

# Kozai Group's Global Competency Inventory as a Predictor of Oral Performance in Foreign Languages

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# **Kozai Group's Global Competency Inventory as a Predictor of Oral Performance in Foreign Languages**

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## **Abstract**

Kozai Group's Global Competency Inventory (GCI) was created in order to predict the ability of expatriates to function in foreign cultures. In particular it measures 16 competencies possessed by people who exhibit success in living and working in cross-culturally complex situations. This paper reports the results of a study in which it was investigated if high scores on the GCI corresponded with high oral/aural performance in a foreign language (in this study the focus was on the performance of Chinese students in speaking Japanese). Of the 16 competencies comprising the GCI a total of 14 competencies were highly associated with superior oral/aural performance in Japanese among the Chinese students. These results confirm the author's main hypothesis that the same affective factors or psychological traits such as personality traits and attitudes that facilitate effective cultural adaptation also facilitate foreign language acquisition.

## **(1) Research Questions**

There are two main related research questions that informed the experiment reported in this paper. The first is "what psychological traits (including attitudinal, affective and personality factors) make some people better at foreign language acquisition and oral/aural performance than others?" Subsequently, "do the psychological traits that help explain why some people adapt to cultures better than others also help explain individual differences in foreign language acquisition, particularly in terms of oral/aural performance?"

## **(2) Previous Research into Psychological Traits and Affect in Relation to Foreign Language Acquisition**

First of all, it should be noted that though the term "foreign language acquisition" is employed here. I am well aware of the debate concerning the differences in the use of the terms: Second Language Acquisition (SLA), Foreign Language Acquisition (FLA), Foreign Language Learning (FLL), etc. However, the significance of the results presented here are meaningful no matter what term and it's associated construct you use. I use SLA when SLA is used in the research literature to which I refer and FLA as a global term that would include SLA, FLL, Third Language Acquisition (TLA), Multiple Language Acquisition (MLA), etc. - ad nauseam.

Researchers in SLA such as Brown (1980), Schumann (1975), and Taylor (1974) have argued that success or failure in SLA is largely the result of social, psychological, and affective factors (SPA factors). There has been considerable research involving SPA factors but not always with a holistic approach. Motivation studies have been at the forefront. The main issues concerning reliable and meaningful results are: (1) the dependent variable – measures of individual differences in FLA, and (2) the independent variable(s) – measures of psychological traits (such as personality, attitudes, motivation, etc.) – and (3) the theoretical constructs tying together the measured independent variables.

According to Dörnyei (2005), inconclusive results in the literature concerning the relationship between psychological traits (personality variables) or SPA and SLA have been partly due to methodological limitations or inconsistencies. The dependent variable (FLA) has often been language achievement in terms of academic success in foreign language study measured by such criteria as exam grades, grade point average, final degree results, and course-specific evaluations. All these are very indirect measurements of performance in the target language and would not capture the finer points of individual difference in oral/aural performance such as communication competence, accent, pronunciation, naturalness of speech, etc. compared to native speakers of the target language.

Some studies (e.g. Naiman et al., 1978) that only examined criterion measured from written language found no relationships between these and extraversion-introversion. There are also problems with consistency: akin to the proverbial comparison of apples and oranges – are you comparing similar enough subjects in terms of their relevant background factors (those that would affect FLA performance but are not psychological traits)? More reliable results for the dependent variable under consideration may be obtained by using sample subjects who have reached a certain high-level threshold in FLA attainment, such as becoming a student at a university where the target language (TL) is the language of instruction for non-language-related courses, share the same mother tongue, and are controlled for other potentially significant demographic variables. As demonstrated in the analysis of the subjects' demographics in this paper, these factors have been sufficiently considered and accounted for.

In relation to the independent variables representing affective factors, the Myers - Briggs Type Indicator (MBTI) is one of the personality type assessment inventories used to generate psychometric scales for the independent variables. Indirect measurement is the essential issue when using such personality type assessment inventories. MacIntyre and Charos (1996) argue that global personality traits are implicated in the learning process via their influence on language-related attitudes, anxiety, perceived competence, and motivation.

In response to the need for more complex theoretical constructs, MacIntyre, Clément, Dörnyei, and Noels (1998) offer the Willingness to Communicate (WTC) model in which personality forms an important part of the construct, with four further layers of variables conceptualized between personality traits and communicative behaviour (Dörnyei, 2005:23). It can be argued that language and culture are so interrelated that investigating one without sufficiently considering the other creates a theoretical weakness in any construct. This should especially be true in the case of FLA where one is not just acquiring knowledge of and experiences in a new language but also a new culture. From my own experience as a polyglot, I have noticed that interference between languages is minimized when I “feel the language.” This “feeling of the language” is associated with feeling a part of the culture in which I actually used the language, bringing back memories and feelings associated with experiences that took

place in the cultural context of the target language. It is noteworthy that it is harder to be in tune with this feeling (flow) when involved in a monologue to demonstrate proficiency in the target language than when interacting with a representative from the target culture.

