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# **The Making of the Mainstream Discourse of Sex Education in Japan: The Role of a Japanese Periodical *Sex Education Today* (1972-1983)**

**Hiroko HIROSE**

This paper elucidates the making and the characteristics of mainstream discourse of sex education in Japan, by examining a commercial periodical *Gendai seikyokukenkyuu* (*Sex Education Today*) published by Nihon Seikyokukenkyuu Kyoukai (the Japanese Association for Sex Education, JASE) from 1972 to 1983. The dominant discourse of sex education was transferred from that of ‘Purity Education’ policy, which was introduced by the government after the end of the Second World War, onto the sexology-oriented sex education lead by JASE. *Sex Education Today* played a crucial role in this transfer, by transmitting sex education knowledge from both inside and outside of the country energetically. This magazine also played an important role in the building of the structured school sex education curriculum, which acted as an official curriculum until the government guideline was published in 1999. In spite of this remarkable influence of this magazine, it has only rarely been examined by scholars. Based on its findings, this paper further suggests that, it was not only ‘extreme’ sex education but also the mainstream sex education generally, which was targeted in the campaign of criticism raised in the 2000s.

Keywords: sex education; discourse; Japan; *Sex Education Today*; JASE

## **The purpose of this paper**

This paper elucidates the making and the characteristics of mainstream discourse of sex education in post-war Japan, by examining a periodical *Gendai seikyokukenkyuu* (*Sex Education Today*) published by Nihon Seikyokukenkyuu Kyoukai (the Japanese Association for Sex Education, JASE) from 1972 to 1983. Based on its findings, this paper further suggests that, it was not only ‘extreme’ sex education but also the mainstream sex education generally, which was targeted in the campaign of criticism raised in the 2000s. The time when this periodical was published, was the turning point of the dominant discourses of sex education, from that of the ‘Junketsu Kyokukenkyuu (Purity Education)’ policy to that of sexology-oriented sex education, which places importance on biological and anatomical aspects of sex. This periodical played a significant role in shifting the dominant base of discourse. However, until now, this magazine has only rarely been examined by scholars, even in Japanese literature.

One of the biggest events about sex education in recent Japan is so called ‘sex education bashing’, which is a campaign of criticism raised in 2002 (Hirose 2013). This paper recognises that this campaign was targeting not only ‘extreme’ sex education but also mainstream sex education generally. The examination of the mainstream discourse will enable us to confirm this. Among a number of sex education NPOs in Japan, JASE is the core organisation and is occasionally introduced in English literatures (McLelland 2015, Fu 2011). However, in order to understand the nature of the campaign of criticism, it is equally necessary to spotlight a nationwide NPO ‘Ningen to Sei Kyokukenkyuu Kenkyuu Kyougikai (The Council for Education and Study on Human Sexuality, Seikyokyo)’. Seikyokyo was

established in 1982 and has been active in promoting school sex education, holding their four ‘Key words’, science, human right, independence and coexistence.

It is known that JASE and Seikyokyo were confronted each other, and this conflict was mirrored into the opposing relationship between their leaderships; Tanomura Yuuki (1923-2009) representing JASE and Yamamoto Naohide (1932-2000) representing Seikyokyo. They are explained as the two greatest based on different sex education understandings (Nishigaito 1993: 187). Tanomura, as a former teacher, became a head teacher after working for a board of education. He devoted much to popularising sex education, collaborating with the central government as an advisor for their sex education policy. He joined JASE from its early stages, and substantially led the association since the 1980s. N. Yamamoto<sup>1</sup> also joined JASE from its early stages, and established Seikyokyo in 1982 after working as a teacher. Both contributed articles to *Sex Education Today* based on their teaching experiences.

It was Seikyokyo that was targeted by the campaign of criticism in the 2000s. The preliminary stage of this campaign initiated in the 1990s when Takahashi Shirou criticised sex education practices by members of Seikyokyo as ‘extreme sex education’, because their teachings, Takahashi claims, contained information about contraceptives and intercourse, etc. in a positive approach. Takahashi is a right-wing academic, who sympathises, for example, Valerie Riches in the UK (Takahashi 1993), who is well known to have led the Responsible Society (The Family and Youth Concern), fiercely criticising sex education led by FPA. The conflict between Tanomura and N. Yamamoto was amplified by the appearance of Takahashi, because, Takahashi criticised N. Yamamoto at the same time cooperated Tanomura in publishing a book (Tanomura & Takahashi 1993).

A series of criticisms led by Takahashi in the early 1990s was an opposition to the positive spotlights on sex education after the revision of Japan’s national curriculum, Course of Study, in 1989, a revision which was sensationally labelled as the beginning of the first year of sex education by the media. Although the change in this revision was minor in its content, authorised health education textbooks were for the first time provided. Members from Seikyokyo were given a high profile in the media under a favourable spotlight on sex education. Takahashi attacked this positive move.

N. Yamamoto categorised Takahashi as one of the purity education promoters, and wrote indignantly that his criticism was ‘an abusive ideological campaign led by dogma’ (Yamamoto 1994: 10). N. Yamamoto categorised Tanomura as one of the ‘purity education promoters’, as well (Yamamoto 1994: 21). Their relationships were then pictured as N. Yamamoto vs. Tanomura & Takahashi.

This configuration, however, misleads us when we need to understand the comprehensive framework of the discourse of sex education in Japan. It is ineffective to explain the nature of the attack in the 2000s. Although, the framework of N. Yamamoto vs. the ‘purity education promoters’ in the 1990s is similarly observed in the campaign in the 2000s, the target this time was expanded from Seikyokyo to other providers, including those teachers associated with JASE. Tanomura interpreted this expansion as chaotic and unreasonable. He irritably complained by saying that the campaigners targeted not only ‘extreme’ sex education but also other sex education boundlessly, and regretted that whole sex education became stagnant (Tanomura 2004, 2006).

Tanomura should be regarded as closer to N. Yamamoto than to Takahashi in their basic

understanding of sex education. Both Tanomura and N. Yamamoto stood on the mainstream position of sexology-oriented sex education, which was created in the early days of JASE, and was still in place. Takahashi would not approve of sexology-based sex education. The clear disagreement between Tanomura and N. Yamamoto was, for example, the attitudes towards the teaching about intercourse. While N. Yamamoto insisted that teaching sexual intercourse was the essential topic, for any age group, Y. Tanomura insisted that a teacher must be careful in teaching sexual intercourse to elementary school pupils. The difference observed between Tanomura and N. Yamamoto should be understood as variations within the mainstream discourse.

JASE, which was substantially led by Tanomura, was involved in the expanded campaign of criticism in the 2000s, because the nature of the attack was not the criticism against so called 'extreme' sex education led by Seikyokyo but against the mainstream discourse of sex education generally, regardless of whether the campaigners were aware of this or not. To confirm this, it is necessary to clarify the nature of the mainstream discourse of sex education in Japan.

### **The discourse of sex education before the settlement of JASE**

Sex education in post-war Japan began with the official document 'Shishou no torishimari narabini hassei no boushi oyobi hogotaisaku (Measures for the regulation, prevention and protection of private prostitutes)' approved by the Jikan kaigi (meeting by all vice-ministers) on November 14 in 1946, a year after the end of the Second World War. This document aimed 'to thoroughly realise the intention of the abolition of legitimate prostitutes as well as of all the boundaries on them, and to prevent the appearance of, so called, 'Yamino onna (women in the dark)'. Following this notification, Shakai kyouiku kyokuchou (the chief of the Office for Social Education) in Mombushou (the Ministry of Education) released a document 'Junketsu kyouiku no jisshi ni tsuite (On Purity Education)' in January 1947. Junketsu Kyouiku Iinkai (The Purity Education Committee), followed by Junketsu Kyouiku Bunka Shingikai (the Purity Education Division Council) and Junketsu Kyouiku Kondankai (the Purity Round Table Conference), was set up to advocate the Junketsu Kyouiku (Purity Education) policy.

