

A study for assessing motor skills and verbal development of children in East Asia

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Previous study

Our research group previously developed a new psychological scale to assess characteristics of preschoolers' development (e.g., assessing social, verbal, physical aspects) in East Asia (Aoyagi et al., 2012). The scale was made up with the idea that there might be similar/common behavioral patterns among children in Japan, Korea, and China that are geographically/ethnically close to each other. In the process of making the scale, commonalities and developmental differences among children were examined so that we can better assess their development by using a common scale.

Present study

This study reports on developmental differences in motor skills and verbal abilities between Korean and Japanese children, who are supposed to be very close in terms of culture.

Method

procedure: 1177 Japanese and 1341 Korean parents who have three- to six-year-old children took part in this survey and answered to the questionnaire.

questionnaire: It had two scales that were about motor skill and verbal ability development. And each scale contained two sub –scales. Motor skill had fine motor and gross motor skills, and verbal ability had language comprehension and expression abilities.

Result

- 1) Korean children showed faster development in approximately 30% of questionnaire items on motor skills.
- 2) Korean children showed higher scores in approximately 40% of the items on verbal development.

Table 1 Mean score of each area by age

motor skills					verbal development						
	age	3	4	5	6		age	3	4	5	6
fine motor skill	korea	2.94	3.34	3.59	3.69	verbal ability	korea	2.84	3.14	3.46	3.63
	Japan	2.68	3.11	3.43	3.51		Japan	2.50	2.94	3.27	3.42
gross motor skill	korea	2.72	2.99	3.20	3.38	language comprehension	korea	2.95	3.41	3.62	3.73
	Japan	2.48	2.80	3.17	3.37		Japan	2.44	2.94	3.31	3.45

Discussion

1) This result is not concordant with the national statistics reports from each country, which indicate no differences in physical development between children in these two countries.

2) This result is not concordant with the Program for International Student Assessment (PISA) founded by OECD (2006, 2012) which has indicated that there were no differences in reading abilities between these two countries.

We interpreted these results to mean that Korean parents are more enthusiastic and spend more time/money on the early childhood education compared to Japanese parents.

We discussed our methodological limitations using assessments with indirect measures obtained from parents, but not from children themselves.

Table 2 Mean score of physical strength

country	Korea		Japan	
	male	female	male	female
50m dash	7.8	9.8	7.5	8.9
grip	40.6	26.4	38.7	25.7
stanging long jump	208.1	150.8	216.7	168.7

source

15 year-old

Korea: National education information system, <http://www.neis.go.kr/>

Japan: Ministry of Education, Culture, Sports, Science and Technology/,

<http://www.e-stat.go.jp/>

Table 3 Mean score in PISA 2012

	Korea	Japan
Reading	536	538
Science	538	547
Mathematics	554	536

15 year-old

Table 4 Percentage of going to private school

	Korea	Japan
preschool children(3-6 year-old)	68.3*	38.4
elementary school children	80.9	47.9

*only seoul city

Korea: Statistics Korea, <http://kostat.go.kr/>

Japan: MHLW Grants System, 1.201018027A, <https://mhlw-grants.niph.go.jp/>