AN INTERNATIONAL COMPARATIVE STUDY ON BODY CONCEPTS OF YOUTHS

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(Research Journal of Physical Education, Vol. 12, No. 3, p. 141~146, 1968.)

Abstract

Simple but basic body concepts of height and weight of youths in five countries (America, England, Japan, Korea, and Taiwan) were surveyed utilizing a questionnaire method consisted of three questions on the present, individual ideal, and the national ideal average body-build and the results were compared. Both boys and girls in America and England were taller and heavier than their Asian counterparts in all three categories. Generally speaking, boys in all countries wanted to be individually larger than their national averages but girls wanted to be rather slimmer. Sex differences in the height of individual ideals was 15 cms. and about 12 cms. for the national ideal averages. There were no general tendencies in the category of the national ideal average imagined by the opposite sex. The validity of this method and its results were proved by three points in the process of data analysis.

Purpose and Significance

The Japanese people tend to think that their physiques and state of physical fitness are inferior to those of Western peoples. In this respect, it is interesting to know how much height and weight they want to have as their ideal body-builds and the difference in them between theirs and the Westerners. On the occasion of the Tokyo Olympics held in 1964, before and after it, the present investigators had conducted surveys using a questionnaire method and found some interesting facts and tendencies concerning them. (1) (2) (3) In this study, applying the same questionnaire, the survey was extended internationally to include boys and girls in several countries in order to find out differences or similarities among them and to think about reasons for them. Clarification of the body concepts of youths in one country or internationally might have some significance to a formulation and planning of a practical program of physical education in school or in community.

Method and Procedure

A simple questionnaire method was used in this study. It consisted of three questions: (1) What are your present height and weight? (2) What height and weight would you like to have as your ideal physique, whether or not you can attain them? and (3) What height and weight do you think are ideal for the average people in your country? The survey was made in America by Ishikawa while he was studying abroad in Los Angeles, 1966; in

England by Mizuno when he visited Landon in 1965; in Japan by Hirata, Aoyama and others in 1963 and '65; for Korean boys and girls in Tokyo by Ling in 1966; and in Taiwan by Shi when he went back to Taiwan in 1965. Numbers of sample subjects and their locations were 60 men students at the University fo California at Los Angeles; 86 boys and girls at Northgate Grammer School, Bury St. Edmund Grammer School, Hadleigh Modern School, and some others; 2,757 boys and girls at 16 senior high schools and colleges in Tokyo; 107 boys and girls at the Higher Division of the Korean Academy in Tokyo; and 1,612 boys and girls at three senior high schools in the City and the Prefecture of Taipei in Taiwan.

Original measurements presented in inches, pounds, or stones were transferred into centimeters or kilograms. The validity of the results of this method was proved by following three points: (1) Ideal height and weight of each individual did not have direct correlations with his present height and weight; (2) Personal traits determined by MMPI had partial relationships with responding tendencies but its effect on the total results was negligible; and (3) Bodily measurements re-called by each individual had a high correlation with his actual measurements, therefore the former could be used in place of the latter. Comparison was made in terms of mean values calculated in each category for each country.

Results and Discussion

All mean values calculated in each category are shown in Table 1.

Table. 1 Mean Values of Height and Weight in Four Categories

Sex	Countries S.D.	Individual Present (1)		Individual Ideal (2)		National Ideal (3)		National Ideal Imagined by the Opposite Sex (4)	
		H.	W.	H.	W.	H.	W.	H.	W.
B O Y S	America	179.2	73.4	184.4	81.5	181.5	77.6	—	—
	S.D.	6.6	8.6	5.0	4.9	4.9	5.5	—	—
	England	174.4	63.6	182.9	77.4	178.5	74.4	182.5	73.0
	S.D.	5.6	7.5	3.5	6.1	2.8	5.6	4.5	6.0
	Japan	168.5	58.9	176.0	68.0	174.6	67.6	176.1	68.3
	S.D.	5.3	6.8	4.4	6.5	3.8	5.3	3.5	5.3
	Korea	165.8	55.6	176.4	66.0	172.1	62.7	171.5	61.2
	S.D.	5.7	5.9	4.3	5.9	3.9	4.2	4.1	4.8
	Taiwan	166.5	56.4	172.8	61.1	173.1	63.0	175.5	67.0
	S.D.	5.5	6.0	4.1	5.6	3.4	5.5	4.0	6.4
G I R L S	America	—	—	—	—	—	—	165.1	53.5
	S.D.	—	—	—	—	—	—	4.1	3.7
	England	162.6	55.1	167.3	54.9	166.6	57.5	167.9	55.4
	S.D.	7.3	6.4	4.8	5.7	4.7	3.8	2.1	4.2
	Japan	156.1	51.2	160.6	52.3	162.0	54.1	163.3	55.2
	S.D.	4.7	5.4	2.9	3.6	2.7	3.5	3.9	5.5
	Korea	157.7	51.4	161.7	50.8	160.7	51.0	161.8	53.7
	S.D.	5.0	5.5	2.5	3.5	2.1	2.6	5.3	6.1
	Taiwan	156.1	47.1	162.6	51.7	164.6	53.7	164.4	51.6
	S.D.	5.0	4.8	4.1	3.6	4.7	4.1	4.9	5.1

(1) Differences in body concepts of youths between five countries

As shown in Figure 1 and 2, American and English boys and girls are taller and heavier than their counterparts in Asian countries in the aspects of the individual ideals and the national average height and weight. Even in the individual ideal physique no

Fig. 1. Comparison with means in height for four categories.

