



Children's affective changes in English activities: A trial to invent a measurement of children's affects

Naoko Yamaga

Tokyo Junshin Women's College

Reference Data:

Yamaga, N. (2007). Children's affective changes in English activities: A trial to invent a measurement of children's affects. In K. Bradford-Watts (Ed.), *JALT2006 Conference Proceedings*. Tokyo: JALT.

This paper introduces a study which investigated the value of English activities in international understanding lessons in the Period for Integrative Study. The purpose of this study was to develop an instrument (the International Understanding Questionnaire for Children (IUQC)) to measure children's attitudes toward different cultures or children's international posture (Yashima, 2002) and their self-related constructs, in particular, self-esteem (Harter, 1982) and collective self-esteem (Luhtanen & Crocker, 1992). The researcher measured these affects of 107 elementary school children who started international understanding lessons at a public school in April 2006. The 107 included 62 fifth graders and 45 sixth graders. This study showed that the scales were reliable for ten to twelve years old children.

本稿は、公立小学校の総合的な学習の時間で行われている国際理解教育の中の英語活動の意義を検証するものである。本研究の目的は、英語活動に参加した児童の異文化に対する態度（ここではInternational Posture (Yashima, 2002) と定義する）、そして情意面、特に自尊感情 (Harter, 1982) と社会的自尊感情 (Luhtanen & Crocker, 1992) を調査することにある。本稿独自の試みとして小学生のための国際理解アンケート (IUQC) を作成し、上述の情意側面を調査した。調査対象は、2006年4月より国際理解教育の授業を受けた公立小学校児童107名とした。107名のうち、6年生が62名、5年生が45名であった。調査の結果、上記3項目を測定するために作成された尺度は、10～12歳の年齢の児童にとって、一定の信頼性を示す尺度であり、効果的にその項目を測定できることが明らかとなった。

In 2002, the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) introduced what they called “international understanding education” to public elementary school students as part of the Period for Integrative Study. The concept underlying the Period for Integrative Study was innovative in the Japanese educational system at the time of its introduction. Each elementary

school administrator selects one of four subjects when implementing this course: international understanding, information technology, environmental studies, or health and social welfare. International understanding has been chosen at 92.1% of the public elementary schools as of 2004 (Educational Research Institute, 2005).

Trials of the international understanding lessons have resulted in heated debate about English education among authorities in the field of language education, elementary school teachers, and parents of elementary school aged children. Some of them seem to have confused English education with the *English activities* that are one part of international understanding education, and they strongly expect that children will develop communicative English skills through their participation in this course (Educational Research Institute, 2004). This study differentiated the English activities implemented in international understanding classes from early English education and hoped to confirm whether international understanding education provided a high-value education for public elementary school students.

In the Report of the 15th Central Council for Education held in July 1996, the following three points were identified as demanding special attention when promoting education on topics related to internationalization. These three goals were stated both in Japanese and English. The following translation is part of the report (MEXT, 2001, p. 121):

1. Open-mindedness and understanding regarding other cultures, and the development of an attitude that is respectful of these cultures and qualities, and the development of the abilities necessary for living together with people from different cultures.

2. Establishment of a strong sense of self and sense of being Japanese to better appreciate the concept of international understanding.
3. Development of basic foreign language skills, the ability for self-expression, and other communication skills for the purpose of expressing one's own thoughts and intentions, while respecting the positions of others in an international society.

As these are the three goals of the international understanding lessons, the degree to which each goal is being attained should be investigated empirically. Some studies were administered to investigate the development of English proficiency such as listening and speaking skills (e.g., Shirahata, 2002; Takada, 2004), which were stated in the third goal above. Unfortunately, no clear-cut results were found in those studies to support the early introduction of English education to elementary school students.

The first and second goals above demand special attention. In the first goal MEXT (2001) appears to expect children who have experienced international understanding lessons to show an interest in knowing about other cultures, to develop a degree of familiarity with them, and to cultivate an attitude of valuing these cultures and people. The second goal included the development of a strong sense of self as well as a sense of being Japanese. For various reasons the achievement of these goals has received less attention than the third goal, the development of basic foreign language skills. One major reason for the lack of attention may be due to ambiguity about what each goal meant among researchers, and a second reason may be the paucity of reliable instruments to investigate the achievement of the goals. For

this study, a measure to evaluate these affective constructs was developed.

