

An Investigation of the Cross-Cultural Comparability of Social Skills

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Introduction

In recent years, social skills training has been conducted in countless schools and similar institutions in the attempt to improve communication ability not only for children who have learning disabilities or developmental disabilities, but also for children without disabilities (e.g., Sato & Sato, 2006; Shimada & Iida, 2006; Watanabe & Yamamoto, 2003). Also, in the last few years, the inclusion of the measurement of social skills in the PISA (Programme for International Student Assessment) test administered by the OECD (Organisation for Economic Co-operation and Development) have come under review (Schleicher, 2003), and interest in social skills has been increasing (Sato & Sato, 2006).

The PISA test, which has generated so-called “PISA Shock” not only in Germany but in Japan as well (e.g., Ishii, 2007), up until the present day, has conducted an international comparison of reading literacy, mathematical literacy, science literacy, problem-solving ability, and so on. The possibility of conducting an evaluation of social skills in the same fashion has been considered, but social skills are heavily influenced by the cultural context, and it is believed that since the standards for evaluation of social skills are set within the frameworks of given societies, any cross-cultural comparison beyond these frameworks is essentially impossible (Aikawa, 2000, 2007).

However, if these differing social frameworks share some commonalities, comparison of those commonalities is possible. More specifically, it is believed that if, within this category of social skills, some subscale skills can be considered common between different societies, then cross-cultural comparison is possible across dif-

fering societies. Thus, this study undertakes to consider based on survey data whether the cross-cultural comparison of social skills is possible, and if so, then with regard to what sort of subscale skills this is possible. In practical terms, data were collected in different cities using an identical scale, and then it was investigated whether common subscale skills could be configured or not. If common subscale skills are indeed able to be constituted, then cross-cultural comparison of these skills between different societies is believed possible.

Since there are various definitions for social skills (e.g., Ishii, 2006), and since these vary depending on the context and the purpose of each study, no consistent definition of social skills currently exists among researchers. This study defines social skills as “those behaviors that help students adjust to their school life, maintaining good relationships with their peers and teachers, without compromising their individuality.” This definition is the one used for development of the Social Skill Inventory for Middle School Students, SSI-M (Sugimura, Ishii, Zhang, & Watanabe, 2007) utilized in this study.

SSI-M was developed as a scale for measuring the social skills of middle school students, and its high degree of reliability and validity was confirmed by Sugimura et al. (2007). To the knowledge of the authors, this is the only standardized scale used within Japan as a scale for measuring the social skills of children.

There are also other scales for measuring the social skills of children, such as the scale for school life skills (for junior high school students) developed by Iida and Ishikuma (2002). This scale focuses on skills required by junior high school students in coping with developmental issues and educational issues, and is intended to prevent problems such as inability to adjust to school life. Also, the scale measuring the social skills of elementary school students developed by Shimada, Togasaki, Okayasu, and

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Sakano (1996) was created for the purposes of investigating the connection between the acquisition of social skills in children and the alleviation of school-related stress. The scale for measuring the social skills of junior high school students developed by Togasaki, Okayasu, and Sakano (1997) was also created for the purposes of investigating connections with the alleviation of school-related stress. However, these studies did not have large sample sizes, and they did not achieve to standardize the scale scores.

On the other hand, standardized documentation for the Kiss-18 (Kikuchi, 1988), which is widely used as a scale for social skills, is provided by Kikuchi (2007). However, this was developed for use with adults and was not created for the purpose of measuring the social skills of children.

For this study, since there is an abundance of social skills training conducted in schools, and also since the PISA test targets children of 15 years of age, it was decided to use the definition and scale from Sugimura et al. (2007) in conducting research investigating the cross-cultural comparability of the social skills of children.

Method

Scale

As explained above, the Social Skill Inventory for Middle School Students (SSI-M) scale was used. This scale has been confirmed to possess high reliability and validity as a scale for measuring the social skills of middle school students, and is a scale for which standardization has been carried out within Japan. SSI-M is a scale for measuring social skills that is composed of 5 subscale skills: relationship-building skills, basic manners skills, skills in consideration toward others, assertiveness skills, and emotion regulation skills. Each subscale includes 10 items, for a total of 50 items. It features two response methods; "rather true (1)" and "rather false (0)."

The definition of each subscale skill is as follows. Furthermore, each practical item on the scale is indicated on Table 3 and elsewhere.

Relationship-building skills: Skills required for establishing relationships with new friends.

Basic manners skills: Skills for observing fundamental manners.

Skills in consideration toward others: Skills for behaving in consideration toward others within friend relation-

ships and in groups.

Assertiveness skills: Skills for expressing one's own thoughts and feelings in a non-aggressive fashion, without infringing on the rights of other pupils or teachers.

Emotion regulation skills: Skills for regulation or control of feelings.

Selection of Survey Cities

PISA is principally administered by the OECD, and it is centered around European and American survey institutions such as ETS (USA), ACER (Australia), Cito (Netherlands). Accordingly, it is believed that the question items of PISA reflect Western rhetoric in their contents (Horie, 2007).

However, if we accept that social skills have their roots in societies, which is to say in cultures, as stated by Aikawa (2007), then we should not suddenly apply to Western countries a scale for measuring social skills that was developed in Japan and then compare the results. It is believed that instead of this, conducting surveys first in Asia, which represents a comparatively closer cultural sphere, and then undertaking comparison with Japan will be more efficient from the viewpoint of cross-cultural comparison of social skills. Asian cities were selected for survey in this study in order to reflect a cultural sphere relatively closer to Japan. The Chinese cities of Shanghai and Shenzhen, as well as Yangon in Myanmar (Burma), were selected.

