

University Students' Life Skill Comparison in Japan and British Columbia, Canada

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ABSTRACT

This study held two objectives. One objective was to clarify differences in high school graduates' life skills between Japan and the province of British Columbia in Canada (B.C.). The other was to gain some implications for further development of life skills in Japan. A survey on 82 life skills was delivered to university students in Japan and B.C. in 2008. The participants were asked the same three questions for each life skills: if the life skills was one the participants were already practicing ("Practice"), if the life skills was one the participants wanted to learn more to improve their life ("To be improved"), and if the life skills was one the participants expected people should learn in Home Economics ("Expectation").

KEY WORDS : University Students, Life Skills, International Comparison, Survey, Canada

I Introduction

1. Home Economics education in Japan and British Columbia, Canada

Although there were no more home economics class hour reductions with the Japanese newest course of study, the home economics class hours of all the school levels stayed within the same limited hours as the 1998 and 1999 course of study. With this situation, on one hand, it is almost impossible to accomplish the same home economics education as the former 1989 course of study, nor to have children nurture truly affluent life skills. On the other hand, do high school graduates, who studied under the 1989 course of study with more home economics class hours, have enough life skills to manage their lives more efficiently?

Further, the situation of home economics education in other countries reports that the content of home economics education recognized in Japan is not necessarily taught under "Home Economics"¹⁾. Then, what kind of life skills do people have in other countries when they finish their primary and secondary school education?

This study chose to look at the province of British Columbia in Canada (B.C.). It was because B.C. home economics education appeared to have some similarities to Japanese home economics education. For example, B.C. has kept the subject name "Home Economics," when most of the other provinces in Canada teach home economics content under different names (Smith & de Zwart, 2010), and offers home economics programs and courses at both the lower and upper secondary schools.

Yet, B.C. has some differences from Japan. In B.C.'s elementary school level, there is no subject called home economics. However, "Personal Planning" (British Columbia Ministry of Education, 1999) was offered to Kindergarteners and students from Grade 1 to 7 between 1997 and 2008. There was

also an advanced subject of "Personal planning," "Career and Personal Planning" (British Columbia Ministry of Education, 1997) from Grade 8 to 12 at the secondary school level. Both subjects were required and grouped under three broad organizers, "Planning Process," "Personal Development" and "Career Development." Further, "Personal Development" had 6 suborganizers, "Healthy Living," "Mental Well Being," "Family Life Education," "Child Abuse Prevention," "Substance Abuse Prevention," and "Safety and Injury Prevention." The same organizers and suborganizers were used throughout Kindergarten to Grade 12. Advanced learning outcomes were set according to the individual grades. They contain health management components such as physical health, mental health, sex education and substance abuse. Interestingly, the learning outcomes of "Personal Development" indicate its embracement of home economics education as well. For example, food content was in "Healthy Living," family and child rearing and relationship contents were in "Family Life Education" and "Child Abuse Prevention," housing content was in "Safety and Injury Prevention." "Career Development" included citizenship content.

B.C. had "Home Economics 8 to 10" (British Columbia Ministry of Education, 1998) for Grade 8 through 10 at the secondary school level. "Home Economics" was one of the four "Applied Skills" subjects. "Business Education," "Information Technology" and "Technology Education" were the other subjects of "Applied Skills." During the secondary school enrollment period, students were required to take 4 credits from "Applied Skills" or the other subject area, "Fine Arts." It means that not all students chose "Applied Skills" and further took "Home Economics" in order to fulfill all the 4 credits. "Home Economics 8 to 10" had four organizers, "Addressing Needs and Wants," "Working with Food Resources," "Working with Textile Resources" and "Nurturing Growth and Development."

For Grade 11 and 12, B.C. offered "Home Economics 11 and 12" (British Columbia Ministry of Education, 1998). It consisted of four elective home economics courses, "Family Studies," "Cafeteria Training," "Food Studies" and "Textile Studies". Again, because they were elective courses, not all students took those home economics courses in Grade 11 and 12.