Fig. 2. Comparison with means in weight for four categories.

group of Asian boys does reach to the present level of American boys. The same thing can be said in the aspect of height of girls. The condition of the second question was that the responders should not take into consideration of limiting factors of their height and weight; however, the body concepts of their individual ideals are not identical in the world-wide perspective. This seems to be due to that people idealize their physiques at present according not to the international standard but to their respective historical and racial standards. It is very interesting to see that the Asian youths' individual ideals in their concepts do not reach but are near to that of the present level of the Westerners'.

There were no distinctive differences in the rates of increase in the body concepts of height from the present level for both boys and girls. However, in the height of the national ideal average for boys, all three Asian countries showed the highest rate of increase (about 4%), England was the second (about 2.5%), and the lowest was America (about 1%). (Figure 3.) In the concepts of weight of the national ideal averages American boys also showed the lowest rate of increase (about 5%) and English and Japanese boys showed the highest (about 13.5%). Although the difference in the rate of increase in height of the national ideal averages was small, it is expected that the Asian boys would gradually come closer to the level of their Western counterparts.

As seen from tendencies of the images of total body-builds, (Figure 4.) there was found a distinctive gap between the Westerners and the Asians. The former wanted to gain more in weight than in height in the aspect of the individual ideals and the latter wanted to gain

Fig. 3. Comparison with the rate of increase in height and weight over the present level.

Fig. 4. Comparison with body-build using weight-height regression for four categories.

Fig. 5. Percentages of girls' height and weight over those of boys in four categories.

rather more in height than in weight. These two facts might be interpreted as to reflect their respective ideals of physical culture in two groups of the world.

There were variations among the sex differences in the weight of the individual ideals. As shown in Figure 5, English girls' weight would be about 71% of that of boys (the amount of difference was 22.5kgs.), Japanese and Korean girls' was about 77% (about 15.5kgs.), and Taiwan girls' was about 84.5% (about 9.5kgs.).

(2) Similarities in body concepts

Boys in the almost all countries studied, except Taiwan, wanted to be individually taller and heavier than their respective national ideal averages. However, girls showed their wishes for being lighter in weight but rather taller in height. These findings seem to reflect a popular ideal of individual body-build of both men and women in the present-day societies. Man seems to want to keep his position at a little higher level than the average; that might show his tendency to maintain a sense of superiority to the average people of his own country. Woman's ideal body-build seems to be definitely determined by the popular belief in good figure of a lady; that is not too tall nor too short, that not too heavy nor too light but that is rather small and harmoniously figurative.

There were similarities in the sex difference in height of both individual ideal and national ideal average of body-builds. (Figure 1. and 5.) The amount of difference was about 15cms. in the individual ideal and about 12 cms. in the national ideal average; that means girls' height was about 90.5% of that of boys in the former and that about 94% in the latter, which was almost the same as the present actual difference. This shows a superficial but interesting relationship existing between man and woman.

Summary and Conclusion

Body concepts of youths in five countries were studied by means of a questionnaire method and the results were compared. Although its sampling and the total number of subjects were limited, following three conclusions might fairly be drawn from data analysed. (1) Even in the individual ideals and in the national ideal averages American and English boys and girls would be taller and heavier than their Asian counterparts and American's present height and weight were greater than those of the English; (2) boys wanted to be individually taller and heavier than their respective national ideal averages and girls wanted to be slimmer than the national averages; and (3) sex difference in height of the individual ideal and the national ideal average were 15cms. and 12cms. respectively, i.e, girls' height would be about 90.5% and about 94% of that of boys respectively.

Bibliography

- 1) **T. Mizuno, H. Hirata, and others:** "Ideal Body-Builds of Present-day Youths," Research Journal of Physical Education, **9**: 1: 398, 1966.
- 2) **T. Mizuno, H. Hirata, and others:** "A Study on Ideal Body-Builds and Personal Traits," Research Journal of Physical Education, **11**: 1: 132, 1967.

- 3) **T. Mizuno, H. Hirata and S. Aoyama:** "Effect of the Tokyo Olympics on the Body Concepts of Japanese Youths", *Research Journal of Physical Education*, **10**: 2: 133, 1966.
- 4) **T. Mizuno, J.C. Shi, and S. Aoyama.:** "International Comparative Study of Body Concepts of Youths," *Research Journal of Physical Education*, **12**: 5; 1968.