This policy led by the Office for Social Education in the Ministry of Education, expanded its concern from prostitutes' issues to juvenile delinquency then to education for ordinary young men and women (Saitoh 2012). In parallel to this policy, sex education was planned for school and practiced in health education. However, sex education was not visible behind the Purity Education policy (Tanomura et.al. 1993: 14). In the 1960s, the Purity Education policy ended after the Purity Education Round Table Conference was closed. Sex education publication and new activities were left unorganised until the next move.

### **The settlement of JASE and the publication of *Sex Education Today***

The establishment of JASE changed the scene. JASE was established on the approval of the Minister of Education, and was 'the first and only corporative body for sex education in Japan' (Mamiya 1981). One of the most popular publishers for education, Shogakukan, was the backer of this project. The core founding members were a sexologist Asayama Shinichi and a medical critic Muramatsu Hiroo, whose

liberal thoughts as scientists developed JASE's philosophy. A psychologist Mamiya Takeshi, who was a former member of the Purity Education Round Table Conference, also joined JASE from the beginning. The ex-Minister of Health and Welfare, Uchida Tsuneo, took the directorial position, and the ex-Minister of Education, Kennnoki Toshihiro, became one of the auditors. Asayama, Muramatsu and Hayashi Shirou who represented from Shogakukan formed the senior board of directors.

JASE stated its purpose as follows (JASE 1972: 3).

Values and customs related to sex have diversified rapidly, in this transfiguration, not only Japan but some modern countries are experiencing a large break between young people and adults with their sexual consciousness and behaviour. We have no arena of dialogue as a measure of common understanding. In such a situation, it is strongly awaited to obtain desirable consciousness of sex in each place, such as home, school, and society, and to develop research for proper education

JASE was established with approval of the Minister of Education. We aim to develop research on sex to contribute to promote a better society, through pursuing the following: 1 building databases of materials from inside and outside Japan by doing basic survey and research on sex education; 2 organising conferences, lectures and training sessions; 3 publishing magazines, books and materials on sex education.

We have built connections with bodies and associations in Europe, the United States and other countries. We wish to contribute to society by providing information, materials and by developing researches as a representative association of Japan.

One of their main projects was the publication of *Sex Education Today*. *Sex Education Today* was published as a commercial periodical from 1972 to 1983 backed by Shogakukan counting 58 issues, quarterly from Issue 1 to 16 and bimonthly from Issue 17 to 58. For each volume, 2000 copies<sup>2</sup> were issued targeting schools, local government offices, sex educators and medical professionals. This magazine, publicising real-time information from JASE, vitally distributed new knowledge of sex education. The contents of this magazine consisted of information for basic understanding of sex education, overseas sex education information, sex education school curriculum, governmental topics on sex education, problems related to sex education, surveys relating to sex education, history of sex, general topics and opinions on sex and so on.

### **The base of sex education set on sexology**

*Sex Education Today* set its basic framework of sex education on sexology, from the outset. The keynotes were presented in articles appearing serially in the first and the second issues. One was the landmark symposium 'Seikyouiku towa nanika (What is sex education?) (Asayama et.al. 1972a, b)' and the other was two pieces of L. A. Kirkendall's special contribution articles, 'Gendaishakai ni okeru sei no yakuwari (The role of sex in modern society) (Kirkendall 1972a)' and 'Gendaishakai ni okeru seikyouiku no yakuwari (The role of sex education in modern society) (Kirkendall 1972b)'.

The participants of this symposium were Asayama, a teaching professional Kurokawa Yoshikazu and Mamiya from JASE, plus an academic Tada Michitarou. Tada was invited to this symposium because of his work in *Sei (Sex)* (Matsuda 1971) published in the previous year, which showed the

negative tone against sex education. Therefore, his position in the symposium was to oppose it.

This symposium presented topical subjects for the new stage of sex education, repeatedly referring to aspects of sex education, which were social, physiological and biological. Asayama, Muramatsu and Kurokawa valued knowledge from sexology, and accordingly, placed importance on biological and anatomical aspects of sex. However, Tada opposed it saying that the understanding of sex and sex education from the aspect of science or biology is an attitude of ‘the limited civilisation dominated by enthusiasm for science’ (Asayama et.al. 1972a). Tada added that, it was difficult to teach about sex at school, because, while, sex had an emotional element as its essence, school was an arena rather to teach analytical academic knowledge.

In spite of their different aspects to sexology, their common understanding of the obstacles to teach biological knowledge about sex was a sense of shame. They demonstrated two types of shame; one regards sexual intercourse as a shameful act and will work as an obstacle to sex education, and the other is a shared sense in Japanese culture for respectable human relationship on sex. And what should be removed, they said, was the former type of shame (Asayama et.al. 1972a).

Another core topic raised in the symposium was the understanding of the peculiar setting of sex in Japanese culture. Tada made mention of Sweden saying, ‘in Sweden, they seem to have wide freedom, but the reality is they have a solid morality that underpins the monogamous system’, and said ‘on the contrary, the control is rather loose in Japan’ (Asayama et.al. 1972a: 24). Asayama similarly referred to ‘Gedo (heresy)’ culture widely practiced in Japan. He said, ‘Japanese culture comprises of co-prosperity of the face and the back’, and said ‘there was freedom in “Gedo” in the “back” world. Gay and anything were OK there’ (Asayama et.al. 1972a: 9). The sexological aspect would shape and transfer the ‘Gedo’ elements to ‘disorder’ field for examination. This symposium shows the founders were struggling to modify sexuality elements practiced in Japanese culture into a sexology-oriented sex education framework.

### **Keynotes by L. A. Kirkendall but not by Senji Yamamoto**

Actual ideas for sexology-oriented sex education were employed from overseas knowledge. L. A. Kirkendall took the role to present the whole framework of sex education; how to understand sex and how to build sex education. His special contribution articles ‘The role of sex in modern society’ and ‘The role of sex education today’ were carried in the first and the second issue. They contain 10 subjects that were clarified by sexual science those days, and 10 subjects for sex education problems so far.

The ten subjects Kirkendall presented for knowledge based on sexual science are,

- 1, the essence of sex should not be understood related only with sexual consciousness or sexual activities, but also whole activities,
- 2, the significance of being a man or a woman for each individual covers his or her entire life,
- 3, sexual behaviour represents his or her personality,
- 4, sexual desires are normal phenomena,
- 5, masturbation for any age groups should be accepted,

- 6, sexual activities are responsible for participants and there are no reasons to be bothered by others,
- 7, personal relationships do not last long only with physical fulfillment,
- 8, sexual activities between opposite sex are occasions for unifying personalities and even can be a ceremony to praise happiness of life,
- 9, institutions such as marriage do not mean anything for sexual activities, and
- 10, ‘adultery’ cannot be reformed with force or fear (Kirkendall 1972a).

Those pieces of knowledge presented a liberalism aspect but yet lacked aspect to understand sexual minority. Ten subjects Kirkendall presented for sex education problems so far are; that sex education

- 1, hasn’t been sexuality education but rather education about reproduction or moral,
- 2, may suggest certain types of behaviours but lacks adaptive aspects,
- 3, has stuck to the fixed idea of ‘truth of life’ knowledge education,
- 4, has ignored the idea of active thinking and decision making,
- 5, has had negative attitude and tried to avoid or to be away from sex,
- 6, was tended to be understood as indulgence to solve any moral problems,
- 7, hasn’t been discussed in public but stealthily,
- 8, has been very often considered to be the responsibility of merely parents or merely teachers,
- 9, has taken too much importance from statistical figures but from individual lives, and,
- 10, has been understood as mastery performance and relies on only a limited number of professionals (Kirkendall 1972b).