A central theme to Norton's (2000:3) influential book *Identity and Language Learning* is that artificial distinctions have been drawn between the learner and the larger social world. She argues that problems occur when affective factors are seen as divorced from the socio-cultural context or when the focus is solely on the socio-cultural context. In relation to SLA and performance of an individual learner, personality factors do matter and so does the socio-cultural context. The expression of personality factors is modulated by socio-cultural context. For example, individuals can be classified being at different points on a given introvert-extrovert scale. Nevertheless, the degree of extroversion expressed of any given individual at any point on the said scale will always be modulated by socio-cultural context. This can be observed when there are inequitable relations of power and status; such as a student talking to a professor in contrast to a student talking to another student.

Many of the SPA factors related to FLA potentially come together when examining individual differences in cultural adaptation. Schumann's Acculturation Model (1978) is one of the most well known early attempts to explore the relationship between cultural adaptation and SLA. Communicative competence in the target language facilitates cultural adjustment and vice versa. Schumann's (1986) acculturation model predicts that learners will acquire the target language to the degree they acculturate to the target language group. Schumann (1986) argued that two groups of variables – social factors and affective factors – cluster together into a single variable that is a major causal variable in SLA. Schumann called this variable acculturation - the social and psychological integration of the learner with the target language (TL) group. Schumann (1986:379) stated: "I also propose that any learner can be placed on a continuum that ranges from social and psychological distance to social psychological proximity with speakers of the TL, and that the learner will acquire the second language only to the degree that he acculturates."

Larsen-Freeman & Long (1991) argue that Schumann did not specify the combinations and/or levels of social and psychological factors to predict language outcomes and that Schumann did not explain how these factors affect the rate of attainment. This is a very empiricist-type remark, expecting definitiveness where it may not be available. My experiment presented in this research serves to partially address this concern, however, it must be understood that there is no one single recipe for success. In addressing the research questions I proposed, I have sought to find a validated psychometric instrument that focuses on the psychological traits associated with success in cultural adaptation and test the hypothesis that they are also related to success in FLA. The experiment in this research does not attempt to quantitatively verify Schumann's Acculturation Model, but the results do demonstrate the spirit of the model is very insightful and that any model attempting to explain individual differences will be more robust by incorporating these culture-language related factors.

### **(3) Kozai Group's Global Competency Inventory (GCI)**

After reviewing most of the questionnaires that are used to predict people's ability to function effectively in cross-cultural environments, the GCI was chosen as the most appropriate instrument based

on my expertise and experience in the field of cross-cultural management. Kozai Group kindly agreed to cooperate by offering the free use and analysis of the GCI in the experiment. Thus, the Kozai Group's GCI was employed as a validated instrument for measuring psychological traits affecting cultural adaptation (associated with effective behavior in a cross-cultural environment) to obtain rankings for the experimental subjects in 16 competencies to explore if relatively higher scores correspond with higher oral/aural performance in a foreign language.

Global Competencies Inventory (GCI) measures 16 dimensions associated with effective intercultural behavior and dynamic global managerial skill acquisition and are grouped under three factors:

**Perception Management (learning effectively):**

(1) Nonjudgmentalness, (2) Inquisitiveness, (3) Tolerance for Ambiguity, (4) Cosmopolitanism, and (5) Interest Flexibility.

**Relationship Management (managing relationships effectively):**

(1) Relationship Interest, (2) Interpersonal Engagement, (3) Emotional Sensitivity, (4) Self Awareness, and (5) Social Flexibility.

**Self Management (management self in challenging situations)**

(1) Optimism, (2) Self Confidence, (3) Self-Identity, (4) Emotional Resilience, (5) Non-Stress Tendency, and (6) Stress Management.

**(4) Statement of the Hypotheses**

The 16 dimensions of the GCI are associated with effective intercultural behavior. Thus, they represent the psychological traits that help explain why some people adapt to cultures better than others. High scores on the GCI competencies and the three factor variables are associated with effective cultural adaptation. I hypothesize that the psychological traits associated with effective cultural adaptation are also associated with effective language acquisition measured in terms of oral/aural performance.

Summary Hypothesis 1a: There are significant positive correlations between the scores for the 16 competencies of the GCI as well as for the three factor variables with "Japanese Ability".

Summary Hypothesis 1b: The mean scores for the 16 competencies of the GCI as well as for the three factor variables of the "Top 17" in "Japanese Ability" subgroup are significantly higher than those for the "Bottom 17" subgroup.

Summary Null Hypothesis 1a: The correlations between the scores for the 16 competencies of the GCI as well as the three factor variables with "Japanese Ability" are 0 or negative.

