Stature, Sitting Height and Relative Sitting Height of Female Northern Kyushuities

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Abstract : Stature, sitting height and relative sitting height (a ratio of sitting height to stature) of 318 high school girls of 17 years of age in Kitakyushu City were studied. They consisted of groups over a three-year period; 1973, 1980 and 1984. There are statistically no significant changes in the stature, in the sitting height, and in the relative sitting height among these three groups. The relative sitting height of these three groups is about 54%, which is about the same as among the Chinese, Eskimos, American-Indians and the Hokkaido-Ainu.

Key words : stature, relative sitting height, female Northern Kyushuities.

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Introduction

Hojo *et al.* (1981) described that the secular unchangeability in relative sitting height (a ratio of sitting height to stature) of female Northern Kyushuities. This study was made as one of the studies of growth, of Northern Kyushuities from the anthropological viewpoint. Regarding the physical growth we must consider environmental and genetic differences. From this point of view the subjects of this study were limited to ones born and living in the Northern Kyushu district. They are the pupils of the same high school as those of the former study, Orio Women's High School.

Materials and Methods

As shown in Table 1, materials used in this study were 318 female Northern Kyushuities and consist of groups over a three-year period; 1973, 1980 and 1984. These data are those of 17-year-old high school girls of Orio Women's High School, located in Northern Kyushu, Kitakyushu City. Stature and sitting height are measured according to the anthropometry of the Martin-Saller's method (Martin & Saller, 1957).

Table 1. Numbers, means and standard deviations of stature, sitting height and relative sitting height of 17-year-old female Northern Kyushuities

Item	1973			1980			1984		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Stature (cm)	256	155.59	4.92	41	156.38	4.65	21	154.33	4.73
Sitting height (cm)	256	84.61	2.63	41	85.00	3.22	21	83.39	2.50
Relative sitting height (%)	256	54.4	1.35	41	54.4	1.33	21	54.0	0.90

Results and Discussion

As shown in the Table 1, the relative sitting heights of groups over a three-year period are nearly equal, from 54.0% to 54.4%, and the mean stature in 1984 is statistically insignificantly smaller than that in 1980 (by t-test; $t < 1.62$).

On the other hand, it is said that relative sitting heights show certain differences among different ethnic groups, for example, in Australian Aborigines and in many Black peoples from 45% to 50%; in the Chinese, Eskimos and American Indians from 53% to 54% (Harrison *et al.*, 1964); in the Hokkaido-Ainu 54.6% (Martin & Saller, 1959).

By combining the results of our former study (Hojo *et al.*, 1981) with this present paper, it is evident that among these groups over a three-year period there are no statistically significant changes either in the stature, or in the relative sitting height. The mean values of their relative sitting heights, about 54%, are common to those of the Chinese, Eskimos, American Indians and the Hokkaido-Ainu.

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北九州人女子の身長、座高および比座高

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要 旨： 北九州市在住の17才の女子高生，318名の身長，座高および比座高（身長に対する座高の百分率）を対象に研究した．計測は，Martin-Saller法に基づいて行われた．計測値は1973年，1980年および1984年に計測された3群に分けられ，これら3群間に身長，座高および比座高の各値に統計的に有意な差がなかった．比座高は約54%で，この値は3群に共通であるばかりでなく，若干の中国人，エスキモー人，アメリカ・インディアンおよび北海道アイヌ人に共通である．

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