Abstract

The aim of this diploma thesis is to find out whether pigs exhibit laterality in social behavior, especially the laterality of rotational movements in game behavior and social interactions. We aimed also to explore how this laterality is influenced by other factors, especially the possibilities of playful behavior in ontogenesis, personality and others social and non-social factors. Alternatively, whether the degree of laterality determined varies depending on the social situation (game / aggression) and whether is influenced by the litter.

I have investigated this behavior for 64 pigs in 16 litters from videotapes of their social behavior. For each pig, I recorded the playing element and the preferential side.

For individual game elements I did not find any preference for rotation at the population level and only a slight tendency for individual laterality. For social game elements, I have shown a weak population tendency to prefer left side, but only for a group of more playing pigs.

The main contribution of this work is the symmetry found in the implementation of individual game elements and, on the contrary, the observed laterality at the population level for social game behavior. Since the laterality of playful behavior has not yet been investigated, it is possible that this symmetry is typical for individual game elements and may have deeper signifcance. On the other hand, the side preference in the social behavior of animals is known, although it has been recorded only for a mother-infant a couple, so it is possible that this preference does not apply only to this relationship, but to social behavior in general. This issue certainly deserves further investigation.

Keywords: laterality, social behavior, rotation, game, agression, pig