Shanghai and Shenzhen are located within the cultural sphere of Chinese character and cities where modernization is well underway. Therefore, they were considered appropriate for comparison with Tokyo, where the Japanese survey was conducted. Yangon was the capital of Myanmar until 2006, and it remains the largest city in Myanmar. Other reasons for its inclusion among the survey cities is its predominance of Buddhism and friendly stance towards Japan, as well as the inroads made by many Japanese corporations in recent years.

Translation

As explained in the previous section, Shanghai and Shenzhen (China), and Yangon (Myanmar) were selected as target cities in which to conduct testing of junior high school students. The SSI-M thus required translation into Chinese and Burmese languages.

The services of a professional specialist were sought

for the Chinese translation. The appropriateness of the translation was subsequently verified by a Chinese researcher with over 10 years residence in Japan and with experience of writing academic papers, books and other documents in Japanese. Additionally, before commencement of the survey, further verification and revision of survey items was performed in Shenzhen by a Chinese researcher well-versed in Japanese, as well as a local junior high school student, in order to confirm that there were no items with unclear meaning or using expressions unfamiliar to local junior high school students.

For the Burmese translation, at first, these were translated into English by a researcher who developed the SSI-M items and has more than 3 years of experience as an international student in the USA, in conjunction with a Japanese national with a long history of residence in New York and experience working in an embassy of a western country. This English translation and the Japanese original were then used as a base for a translation into the Burmese language, which was performed by a Burmese researcher resident in Yangon. This researcher previously worked as a local high school English teacher and had also studied in Japan for nearly 7 years, acquiring a doctoral degree there. The translated Burmese document was then checked by a Burmese student who has two experiences studying in Japan, in order to verify that there was no discrepancy in content with the English and Japanese versions.

Conducting Survey

The survey period was April 2007 for Shanghai, March 2007 for Shenzhen, and February 2007 for Yangon. Also, for the Japanese data, the data used was from the period of scale development, which was conducted in Tokyo between September and November 2006.

With regard to conduct of the Shanghai, Shenzhen, and Yangon surveys, local junior high school teachers were approached on our behalf by local researchers engaged at local universities and requested to conduct these surveys targeting junior high school students. In order that issues such as locality or parental socio-economic status did not bias the results, these surveys were conducted at multiple schools wherever possible.

Surveys were conducted at each school using the time between classes. Local university students carried out data entry tasks from the collected response sheets under supervision of the local researchers.

Result

Subjects

Table 1 shows the number of subjects in each city that returned valid responses without missing values. The number of subjects was 250 in Shanghai, 276 in Shenzhen, 1901 in Tokyo, and 342 in Yangon, meaning that the cooperation of roughly 300 persons was obtained in each of the 3 non-Japanese cities.

The number of schools selected was 3 in Shanghai, 1

Table 1 Sample size

	City				Total
	Shanghai	Shenzhen	Tokyo	Yangon	
Grade					
6	–	–	–	101	101
7	121	84	1004	109	1318
8	122	90	695	122	1029
9	–	93	188	–	281
unknown	7	9	14	10	40
Sex					
male	143	147	1000	194	1484
female	100	120	887	138	1245
unknown	7	9	14	10	40
Total	250	276	1901	342	2769

in Shenzhen, 9 in Tokyo, and 5 in Yangon. In Shanghai, the 3 schools were selected to represent higher, middle, and lower parental socio-economic status. In Shenzhen, the junior high school affiliated with a university, which did not necessarily indicate prominent academic ability, but rather that the parental socio-economic status of students was distributed in the mid to higher levels. The 9 Tokyo schools were all public junior high schools, and the selection included schools recognized as the best in their districts, as well as middle-ranked schools. In Yangon, 2 schools from the central urban district, 2 schools from the peripheral urban district, and 1 school from a suburban district were selected.

With regard to school grade, students in the first year of junior high school in Shanghai, Shenzhen, and Tokyo are in their 7th year of education, but since the school age in Burma is one year earlier, students in the first year of junior high school there were calculated as being in their 6th year of education. In Shanghai and Tokyo, due to the timing of the survey, it proved difficult to obtain data on third-year junior high school students, and so subjects from this school year are either fewer or non-existent.

A comparison of subjects by sex indicates that male students were slightly more numerous than female students in each city examined.

Reliability

Table 2 shows the alpha coefficient value for each subscale skill. Looking at Table 2, it can be seen that the alpha coefficient value for each subscale skill was between 0.55 and 0.79 in Shanghai, between 0.57 and 0.80 in Shenzhen, between 0.72 and 0.87 in Tokyo, and between 0.36 and 0.64 in Yangon. In Yangon, values below 0.5 (indicating that the error variance was greater than the variance of true scores) were observed for the 3 subscale

skills of basic manners, consideration toward others, and assertiveness.

Examining the size of the alpha coefficient values for each subscale skill in the 3 non-Japanese cities, it can be seen that relationship-building skills were the highest (0.79 in Shanghai, 0.80 in Shenzhen, 0.64 in Yangon: same order follows below), followed by consideration toward others (0.68, 0.65, 0.47), and then emotion regulation (0.65, 0.66, 0.56).