International posture

Yashima (2002) proposed a concept called *International Posture*, which was defined as “attitude toward the international community” (p. 56). Yashima explicated the necessity of this concept in Japan, “in a context in which there is not much daily contact with native speakers of English, learners are not likely to have a clear affective reaction to the specific L2 language group” (p. 124). That is, the paucity of daily contact tends to create one general and broad attitude toward the international community, which includes many cultures and qualities different than the Japanese. This affective concept seems to be similar to what MEXT outlined in the second goal for Japanese elementary school students.

Yashima (2002) examined the relations between *International Posture* and other affective and L2 learning variables with 297 Japanese university students. This construct is comprised of four subcategories: *Intercultural Friendship Orientation in English Learning* ($\alpha = .85$), reflecting the degree of importance of learning English for the purpose of interacting with members of the second language community, *Intergroup Approach-Avoidance Tendency* ($\alpha = .67$), reflecting the tendency to approach or avoid non-Japanese within Japan, *Interest in International Vocation or Activities* ($\alpha = .79$), reflecting interest in an international career or living overseas, and *Interest in Foreign Affairs* ($\alpha = .73$), reflecting interest in international issues.

Self-esteem

A strong sense of self is one component of the third goal put forth by MEXT (2001). Among the disparate self-related constructs that have been proposed in the field of psychology, this is useful in the present study. James (1980) defined *self-esteem* as a self-feeling that is determined by how successful we are in accomplishing tasks or reaching goals that we value. Woolfolk (2004) defined *self-esteem* as “an affective reaction—a judgment about who you are, for example, feeling good about your basketball skills. If people evaluate themselves positively—if they ‘like what they see’—we say that they have high self-esteem” (p. 71). When using the expression *strong sense of self*, MEXT probably intended to focus on the degree to which elementary school students evaluate their own characteristics positively or feel good about them, in other words, *self-esteem*. Harter (1982) invented Harter’s Perceived Competence Scale for Children, composed of four subscales: *cognitive competence*, *social competence*, *physical competence*, and *self-worth*. The self-worth subscale was designed to measure children’s *self-esteem*, in other words, how much the individual likes himself or herself as a person. Harter (1982) verified that children at age eight and older make distinct judgments about their competence in three domains and their *self-esteem* is placed higher than the domain-specific perceived competences in the self-evaluation process. Therefore, it can be said that asking elementary school students about *self-esteem* is logical and appropriate from the perspective of cognitive development.

Collective self-esteem

A sense of being Japanese is the other component of the third goal. Tajfel and Turner (1979) defined *social identity theory*, which is the proposal that there are two distinct aspects of self concept: *personal identity* and *social identity*. *Personal identity* is how each individual evaluates him or herself as a whole person. *Social identity*, on the other hand, is “part of an individual’s self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1981, p. 255). The association between the two self-related concepts can be regarded as the combination of a *sense of being self* and a *sense of being Japanese*. Based on the theory, Tajfel and Turner (1979) criticized previous researchers for using self-esteem measures that were constructed to assess people’s evaluation of personal self, and proposed that the other crucial aspect of self, *social identity*, should be included in the existing measures. The third goal of MEXT should thus include perspectives of both *personal identity* and *social identity*.

Luhtanen and Crocker (1992) designed the Collective Self-Esteem Scale, a self evaluation instrument to measure values that an individual places on social groups. Social groups are defined by gender, family, occupation, race, ethnicity, and nationality. This scale has four subcategories (Luhtanen & Crocker, 1992): *Membership Esteem* ($\alpha = .73$), a respondent’s judgment of how good he or she is as a member of their social groups, *Private Collective Self-Esteem* ($\alpha = .74$), a respondent’s personal judgments of how good his or social groups are, *Public Collective Self-Esteem* ($\alpha = .80$), a respondent’s judgment of how other people evaluate his

or her social groups, and *Importance to Identity* ($\alpha = .76$), the importance of a respondent’s social group memberships to their self-concept. The definition of *good* was not clearly defined in the original paper by Luhtanen and Crocker. It seems that the definition of good was highly dependent on an individuals’ own measurement regarding what they appreciate the most.

