The assumption made in the present investigation that the physical development in the aspect of body lateralization and its change in children from both countries appear to be similar was only partially confirmed. Such a situation may result from many reasons, although the basic one seems to be a small number of subjects. A pilot study was carried out only, and in terms of the results obtained from the research one may make certain conclusions, although more extensive research involving a bigger population might provide more reliable results.

The results obtained lead to the following conclusions:

1. The investigated Polish and Slovak girls and boys did not show any differences in terms of the direction of functional asymmetry of the hand, eye and leg. In all the examined motor and sense organs the right side direction predominated.
2. The seven-year-old Polish and Slovak girls and boys did not differ in terms of the functional asymmetry profile. In both groups an undetermined profile prevailed. During the second round of tests, in the Slovak boys the predominating profile was a determined homogenous profile, whereas in the Polish boys a specified heterogeneous profile predominated. During the second round of tests, in the Slovak girls still the prevailing profile turned out to be undetermined, whereas the Polish girls had a predominant determined homogenous profile.
3. The Polish girls had a significantly higher level of dynamic asymmetry than the Slovak girls. The Polish and Slovak boys had a similar level of dynamic asymmetry.
4. Functional and dynamic asymmetry shows a positive tendency concerning the changes in its direction, profile and size. The percentage of children representing determined profiles and directions of functional asymmetry is increasing. Also the level of dynamic asymmetry of the investigated motor abilities shown by the right and left side of the body is increasing. Such changes occur both among girls and boys in Poland and in Slovakia.

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