Factor Analysis

In order to examine whether latent factors identical to Tokyo could be assumed for each city in regards to the behind the question items, confirmatory factor analysis was first performed for each city, targeting a factor loading matrix of the factor analysis results using the Tokyo data. However, for every city, it was judged impossible to assume that structure of factors was completely identical to Tokyo.

Thus, explanatory factor analysis was performed for each city, and the results compared. Initial common values were attributed by the max method, and then factor analysis conducted using the least squares solution and the promax rotation method. Tables 3 to 6 show the analysis results for each city. However, the sequencing of question items follows the results for Tokyo.

Table 3 shows the results for Shanghai. In Shanghai, the question items for emotion regulation skills grouped to form a single factor (F4). The "consideration toward others" items also came close to grouping into a single factor, and several items from basic manners and relationship-building also weighed heavily on this factor (F1). 6 items within relationship-building and 5 items within assertiveness also grouped together to form a single factor (F2). Within the basic manners items, the remaining items (with low relation to the "consideration toward

Table 2 Alpha coefficient of scales

	Shanghai	Shenzhen	Tokyo	Yangon
relationship-building	.79	.80	.87	.64
basic manner	.59	.57	.74	.46
consideration toward others	.68	.65	.76	.47
assertion	.55	.63	.76	.36
emotion regulation	.65	.66	.72	.56
Total	.80	.83	.86	.70

Table 3 Result of factor analysis in Shanghai

Item	Factor1	Factor2	Factor3	Factor4	Factor5	Communality
relationship-building						
12. I am good at icebreaking and mingling with strangers.	.172	.577	-.075	.157	.133	.484
20. I can talk to strangers without hesitating.	.021	.666	-.111	.156	.263	.613
50. I am not good at talking to stranger(s).	.062	.454	-.102	.009	.646	.705
07. I don't have a problem making new friends.	.133	.520	.086	.046	.234	.458
39. I say hello to strangers.	-.182	.553	.230	.300	.164	.635
29. I have no problem making new friends.	.514	.519	.008	.071	.051	.662
04. It takes time to open up myself to others	.092	.120	.122	.036	.650	.516
48. It's difficult for me to make new friends in new situations.	.137	.012	.233	-.013	.652	.526
09. I tend to give a good first impression.	.397	.278	-.003	.179	.160	.399
16. I am not good at carrying a conversation with a stranger.	.384	.286	-.181	.214	.249	.430
basic manner						
02. I say grace or "thank you" before meals.	.049	-.121	.375	.151	.044	.166
43. I say "thank you" after meals.	-.023	.108	.357	.065	-.020	.169
35. I say thank you when someone is nice to me.	.625	.004	.325	-.174	.051	.610
05. I sometimes don't apologize when I bump to someone.	.186	-.075	.341	-.048	.161	.197
37. I say "excuse me" or "sorry" when bumping to someone.	.719	-.009	.333	-.151	-.267	.791
23. I sometimes don't say "thank you" when I should.	.753	-.253	.091	-.081	.303	.723
28. I greet my friends, classmates and teachers at school in the morning.	.245	-.049	.588	.181	.156	.561
21. I choose sometimes not to respond to my teacher(s) and friend(s).	.640	-.044	-.088	.000	.302	.512
45. I say goodbye to my friends and teachers when I leave school.	-.017	-.045	.654	-.005	.150	.419
06. I knock the door before I enter teachers rooms.	-.057	-.138	.743	.040	.282	.547
consideration toward others						
34. I am considerate of others.	.468	.020	.238	.265	-.308	.517
18. I make sure I am understood when I talk.	.204	.048	.419	.233	-.119	.380
11. I try to make my conversation interesting.	.542	-.024	-.074	.217	-.195	.358
01. I am a patient listener.	.367	.162	.725	-.160	-.141	.918
32. In a group, I make sure people are having a good time.	.667	.233	-.005	.161	.076	.639
36. I listen to others, instead of just talking about myself.	.813	.007	.114	-.176	-.052	.710
19. I tend to do things without thinking of what others feel.	.819	-.073	-.044	-.045	.129	.672
22. I am a good team worker.	.425	.270	.205	.083	.082	.463
31. I make sure that people have opportunities to speak in a discussion.	.265	.284	.141	-.200	.243	.306
27. I keep my word with my friends.	.700	-.025	-.108	.322	-.307	.643
assertion						
42. I say "no" when it is "no."	-.148	.560	.048	-.339	-.069	.362
40. I tend to put up with my friend(s).	-.062	.037	-.165	-.304	.041	.134
03. I can't say "no" when people ask me of things	-.336	-.024	.167	.122	.496	.327
47. I can express my opinion even it opposes to my teachers.	-.444	.495	.372	.036	.140	.563
25. I don't hesitate to be assertive.	.077	.062	-.107	.023	-.029	.425
17. I confront my friend(s) when I get offended.	-.107	.623	-.115	-.244	.075	.367
46. I tend to keep my feelings and thoughts to myself.	-.028	.246	-.046	.050	.447	.295
38. I have no problem expressing my opposition.	.130	.691	.044	-.147	-.073	.500
13. I can say "no" to my friend(s).	-.106	-.027	.025	.058	.016	.012
14. I ask teachers questions when I don't understand.	-.134	.156	.391	.097	-.034	.216
emotion regulation						
08. I tend to show my emotions even when I try not to..	.056	-.005	-.102	.442	.161	.248
10. When I get upset, I tend to take it out on others.	.398	-.321	.116	.402	.053	.404
49. I don't show my emotions on my face.	-.031	-.021	.102	.488	.036	.250
24. I can behave myself even when I am upset.	-.079	.009	.145	.657	-.004	.456
15. When I get upset, I tend to do things that I'll regret later.	-.370	-.246	.059	.371	.004	.259
41. I keep myself calm even when I am nervous.	-.171	.226	.161	.586	-.037	.492
44. I tend to remain out of focus once getting distracted.	-.184	-.151	.256	.388	.293	.278
30. I am calm even when I am feeling rushed.	-.059	.248	.074	.679	-.240	.627
33. I tend to get panicked when I get scared.	.049	-.112	-.155	.542	.281	.411
26. I sometimes reveal someone else's secret by accident.	.232	-.199	-.095	.463	.198	.342
Variance explained by each factor eliminating other factors						
	5.958	3.953	2.974	3.405	2.944	
Inter factor correlation						
Factor1	1					
Factor2	.137	1				
Factor3	.290	.299	1			
Factor4	.150	.249	.084	1		
Factor5	.107	.127	-.036	.109	1	