2. Life Skills

The word, 'life skills,' originates in the health education field. Aoki (2007) points out two mainstream 'life skill' origins that were introduced to Japan. One is a health education program called "Know Your Body" created by the American Health Foundation. "Know Your Body" is a comprehensive, skill-based health promotion program (Resnicow, Cross & Wynder, 1993, p.189). The other mainstream is the World Health Organization's project, "Life skills education in schools." WHO (1997) defines life skills as "abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and changes of everyday life" (p.1). However, these life skills were developed in the health education field, and differ from life skills that home economics education focuses on. According to Aoki (2007), life skills in home economics are skills to identify new challenges to cope with in our life and improve and enhance our life with concrete solutions by looking into our life structure (p.11). She also mentions that those skills are to create personal lives as well as society (p.11). The related concepts have been also discussed in many publications of the Japanese home economics education field (Naito, 2000; Tanaka, 2000; Saito, 2000). There are other definitions for life skills in the life science field, such as "independent ability of life" (Yamada & Takagi, 1994), and "not only knowledge and techniques, but also integrated skills related to life" (Nakata, Onishi & Saito, 2005).

Learning from these concepts of life skills, this study defined life skills as necessary skills for

individuals to live independently and interdependently, as well as to create better personal and family lives and society for now and the future. The word, 'skills,' includes attitude, knowledge and practical techniques.

II Research objectives

Therefore, one objective of this study was to clarify differences in high school graduates' life skills between Japan and B.C.. The other objective was to gain some implications for further development of life skills in Japan.

III Research Methods

A questionnaire was created to conduct a survey on life skills. The life skills included in the questionnaire were brought from an American home economics textbook "Skills for Life" (Couch, Felstehausen & Hallman, 2000). The reason to have referred to "Skills for Life" was that its title itself stood for life skills. It was also found that the life skills defined in this study conform to the elements in "Skills for Life." It encompasses a broad range of life skills as it is designed to help students achieve success for now and the future (Couch et al., 2000, p.xxxi). It contains the same elements the 1989 course of study home economics taught, as well as some elements that can be expanded on in future Japanese home economics education, such as career planning, health and self-concept. In order to make a questionnaire, first overlaps of the "Skills for Life" content and the 1989 course of study home economics education content were extracted. Then, some life skills related to career planning, health and self-concept in "Skills for Life" were added into the questionnaire.

A pre-study was conducted with 47 participants in 2005, asking what life skills should be studied. A few life skills were added based on results. So the originally developed questionnaire had 143 life skills. Another pre-study was conducted in 2007 by delivering the questionnaire to 560 participants in Japan. It was found that the 143 life skills were too many to answer. Then, the 143 life skills were modified to 82.

The finalized questionnaire with the 82 life skills were from 13 categories; Decision making and resource management(6), Consumerism and economics(4), Environment and natural resources(2), Career planning(4), Health management(7), Self-concept(4), Family(6), Human relations(7), Citizenship(2), Child rearing(11), Clothing(11), Foods(12) and Housing(6). The bracket number after each category shows the number of life skills included in the category. The participants were asked the same three questions for each life skills: if the life skills was one the participants were already practicing ("Practice")²⁾, if the life skills was one the participants wanted to learn more to improve their life ("To be improved"), and if the life skills was one the participants expected people should learn in Home Economics ("Expectation").

This study understood that when learned life skills are practiced in our daily life, such practice bears motivation to improve the skills, as well as induces an expectation to have the skills learned at school, especially as home economics content. The study did not pursue whether the life skills were learned in home economics at school or through daily life experience, and believed that the life skills are necessary skills for individuals to live their lives no matter where they were acquired.

The questionnaire was first written in Japanese, and then translated into English. Two native English speakers proofread the English questionnaire. The questionnaire sheets were delivered to participants through their university instructors before their classes, and collected at the following week classes and sent to the researchers, or mailed directly from participants to the researchers.

Table 1 and 2 show the effective questionnaire numbers, collection rates and some characteristics of the participants. The Japanese participants were 272 university students (Males: 107, Females: 163, Gender N.A.: 2). The participants were either 3rd or 4th year undergraduate students, or graduate students, and finished their school education under the 1989 course of study. The majors of most Japanese participants were Education and Life Science. They were mainly from the Chubu region and the rest of the participants were from other regions in Japan. The B.C. participants were 254 university students (Males: 30, Females: 218, Gender N.A.: 6). They were between 1st and 4th year undergraduate students and had their home economics education with the home economics curriculum implemented between 1999 and 2008 in B.C.³⁾. Most B.C. participants' major was related to Life Science. The survey was undertaken in March, October, November and December, 2008 in Japan, and March, 2008 in B.C..

The application software SPSS Basic version 16 was used to conduct the statistical analysis. There was no significant difference between the male and female participants with a t-test on the population mean value of the two gender groups in either country. Therefore, this paper only analyzed and discussed differences between Japan and B.C..