Luhtanen and Crocker (1992) administered the scale to introductory psychology students at a large American university. To use this scale for elementary school students in Japan, it should be adjusted both to their cognitive level and to the Japanese context; here, the child’s sense of being Japanese is regarded as *collective self-esteem*. Likewise, the definition of social groups should be reconsidered for pre-secondary students. Whereas adult social groups may include gender, family, occupation, race, ethnicity, and nationality, social groups of pre-secondary children likely focus on school groups.

Overall, children’s cognitive development is a crucial matter in order to develop a new scale based on the existing scales; bearing this in mind, age difference was investigated in this study.

Design suitable measures for children

The International Posture Scale (Yashima, 2002) and the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) were originally invented for young adult learners, whereas Harter’s Perceived Competence Scale for Children (Harter, 1982) was designed for elementary school students eight years or older. Because the goal of this study was to develop

an affective instrument for elementary school students, the scales referred to above needed to be adapted for elementary school children. Based on the scales, the International Understanding Questionnaire for Children (IUQC) was designed to measure elementary school children's International Posture, Self-Esteem, and Collective Self-Esteem.

“In designing suitable measures for young children, researchers have to, at [a] minimum, ensure that the questions really do measure the designed concept; that the questions are unambiguous, and that children interpret the questions in the way the researcher intended” (Scott, 1997). These four points were carefully considered. First, a four-point Likert scale was utilized in the IUQC, although the International Posture Scale (Yashima, 2002) and the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) both used seven-point Likert scales. With a four-point Likert scale, elementary school children can easily differentiate among the possible responses (Pintrich & Schunk, 1996). Second, complex expressions and difficult vocabulary were simplified. For example, one item of the International Posture Scale, “I want to work in an international organization such as the United Nations” was changed to “I want to work with many foreigners in an organization” in the IUQC because fifth graders have not yet learned about the United Nations. Third, a fundamental principle of only one subject and one verb per sentence was rigidly adhered to for the items in the IUQC. Fourth, the information regarding understandability of the scales for elementary school children was gathered from multiple sources such as elementary school teachers, parents who have children of a

similar age, and school-aged children, “as any one account may be biased” (Tein, Roosa, & Michaels, 1994) prior to the initiation of the study. In particular, the following three research questions were posed:

1. Is the IUQC a reliable tool for elementary school students (10- to 12-year-olds)?
2. Does the four point Likert scale of the IUQC provide an acceptable fit for the elementary school students?
3. Do fifth graders (10-to-11 year olds) perform differently from sixth graders (11-to 12 year-olds) on the IUQC?

Method

Participants

The participants were 107 elementary school students attending Sakura Elementary School (a pseudonym) in eastern Japan. These 107 included 45 sixth grade students in two classes with one year of experience of English activities in international understanding lessons and 62 fifth grade students in two classes who had not experienced English activities in the international understanding lessons. They have been taking part in a one-year international understanding program from May 2006 to March 2007, and as of the date of writing, data collection has not been completed.

During the international understanding lessons, the elementary school students participated in English activities organized by their homeroom teacher and Japanese college students majoring in early English education at a women's

college located near the school. The college students mainly conducted class activities and the elementary school teachers supported them by supervising the elementary school students during the lessons. The class activities, lesson plans, and teaching materials were made by the college students. These were all based on the one-year international understanding curriculum, designed by the college students' college professors (including the author).

Instrument

This study employed a survey research design using a questionnaire. The author created the International Understanding Questionnaire for Children (IUQC). The IUQC, which was written in Japanese, consisted of three subscales: *International Posture* (22 items), which revised the items of the International Posture Scale (Yashima, 2002), *Self-Esteem* (7 items) referred to Harter's Perceived Competence Scale for Children (Harter, 1982), and *Collective Self-Esteem* (16 items) referred to the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992). More details are to follow. Thus, the IUQC included a total of 45 4-point Likert scale items anchored by 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree).