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Table 4 Result of factor analysis in Shenzhen

Item	Factor1	Factor2	Factor3	Factor4	Factor5	Communality
relationship-building						
12. I am good at icebreaking and mingling with strangers.	.750	-.112	-.003	.009	.181	.610
20. I can talk to strangers without hesitating.	.812	-.274	.088	-.090	.006	.662
50. I am not good at talking to stranger(s).	.899	-.208	-.055	.067	-.058	.703
07. I don't have a problem making new friends.	.635	.107	.186	.068	.136	.653
39. I say hello to strangers.	.692	-.166	.099	.241	-.037	.577
29. I have no problem making new friends.	.787	.279	-.066	-.067	.147	.867
04. It takes time to open up myself to others	.491	-.005	.249	.027	-.016	.388
48. It's difficult for me to make new friends in new situations.	.535	.126	-.145	.095	-.046	.323
09. I tend to give a good first impression.	.583	.037	.138	-.035	-.005	.422
16. I am not good at carrying a conversation with a stranger.	.310	.236	.314	.148	-.452	.510
basic manner						
02. I say grace or "thank you" before meals.	.080	-.126	.049	.192	.470	.268
43. I say "thank you" after meals.	.017	.228	.073	-.020	.183	.106
35. I say thank you when someone is nice to me.	-.187	.877	-.058	.037	.275	.843
05. I sometimes don't apologize when I bump to someone.	-.118	.685	.152	-.115	.128	.469
37. I say "excuse me" or "sorry" when bumping to someone.	-.037	.942	-.014	-.112	-.018	.844
23. I sometimes don't say "thank you" when I should.	-.091	.642	.121	.049	.017	.402
28. I greet my friends, classmates and teachers at school in the morning.	.056	.290	.190	-.004	.071	.149
21. I choose sometimes not to respond to my teacher(s) and friend(s).	.185	.776	.065	.093	-.398	.821
45. I say goodbye to my friends and teachers when I leave school.	.313	.416	.010	-.110	-.016	.336
06. I knock the door before I enter teachers rooms.	-.236	.434	.346	.084	.047	.262
consideration toward others						
34. I am considerate of others.	.065	.302	.046	.222	.615	.488
18. I make sure I am understood when I talk.	.012	.188	.094	.169	.584	.455
11. I try to make my conversation interesting.	.126	.146	-.181	.160	.516	.368
01. I am a patient listener.	.168	.237	.023	.155	.384	.341
32. In a group, I make sure people are having a good time.	.276	.385	.079	.057	.415	.585
36. I listen to others, instead of just talking about myself.	.457	.594	-.150	-.229	.327	.926
19. I tend to do things without thinking of what others feel.	-.128	.696	-.157	.512	-.063	.843
22. I am a good team worker.	.686	.091	-.050	.027	.076	.528
31. I make sure that people have opportunities to speak in a discussion.	.364	.374	.021	-.095	.088	.381
27. I keep my word with my friends.	.181	.070	-.140	.376	.166	.199
assertion						
42. I say "no" when it is "no."	-.070	.027	.662	-.207	.205	.485
40. I tend to put up with my friend(s).	.020	-.241	.242	-.375	-.118	.265
03. I can't say "no" when people ask me of things	.113	-.042	.483	.087	-.317	.363
47. I can express my opinion even it opposes to my teachers.	.096	.007	.605	.021	.031	.428
25. I don't hesitate to be assertive.	.248	.038	.645	-.137	-.036	.564
17. I confront my friend(s) when I get offended.	.051	.089	.668	-.046	-.114	.455
46. I tend to keep my feelings and thoughts to myself.	-.005	.079	.427	.011	-.009	.185
38. I have no problem expressing my opposition.	.055	.318	.551	.008	.269	.562
13. I can say "no" to my friend(s).	-.070	.054	.098	-.207	-.110	.052
14. I ask teachers questions when I don't understand.	-.011	.291	.449	-.106	-.079	.244
emotion regulation						
08. I tend to show my emotions even when I try not to..	-.012	.023	.200	.515	-.294	.443
10. When I get upset, I tend to take it out on others.	.078	.118	-.133	.742	-.187	.653
49. I don't show my emotions on my face.	.011	-.229	.002	.492	.166	.260
24. I can behave myself even when I am upset.	-.143	-.014	.119	.679	.248	.509
15. When I get upset, I tend to do things that I'll regret later.	-.238	-.147	.378	.140	.151	.221
41. I keep myself calm even when I am nervous.	.003	.007	.151	.439	.229	.281
44. I tend to remain out of focus once getting distracted.	.061	.039	.326	.335	.014	.285
30. I am calm even when I am feeling rushed.	.063	-.168	.118	.700	.433	.669
33. I tend to get panicked when I get scared.	.067	-.116	.432	.360	.006	.399
26. I sometimes reveal someone else's secret by accident.	.041	.234	-.077	.429	.055	.278
Variance explained by each factor eliminating other factors						
	4.505	4.904	3.116	3.412	2.663	
Inter factor correlation						
Factor1	1					
Factor2	.298	1				
Factor3	.347	-.049	1			
Factor4	.102	.167	.173	1		
Factor5	.215	.121	.125	-.101	1	