The researchers were aware of the limit in causal explanation because the two countries have not only curriculum differences, but cultural differences. Those embedded differences could influence people's life skills in each country. However, this study believed that a comparative study would still bring some aspects for each country to learn from each other for further improvement.

Table 1: Delivered and collected questionnaire numbers & participants' gender

Country	Delivered number	Effective collection number	Effective collection rate	Males	Females	Gender N.A.
Japan	500	272	54.4 %	107	163	2
B.C.	536	254	47.4 %	30	218	6

Table 2: Participants' majors & regions of collection

Country	Education	Life Science	Language Art	Others	Total	Regions of collection	
						Chubu	Other regions
Japan	132	102	18	20	272	143	129
						British Columbia	
B.C.	—	222	32	—	254	254	

IV Results and Discussion

1. Life skills in "Practice"

A nonparametric test was implemented in order to compare the Japanese average "Practice" percentage of each of the 13 categories to the B.C. average. B.C. showed significantly higher rates in "Practice" with all the 13 categories. Overall, the B.C. participants were practicing more life skills than the Japanese participants.

The top and bottom three "Practice" categories were examined next (Table3, Table4). It was not possible to look into details of all the categories in this paper due to the space limitation. With the same reason, the top and bottom three categories of "To be improved" and "Expectation" were analyzed in the following sections.

The Japanese highest "Practice" category was "Self-concept" (58.6%). The second was "Health management" (57.2%) and third was "Human relations" (54.4%). All of them were less than 60%,

Table 3: Top three "Practice" categories

Country	Highest		2 nd		3 rd	
Japan	Self-concept	(58.6%)	Health management	(57.2%)	Human relations	(54.4%)
B.C.	Health management	(78.6%)	Citizenship	(77.8%)	Self-concept	(74.2%)

Table 4: Bottom three "Practice" categories

Country	Lowest		2 nd Lowest		3 rd Lowest	
Japan	Child rearing	(25.3%)	Consumerism & economics	(31.6%)	Career planning	(33.1%)
B.C.	Child rearing	(35.6%)	Consumerism & economics	(46.3%)	Career planning	(55.9%)

even though they were the top three. The Japanese lowest "Practice" category was "Child rearing" (25.3%). The second lowest was "Consumerism and economics" (31.6%) and third lowest was "Career planning" (33.1%).

The B.C. highest "Practice" category was "Health management" (78.6%). The second was "Citizenship" (77.8%) and third was "Self-concept" (74.2%). All three went beyond 70%, which were higher than the Japanese top three. As the same as the Japanese, the B.C. lowest "Practice" category was "Child rearing" (35.6%), second lowest was "Consumerism and economics" (46.3%), and third lowest was "Career planning" (55.9%).

"Self-concept" was in the top three for both Japan and B.C.. However, "Self-concept" is not included in Japanese home economics education. It is assumed that other education contributed to the development of the Japanese participants' "Self-concept" skills. It is also interesting to note that B.C. "Practice" percentages of three out of the four "Self-concept" life skills were significantly higher than Japan when a chi-square test was applied. Those three were "Identifying your uniqueness as an individual" ($P < 0.001$), "Understanding physical and mental development during Adolescence" ($P < 0.001$) and "Understanding and accepting yourself" ($P < 0.01$). It showed that significantly more B.C. participants had confidence in practicing those "Self-concept" life skills. It is assumed that "Personal Development" in "Personal Planning" and "Addressing Needs and Wants" in "Home Economics 8 to 10" helped the B.C. participants' development of those "Self-concept" life skills.

At a glance, it seems that most of the Japanese and B.C. participants were well practicing their mental and physical health management since both Japanese and B.C. "Health management" practicing rates were in the top three. However, "Health management" is not mainly taught in home economics education in Japan. Other education, beside home economics, seems to have assisted the development of the Japanese participants' "Health management." As well, the B.C. participants' "Practice" of the six life skills in "Health management" was significantly higher than the Japanese participants. Especially, "Understanding health problems caused by smoking" and "Understanding dangers associated with alcohol consumption" were the B.C.'s second highest "Practice" life skills among the 82 skills. This result seems to be reflected on the health education that was emphasized in "Substance Abuse Prevention" in "Personal Planning" throughout all the grades in B.C..