The *International Posture* part of the IUQC was composed of the following four subcategories which were the same as the International Posture Scale (Yashima, 2002).

1. Intercultural Friendship Orientation: Four items measured the degree to which a respondent learns English for the purpose of interacting and communicating with members of the second language community.

2. Intercultural Approach-Avoidance Tendency: Seven items assessed the tendency to approach or avoid non-Japanese within Japan.
3. Interest in International Vocation/Activities: Six items measured interest in an international career or living overseas.
4. Interest in Foreign Affairs: Five items measured interest in international issues.

The *Self-Esteem* subsection of the IUQC had seven items developed from the self-worth subscale of *Harter's Perceived Competence Scale for Children* (Harter, 1982). Harter utilized a structure alternative format design; but, in this study, the items were measured on a 4-point Likert scale in order to keep all subscales consistent.

The *Collective Self-Esteem Scale* was comprised of the following four subcategories which were the same as the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992).

1. Membership Esteem: Four items measured a respondent's judgment of how good or worthy he or she is as a member of their social groups.
2. Private Collective Self-Esteem: Four items assessed a respondent's personal judgment of how good his or her social groups are.
3. Public Collective Self-Esteem: Four items assessed a respondent's judgment of how other people evaluate his or her social groups.

4. Importance to Identity: Four items assessed the importance of a respondent's social group memberships to his or her self-concept.

Social groups was specified in consideration of the participants' cognitive development. In middle and late childhood, children can describe the self by referring to social groups and can evaluate themselves in comparison with others (Ruble, 1983; Santrock, 2004). Thus, they can integrate and synthesize their ethnic and culture-related features by knowing about the social groups to which they belong, an action that will lead to identity formation. Based on this notion, the *social groups* in the original Collective Self-Esteem Scale was replaced with *my class* or *classmates* in the IUQC items because the international understanding program was offered to the students at the class level, where students were often aware of classmates as a social group.

Procedure

The questionnaire was administered by the homeroom teachers in May 2006. Under each of the four homeroom teacher's instruction, the participants filled out the questionnaire in each classroom in 30 minutes. They were told not to spend too much time to answer each question, and to ask the homeroom teachers questions when they did not understand what any question was meant to say, and to leave it blank when they could not choose one number in answer to each question. All instructions were given in Japanese.

Data analysis

The *Winsteps*tm computer program was used to estimate a difficulty (symbolized by *b*) parameter for every item on each scale. A *b* parameter that was too low (less than -2.95) or too high (more than 2.95), or a standardized residual statistic is more than 2.0 indicated a problematic item.

One-way analysis of variance (ANOVA) was conducted in order to investigate the performance difference between fifth and sixth grade students ($p = .05$) by using SPSS 12.0. Before conducting the ANOVA, assumptions were checked (Tabachnick & Fidell, 2001). Because missing cases were 1.1% (53 cells out of 4,815 cells), which was less than 5 %, the missing cells were eliminated from the data (Tabachnick & Fidell, 2001). No univariate or multivariate outliers were found.

Results and discussion

Descriptive statistics

In this study, the total number of participants was 107, 62 fifth graders and 45 sixth graders. The descriptive statistics of the questionnaire are indicated in Table 1. Because Rasch person logit scores were used, a mean score of zero indicates the midpoint in each subscale. The Rasch model provides statistics of fit which can be used to control the quality of measures (Bond & Fox, 2001). In outfit statistics, MNSQ is the mean-square outfit statistic with an optimal value of one. A value over 2.0 is considered as a problematic item because "off-variable noise is greater than useful information" (Linacre, 2006, p. 201). As shown in Appendix 2, there were no such items. Another form of mean-square outfit statistic,

ZSTD, is also presented. “ZSTD is only useful to salvage non-significant MNSQ > 1.5 , when sample size is small or test length is short” (Linacre, 2006, p. 201). Therefore, this outfit statistic is not of concern in this case. Infit statistics are also presented in MNSQ and ZSTD forms in Appendix 2. Again, no problematic MNSQ item (over 2.0) was found. Thus, all 45 items fit the IUQC.