In addition, Kirkendall outlined ten basic rules suggested for sex education, which are; sex education, 1, is all life experiences, 2, is life-long education. 3, is parents’ attitudes, 4, is a life philosophy, 5, is a study on family relations, 6, is the embodiment of life respect, 7, is indispensable for healthy development, 8, does not make unreasonable secrets, 9, is guidance, and 10, values motivation rather than activities (Kirkendall 1972b). These pieces of information enable us to understand the framework of sex education the magazine held.

Apart from the content Kirkendall presented, we should note the fact that *Sex Education Today* invited Kirkendall for its beginnings instead of Yamamoto Senji (1889-1929), who had produced high-quality research on sexology in Japan. S. Yamamoto is a well-known sexologist, who emphasised the importance of scientific understanding of sex and gave university lectures very early on; his publication of *Seikyōiku (Sex Education)* (Yamamoto 1932) is one of his most popular works. A JASE’s founding member Asayama, who was also one of the three winners of the first WAS (World Association for Sexual Health) Award in 1979, appraised S. Yamamoto by saying ‘S. Yamamoto’s *Sex Education* and sexual surveys were far more advanced works than those in Europe and the U. S. (Asayama 1973)’. However, S. Yamamoto joined the dissident movement, and was purged from his



university. At the end, he was assassinated by a right-wing enthusiast. It may be a wise choice for JASE to rely on a newcomer American instead of the icon, who had the image of being a communist political dissident. This enabled JASE to obtain its advantageous position during the period of the cold war and under the Liberal Democratic Party Government.

### **Transferring dominant discourse from ‘Purity Education’ to sex education**

The relation between the Purity Education launched after the war, and the JASE led sex education should be clarified. They were not totally discontinuous. This can be said from the fact that Mamiya, who was a former member of the Purity Education Round Table Conference, and had published a book *Nihon no junketsu kyōiku (Purity Education in Japan)* (Mamiya 1969), joined JASE from the beginning. In spite of its out-of-date image, the Purity Education policy intended to overturn the old male-dominated relationship in order to promote a democratic society after the war. One of the five works in the Purity Education series published by the Ministry of Education, *Danjyō no kousai to reigi (Male-female association and etiquette)*, presented progressive ideas for the time, emphasising the importance of the democratic and healthy relationship between men and women favourable to co-education, which was widely introduced in Japan after the war as a democratic system (Ministry of Education 1950). Koyama Shizuko suggests that the Purity Education policy was the other side of the democratic co-education system (Koyama 2014: 32).

However, the differentiation was emphasised at the time of JASE foundation. Tanomura pointed to the incompatible elements contained in the Purity Education policy, saying

The first Guidance for the Purity Education (by the Purity Education Committee) was well written telling young people about what they would encounter. But its supplement made the situation confused. The chairperson of the Committee explained about “purity” there (Tanomura 1993: 14).

The chairperson wrote in the supplement that ‘sexual intercourse only between a married couple can be accepted as purity’ (Ministry of Education 1949). Asayama also argued in his book *Seikyōiku (Sex Education)* that it was not good for this policy ‘to employ the terminology “purity education” instead of “sex education”’ (Asayama 1967: 3). Because, he says, the word ‘purity’ recalls the physical virginity of women and a male-dominated sexual morality (Asayama 1967: 4).

The reason why the Purity Education policy employed the terminology ‘purity education’ was later explained by Shakai Kyōiku Shingikai (the Council for Social Education) at the Ministry of Education. They said it was because the terminology ‘sex education’ was not yet popular, therefore, this word might be taken narrowly from its impression (Ministry of Education 1955). However, apart from the intention of the policy makers, the word ‘purity’ reminds us of women’s virginity as well as of male-dominated sexual morality, as Asayama suggested (Asayama 1967).

In March 1972, when the Ministry of Education was not able to ignore the argument on the purity education and sex education, they released an announcement on the terminology. In this announcement, the Ministry of Education declared that purity education and sex education had no differences; they said,

The Ministry of Education understands that the meanings and philosophies of purity education and sex education are not different in their essence, and that their purposes and contents are not distinctive. The Ministry of Education will, therefore, pursue official works based on the understanding that the purity education and sex education are synonyms (Ministry of Education 1972).

*Sex Education Today* Issue 11 (1974.12) ran an explanatory article about terminology. Introducing the comment by the Ministry of Education, the article added that the cause of the confusion was not only because of the matter of nuance of the words or the fields they covered, but also of the gradual transition of aspects and attitudes for desirable sex education shared in society. Issue 11 (1974.12) as well reported a survey result on the usage of the terminology in local sex education guidebooks from 40 prefectures and municipalities. The result showed sex education was used in 28 guidebooks and purity education in 9. The official terminology usage for sex education is always a topic in this field in Japan, until now (Hirose 2013).

In such a terminological situation, *Sex Education Today* clearly employed the terminology ‘sex education’. This fact demonstrated the new starting point of the magazine which distinguished itself from the Purity Education policy.

### **Building school sex education curriculum**

Building a curriculum for school sex education was one of the key projects for JASE and *Sex Education Today*. The curriculum proposed by JASE together with articles on curriculum studies by professionals is carried in every issue of *Sex Education Today*, covering from kindergarten/nurseries to high school and special schools. When the *Seikyouiku Shidou Youkou (Sex Education Teaching Guidance)* was launched by JASE in 1979, special sections were secured in every issue of the magazine from Issue 39 (1980.4) to 49 (1981.12), carrying articles suggesting actual teaching plans based on the guidance. This guidance, in substance, functioned as an official guidance for sex education nationwide until the Ministry of Education published *Gakkou ni okeru Seikyouiku no Kangaekata Susumekata (How to View and Practice Sex Education at School)* in 1999. Both Tanomura and N. Yamamoto, deeply participating in building or introducing the guidance to schools, contributed a number of articles as experts.

Teaching about sexual intercourse was a chief subject in curriculum matters in the magazine, and drew much attention. This topic is featured in Issue 17 (1976.8), 18 (1976.10), 24 (1977.10), 25 (1977.12), 26 (1978.2), and 45 (1981.4). In the Issue 18, ‘Karikyuramukenkyuushirizu: shou-chuu-kou niokeru seikou no shidoukenkyuu (De-bugging-your-ccurriculum series: Studies on teaching sexual intercourse to elementary, junior and senior high school students)’ consists of four articles, one is by Tanomura, who presents a general framework for teaching intercourse, followed by three detailed articles, which cover elementary, junior high and high school.

Tanomura points, in his article, that there are sub factors, which children need to obtain before they learn about intercourse, and then insists that teaching should not be given in a solitary state but should be given in a structured curriculum. The article on elementary schools reports that a teacher dealt with this topic in the ‘my birth’ section for lower age group, in the ‘children’s births’ section for middle

age group and in the 'mechanism of fertilisation' section for older age group. The article on junior high schools points out that classes without teaching intercourse tend to generate an apathetic atmosphere in the classroom. The article on high schools, which is written by N. Yamamoto, shows the tendency that students think it is OK to have sex if they love each other.

