which may be a consequence of stress caused by long-term housing.

From the sheets filled in by stockmen, as well as by unfamiliar persons, could be concluded that most dogs were *friendly* when they are offered rewards. Stockmen indicate that four of the dogs chewed the rewards in haste, two of them trying to hide or bury them and six dogs eating them calmly.

Most dogs were rated *calm* when were restraint by familiar people, which shows that these dogs are accustomed to the presence of stockmen.

Concerning dogs' behavior in the presence of unfamiliar persons, stockmen indicate the following: eight dogs manifested *friendly* from the first moments, three of them manifested *friendly* but seeking excessively attention of foreign person, one dog became *friendly* only if received rewards and showed this behavior after several meetings with the person. In terms of *aggressiveness* in the presence of foreigners, four dogs expressed this pattern if the foreigner approaches to the house and one dog seemed *fearful* at the sight of strangers, refusing to get out of the house.

Christensen et al. (2007) showed that temperament assessment performed in dogs housed often lead to inconclusive results because of the situations that trigger certain types of aggression, such as territorial aggression, predatory and intraspecific, very difficult to simulate. In the studied group, territorial aggression was not found in any of the situations, but were reported some episodes of aggression between dogs, especially for females in heat - which is more aggressive at the time, similar to Chrousos et al. (1998) findings.

CONCLUSIONS

- Researches on temperament of the dogs from German Shepherd and Belgian Shepherd breed housed for a long time in a training unit revealed that most of the animals behave friendly or calm. Habituation of the dogs with environment is a factor that can significantly influence temperament, which is why the testing was performed after the dogs in the study group spent a significant period of time in the particular environment.
- For dogs belonging to the personnel (subgroup B - those who have access outside the training unit) in the exercise area, in the company of familiar persons, the priority was the need to explore the environment followed by the need for exercise, the need to interact with familiar peoples being on the third position. For subgroup A (reserve of the lot) first stood the interaction with familiar peoples. In both subgroups, the need to interact with other dogs came in the last place.

- Dogs in the studied group showed a high degree of attachment to familiar peoples and a friendly attitude toward unfamiliar peoples. Being housed for a long-term and deprived of social contact, the need for dogs' socialization occur significantly.
- As a high percent of dogs manifested different phobias, the behavior therapy represents a priority, fear and anxiety major affecting the dogs' welfare.
- Aggressive behavior could be controlled by proper dog training techniques, targeted in relation to the tendency of animal to express certain agonistic behavior patterns. Along with race characteristics, the individual temperamental features could be considered. It is recommended that the individual test for temperament assessment be conducted before the beginning of the daily training program.

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