Table 1. Descriptive statistics for subscales (based on Rasch person logit scores)

	Min	Max	M	SD	reliability
IF(IP)	-0.08	1.21	0.84	1.78	0.68
IAA(IP)	-0.77	0.73	0.86	1.07	0.65
INTLA(IP)	-0.64	0.71	-0.03	0.90	0.56
IFA(IP)	-2.60	1.39	-1.02	1.56	0.69
SE (SE)	-1.12	0.75	-0.53	0.92	0.60
MEMBER(CSE)	-1.66	0.60	-0.42	1.12	0.44
PRIVATE(CSE)	-1.03	1.28	1.00	1.65	0.62
PUBLIC(CSE)	-1.44	1.00	-0.26	1.44	0.55
IDENTITY(CSE)	-1.92	1.78	0.20	0.91	0.13

Note. IP = International Posture; SE = Self-Esteem; CSE = Collective Self-Esteem; IF = International Friendship; IAA = Intergroup Approach Avoidance; INTLA = Interest in International Activities; IFA = Interest in Foreign Affairs; MEMBER = Membership Esteem; PRIVATE = Private Collective Self-Esteem; PUBLIC = Public Collective Self-Esteem; IDENTITY = Importance to Identity.

The reliability of the questionnaire (45 items) was .85. Cronbach's alpha for each subcategory is indicated in the far right column in Table 1. The Importance to Identity and Membership Esteem subcategories of the Collective Self Esteem subscale showed low values of reliability ($r = .13$ and $r = .44$ respectively). The individual items should be further investigated to be reliable for elementary school students. Overall, however, it can be said that the IUQC is a good initial step in obtaining a reliable tool for addressing the first research question for students of upper elementary school age.

To address the second research question, the function of the rating scale was investigated. As shown in Table 2, the 4-point scale provided an acceptable fit although showing narrow gradations of scale steps. The participants used all four choices of the rating scale consistently, suggesting that the scaling functioned well in classifying the different levels of the participants' affective constructs.

Table 2. Frequency measurement report for rating scale

Rating scale	Count	%	Step difficulty	Outfit (mean square)	Category measure
Strongly disagree	1145	24	-0.77	1.02	-1.97
Disagree	1201	25	-0.26	0.83	-0.54
Agree	1248	26	0.33	0.96	0.53
Strongly agree	1167	24	0.69	1.16	1.98

The last question was to investigate whether fifth graders performed differently from sixth graders on the IUQC. A one-way ANOVA was conducted with grades as the independent variable and the nine subcategories as dependent variables. Since the ANOVA was run nine times with the same data, to retain the intended significance of $p < .05$, a Bonferroni adjustment was conducted ($p = .0055$). No statistically significant difference was then found in each subcategory.

To summarize this, the participants' responses to the three affective constructs, International Posture, Self-Esteem, and Collective Self-Esteem did not represent any clear difference by student grade. If there had been differences in the 5th and 6th grade participants' responses at the second administration of IUQC at the conclusion of the one-year International Understanding program, it can be said that the respective students should have required different lengths of periods to develop the three affective constructs.

To investigate further, a one-way ANOVA was conducted with four classes (two in the fifth grade, 5A and 5B, and two in the sixth grade, 6A and 6B) as the independent variable and the same nine dependent variables. Again, a Bonferroni adjustment was also conducted. Only one subcategory, the Public Collective Self-Esteem subcategory was statistically significant ($F(3, 103) = 10.914, p = .000$). A post-hoc multiple comparison indicated the significant differences were between 5A and 5B as well as between 6B and 5B. It was interesting to know that 5B seemed to have had more difficulty in endorsing higher Public Collective Self-Esteem than the other classes. In order to investigate the reasons, class observations and interviews with some elementary

school students and their homeroom teachers will be useful. Further research is required to more fully elucidate this point.