A serial articles 'Tankishuuchuu rensaikouza: watashinara kono shudai wo kou shidousuru (Serial intensive course: This is how I treat this subject)', in Issue 23 (1977.8), 24 (1977.10) and 25 (1977.12), contain articles on teaching sexual intercourse, for its elementary section. An article, which writes about the elementary school division of the 7th JASE summer seminar and the 8th National Sex Education Conference by Nihon Seikyouiku Kenkyukai (the Japan Sex Education Research Group) in Issue 25, elucidates the atmosphere held in the both venues. The report says that it seemed seminar participants felt it was difficult to teach intercourse. The article introduces arguments saying that there were many opinions such as 'It's not easy to find satisfactory teaching contents' (Issue 25: 137).

Issue 26 (1978.2) carries 'Field report: Guidance in a junior high school: What is sexual intercourse for human being?', and Issue 45 (1981.4) carries N. Yamamoto's article about a way to teach sexual intercourse to high school students based on the Guidance by JASE.

Considering a number of field studies and trials, Tanomura reaches his position, where he insists that it is crucially necessary to be sure about children's readiness in learning when teachings happen, and that elementary school pupils are too young to accept facts in learning intercourse. He warns teachers must not handle this topic without confirming children's development stages; various problems will occur, otherwise (Tanomura, Takahashi 1993). On the other hand, N. Yamamoto reaches his position, where he insists that this topic is the essence of sex education. He, therefore, encourages all teachers to become eligible to teach intercourse (Yamamoto 1994).

## **Conclusion**

*Sex Education Today* published by JASE, thus, transferred the dominant discourse of sex education from that of the Purity Education policy onto sexology and employed a framework picturing the Purity Education and JASE's sex education as opposite numbers. The magazine's intentional usage of the terminology, 'sex education' demonstrated the start of an alternative project in sex education in Japan. At the end, this project formed the mainstream of sex education in Japan. The notable is the role of *Sex Education Today* in building a structured curriculum for school sex education. The curriculum knowledge accumulated into articles in *Sex Education Today* was effectively utilised in editing the *Sex Education Teaching Guidance* by JASE, and its idea and contents were again distributed through the magazine nationally.

Tanomura later recalled the morale and excitement shared by people in those days, when the magazine was launched. He says,

There were a chaotic atmosphere and trial and errors among attendants of the seminars, and they had impressions that they were liberated, with the background of sexual emancipation trends. It is true, that such was fun. I mean, they had some senses of mission and felt responsible to break down the

feudalistic and closed Japanese society. At the same time, they were not actually sure about what they should be free from, and could not make a clear focus on the target (Uno et al. 1995: 24).

Mamiya similarly points that the transition of sex education base from the Purity Education to anatomical and biological sex education was also modified. He recalls that, in the National Sex Education Research Conference in 1986, it was confirmed that sex education should be shifted from the one, which give too much weight on the physiological aspect, to sexuality education. Sexuality education, he states, gives balanced weight on physiological, psychological and social aspects, and overcomes forcing somebody of sexual value, knowledge and attitude but supports him or her to make their own decisions (Mamiya 1995: 19).

The mainstream discourse of sex education built in the 1970s continued to be updated adjusting to social changes. Acquiring a new concept of sexual minority is one of their improvements. Parallel to the development of the mainstream discourse of sex education, the conflict between N. Yamamoto and Tanomura became obvious. However, this conflict was an incident within the mainstream. The campaign of criticism against sex education occurred in 2002 targeted the two, not because the campaigners failed to focus the target, but they targeted the mainstream sex education.

#### **Note**

1, Initial is added only to Yamamoto, in order to differentiate two Yamamoto.

2, Information from JASE.

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# Secular Changes in Body Height and Weight of Population in Japan since the End of WW II in Comparison with South Korea

Hiroshi Mori

“It (stature) is a net measure that captures not only the supply of inputs to health but demands on those inputs.” (R.H. Steckel, *Jr. Econ. Literature*, 1995, p.1903)

## Introduction

A small group of researchers, including the author, in Japan and the United States have been engaged in the econometric analyses of food consumption mainly in Japan from the age/generation perspectives (Mori eds., *Cohort Analysis of Food Consumption in Japan*, 2001; Mori et al., *Declining Orange Consumption in Japan: Generational Changes or Something Else?*, 2009; Mori, Saegusa, and Dyck, “Structural Changes in Demand for Foods in a Rapidly Aging Society,” 2016; etc.).

Due to the data source, *Family Income and Expenditure Survey*, on which we relied, our analyses have been focused on at-home food consumption, with little attention to the increasing eating out particularly among the young generations. And yet, we have discovered appreciably declining tendencies in per capita consumption of a number of major food products—rice, fresh fish, fresh fruit and vegetables and even milk among the younger age groups, regardless of sex in the past two or three decades. Per capita at-home consumption of fresh fish and fresh fruit, in particular, by non-adults and those young adults in their 20s and 30s is estimated to have decreased drastically in the past 30 years or so, as compared to the older generations, which have not changed appreciably in consumption. As a consequence, those in their teens and their 20s are estimated to consume around one-tenth of fresh fruit, compared to those in their 60s and above in recent years. The same phenomenon has taken place for fresh vegetables, although to a much lesser degree. Per capita at-home consumption of fresh meat has increased moderately over the period across the board, with the consumption by the high-teens and young adults in their 20s and 30s only some 10% more than 30 years ago, far less than needed to compensate for the drastic decreases in fish consumption by these young age groups (refer to Table 1, for details).

*National Nutrition Survey* by the Ministry of Health, Labor, and Welfare, initiated at the advice of the Occupation Forces soon after WW II, started to publish nutrition intakes by the age groups in the annual report of KOKUMINN EIYOU no GENJYOU (*Present Situation of National Nutrition*) in 1995. Per capita total caloric intake from all sources, including alcoholic beverages, is reported to have increased from approximately 2,100 (kilo) calories in 1950 to 2,230 calories in the peak period of the early 1970s, and then gradually

Table 1 Changes in per capita At-home Consumption of Selected Food Products by Age Groups in Japan, 1980-2010

A: Fresh Fruit (kg/year)					B: Fresh Vegetables (kg/year)					C: Fresh Meats (kg/year)				
age/year	1980-81	1989-91	1999-01	2009-11	age/year	1980-81	1989-91	1999-01	2009-11	age/year	1980-81	1989-91	1999-01	2009-11
15~19	29.0	15.4	7.6	4.4	15~19	53.0	42.3	33.5	34.6	15~19	16.2	16.9	16.1	16.8
20~24	30.3	16.8	10.3	7.8	20~24	55.0	45.0	38.2	37.4	20~24	13.0	13.3	13.4	14.1
25~29	31.5	19.4	13.5	12.0	25~29	56.3	47.4	42.9	41.3	25~29	12.4	12.2	13.2	13.9
30~34	39.7	27.2	18.5	15.2	30~34	61.2	51.7	47.1	45.3	30~34	12.9	12.4	12.9	14.4
35~39	47.0	36.1	24.3	17.9	35~39	68.3	57.2	51.8	48.8	35~39	13.5	13.2	12.9	15.0
40~44	49.8	42.8	31.0	20.4	40~44	75.6	66.6	58.0	52.4	40~44	13.6	14.5	13.8	15.6
45~49	53.9	48.4	36.0	24.7	45~49	83.3	76.4	65.5	56.9	45~49	13.5	15.1	14.4	15.8
50~54	56.9	51.0	44.4	30.9	50~54	89.2	81.6	75.3	62.9	50~54	13.0	14.0	14.6	15.7
55~59	57.4	55.9	51.7	39.3	55~59	91.6	87.0	84.9	71.5	55~59	12.0	12.9	14.4	15.8
60~64	58.4	59.3	58.1	48.9	60~64	93.3	90.4	90.7	81.5	60~64	11.7	12.0	13.8	16.1
65~69	56.3	59.8	61.2	54.9	65~69	92.1	91.2	93.5	86.2	65~69	10.4	10.5	12.2	14.6
70~74	55.5	60.3	62.5	57.6	70~74	85.1	85.0	89.8	85.6	70~74	9.0	9.0	10.4	12.4

