

ETHOLOGICAL STUDIES ON SOCIALIZATION OF PUPPIES TO THE ENVIRONMENT ACCORDING TO THEIR TEMPERAMENT TYPE

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Summary

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An experiment was carried out with Doberman and German Shepherd puppies in order to investigate their ethological problems and the quality of their socialization. Placed under equal conditions in six different situations, the puppies reacted according to their temperament type – L, F, G or A. The behaviour of dogs in all six situations showed that the calmest and most self-confident were puppies of type L, followed by types F, G and A.

Key words: behaviour, dogs, environment, nervous system, socialization

INTRODUCTION

The importance of adaptation of puppies' behaviour patterns to the environment or socialization of puppies is beyond any doubt. After its birth, the puppy has not a sense of belonging to a given species, and its instincts do not tell it anything with this regard (Quéinnec, 1981). That is why the little animal has to cope alone with the problem. According to Vastrade (1986), the socialization of a puppy is a process of practising and development of social contacts through realization of the means of communication. In this animal species, the appropriate period of socialization begins at the age of 3 weeks and lasts to the age of 3 months or 70 days (Quéinnec, 1983). The period is genetically coded and equal for all dogs regardless of their breed (Fox, 1976; Quéinnec, 1981; 1983). The mechanism of socialization in dogs is realized at two stages: phase of attraction and phase of refraining. According to Vas-

trade (1986), the phase of attraction begins from the end of the 3rd week of age.

Dehasse & de Buyser (1983) and Pieters (1983) accentuate on the fact, that the puppy learns first to which species does it belong, i.e. it understands that it's a dog. Then, it learns to communicate, i.e. to bark and to use its patterns of behaviour in a most effective way. It tests its abilities at the time when playing with its mother and the other puppies from the litter.

It is therefore clear, that socialization is a specific natural experience. It is a kind of adaptation to the environment that is different from, for instance, the habituation according to the conditions of rearing (Vastrade, 1986). The author also states that the dog needs to be well socialized if it has to be a companion or working dog. Therefore, appears the question of evaluation of socialization quality of dogs. It is done by tests, that according to Anastasi

(1961) and Bobmoir (1972) should include definite criteria. They serve to investigate the behaviour reactions of juvenile animals, put under equal conditions. The ethological behaviour and further the socialization, depends also on the type of temperament.

In men, Hippocrat distinguishes four types of temperament: sanguine (strong and steady), choleric (strong, steady but more temperamental), phlegmatic (strong but slow moving) and melancholic (weak and prone to depression). Similarly, four temperament types in dogs have been identified: type L (chase and hunt dogs); type F (obedient, calm dogs), type G (melancholic dogs), type A (anxious but fierce). The type L from both canine genders and male dogs from type F correspond to the sanguine temperament in humans (Table 1). Both genders of type F correspond to choleric human temperament. Female dogs of type F and males of type G correspond to phlegmatic temperament in men whereas both genders of dogs of type G – to melancholic temperament (Vastrade, 1986).

Table 1. Types of temperament

Man	Dog
Sanguine	type L (both genders) type F (males)
Choleric	type F (both genders)
Phlegmatic	type F (female) type G (males)
Melancholic	type G (both genders)

There are no literature or practical data about the socialization of puppies from the Dobermann and German Shepherd breeds and this fact motivated our study with these two breeds that are amongst the most commonly encountered ones in our country. The aim was to estab-

lish the quality of socialization of puppies depending on their temperament through investigation of their behaviour in specific situations.

MATERIALS AND METHODS

In this study, we used the test of Toman applied since 1984 (Vastrade, 1994) and compliant to all requirements of a study upon the socialization of dogs to the environment. The test is standard, confident, precise and validated. It is run when dogs are at the age of at least 6 weeks or 42 days. The study was performed with 12 puppies at the age of 50 days – 6 Dobermanns and 6 German Shepherds. Half of dogs from each breed were female and the other half – male. The animals were not weaned. They were housed with their mothers in special separate rectangular 5 m² areas (nests). The wooden floor of nests was covered with straw bedding. The fences were done from processed wood and their height was 150 cm. The hygiene was maintained at a proper level. The nests were cleansed every day.

The ethological study on puppies' behaviour was done on the background of the determined microclimatic parameters, stated in the Results section: temperature (T°), relative humidity of the air (R, %), velocity of the air motion (V, m/s), harmful gases (NH₃, mg/L). They were measured by routine methods on a daily basis.

Puppies were fed four times a day. As they were not completely weaned, they were given additionally milk, minced and cooked meat or fish with vegetable, grated carrots and stale wholemeal bread, soaked in meat broth and put in special metal bowls. Drinking water was supplied also 4 times daily in metal bowls, with volume of 2 L, one in each nest.