Conclusions

This study provided an initial step to develop an instrument of elementary school children's affective changes (International Posture, Self-Esteem, and Collective Self-Esteem) in English activities in international understanding lessons at a public school in Japan. The statistical analyses showed that the IUQC was a reliable tool for the 10- to 12-year-old participants; in other words, the reliabilities of seven of the nine subcategories under the three affective constructs were adequate and the 4-point Likert scale functioned well. The fifth-grade participants did not perform differently from the sixth-grade participants on the items of the IUQC to measure International Posture, Self-Esteem, and Collective Self-Esteem. Regarding this, further study is required with participants of the same or similar ages for a longer period. Furthermore, significantly different responses regarding Public Collective Self-Esteem, or how well one's own class is considered by others, were found among the four classes. Qualitative ways of analysis are necessary for the further study. Class differences will surely become a key issue to be investigated in the continued research.

Hopefully, further research on the IUQC will help clarify effectiveness or ineffectiveness of the current form of English activities in international understanding lessons for Japanese public elementary school children.

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Appendix 1

The International Understanding Questionnaire for Elementary School Children (the IUQC)

総合的な学習の時間(国際理解教育)に関するアンケート

問1. あなたは何年生ですか。 小学校()年生

Q1. Which grade are you in?

問2. あなたは何才ですか。()

Q2. How old are you?

みなさんに、総合的な学習の時間(国際理解教育)の時間についてお聞きします。正しいこたえとか、まちがったこたえというのはありません。お友だちと相談せずにご自分で、自分の気持ちに合うものに正直に○をつけてください。

The following questions are about the Period for International Study (International Understanding lessons). There is no right or wrong answer for these questions. Please choose one choice which is the closest to your feelings for each question. Do not talk to your friends and answer the questions on your own.

1. 英語を勉強するのは、世界中の人たちと会って話をしたいからです。
As a reason to study English, it will allow me to meet and talk with foreigners.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

2. 英語を勉強するのは、世界中の人たちやそのくらしについて知りたいからです。

As a reason to study English, it will allow me to get to know various cultures and peoples.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

3. 英語を勉強するのは、世界中の人たちと一緒に仕事がしたいからです。
As a reason to study English, I'd like to work with foreigners.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

4. 英語を勉強するのは、世界中の人たちと友だちになりたいからです。
As a reason to study English, I'd like to make friends with foreigners.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

5. 外国の人たちと友だちになりたいです。
I want to make friends with foreigners.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

6. なるべく、外国の人たちと話さないようにしています。
I try to avoid talking with foreigners if I can.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

7. 学校に外国からきた友だちがいたら、話しかけようと思います。
I would talk to an international student if there were one at school.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

8. もし、外国の友だちができて、しばらく家に泊まることになったらいいと思います。
I wouldn't mind sharing an apartment or room with an international student.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

9. 近くにすんでいる外国の人たちにしんせつにしたいと思います。
I want to participate in a volunteer activity to help foreigners living in the neighboring community.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

10. もし、となりの家に外国の人がひっこしてきたら、なんとなくいやな気持ちになります。
I would feel somewhat uncomfortable if a foreigner moved in next door.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

11. レストランやえきで、日本語のできない外国の人たちがこまっていたら、たすげると思います。
I would help a foreigner having trouble communicating in a restaurant or at a station.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

12. 大人になっても、自分のすんでいる町にいたいです。
I would rather stay in my hometown.
はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ
Strongly agree • Agree • Disagree • Strongly disagree

13. 日本だけではなく、いろいろな国にすんでみたいです。

I want to live in a foreign country.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

14. 外国の人たちがたくさんいるところで、はたらいてみたいです。

I want to work in an international organization.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

15. 外国でボランティアをやってみたいと思います。

I'm interested in volunteer activities in a foreign country.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

16. 外国でおこることは、毎日の生活にはあまり関係がないと思います。

I don't think what's happening overseas has much to do with my daily life.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

17. 大きくなって、外国にでかけることの多い仕事をするのはいやです。

I'd rather avoid the kind of work that sends me overseas frequently.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

18. ふだんニュースで世界のできごとを見ます。

I often watch news about foreign countries.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