D: Fresh Fish (kg/year)					E: Fluid Milk (lt/year)					F: Rice (kg/year)				
age/year	1980-81	1989-91	1999-01	2009-11	age/year	1980-81	1989-91	1999-01	2009-11	age/year	1980-81	1989-91	1999-01	2009-11
15~19	10.9	7.9	5.0	2.9	15~19	26.8	28.3	25.9	19.5	15~19	50.1	29.4	18.3	15.8
20~24	11.4	7.9	5.9	3.7	20~24	28.8	26.6	22.9	19.1	20~24	38.0	24.9	16.4	13.2
25~29	12.2	7.9	6.6	4.8	25~29	29.8	26.9	21.8	19.3	25~29	34.1	23.4	18.2	14.2
30~34	14.1	10.2	7.9	6.1	30~34	27.8	31.4	27.4	21.7	30~34	40.7	27.3	21.2	18.0
35~39	15.4	12.3	9.8	7.4	35~39	21.3	31.8	33.1	24.5	35~39	48.9	35.1	26.9	22.2
40~44	15.6	14.6	12.5	8.7	40~44	20.0	32.8	36.7	27.1	40~44	58.1	44.8	32.7	26.3
45~49	16.7	17.1	15.2	10.2	45~49	21.8	31.9	36.3	28.4	45~49	61.8	50.1	37.4	29.0
50~54	18.6	18.5	18.3	12.1	50~54	23.0	31.1	34.6	28.8	50~54	60.7	52.6	42.8	31.0
55~59	19.8	19.1	20.2	14.6	55~59	22.4	32.8	35.2	30.1	55~59	56.6	54.3	48.0	34.7
60~64	19.9	19.3	20.3	17.2	60~64	23.6	35.7	37.7	32.3	60~64	60.9	53.1	49.9	39.8
65~69	18.5	18.8	19.9	18.2	65~69	24.6	36.9	40.9	34.8	65~69	59.7	51.2	50.3	43.8
70~74	17.1	17.8	18.7	17.2	70~74	25.0	37.3	43.5	37.0	70~74	54.2	46.2	46.1	42.3

Sources: calculated by Mori, using FIES data with the TMI model.



declined to approximately 2,000 calories in the mid-1990s, and further down to approximately 1,850 calories, presumably reflecting a significant, rapid aging of the population.

Over the normal life cycle, ordinary people consume the largest amount of foods in their mid-teens and total caloric intake per person gradually declines as they age toward their elderly years. According to the *Nutrition Survey* age classification, males in the age group, 15-19 years old consume the largest amount of calories, followed by those in their 20s to 50s, and females in the age group of 7-14 take nearly equal or slightly larger amount than the late teen age groups. Males in their high-teens of 15-19 are estimated to take approximately 2,500 calories per day per person in the mid-1990s and have kept their caloric intakes almost constantly at this level until 2014, the latest survey year. As will be shown in the subsequent section, Japanese males of 20 years of age have not grown either in body height or weight during the corresponding years in the past. As they have not eaten more, they have not grown bigger, or they have ceased growing, because they have quit eating more. To be exact, the author should be happier, if we could state more specifically that the young Japanese have ceased to grow for some time in height, in particular, because they have not learned to eat more properly. As will be shown in the later section, the Japanese young in their early 20s have been lower in body height than the Korean peers by approximately 4 cm in the recent decade, and 12-13 cm lower than those in the world's tallest nation, the Netherlands, no to speak of.

### **Secular Changes in Body Height in the Western Nations**

It is widely conceived in Japan that Americans have long been very tall. It is also conceived that Europeans have long been tall, i.e., vaguely people in North: Sweden, Norway, Netherlands, etc. the tallest, followed by those in Middle: G. Britain, Germany, Austria, etc., and those in South: France, Italy, etc. somewhat shorter than the above nations. As the westerners are distinctly different in skin complexion from the Northeast Asians, so are they tall in body height as a racial feature, so to speak. This is the concept which has been commonly held by many people. However, research contradicts this belief, such as the articles: "Stature and the Standard of Living" by Steckel; "Economic Growth, Population Theory, and Physiology" by Fogel, and a few other papers (provided courtesy of Professors S-W Park, and J-S Moon, pediatricians in S. Korea).

Surprisingly, young male adults in the Netherlands, the currently the tallest nation in the world, were 164cm, 3cm shorter than those in France in 1850 and that the peers in Sweden and Norway were 168cm and 169cm, respectively then. On average, Europeans have grown more than 10cm taller in the past 100 years (Hatton, 2013). The data regarding male body height in the 19<sup>th</sup> century were mainly based on the military draft exams. Therefore, the statistics provided in Tables 2-3 and Figure 1 can be relied with certain confidence, although 1-2 cm differences on both time-series and cross-sectional comparisons should be

Table 2 Secular Changes in Adult Male Stature in The Western Nations, 19th century to 20th Century  
(cm)

	U.K.	Norway	Sweden	France	Denmark	Hungary
19-I	168.0	—	166.7	164.3	165.4	163.9
19-II	171.6	—	168.0	165.2	166.8	164.2
19-III	169.3	168.6	169.5	165.6	165.3	—
20-III	175.0	178.3	177.6	172.0	176.0	170.9

Source Fogel, "Economic Growth", *AER*, 84(3), p. 372.

Table 3 Secular Changes in Adult Male Stature in The Western Nations, 1800–1950

	U.S.	U.K.	Sweden	Norway	Nethlands	France	Aus/Hung
1800	173	167	166	166		163	163
1850	171	166	168	169	164	167	
1900	171	167	172	171	169	165	
1950	175	175	177	178	178	170	171

Source: Steckel, "Stature," *Ec. Literature*, XXXIII, p. 1919.

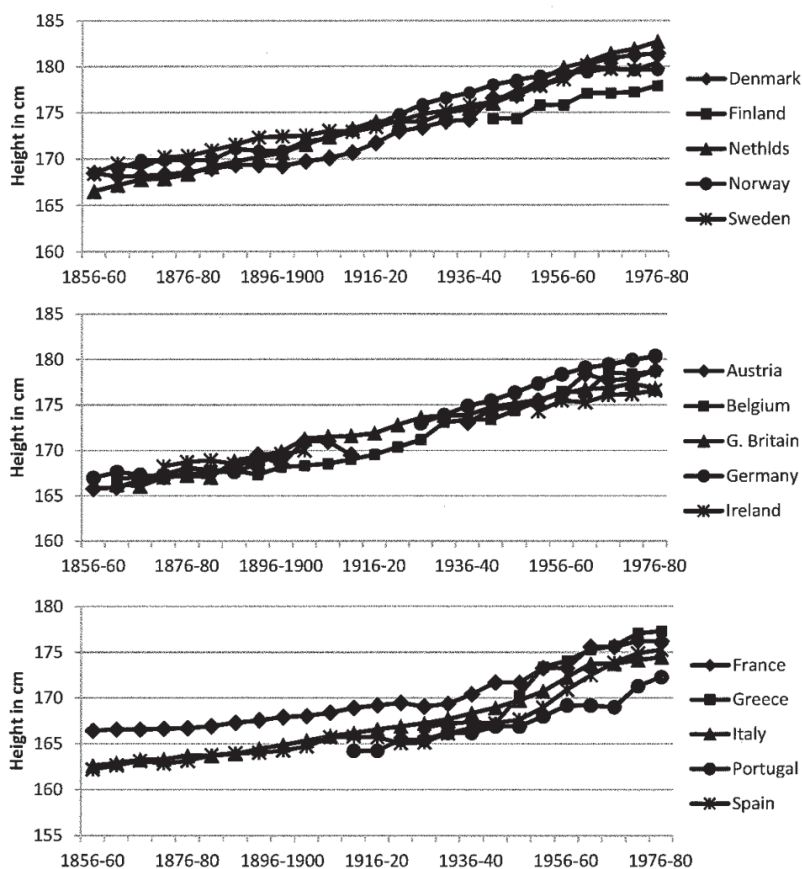


Fig.1 Adult male height by birth cohort, 1856–60 to 1976–80.