As well, the Japanese participants had high "Human relations" practice. However, again, a chi-square test showed that B.C. "Practice" percentages of four out of the seven "Human relations" life skills were significantly higher than Japan. The four were "Understanding the relationship between communication and culture" ($P < 0.001$), "Relating to people of different gender" ($P < 0.01$), "Communicating effectively to take care of elderly people" ($P < 0.001$) and "Resolving conflicts with others" ($P < 0.05$). The Japanese participants studied family relations in home economics education. But, it seems to have helped the participants' limited "Human relations" skills. Significantly more

participants in B.C. had the human relationship skills to relate to people with further differences from oneself. It implies that the relationship content included in "Family Life Education" in "Personal Planning" and "Family Studies" in "Home Economics 11 and 12" assisted the B.C. participants' development of broader human relationship skills.

B.C. showed high practice to the "Citizenship" skills as well. This also appears that citizenship was well perceived by the B.C. participants. The citizenship content was taught in "Career Development" of "Personal Planning."

The bottom three "Practice" categories of both Japan and B.C. were "Child rearing," "Consumerism and economics" and "Career planning." The reason why "Child rearing" was the lowest is assumed that the "Child rearing" category included understanding special needs for children with disabilities, adopted children, children of single parents, children of teen parents and abused children. Most participants in both Japan and B.C. were unfamiliar with those special need children. The second lowest "Consumerism and economics" contained "Making an effective and fair complaint with your unsatisfactory purchase," "Understanding different kinds of illegal business practices and their characteristics" and "Using financial services effectively" that were skills most participants, as university students, did not need to practice in their daily life. "Career planning" was also in the bottom three. Both Japanese and B.C. participants shared the same challenge as young adults who were expected to enter the world of work soon. Yet, comparing the "practice" rates between Japan and B.C., significantly more B.C. participants showed their practice of "Career planning" skills. This can be reflected on the thorough education of "Career and Personal Planning" in "Personal Planning" which started even from the kindergarten stage in B.C..

2. Life skills "To be improved"

A nonparametric test was again implemented in order to compare the Japanese average "To be improved" percentage of each category to the B.C. average. Japan had significantly higher "To be improved" percentages with three categories, "Health management," "Self-concept" and "Citizenship." Japan showed lower "Practice" rates with those categories. Therefore, it is understandable to see more desire to improve life skills in those categories for Japan. Japan could have showed desire to improve the life skills of even more categories since most "Practice" rates were lower than B.C., but did not. B.C. showed significantly higher "To be improved" percentages with five categories, "Decision making and resource management," "Consumerism and economics," "Environment and natural resources," "Child rearing" and "Clothing." B.C. had significantly higher "Practice" rates with all 13 categories. Still, B.C. had more motivation to improve the life skills in those five categories.

Next, the top and bottom three "To be improved" categories were examined (Table5, Table6). The Japanese highest "To be improved" category was "Career planning" (57.6%). The second was "Child rearing" (56.4%) and third was "Consumerism and economics" (51.9%). Again, as with the "Practice" results, all of them were less than 60 %, even though they were the top three. The Japanese lowest "To be improved" category was "Health management" (33.9%). The second lowest was "Clothing" (35.2%) and third lowest was "Self-concept" (39.3%).

The B.C. highest "To be improved" category was "Child rearing" (63.9%). The second was "Consumerism and economics" (55.5%) and third was "Career planning" (55.2%). The B.C. top three "To be improved" percentages were not as high as its "Practice." The highest was only just above 60%. The B.C. lowest "To be improved" category was "Citizenship" (28.4%), second lowest was "Health management" (30.5%), and third lowest was "Self-concept" (35.9%).

Table 5: Top three "To be improved" categories

Country	Highest	2 nd	3 rd
Japan	Career planning (57.6%)	Child rearing (56.4%)	Consumerism & economics (51.9%)
B.C.	Child rearing (63.9%)	Consumerism & economics (55.5%)	Career planning (55.2%)

Table 6: Bottom three "To be improved" categories

Country	Lowest	2 nd Lowest	3 rd Lowest
Japan	Health management (33.9%)	Clothing (35.2%)	Self-concept (39.3%)
B.C.	Citizenship (28.4%)	Health management (30.5%)	Self-concept (35.9%)

The Japanese top three "To be improved" categories were the same as the B.C. top three. The "Practice" rates of those three were the bottom three both in Japan and B.C.. It can be said that the Japanese and B.C. participants showed a high degree of desire to improve those life skills because of their mal-practice.

On the contrary, the high "Practice" categories such as "Health management" and "Self-concept" fell into ones of the lowest "To be improved" categories both in Japan and B.C.. It means that they were not interested in improving those life skills because they were already able to practice them.

