RESEARCH NOTE

YOUNG CHILDREN'S RECOGNITION OF THEIR OWN IMAGE

Norihiro Itoh

Hokkaido University of Education, Asahikawa

It has been suggested by many researchers that awareness of one's own body as a physical entity apart from others is the starting point for development of a self-identity. This research investigated the young child's ability to discriminate an image of himself/herself from that of other people.

Subjects were 119 young children from one to six years of age, who were attending either a nursery school or a day care in Asahikawa.

There were two types of tasks. In the first task, the subjects were asked to select their own picture out of a set of pictures. There were two comparison sets used : the first consisted of the subject and several other children of the same age. The second set consisted of the subject and persons of various ages. For each comparison set, photographs were taken of the individuals within the set from three different perspectives : front, side and back.

Thus, there were a total of six comparison sets of photographs presented to the subjects, each containing eleven photographs, from which the subject was asked to select his/her own image.

In the second task, the subjects were presented with four sets of line drawings and asked to select the picture that was most similar to themselves. The sets of drawings included a total of seven cards depicting the following : a body part (head, trunk, legs) or whole figure of a standing child, a kangaroo, a spaceman, a robot, a tower of blocks, a sun-flower, and an umbrella.

In considering the results of the first task, in which the subjects were asked to select the photograph of themselves from that of other individuals, two questions were asked : (1) At what age can children discriminate their own image from that of others ? (2) What effect is there on their ability to discriminate when the photographs are taken from different perspectives ? The results of the first task are shown in table 1.

Overall, there were no age diferrences, except for the significantly low performance of the one-year-olds relative to the other growps. However, since these youngest subjects were probably not able to fully understand the task, this difference was to be expected.

The perspective of the photographs showed some effect on the children's ability to recognize their own image : front perspective photographs produced the highest rate of correct responses, side perspective photographs were recognized less often, and the lowest rate of correct response was found for back perspective photographs.

TABLE 1

Percentage of correct choices of his/her own photo

Age group	N	From among 11 photos of the persons of various ages			From among 11 photos of the children of the same age		
		front	side	back	front	side	back
Six	21	100	100	100	100	100	100
Five	25	100	88	88	100	100	100
Four	21	100	90	95	100	100	95
Three	21	100	90	86	100	90	90
Two	21	95	76	57	95	81	62
One	10	50	40	10	30	10	10

The second task required that the subjects select the picture that was most similar to themselves from a comparison set that included a body part and other objects. The results of this task are shown in tables 2 and 3.

TABLE 2

Percentage of correct choices of the picture of body part/figure

Age group	N	Card			
		Head	Trunk	Legs	Whole body
Six	21	90.5	80.9	95.2	95.2
Five	25	84.0	72.0	92.0	84.0
Four	21	61.9	47.6	52.4	52.4
Three	21	28.6	23.8	28.6	23.8
Two	21	28.6	9.5	14.3	33.3

TABLE 3

Percentage of errors of total responses

Age group	N	Card							
		Head		Trunk		Legs		Whole body	
		A	B	A	B	A	B	A	B
Six	21	9.5	0	19.1	0	0	4.8	4.8	0
Five	25	16.0	0	28.0	0	4.0	4.0	16.0	0
Four	21	23.8	14.3	28.6	23.8	23.8	19.1	28.6	19.1
Three	21	47.6	23.8	47.6	28.6	38.1	28.6	42.9	33.3
Two	21	47.6	14.3	42.9	33.3	42.9	28.6	23.8	33.3

A refers to the pictures similar to human body.
B refers to the pictures dissimilar to human body

In overall performance, four-year-olds were better able to correctly select the picture of the body part/figure compared to three-year-olds ; and correspondingly, five-year-olds were more accurate than four-year-olds. Regarding the results for each set of cards, significant differences were found between the ages of three and four 'in recognizing the head as the object most similar to the subject ; and a difference was also found between the ages of four and five in recognition of the legs and whole body.

In conclusion, the results show that children are able to recognize their own image from among a group of photographs of individuals from at least age two ; however, this task is more difficult for them when the photographs are presented in side and back perspectives. Also, the results have shown that young children gradually learn to recognize body parts as objects that are most like themselves, when presented with a set of different objects from which to select. Errors in selection are at first generally random ; however, as children become more able to correctly select the human figure/body part, their incorrect selections are increasingly those of objects that are more similar to a human being (e.g., robot vs. tower of blocks).

執 筆 者 紹 介 （掲載順）

マイケル・ルイス（ラトガース医科大学・教授）

マーガレット・サリバン（　同　上　・助手）

リンダ・マイケルソン（　同　上　・助手）

三　宅　和　夫（教授・附属乳幼児発達臨床センター長）

高　橋　恵　子（教授・国立音楽大学）

陳　　省　仁（大学院博士後期課程）

佐　藤　公　治（講師・北海道教育大学）

氏　家　達　夫（大学院博士後期課程）

田　島　信　元（助手・発達心理学講座）

稲　垣　佳　世　子（助教授・千葉大学）

波　多　野　誼　余　夫（教授・独協大学）

伊　藤　則　博（教授・北海道教育大学）