Source: transcribed from Hatton, "Europeans so tall," p.3.

regarded within the statistical errors. The most important fact to be kept in mind is that the young male adults have grown more than 10cm taller over the 100 years or so since the late 1800s in most European countries. Hatton (2013) seems to attribute the growth in body height, if only statistically, to the fall in infant mortality. The infant mortality rate is measured as: the number of deaths within one year after birth/the number of births, which may reflect the disease environment in the chosen short period. It is, however, questionable that the fall in infant mortality was “the most important proximate source of increasing height” (Hatton, p.1). At any rate, one of the key findings in this section is that people can grow conspicuously in height, regardless of race and geographical locations, if the environmental conditions allow it.

### **Changes in Body Size of Japanese People after WW II**

Japanese young males in their 20s were 161.6 cm tall (on average, to be omitted afterword) in 1950 and those in their 30s and 40s, who were in their 20s in 1940 and 1930, respectively were 160 cm, implying that the young adults had not grown much taller until 1950 or so. They grew 1.0 cm taller from 1950 to 1960 and grew 3.0 cm taller in the next decade and again 3.0 cm taller to 168.5 cm in 1980 and grew to 170.7 by 2.2 cm in 1990 and ceased to grow any taller since then at 171.0 cm in 2010. The young Japanese males grew nearly 10 cm in height during the 50 year period from the mid-20<sup>th</sup> century. The exact same growth patterns in height are observed in the young females, i.e., they grew from 150.2 cm in 1950 to 157.3 cm in 1990 and then ceased to grow since then (0.5 cm taller in 2010, probably within the range of statistical errors).

Those males in their 50s grew taller steadily from 163.2 cm in 1990, to 165.8 cm in 2000 and 168.3 cm in 2010. Those in their 50s in 1990 were born in the 1930s. These cohorts were in their 20s in 1960 and those in their 50s in 2010 were in their 20s in 1980. With these cohort aspects taken into consideration, it is fair to state that population in Japan ceased to grow in height around 1990 and won't grow any taller from now, unless boys and girls under 20 years of age now restart growing taller appreciably any more than at present again for unpredictable reasons in the near future (Table 4).

As regards body weight, Japanese males have grown heavier accordingly in all age classes, mid-teens, 20s, 30s, 40s, 50s, 60s, and 70+. Particularly, Japanese males in the middle to elderly age groups seem to have grown heavier in weight relative to height, whereas those in their mid-teens and 20s have grown only a little heavier since 1990. On the other hand, female population, those in the younger age groups, in particular, have grown much less in weight than the male counterparts. Those in their 20s, for example, grew in height by 7.6 cm from 150.2 cm in 1950 to 157.8 cm in 2010 but they grew from 49.8 kg to 51.3 kg in weight over the corresponding period. Those in the middle to the elderly age groups, however, have grown appreciably in weight, like the male peers seen above, as demonstrated in terms of BMI in Table 5. The female population in their 20s and 30s have

Table 4 Changes in Body Height and Weight by Age Groups and Sex in Japan, 1950–2010

(A) Height_Males (cm)							
age/year	1950	1960	1970	1980	1990	2000	2010
4–6	102.6	105.0	108.1	109.1	110.2	109.9	110.8
14–16	152.1	157.8	163.0	165.7	166.6	167.6	167.7
20–29	161.6	162.6	165.5	168.5	170.7	171.1	170.8
30–39	160.4	161.7	163.3	166.0	168.9	170.9	171.5
40–49	159.2	160.0	162.0	163.2	166.5	169.0	170.4
50–59	157.7	158.7	160.0	161.3	163.2	165.8	168.3
60–69	154.4	156.8	157.7	159.1	161.0	162.9	165.3
70+	154.0	154.3	155.5	156.6	158.2	159.7	160.9
Weight_Males (kg)							
age/year	1950	1960	1970	1980	1990	2000	2010
4–6	16.58	17.13	18.07	18.63	19.06	18.99	18.89
14–16	44.21	48.44	52.80	55.58	56.80	57.36	56.39
20–29	55.44	56.22	58.74	61.44	64.51	65.47	65.34
30–39	55.04	56.23	59.33	62.24	65.39	68.93	70.13
40–49	54.48	56.01	58.50	61.42	64.46	67.80	70.23
50–59	53.20	54.50	56.63	58.98	62.20	64.97	67.90
60–69	51.29	52.29	54.32	56.41	59.09	62.23	64.70
70+	49.09	49.43	50.79	52.66	55.14	57.77	60.00
(B) Height_Females (cm)							
age/year	1950	1960	1970	1980	1990	2000	2010
4–6	101.6	104.0	107.4	108.4	109.1	108.7	110.5
14–16	148.0	151.1	154.0	156.0	157.0	157.4	157.2
20–29	150.2	151.4	153.3	155.4	157.3	157.8	157.8
30–39	148.8	150.2	151.7	153.4	155.8	157.6	158.2
40–49	147.4	148.8	150.4	151.8	153.5	155.9	157.8
50–59	145.7	147.0	148.3	149.6	151.3	153.2	155.1
60–69	143.5	144.2	145.3	147.1	148.5	150.6	152.3
70+	141.0	140.6	141.6	142.2	144.4	146.2	147.4
Weight_Females (kg)							
age/year	1950	1960	1970	1980	1990	2000	2010
4–6	16.01	16.60	17.65	18.14	18.58	18.50	18.74
14–16	44.09	46.89	49.30	50.17	50.07	50.46	49.83
20–29	49.84	49.40	50.36	50.78	51.28	51.00	51.26
30–39	49.25	49.24	51.52	51.97	52.72	53.37	53.93
40–49	48.25	49.57	52.01	53.46	53.60	54.73	55.40
50–59	46.69	47.87	50.61	52.05	53.50	54.40	54.30
60–69	44.80	45.73	47.78	49.85	51.73	53.47	53.40
70+	41.82	42.41	44.03	45.79	47.69	49.33	49.93

Sources: Health and Labor Ministry, *National Nutrition Survey*, various issues.

Table 5 Changes in BMI by Age Groups and Sex in Japan, 1950–2010

(A) BMI\_Males

age/year	1950	1960	1970	1980	1990	2000	2010
5	15.74	15.53	15.45	15.64	15.69	15.71	15.38
15	19.12	19.46	19.86	20.24	20.47	20.41	20.05
25	21.24	21.26	21.45	21.63	22.14	22.36	22.40
35	21.40	21.51	22.26	22.58	22.92	23.60	23.85
45	21.50	21.88	22.30	23.05	23.25	23.73	24.19
55	21.39	21.64	22.11	22.66	23.35	23.63	23.97
65	21.52	21.27	21.84	22.28	22.80	23.44	23.69
75	20.70	20.76	21.01	21.48	22.05	22.66	23.19

Notes: BMI=(weight in kg)/(height in meter)<sup>2</sup>  
age 5=ave(4:6)  
age15=ave(14:16)  
age25=ave(20:29)  
age35=ave(30:39)  
age75=ave(70+)  
each annual year=3 year average, like 1950=ave(1949:1951)

(B) BMI\_Females

age/year	1950	1960	1970	1980	1990	2000	2010
5	15.51	15.34	15.30	15.45	15.60	15.67	15.34
15	20.13	20.55	20.78	20.61	20.32	20.37	20.17
25	22.08	21.55	21.43	21.03	20.71	20.48	20.59
35	22.24	21.83	22.40	22.09	21.71	21.50	21.56
45	22.20	22.39	23.00	23.20	22.76	22.52	22.24
55	21.99	22.15	23.02	23.27	23.38	23.18	22.58
65	21.77	21.99	22.63	23.03	23.46	23.57	23.02
75	21.04	21.45	21.97	22.66	22.87	23.07	22.97

Sources: calculated by the author, using the data in Table 4:

been consistently declining in BMI, from 22.1 and 22.2 in 1950 to 20.6 and 21.6 in 2010, respectively. The authors hear that young Japanese women, not few in number, are excessively concerned about "dieting" without good reasons.