It was characteristic that the Japanese second lowest "To be improved" category was "Clothing." It can be assumed that this result came from the fact that clothing hands-on life skills were not well emphasized in the 1989 home economics course of study and in Japanese current daily life. "Citizenship" was the B.C. lowest "To be improved" category. This is attributed to the "Practice" results. Only a few B.C. participants revealed any desire to improve "Citizenship" life skills. The rest seemed to have confidence in their citizenship practice.

3. Life skill learning "Expectation"

A nonparametric test was again implemented in order to compare the Japanese average "Expectation" percentage of each category to the B.C. average. Only "Consumerism and economics" and "Clothing" were the ones Japan indicated significantly higher "Expectation." B.C. indicated significantly higher "Expectation" with ten out of the 13 categories. This assured that the B.C. participants recognized more categories of life skills to be learnt in home economics education.

Again, the top and bottom three "Expectation" categories were examined (Table7, Table8). The Japanese highest "Expectation" category was "Foods" (61.1%). The second was "Environment and natural resources" (56.8%) and third was "Consumerism and economics" (55.5%). In common with the "Practice" and "To be improved" results, all of them were around 60%. The Japanese lowest "Expectation" category was "Self-concept" (24.5%). The second lowest was "Human relations" (25.5%) and third lowest was "Career planning" (36.7%).

The B.C. highest "Expectation" category was "Health management" (71.9%). The second was "Environment and natural resources" (68.3%) and third was "Foods" (65.0%). The B.C. top three "Expectation" rates were around 70%, which were higher than Japanese top three. The B.C. lowest "Expectation" category was "Self-concept" (40.7%), second lowest was "Clothing" (44.7%), and third lowest was "Human relations" (46.6%).

"Foods" and "Environment and natural resources" gained high expectation to be learned in home economics from both Japanese and B.C. participants. This must be because foods are traditionally home economics content as well as being a critical human need. Besides, hands-on food skills are not commonly included in other school subjects.

Table 7: Top three "Expectation" categories

Country	Highest	2 nd	3 rd
Japan	Foods (61.1%)	Environment & natural resources (56.8%)	Consumerism & economics (55.5%)
B.C.	Health management (71.9%)	Environment & natural resources (68.3%)	Food (65.0%)

Table 8: Bottom three "Expectation" categories

Country	Lowest	2 nd Lowest	3 rd Lowest
Japan	Self-concept (24.5%)	Human relations (25.5%)	Career planning (36.7%)
B.C.	Self-concept (40.7%)	Clothing (44.7%)	Human relations (46.6%)

The high expectation from both Japan and B.C. toward "Environment and natural resources" can be explained with the fact that our environment and natural resources are not only closely related to foods, but also drawing great world-wide attention because of the global warming effect toward our daily life.

The Japanese participants also showed high expectation on "Consumerism and economics." It is assumed that this expectation was forged from constant consumer issues in Japan. Consumer issues have become a social problem, and even triggered the government to set up a consumer agency, which also drew nationwide attention.

"Health management" was the B.C. highest "Expectation" category. The B.C. participants recognized "Health management" as home economics content. In the background of this expectation, there were B.C.'s "Personal Planning" and "Career and Personal Planning" programs which embraced some home economics content as well as health management content.

"Self-concept" was the lowest "Expectation" category for both Japan and B.C.. It seems that both Japanese and B.C. participants did not have much expectation to have "Self-concept" skills learned in home economics. This can be assumed by their high "Practice" and low desire "To be improved" in "Self-concept."

"Human relations" was in both the Japanese and B.C. bottom three. In particular, the Japanese expectation was less than 20% for four out of the seven life skills in "Human relations." On the other hand, according to the "Human relations" average "To be improved" rates, about 50% of the Japanese and B.C. participants showed a desire to improve the "Human relations" life skills. This describes that "Human relations" life skills had some demand of improvement in both Japan and B.C., but they were not expected to be taught in home economics. It is assumed that the Japanese participants expected other subjects or class hours, for example "Moral education," to teach "Human relations" life skills.

Likewise, the Japanese participants' low expectation to have "Career planning" learned in home economics can be explained by their expectation toward "Integrated Studies," which often comprises of career planning content at some schools.

B.C. revealed low expectation in "Clothing." With each "Expectation" rate of the eleven life skills in the "Clothing" category, it is found that hands-on skills like washing, repairing, sewing by machine, and ironing had more than 50% expectation, but consumer related life skills, such as purchase planning and clothing size, gained low expectation to be taught in home economics. B.C.'s "Textile Studies" in "Home Economics 11 and 12" tends to put more focus on skills such as sewing and constructing garments. This seems to have affected the overall "Clothing" category low expectation.