Table 5 Result of factor analysis in Tokyo

Item	Factor1	Factor2	Factor3	Factor4	Factor5	Communality
relationship-building						
12. I am good at icebreaking and mingling with strangers.	.976	-.063	-.045	-.080	-.032	.841
20. I can talk to strangers without hesitating.	.897	-.046	.061	-.056	-.069	.784
50. I am not good at talking to stranger(s).	.897	.012	-.128	-.035	.039	.724
07. I don't have a problem making new friends.	.880	-.056	.059	-.040	-.021	.759
39. I say hello to strangers.	.745	.116	-.027	.075	-.064	.649
29. I have no problem making new friends.	.726	-.018	.162	-.004	.037	.628
04. It takes time to open up myself to others	.702	.010	-.129	.064	.144	.514
48. It's difficult for me to make new friends in new situations.	.699	.007	-.025	.042	.122	.527
09. I tend to give a good first impression.	.687	.046	.140	.006	-.059	.581
16. I am not good at carrying a conversation with a stranger.	.634	.069	-.038	.088	.170	.503
basic manner						
02. I say grace or "thank you" before meals.	.016	.790	-.258	.095	.000	.539
43. I say "thank you" after meals.	.037	.747	-.280	.098	.039	.484
35. I say thank you when someone is nice to me.	-.098	.724	.261	.030	-.076	.703
05. I sometimes don't apologize when I bump to someone.	.021	.655	.058	-.093	.137	.489
37. I say "excuse me" or "sorry" when bumping to someone.	-.062	.610	.132	-.092	.023	.454
23. I sometimes don't say "thank you" when I should.	.057	.616	.085	-.026	.102	.460
28. I greet my friends, classmates and teachers at school in the morning.	.166	.612	.169	-.046	-.123	.581
21. I choose sometimes not to respond to my teacher(s) and friend(s).	-.008	.572	.122	-.043	.071	.401
45. I say goodbye to my friends and teachers when I leave school.	.114	.572	.213	.049	-.183	.560
06. I knock the door before I enter teachers rooms.	-.093	.442	.170	-.006	-.015	.263
consideration toward others						
34. I am considerate of others.	-.065	.038	.777	-.020	.154	.665
18. I make sure I am understood when I talk.	.003	-.083	.775	.059	.103	.619
11. I try to make my conversation interesting.	-.035	-.020	.652	.008	-.024	.397
01. I am a patient listener.	.079	-.047	.602	-.039	.157	.435
32. In a group, I make sure people are having a good time.	.213	.000	.585	-.048	-.133	.443
36. I listen to others, instead of just talking about myself.	-.101	.086	.581	.017	.184	.428
19. I tend to do things without thinking of what others feel.	-.071	.157	.507	-.078	.231	.415
22. I am a good team worker.	.223	.193	.468	.019	.013	.478
31. I make sure that people have opportunities to speak in a discussion.	.031	.127	.432	.076	-.014	.273
27. I keep my word with my friends.	-.033	.205	.376	-.012	.085	.253
assertion						
42. I say "no" when it is "no."	-.042	-.002	-.014	.824	.062	.660
40. I tend to put up with my friend(s).	-.019	-.026	-.142	.658	.046	.427
03. I can't say "no" when people ask me of things	-.018	-.039	-.219	.618	.136	.414
47. I can express my opinion even it opposes to my teachers.	.065	-.041	.239	.600	-.118	.487
25. I don't hesitate to be assertive.	.309	-.056	.168	.579	-.099	.655
17. I confront my friend(s) when I get offended.	-.042	.007	.053	.549	-.158	.299
46. I tend to keep my feelings and thoughts to myself.	.204	.043	-.040	.515	.067	.406
38. I have no problem expressing my opposition.	.067	.037	.219	.508	-.086	.383
13. I can say "no" to my friend(s).	-.113	.033	-.066	.487	.165	.236
14. I ask teachers questions when I don't understand.	.111	.053	.193	.470	-.127	.366
emotion regulation						
08. I tend to show my emotions even when I try not to..	.089	-.058	.000	-.095	.685	.474
10. When I get upset, I tend to take it out on others.	.036	.125	-.002	-.058	.654	.439
49. I don't show my emotions on my face.	.102	-.081	.118	-.148	.566	.372
24. I can behave myself even when I am upset.	-.046	-.009	.230	-.103	.546	.393
15. When I get upset, I tend to do things that I'll regret later.	-.021	.078	.063	.024	.500	.276
41. I keep myself calm even when I am nervous.	.014	-.088	.179	.250	.485	.399
44. I tend to remain out of focus once getting distracted.	.065	.022	.042	.162	.467	.284
30. I am calm even when I am feeling rushed.	-.021	-.142	.299	.176	.493	.370
33. I tend to get panicked when I get scared.	.136	.000	-.192	.319	.430	.340
26. I sometimes reveal someone else's secret by accident.	-.095	.273	.024	.037	.417	.248
Variance explained by each factor eliminating other factors	4.755	3.618	3.248	3.049	3.046	
Inter factor correlation						
Factor1	1					
Factor2	.236	1				
Factor3	.339	.398	1			
Factor4	.440	.027	.137	1		
Factor5	.034	-.022	.203	.086	1	