The author has been told by the medical professionals that what matters in BMI is the tendencies in the percentage or distribution of obese or near-obese people in population of any age groups, regardless of sex. This paper cannot dig into this topic, due to the absence of data and the author's analytical inability in this field.

### Comparison of Body Growth Patterns of Japanese and S. Korean Children

A few months ago, the author came across a short story in *Chosun Ilbo* on the internet, "high-school senior boys in Korea have stopped growing in height but keep growing in weight,"(February 25, 2016). He had been well aware of the similar phenomena in Japan for some time, but when he compared the reported average height of senior boys at 173.5

cm at the *2015 School Children Health Survey* with that of Japanese peers, boys of 17 years of age, reported in the *2013 National Nutrition Survey*, he was shocked to realize that the Korean senior male students were 3 to 4 cm taller (on average, to be omitted afterward) than the Japanese boys of the same age in 2010-13.

By the courtesy of *Chosun Ilbo* reporters, the author was able to communicate with Professors Soon Woo Park and Jin-Soo Moon, who administered the 2015 school health survey. Prof. Moon was very kind to send him the related data and a couple of important literatures in the field of anthropometric analyses. With very little background in clinical nutrition, physiology, physical education, etc., he tried his best to compile as reliable statistical data as possible on secular changes of body size of children by broad age categories in Korea and Japan from 1965 to present.

The surveys of body size by age have been conducted across the country every year since the end of WW II in Japan, whereas the survey on body size in Korea has been conducted in conjunction with school health surveys on selected years only, as he presumes. Although the sample sizes are quite large in both countries, the number of children in each age cell, classified by one year bracket is limited, with substantial variance in survey data, e.g., mean height of boys of 15 years of age in 2004, 2005, and 2006 are 167.8, 169.5 and 166.8 cm, respectively and mean height of boys of 14, 15, and 16 years of age in 2005 are 165.9, 169.5, and 168.2 cm in the *National Nutrition Surveys*. For the purpose of smoothing, mean values of height of boys in 14, 15, and 16 years of age in three years of 2004, 2005, and 2006 are simply averaged to represent that of 15 years old boys in 2005 for the Japan's case and three age classes are simply averaged in a single year, 1965, 1975, 1985, 1997, and 2005, respectively, in Korea as published in the survey articles provided by Professor Moon.

Table 6-A and Table 6-B provide the secular changes in (mean) body height of boys and girls from 5 year olds to 20 year olds from 1965 to 2005 in Korea and Japan, respectively.

With minor differences in detail ignored, at least two distinct features should be stressed. Koreans have become taller by 3-4 cm than Japanese at the age of 20 years at present, either males or females. They were the same in height in the mid-1980s, boys at 170 cm and girls at 157 cm, respectively. Koreans kept growing taller and Japanese ceased to grow in height since then. In the mid-1970s, at the age of 15 years old, Japanese boys were 164.2 cm, nearly 6 cm taller than the Korean peers. They aged to their mid-20s in 1985, where both Koreans and Japanese were the same in height, 170 cm, implying that Korean boys grew substantially faster than Japanese boys after the age of mid-teens during that period. Exactly the same thing took place in the last decade of investigation, i.e., both Korean and Japanese boys at the age of 15 years old were the same in height at 167 cm in 1997 and the former grew to 174.4 cm and the latter to 171.5 cm in 2005. In the related literatures, we often come across the technical word of "adolescent growth spurt" in height growth (Murata and Hibi, 1992, pp.94-95; Kouchi, 1996, pp.332-334; etc.). Observing the growing patterns of Japanese boys, they seem to have been following (on average) this concept. In this respect,

Table 6-A Comparisons of Body Height by Age Groups of Male Children:  
Korea and Japan, 1965 to 2005

(cm)

year	1965	1964-66	1975	1975-76	1985	1984-86	1997	1996-98	2005	2004-06
age_yr. old	Kr	Jp	Kr	Jp	Kr	Jp	Kr	Jp	Kr	Jp
4-6 ave	100.9	107.4	104.5	108.6	108.0	109.4	109.6	109.3	110.9	110.1
9-11ave	128.2	133.4	131.7	136.1	135.3	137.2	138.1	138.3	141.6	138.6
14-16 ave	156.0	161.6	158.6	164.2	163.5	166.1	167.2	167.3	170.0	167.4
19-21 ave	168.8	165.4	168.4	167.4	170.1	170.6	173.3	171.2	174.4	171.5

Table 6-B Comparisons of Body Height by Age Groups of Female Children:  
Korea and Japan, 1965 to 2005

(cm)

year	1965	1964-66	1975	1975-76	1985	1984-86	1997	1996-98	2005	2004-06
age_yr. old	Kr	Jp	Kr	Jp	Kr	Jp	Kr	Jp	Kr	Jp
4-6 ave	100.2	106.1	103.3	107.8	107.5	108.7	108.5	108.8	109.8	109.5
9-11ave	128.0	134.1	131.9	136.8	135.8	138.3	138.0	139.2	142.1	139.5
14-16 ave	152.2	153.2	153.9	154.8	155.8	156.3	158.9	156.7	159.7	157.0
19-21 ave	155.8	153.7	157.1	155.0	157.4	157.0	160.3	158.2	161.5	158.5

Notes: simple averages of 19 and 20 years olds for Korea.

Sources: Ji-Yeong Kim et al., 2009 for Korea and *National Nutrition Survey*, various issues for Japan.

Korean boys seem to differ distinctly from the Japanese peers.

Girls mature a few years earlier than boys, i.e., their puberty starts a couple of years earlier than boys and their physical maturity is reached around 17-18 years of age, a few years earlier than boys. Therefore, a slightly different age classification should be prepared from that for boys. The absence of professional knowledge in this area prevents us from preparing the tables with different age classification in this article. As early as in 1965, Japanese girls at the age of 15 years old were 153.2 cm, 1.0 cm taller than the Korean peers but 10 years later in 1975 Japanese girls at the age of 20 years old were 155.0 cm, 2.1 cm shorter than the Korean peers then. Again in 1985, the Japanese girls of 15 years old were 156.3 cm, 0.5 cm taller than the Korean peers then but in 1997, Korean girls of 20 years of age were 160.3 cm, 2.1 cm taller than the Japanese peers then.