19. ふだんインターネットで世界のことをしらべます。

I often check the website of news about foreign countries.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

20. ふだん新聞や本で世界のできごとを読みます。

I often read situations and events about foreign countries in newspapers and books.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

21. ふだん家族で世界のニュースについて話します。

I often talk about news in foreign countries with my family.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

22. ふだん友達と世界のニュースについて話します。

I often talk about news in foreign countries with my friends.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

23. 自分に、自信があります。

I feel that I am so sure of myself.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

24. 今の自分に、とてもまんぞくしています。

I am very happy the way I am.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

25. 自分は、すばらしいことをしている、と思います。

I feel good about the way I can.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

26. いつも、自分はよいことをしている、と自信をもっていえます。

I am sure I am always doing right things.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

27. とてもよい人間だと思います。

I am a good person.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

28. もっとちがった生き方ができたらな、と思います。

I wish I could have another way of life.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

29. 今のままの自分でいたいと思います。

I would like to stay the same.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

30. 自分はクラスの中で、大切な人間だと思います。

I am a worthwhile member of this class.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

31. 自分がクラスの人にしてあげられることは少しかです。

I feel I don't have much to offer to the classmates.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

32. クラスの人と力をあわせませす。

I am a cooperative participant in the class.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

33. クラスの中で、あまり役に立たない人間だと思います。

I often feel I'm a useless member of the class.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

34. ふだん自分のクラスにいることがいやだと思っています。

I often regret that I belong to some of the class.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

35. ふだん自分のクラスでよかったと思っています。

In general, I'm glad to be a member of the class.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

36. たいてい、自分のクラスはすばらしいと思っています。

Overall, I often feel that the class is worthwhile.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree ・ Agree ・ Disagree ・ Strongly disagree

37. たいてい、自分のクラスに満足しています。

I feel good about the class.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

38. 自分のクラスは他のクラスの人たちによいと思われています。

Overall, my class is considered good by other classes.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

39.自分のクラスは他のクラスとくらべて、だめだと思われています。

Most people consider my class to be more ineffective than other classes.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

40.たいてい、自分のクラスは他のクラスの人たちにうらやましがられています。

In general, others respect my class.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

41. たいてい、自分のクラスは他のクラスの人たちにきらわれています。

In general, others think that my class is unworthy.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

42.自分のクラスがすぎです。りゆうは、その中にいる自分が好きだからです。

I like my class because I like myself, who is a member of it.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

43. 自分のクラスがきらいです。りゆうは、その中にいる自分がきらいだからです。

I do not like my class because I don't like myself, who is a member of it.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

44. クラスでいいことがあると、うれしくなります。

When good things happen in my class, I feel happy.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

45. クラスでいやなことがあると、いやな気持ちになります

When bad things happen in my class, I feel bad.

はい ・ どちらかといえばはい ・ どちらかといえばいいえ ・ いいえ

Strongly agree • Agree • Disagree • Strongly disagree

どうもありがとうございました。

Thank you for your cooperation.