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Table 6 Result of factor analysis in Yangon

Item	Factor1	Factor2	Factor3	Factor4	Factor5	Communality
relationship-building						
12. I am good at icebreaking and mingling with strangers.	.068	-.263	-.133	.737	.016	.596
20. I can talk to strangers without hesitating.	.001	-.212	.121	.496	.013	.302
50. I am not good at talking to stranger(s).	-.172	.289	.198	.413	-.169	.356
07. I don't have a problem making new friends.	.008	.127	.492	.175	-.078	.324
39. I say hello to strangers.	.022	.066	.184	.628	.046	.480
29. I have no problem making new friends.	.019	.189	.362	.366	.080	.377
04. It takes time to open up myself to others	-.226	.269	.074	.102	-.073	.128
48. It's difficult for me to make new friends in new situations.	-.105	.462	.349	.072	-.070	.378
09. I tend to give a good first impression.	-.077	-.126	.150	.684	.175	.545
16. I am not good at carrying a conversation with a stranger.	-.036	.579	.004	.265	-.305	.505
basic manner						
02. I say grace or "thank you" before meals.	.355	-.233	.312	-.003	.034	.239
43. I say "thank you" after meals.	.528	-.036	.104	-.096	.173	.307
35. I say thank you when someone is nice to me.	.577	.008	.149	-.070	.160	.374
05. I sometimes don't apologize when I bump to someone.	-.071	.457	-.029	-.044	.034	.205
37. I say "excuse me" or "sorry" when bumping to someone.	.632	.022	.169	-.084	.143	.442
23. I sometimes don't say "thank you" when I should.	.236	.451	-.193	-.070	.214	.346
28. I greet my friends, classmates and teachers at school in the morning.	.503	-.168	.056	.070	-.059	.277
21. I choose sometimes not to respond to my teacher(s) and friend(s).	.203	.416	-.137	-.111	-.026	.250
45. I say goodbye to my friends and teachers when I leave school.	.437	-.011	.168	-.025	.004	.212
06. I knock the door before I enter teachers rooms.	.331	-.010	.011	.167	-.322	.261
consideration toward others						
34. I am considerate of others.	.345	-.038	-.027	.090	.208	.172
18. I make sure I am understood when I talk.	.248	.223	.118	.163	.000	.193
11. I try to make my conversation interesting.	.357	-.060	.458	.055	-.016	.339
01. I am a patient listener.	.313	.183	.233	.088	.105	.249
32. In a group, I make sure people are having a good time.	.854	.003	-.445	.045	-.329	1.103
36. I listen to others, instead of just talking about myself.	.400	.043	.008	.220	-.077	.249
19. I tend to do things without thinking of what others feel.	.067	.578	-.063	.016	.020	.348
22. I am a good team worker.	.190	.203	.320	.119	-.077	.235
31. I make sure that people have opportunities to speak in a discussion.	.021	-.004	.254	-.041	-.478	.260
27. I keep my word with my friends.	.509	.233	.249	-.264	-.033	.422
assertion						
42. I say "no" when it is "no."	.397	-.130	.319	.036	-.093	.261
40. I tend to put up with my friend(s).	-.246	-.134	.110	-.248	-.318	.264
03. I can't say "no" when people ask me of things	-.214	-.138	-.203	-.186	.001	.178
47. I can express my opinion even it opposes to my teachers.	-.081	-.044	.658	.051	.031	.454
25. I don't hesitate to be assertive.	.398	-.055	.710	-.056	.094	.656
17. I confront my friend(s) when I get offended.	.145	.034	.055	.421	-.087	.237
46. I tend to keep my feelings and thoughts to myself.	-.122	.365	.143	.042	-.084	.166
38. I have no problem expressing my opposition.	.223	-.066	.598	.088	-.034	.418
13. I can say "no" to my friend(s).	.167	-.116	.140	-.221	-.028	.085
14. I ask teachers questions when I don't understand.	.375	.040	.468	-.168	-.258	.391
emotion regulation						
08. I tend to show my emotions even when I try not to..	-.132	.249	-.037	-.160	.384	.246
10. When I get upset, I tend to take it out on others.	.068	.590	-.028	-.043	.118	.376
49. I don't show my emotions on my face.	.099	-.014	.045	.001	.493	.258
24. I can behave myself even when I am upset.	.414	.144	-.114	.230	.484	.511
15. When I get upset, I tend to do things that I'll regret later.	.074	.502	.014	-.169	.207	.331
41. I keep myself calm even when I am nervous.	.080	-.015	.161	-.016	.450	.251
44. I tend to remain out of focus once getting distracted.	-.061	.361	.130	.049	.163	.195
30. I am calm even when I am feeling rushed.	.246	-.009	.030	.273	.517	.420
33. I tend to get panicked when I get scared.	-.126	.301	-.073	-.019	.296	.185
26. I sometimes reveal someone else's secret by accident.	-.050	.492	.049	-.158	.023	.261
Variance explained by each factor eliminating other factors	4.293	3.321	3.215	2.786	2.240	
Inter factor correlation	Factor1	Factor2	Factor3	Factor4	Factor5	
Factor1	1					
Factor2	.140	1				
Factor3	-.012	.105	1			
Factor4	.144	.070	.130	1		
Factor5	-.019	.025	.133	-.009	1	

others” items) formed a single factor (F3).