Table 7-A and Table 7-B provide the secular changes in (mean) body weight of boys and girls from 5 year olds to 20 year olds from 1965 to 2005 in Korea and Japan, respectively. Compared at the maturity age of 20 years old, in 1985 either Korean boys or girls were the same in weight as the Japanese peers: boys at 61 kg and girls at 51 kg. Some 10 years later, in 1997, Japanese boys at the age of 15 years old were 56.7 kg, only 1.2 kg lighter than the Korean peers who were 57.9 kg. Again 10 years later in 2005, Korean boys at the age of 20 years old were 70.8 kg, 6.9 kg heavier than the Japanese peers. The similar phenomena are observable, i.e., in 1985, Japanese girls of 15 years old were 50.1 kg, 0.9 kg heavier than the Korean peers. But in 1997, Korean girls of 20 years of age were 55.3 kg, 4.0 kg heavier than the Japanese peers, who were 51.3 kg then.

Table 7-A Comparisons of Body Weight by Age Groups of Male Children:  
Korea and Japan, 1965 to 2005

(kg)

year	1965	1964-66	1975	1975-76	1985	1984-86	1997	1996-98	2005	2004-06
age_yr. old	kr	jp	kr	jp	kr	jp	kr	jp	kr	jp
4-6 ave	15.8	17.7	16.7	18.3	17.9	18.7	19.1	18.6	19.9	18.7
9-11 ave	25.7	29.5	27.3	31.8	29.5	33.0	34.7	34.4	39.1	34.4
14-16 ave	45.1	51.1	46.9	54.4	51.9	56.4	57.9	56.7	64.2	57.5
19-21 ave	58.2	57.0	58.7	59.1	61.1	61.8	66.3	63.2	70.8	63.9

Table 7-B Comparisons of Body Weight by Age Groups of Female Children:  
Korea and Japan, 1965 to 2005

(kg)

year	1965	1964-66	1975	1975-76	1985	1984-86	1997	1996-98	2005	2004-06
age_yr. old	Kr	Jp	Kr	Jp	Kr	Jp	Kr	Jp	Kr	Jp
4-6 ave	15.6	17.1	16.1	18.3	17.4	18.3	18.5	18.6	19.2	18.6
9-11 ave	25.9	29.6	27.2	31.8	29.6	33.1	33.8	34.0	37.6	34.0
14-16 ave	44.0	48.0	46.4	49.3	49.2	50.1	52.5	49.9	54.7	51.0
19-21 ave	51.3	50.3	51.6	50.2	51.7	50.8	55.3	51.3	55.7	51.7

Notes: the same as Table 6.

Sources: the same as Table 6.

What can be presumed to have caused these differences? The author can claim with confidence that anything related to racial matters is no answer; per capita net national income cannot be an answer again, because Japan is even today a little greater than Korea in net per capita income, despite the long-lasting economic stagnation after the Japan's economic bubble burst in the early 1990s.

In the past month or so, what caught his mind is Original Article: "South Korea's entry to the global food economy: shifts in consumption of food between 1998 and 2009," *Asia Pac J Clin Nutr* 2012 (Lee, Duffey, and Popkin). The authors emphasize that one of the unique features of food consumption in Korea is that vegetable intake has remained high, with Kimchi the largest contributor to vegetable consumption: its per capita consumption has risen steadily since 1969, increasing from 58 g to 117 g/day in 2009 (p.619). In addition, the daily per capita intake of fruits has also been increasing over time, with particularly rapid change in the 1990s. In 1995, 146 g of fruits were consumed, and this is almost a 10-fold increase from the 18.9 g consumed in 1970, and this trend has continued until 2009 (p.622); see Table X and Table XX in **Supplementary Data** for details. These changes in the Korean diet in the past few decades are just opposite to what has been taking place in Japan over the same period in at-home food consumption, particularly among the younger age groups, as we briefly mentioned in the Introduction (Table 1).

It was only yesterday while drafting this last section, when the author came across the statement, "recent epidemiological studies have shown an association between fruit and vegetable intakes with the bone density in both young and elderly subjects," Prospective Cohort Study by Sugiura and his colleagues, 2012, which refers to "fruit and vegetable



intakes and bone mineral density,” by Prynne et al., 2006; “fruit and vegetable consumption and bone mineral density,” by McGartland et al., 2004; etc. A sincere appreciation goes to Dr. M. Maotani who kindly introduced Dr. Sugiura to the author last week.

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### Supplementary Data:

Tables X and XX provide changes in per capita supply of fruits in selected countries from 1965 to 2010.

Table X Changes in per capita supply of fruits\*, selected countries, 1965 to 2010

	(kg/year)					
	Netherlands	Sweden	USA	UK	R. Korea	Japan
1965	74.43	72.34	76.19	58.72	9.86	39.00
1975	84.64	85.80	100.92	54.96	14.63	61.87
1980					23.25	
1985	93.83	75.44	109.13	64.80	35.13	51.88
1990					46.98	
1995	144.42	82.02	111.16	78.85	69.60	53.24
2000					69.56	
2005	131.58	109.75	109.84	127.02	76.12	60.31
2010	120.19	119.16	102.74	123.30	69.17**	50.82**

Notes: \* fruits for wine excluded; \*\* 2009–2011 averages for Korea and Japan.

Sources: FAOSTAT: Food Balance Sheets.

Table XX Changes in per capita supply of oranges • mandarins and apples, selected countries, 1965 to 2010

	(kg/year)											
	Netherlands		Sweden		USA		UK		R. Korea		Japan	
	oranges	apples	oranges	apples	oranges	apples	oranges	apples	oranges	apples	oranges	apples
1965	20.05	26.30	17.72	18.59	22.45	12.75	9.50	13.22	0.04	5.23	12.28	10.26
1975	25.80	30.55	26.35	23.91	41.03	14.45	11.54	12.81	1.87	7.16	30.94	7.30
1985	28.89	30.52	18.60	22.05	37.01	23.12	14.12	15.96	9.61	11.63	21.08	6.82
1995	54.55	32.14	24.93	15.34	39.65	20.01	18.10	16.90	25.75	14.75	14.18	14.14
2005	40.20	28.44	33.62	25.09	30.89	23.67	40.40	29.65	23.16	7.37	12.35	19.64
2010	27.04	25.02	47.89	19.86	27.98	24.78	37.54	28.01	20.47*	5.29*	10.00*	15.27*

Notes: oranges include mandarins; \* 2009–2011 averages for Korea and Japan.

Sources: FAOSTAT: Food Balance Sheets.

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## 執筆者紹介

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もり ひろし 森 宏 本研究所研究参与

## 〈編集後記〉

本号では、戦後日本社会の断片を捉えた2本の英語論文を掲載した。

1本目は、「The Making of the Mainstream Discourse of Sex Education in Japan: The Role of a Japanese Periodical *Sex Education Today* (1972-1983)」(邦題仮訳「日本の性教育の主要な言説の作られ方：「現代性教育研究」(1972-1983)の役割」)と題する広瀬論文である。広瀬氏は、詳細な文献調査から、1972年から83年にかけて日本性教育協会が発行した「現代性教育研究」が、大戦直後の純潔な性教育から、その後の性科学に基づいた性教育へと転換していく際に重要な役割を果たしたことを示している。

2本目は、「Secular Changes in Body Height and Weight of Population in Japan since the End of WW II in Comparison with South Korea」(邦題仮訳「日韓比較を通じた戦後日本人の身長と体重の長期的な変化」)と題する森論文である。森氏は、年代ごとの一人あたりの食品消費支出、西欧諸国の身長の長期的な変化、戦後の日本人の体格の変化、子どもの成長パターンの日韓比較など豊富なデータを示しながら、我々の食生活や体格の変化を示している。

上記のようなユニークな両論文の内容について、当該分野の研究者にとっては、貴重な論考や記録となるものと推察する次第である。編集後記担当は門外漢ではあるが、小学生の頃に受けた性教育を思い返したり、先日訪ねた高知城の襖柱が自分の身長より低かったことを思い返したりしながら、興味深く拝読させていただいた。

(K.S.)

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