V Summary and implications for future life skill development

To summarize this study, it can be said that the high "Practice" categories in both Japan and B.C., such as "Self-concept," "Health management" and "Human relations," are necessary life skill categories for both Japan and B.C. because more participants were practicing them. The Japanese participants did not show much desire to improve the "Self-concept" and "Health management." Moreover, they did not have much expectation to have the "Self-concept" and "Human relations" learned in home economics. This implies that the Japanese participants did not recognize "Self-concept" and "Human relations" life skills as contents taught in home economics. However, both categories included some skills to which B.C. indicated significantly higher "Practice" rates than Japan. Besides, the textbook this study made reference to, "Skills for Life," included them as home economics content. Therefore, it should be examined if Japanese home economics education can contribute to an improvement of these life skills.

The low "Practice" life skills with high desire to improve, especially ones Japanese home economics education encompasses, such as "Consumerism and economics" and "Child rearing," need to have greater emphasis and establishment in home economics for better practice. "Career planning" had low "Practice" and high "To be improved." It meant that "Career planning" has a high demand to be improved, and gives the potential for home economics to contribute to such improvement. Yet, the Japanese participants showed low "Expectation" in "Career planning." It indicates that they did not have an idea that "Career planning" is a part of home economics content. Actions may need to be taken to shed such attention to home economics because home economics can take an important role for career education.

Overall, B.C. showed better results in "Practice," "To be improved," and "Expectation" than Japan. A further and detailed analysis needs to be carried out to clarify the causal explanation for this. However, it is assumed the persistent, interdisciplinary education helped the B.C. participants' life skill development. That is, the B.C. participants completed "Career and Personal Planning" in Grades 8 through 12 at the secondary school level as well as "Personal planning" in Kindergarten and Grade 1 to 7. Both were required subjects. Not all the content of those subjects were something Japanese education may call home economics. Still, "Personal Planning" and "Career and Personal Planning" were able to familiarize students with home economics content. In fact, some participants recognized those subjects as home economics in the survey. On top of this, this study selected the participants who took one or more elective home economics courses at the secondary school level in B.C.. Therefore, it can be said that not only the home economics education at the secondary school level, but the home economics related education throughout kindergarten to Grade 12 supported the high life skill practice, motivation for improvement, and expectation to study in home economics.

Therefore, one implication for future life skill development is setting an early elementary program which includes home economics content, such as "Personal planning" in B.C.. As the results showed, an opportunity to learn home economics content at the earlier stage seemed to support the participants with more life skill practices. It can be said that Japanese home economics education may raise the life skill standard by offering such early stage instruction.

The other implication is that Japan needs not only to maintain the compulsory home economics education programs from the elementary school to senior high school level, but also secure a substantive amount of class hours for all school stages. The Japanese participants for this study accomplished their education under the 1989 course of study, which had more class hours than the

current course of study. If the Japanese participants were people who had studied under the current course of study, the results could have been worse. As such, it can be said that both the 1998 and 1999 course of study and newest 2008 and 2009 course of study may have a greater difficulty to develop life skills with less class hours and credits for home economics education. Only by regaining the much-needed class hours, Japanese home economics education would sustain the same life skills as what the Japanese participants of this study demonstrated.

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Footnotes:

- 1) The situation of home economics education in other countries can be found in "Kateika no kariyuramu nokaizen ni kansuru kenkyu: Shogaikoku no doukou [A study for the home economics curriculum reform: Movement in other countries]" by National Institute for Educational Policy Research(2005) and "Igirisu, amerika, kanada no kateika kariyuramu[Home economics curricula in UK, US and Canada] by Nihon kateika kyouiku gakkai oubei kariyuramu kenkyukai [Japan Association of Home Economics Education European and North American curriculum research study group](2000).
- 2) Each participant's frequency of life skill practice can be different. However, the frequency of life skill practice was not asked in the questionnaire. This study attempted to encompass as many kinds of life skills as possible to be feasible to conduct a survey. Therefore, it asked only whether or not participants assessed that they already possessed and were practicing each life skills.
- 3) The B.C. curricula introduced in this paper were only applicable to the participants of this study. B.C. has undertaken curriculum revisions on "Personal Planning," "Career and Personal Planning" and "Home Economics." The current curricula differ from the ones the participants studied under.

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