Table 4 shows the results for Shenzhen. It was verified that relationship-building items grouped into (F1), assertiveness items grouped into (F3), and items for emotion regulation grouped into (F4). Some items within “consideration toward others” combined with basic manners items to form (F2), but it can also be seen that 5 items within “consideration toward others” grouped to form (F5).

Table 5 shows the results for Tokyo. Naturally, the grouping of subscale question items was verified here.

Table 6 shows the results for Yangon. It can be seen that 5 items within relationship-building formed (F4) and 5 items within emotion regulation formed (F5), but also that various other subscale items are all mixed in from the first factor to the third factor.

Comparison of Subscale Scores

Table 7 shows mean values and standard deviations for each subscale skill and total scores in each of the 4 cities. Figure 1 shows a comparison of these mean values. In Figure 1, the 5 subscale skills are displayed simultane-

Table 7 Mean and SD of scale scores

	City				Total
	Shanghai	Shenzhen	Tokyo	Yangon	
relationship-building	6.87	6.83	6.00	5.65	6.12
	2.64	2.69	3.26	2.26	3.07
basic manner	8.05	7.85	8.64	7.04	8.31
	1.73	1.68	1.85	1.71	1.88
consideration toward others	8.94	8.79	7.29	8.44	7.72
	1.55	1.58	2.44	1.48	2.30
assertion	5.73	5.57	5.45	6.34	5.59
	2.10	2.25	2.72	1.61	2.53
emotion regulation	5.70	5.37	5.04	4.96	5.12
	2.30	2.27	2.59	2.10	2.49
Total	35.50	34.36	32.42	32.51	32.90
	6.39	6.82	8.02	5.38	7.58

upper: mean, lower: SD.

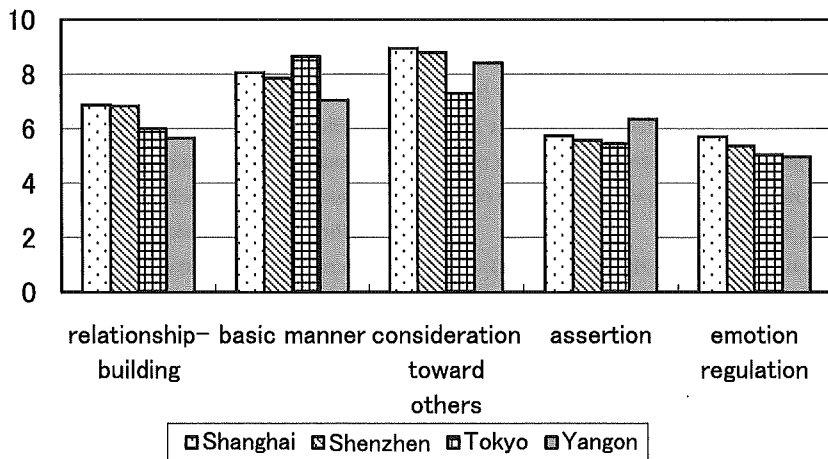


Figure 1 Scale Means of each city

ously for the sake of convenience, and it is necessary to recognize that while comparisons between cities within the same subscale skills are possible, comparisons between mean values of subscale skills are not possible.

Looking at Table 7 and Figure 1, it can be seen that the mean values for Tokyo were relatively high for basic manners, and low for consideration toward others and relationship-building. Also, it was verified that the mean values for Shanghai and Shenzhen were mutually closer with regard to subscale skills, considered in comparison to the mean values of Tokyo and Yangon.

Furthermore, the mean values and standard deviations for total scores for the 50 items were 35.50 (6.39) in Shanghai, 34.36 (6.82) in Shenzhen, 32.42 (8.02) in Tokyo, and 32.51 (5.38) in Yangon, indicating no great variance in mean values.

Discussion

Concerning Reliability of Scale

Firstly, the fact that the alpha coefficient value for each subscale skill from the Tokyo study falls within the range 0.72 to 0.87 indicates a high degree of reliability.

The alpha coefficient values for relationship-building skills in Shanghai and Shenzhen were 0.79 and 0.80, which was taken to indicate a high degree of internal consistency. Also, the alpha coefficient values for consideration toward others as well as emotion regulation were both above 0.65 in Shanghai and Shenzhen, which are comparatively high values. The alpha coefficient values for basic manners and assertiveness exceeded 0.5, so it can at least be inferred that the variance of true scores was not greater than the error variance.

In Yangon, the alpha coefficient value for relationship-building skills was 0.64, which was comparatively high. However, the alpha coefficient values for the other subscale skills were generally low. Except for emotion regulation, which was rated at 0.55, the values of all the other subscale skills fell below 0.5.

Incidentally, in studies such as Murakami (1999), it is indicated that when making comparisons of mean values, lower scale reliability can be compensated for by increasing the number of subjects (as standard error decreases).