Appendix 2

Infit and Outfit Statistics: Entry Order

Items	Measure	S.E.	Infit		Outfit		Subcategories
			MNSQ	ZSTD	MNSQ	ZSTD	
1	-0.59	0.11	0.76	-2.08	0.84	-1.31	IF 1 (IP)
2	-0.48	0.11	0.81	-1.72	0.81	-1.66	IF 2 (IP)
3	0.05	0.1	0.84	-1.58	0.83	-1.62	IF 3 (IP)
4	-0.77	0.12	0.77	-1.86	0.74	-1.98	IF 4 (IP)
5	-0.93	0.12	0.94	-0.36	0.92	-0.47	IAA 1 (IP)
6	-0.34	0.11	0.93	-0.60	0.96	-0.29	IAA 2 (IP)
7	-0.94	0.12	0.99	-0.02	0.98	-0.06	IAA 3 (IP)
8	-0.14	0.10	1.06	0.56	1.08	0.76	IAA 4 (IP)
9	-1.16	0.13	0.70	-2.13	0.65	-2.32	IAA 5 (IP)
10	-0.77	0.12	0.97	-0.15	1.02	0.21	IAA 6 (IP)
11	-0.16	0.10	0.68	-3.30	0.69	-3.08	IAA 7 (IP)
12	0.65	0.11	1.50	3.74	1.65	4.24	INTLA 1 (IP)
13	-0.41	0.11	1.13	1.16	1.12	0.97	INTLA 2 (IP)
14	0.48	0.11	0.64	-3.58	0.62	-3.59	INTLA 3 (IP)
15	0.17	0.10	1.02	0.19	1.01	0.10	INTLA 4 (IP)
16	-0.35	0.11	1.14	1.21	1.25	2.00	INTLA 5 (IP)
17	0.00	0.10	0.87	-1.21	0.86	-1.27	INTLA 6 (IP)
18	-0.66	0.11	1.18	1.40	1.16	1.21	IFA 1 (IP)
19	1.10	0.13	1.44	2.72	1.42	2.37	IFA 2 (IP)
20	0.65	0.11	1.49	3.66	1.45	3.08	IFA 3 (IP)

21	1.10	0.13	1.36	2.25	1.37	2.11	IFA 4 (IP)
22	1.57	0.15	1.00	0.05	1.05	0.31	IFA 5 (IP)
23	0.58	0.11	1.08	0.71	1.07	0.56	SE 1 (SE)
24	0.19	0.1	1.27	2.37	1.27	2.25	SE 2 (SE)
25	0.97	0.12	0.95	-0.34	0.89	-0.67	SE 3 (SE)
26	1.06	0.12	0.98	-0.10	0.94	-0.32	SE 4 (SE)
27	0.97	0.12	0.96	-0.22	0.90	-0.63	SE 5 (SE)
28	-0.04	0.1	1.67	5.29	1.82	6.07	SE 6 (SE)
29	-0.46	0.11	1.45	3.41	1.53	3.76	SE 7 (SE)
30	0.67	0.11	0.93	-0.59	0.91	-0.64	MEMBER 1 (CSE)
31	0.60	0.11	1.10	0.84	1.05	0.40	MEMBER 2 (CSE)
32	-0.70	0.11	0.68	-2.88	0.68	-2.69	MEMBER 3 (CSE)
33	0.62	0.11	0.99	-0.03	0.96	-0.25	MEMBER 4 (CSE)
34	-0.83	0.12	1.01	0.10	0.99	-0.02	PRIVATE 1 (CSE)
35	-0.96	0.12	0.81	-1.43	0.81	-1.27	PRIVATE 2 (CSE)
36	-0.08	0.10	0.78	-2.20	0.79	-2.01	PRIVATE 3 (CSE)
37	-0.39	0.11	0.82	-1.63	0.84	-1.41	PRIVATE 4 (CSE)
38	0.44	0.11	0.76	-2.25	0.87	-1.08	PUBLIC 1 (CSE)
39	-0.01	0.11	0.96	-0.36	1.04	0.41	PUBLIC 2 (CSE)
40	0.58	0.11	0.76	-2.20	0.81	-1.51	PUBLIC 3 (CSE)
41	-0.59	0.11	0.81	-1.62	0.83	-1.36	PUBLIC 4 (CSE)
42	0.60	0.11	0.92	-0.69	0.89	-0.84	IDENTITY 1 (CSE)

43	-0.83	0.12	0.97	-0.20	0.93	-0.45	IDENTITY 2 (CSE)
44	-1.64	0.16	0.83	-0.90	0.86	-0.64	IDENTITY 3 (CSE)
45	1.17	0.13	1.50	2.99	1.83	4.08	IDENTITY 4 (CSE)

Note. IP = International Posture; SE = Self-Esteem; CSE = Collective Self-Esteem; IF = International Friendship; IAA = Intergroup Approach Avoidance; INTLA = Interest in International Activities; IFA = Interest in Foreign Affairs; MEMBER = Membership Esteem; PRIVATE = Private Collective Self-Esteem; PUBLIC = Public Collective Self-Esteem; IDENTITY = Importance to Identity.