The behaviour of puppies were observed in the following situations:

- putting the dogs and their mothers from both control nests in another two, separate, empty premises (5 m² area), completely unfamiliar to them, for 1 hour. The host was with them;
- separation of puppies from their mothers in a way such that they could not see or hear them for 30 min. The host was with puppies;
- separation of puppies from their host for 30 min;
- placing of an empty plastic box in the presence of puppies in the empty premises for 30 min. The host was not present;
- making noise (for example, a melodious song from the radio) for 30 min. The host was not present.
- the host stood in the empty premise amongst puppies, without moving or talking, for 30 min;
- introduction of mothers (after being separated) amongst puppies for 30 min. The host was present;
- the host offered food to puppies – observation for 30 min.

The detection and description of behaviour was done by observation.

RESULTS AND DISCUSSION

The microclimatic conditions during our experiment were in accordance to veterinary hygienic requirements. The air temperature varied between 20–21 °C, the air motion velocity was 10 m/s and the relative humidity of the air – 65%. No NH₃ was detected.

The observations of puppies' behaviour provided the following information:

A. When placed in an unfamiliar environment, one male Dobermann puppy and two male German Shepherds were calm,

did not bark, were not excited and examined curiously the new environment for an hour. Their calm and scrutinizing behaviour allowed us to classify them as representative of sanguine, i.e. type L temperament.

Two male Dobermanns and one female German Shepherd dog barked intensely against the type L puppies and tried to play with them for 60 min. The excited and slightly aggressive behaviour demonstrated by them, corresponded to type F (choleric).

Only one male Dobermann and one female German Shepherd showed signs of fear, whined and turned in a circle, withdrawing themselves from the other puppies. Their behaviour was typical for the representatives of type A canine temperament. This pattern lasted for about 50 min. In the next 10 min, the animals were more quiet.

After this first experiment, the puppies were categorized according to their temperament.

B. When separated from their mothers, the puppies behaved in a way similar to that in experiment A.

C. The same pattern of behaviour was observed when the host was separated from puppies for 30 min.

D. When a small red plastic box was placed amongst puppies, various patterns of behaviour were observed. The representatives of type L approached rapidly near the unknown object, i.e. exhibited a cognitive (exploring) behaviour within the 30-min observation.

The puppies from type F orientated themselves later and more prudently to the box and immediately after that, their behaviour was the same as in type L. All together they studied the object, pushed it and played for the 30 min of the observation.

The puppies from type G demonstrated an apparent fear and withdrew whining from the box. The same actions were observed in representatives of type A. They did not participate in the study of the placed object for the period of our observation (30 min).

E. The behaviour of puppies during the production of an unfamiliar noise (for instance, a melody) was very interesting. The puppies from type L stayed motionless and stared inquisitively around whereas the puppies of types A, F and G were scared and looked for a place to hide, i.e. the most confident dogs were those of type L. This behaviour was observed for about 30 min.

F. The patterns of behaviour were characteristic when the host stood amongst them, without talking or moving. The puppies recognized him immediately, but to first to approach him bounding were puppies from types A and G. The puppies of type F stayed nearby whereas those of type L seemed not to notice the host at all. Apparently, they were much more confident than all others. These reactions were observed for 30 min.

G. After introduction of the two bitches, the puppies that rushed at them were those of type F. The puppies of type L oriented towards the teats seeking to suckle. They demonstrated a good orientation, taking places with most milk. In this moment, a fight for dominance was observed between puppies of type L, each one striving for occupying the teat with most milk. The other puppies also approached their mother, but satisfied themselves with the free places. These reactions were observed for 30 min.

H. When placing food in special bowls, puppies of type L showed again the greatest calmness and confidence. They did not fight for a place. The struggle be-

gan between the representatives of types A and G. The puppies of type F also exhibited confidence, but changed their places very frequently, although continuing to eat quietly. These reactions were usually observed for less than 30 min.

Studies similar to ours, reported by Vastrade (1986) in small breeds (Cocker Spaniel, Bolognese etc.) have also evidenced the presence of the four temperament types. Those data and our results allowed us to assume that the breed affiliation was not fundamental for the temperament type and the socialization in the dog.

CONCLUSION

The patterns of behaviour of puppies in all eight situations showed that the calmest and most confident were puppies of type L, followed by types F, G and A. Placed in different circumstances, the animals reacted differently in accordance to their temperament type – L, F, G or A. Knowing their pattern of behaviour, puppies' socialization as well as their subsequent training could be considerably facilitated in compliance with intended aims.

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