From the above, when undertaking comparison of subscale skills scores in Shanghai, Shenzhen, and Yangon, the following points must be understood. Firstly, in all of these cities, a degree of measurement reliability for

relationship-building skills has been established beyond a certain level. Additionally, comparisons of mean values for each subscale skill in Shanghai, Shenzhen, and Tokyo are also possible to a certain extent. Furthermore, whereas the alpha coefficient value for basic manners in Tokyo was 0.74, the values for other cities ranged from 0.46 to 0.59. This result is only natural, however, when it is considered that this study used a scale that was developed in Japan, and that which constitutes basic manners in Japan is naturally subject to Japanese cultural considerations.

Concerning Factor Analysis Results

Let us now examine the factor analysis results from Tables 3 to 6. For the Shenzhen results displayed in Table 4, while consideration toward others is rather unclear, it can be believed that the 5 subscale skills are composed in an identical fashion to Tokyo. For the Shanghai results displayed in Table 3, while basic manners and assertiveness remain unclear, it can be stated that skills in emotion regulation, consideration toward others, and relationship-building were verifiable. In contrast, in the Yangon study, it can be stated that relationship-building and emotion regulation were verifiable while they were unclear, however, the other subscale skills were believed not to be differentiated.

Accordingly, considering the reliability coefficient values, it is believed that skills in relationship-building were able to be verified as common social skills for the 4 cities in which this study was conducted. Also, for the 3 cities of Shanghai, Shenzhen, and Tokyo, it is believed that skills in consideration toward others and emotion regulation were able to be verified as common social skills. Skills in basic manners and assertion were able to be verified from the Tokyo and Shenzhen data, but these were unclear in Shanghai, and were not verifiable in Yangon, leading to the conclusion that these cannot really be described as common skills among these cities.

The results from Tokyo and Shenzhen, as well as those from Shanghai, were relatively similar while those from Yangon were quite different. Considered from the perspective of cultural similarity, this is believed to reflect the fact that Shanghai, Shenzhen, and Tokyo are located within the cultural sphere of Chinese character use, whereas Yangon is located within the Burmese language cultural sphere, and also that Shanghai, Shenzhen, and

Tokyo have a Confucian culture, whereas in Burma has a Buddhist culture, as well as the fact that China and Japan have a northern Buddhist culture where as Burma has a southern Buddhist culture.

Concerning Results of Comparison of Subscale Scores

Since that the reliability of subscale skills in Yangon was believed inadequate, the discussion here will principally involve comparison results of the mean values for the cities of Shanghai, Shenzhen and Tokyo.

The mean values for Tokyo were relatively lower than in Shanghai and Shenzhen with regard to relationship-building skills and skills in consideration toward others. Accordingly, since these two subscale skills were able to be considered common skills among these cities, it can be assumed that the students from Tokyo having a lower assessment of the extent of their own relationship-building skills and skills in consideration toward others, compared to students from Shanghai and Shenzhen. Stated conversely, students from Shanghai and Shenzhen may assess their own relationship-building skills and skills in consideration toward others more highly than students from Tokyo.

Skills in emotion regulation were verifiable as being common among the 3 cities, and while there was no great variance in mean values here, Shanghai was ranked relatively high, then Shenzhen, with Tokyo ranking lowest.

It is necessary here to consider the influence of social desirability in the response process. The possibility that social desirability might influence responses can never be completely denied as long as a self-report inventory is used. However, as can be seen from Table 7 and Figure 1, it is impossible to explain using the influence of social desirability alone the fact that the magnitude correlation of mean values of each subscale skill between cities differed, and it is believed possible that the assessment of the extent of social skills is reflected here.

From the above, for each subscale skills that were verified as common among the cities of Shanghai, Shenzhen and Tokyo (relationship-building, consideration toward others, and emotion regulation), although these were self-report ratings, the results can be summarized as representing relatively high rankings for Shanghai and Shenzhen and relatively low rankings for Tokyo.

Conclusion

While it may be needless to point out that the cross-cultural comparison of social skills is a difficult matter, since these are so dependent on culture, the results of our study showed that commonalities among relationship-building skills, skills in consideration toward others, and skills in emotion regulation were able to be confirmed in several different cities. This is believed to indicate that cross-cultural comparisons are indeed possible to a certain extent.

First among the issues for future resolution is the undertaking of further research in cities not included in the current study. Considering the ongoing internationalization and globalization of society, even more than comparisons with other Asian cities such as those in South Korea and Singapore, there is a necessity to consider undertaking comparisons with European and American countries.

Also, the scale for measuring social skills used in this study (SSI-M) is a self-report format, but considering that PISA conducts measurement in a test-based format (Schleicher 2003), another issue for future resolution is developing an test-based or objective method of measuring social skills, and then undertaking further cross-cultural comparisons.

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ABSTRACT

An Investigation of the Cross-Cultural Comparability of Social Skills

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The inclusion of the measurement of social skills in the PISA administered by OECD is currently under consideration. However, it is often argued that standards for evaluation of social skills are set within the framework of a given society and that any cross-cultural comparison beyond this framework is essentially impossible. In this study, an investigation was conducted in cities in the Asian region (Shanghai, Shenzhen, Yangon) whose cultures are comparatively closer to Japan's. The Social Skill Inventory for Middle School Students (SSI-M) standardized in Japan was utilized in the study, and a review of the cross-cultural comparability of social skills was undertaken. As a result, it was demonstrated that cross-cultural comparison of skills in relationship-building, consideration toward others, and emotion regulation was possible to a certain extent. Furthermore, from a comparison of mean values of subscale skills, it was clear that mean values for these 3 social skills were lower in Tokyo compared to Shanghai and Shenzhen.

Key words: social skills, cross-cultural comparison, PISA