Summary Null Hypothesis 1b: There is no significant difference between the means of the "Top 17" in "Japanese Ability" subgroup's scores for the 16 competencies of the GCI as well as for the three factor variables and those of the "Bottom 17" subgroup.

## **(5) Methods**

### **Design of the Experiment**

The GCI was administered to 86 Chinese students studying at Kyushu Sangyo University where Japanese is the main medium of instruction. Thereafter the students participated in a videotaped seven-minute semi-structured interview with a Japanese native speaker who interviewed all the 86 subjects. For the first few minutes of the interview the students read a short essay in Japanese concerning "reasons for learning foreign languages." The remaining time of the interview was spent replying to a set of questions concerning their experiences and feelings about studying in Japan and learning Japanese.

The 16 competencies served as the independent variables while the Chinese students' ranking in "Japanese Ability" served as the dependent variable. Both were measured on a 5-point Likert scale. The GCI was chosen since it was hypothesized that the same competencies that facilitate cultural adaptation also facilitate superior performance in oral/aural communication in foreign languages. Oral/aural interaction performance was selected since such an environment tends to elucidate affective factors related to performance to a much greater extent than a non-interactive measurement such as a paper-based test of language ability.

### **Obtaining a Measurement of "Japanese Oral/Aural Ability"**

Six native speakers of Japanese, with graduate degrees in various fields and ranging in age for 24 to 62, were hired to view the videotaped interviews and rank the ability of the Chinese students in spoken Japanese. The evaluation criterion was "how closely the Chinese students sounded like a Japanese native speaker." The six Japanese judges viewed the 86 video files and ranked the subjects independently (no consultation with one another) over a period of one month. The judges were instructed to force-rank the participants' performance on a 1 (the lowest) to 5 (the highest) Likert scale assigning 18 participants with the score of 5, and the remaining four groups of participants (17 in each group) with rankings of 4, 3, 2, or 1 ( $18+17+17+17+17=86$ ). They also assigned a numerical rating for each subject similar to what a teacher would do when grading papers. The sum of this number was only used to determine cut-off points for the Top and Bottom 17 when the rankings were equal at the cut-off points.

At first, calculating the mean scores given by all 6 raters yielded an average standard deviation of 0.926. To reduce inter-rater variation the highest value and lowest value were discarded leaving 4 scores. In the case of more than one score representing the highest and/or the lowest value only one of the equivalent scores was discarded (for example, original scores of 5, 5, 4, 4, 3, 3 would become 5, 4, 4, 3 yielding a mean of 4). The four scores obtained using this system were averaged. This average was used as the measurement of "Japanese Ability." (The average standard deviation for the ratings was 0.594). A summary of the standard deviations for the ratings using four scores is presented in Table 1 below.

The highest nine participants (average score of 5) and the lowest 3 participants (average score of 1) obviously requires complete agreement (Std. Dev. = 0). The average scores between 3.75–3 and 2.75–2.25 had the highest standard deviations, 0.760 and 0.733 respectively. This was expected since the range between 2.25 and 3.75 (total 44 out of 86) represents the most difficult group to score since difference between the participants ability in Japanese would theoretically be the smallest in the middle groupings.

Table 1 : “Japanese Ability” Ranking: Std. Dev. Using 4 Scores

Ranking (across):		5	4.75 – 4	3.75 – 3	2.75 – 2.25	2.0 – 1.0
StdDev (down)	Total	<u>9</u>	<u>14</u>	<u>21</u>	<u>23</u>	<u>19</u>
0.000	14	9	1	1	0	3
0.409	1	0	0	1	0	0
0.500	28	0	6	5	5	12
0.517	13	0	3	2	6	2
0.816	10	0	2	4	4	0
0.957	12	0	2	3	5	2
1.000	2	0	0	2	0	0
1.258	6	0	0	3	3	0
Avg. StdDev	<u>0.594</u>	<u>0.000</u>	<u>0.591</u>	<u>0.760</u>	<u>0.773</u>	<u>0.497</u>

For comparing the means of the variables for the GCI scales and other scales generated in the study between the top “Japanese Ability” scoring group with those of the bottom “Japanese Ability” scoring group, the cut points were set at the “Top 17” and “Bottom 17” in order to increase reliability in terms of minimizing inter-rater variance. For the “Top 17” participants the average standard deviation between the 4 ratings of “Japanese Ability” was 0.210 while that for the “Bottom 17” participants was 0.420. This method yields very high reliability in terms of the measurement of “Japanese Ability” in oral/aural performance.

In summary, the reliability of the measurement for “Japanese Ability” when using all 86 subjects is 0.594 in terms of average standard deviation as an indication of inter-rater variability. Given that the ranking of “Japanese Ability” is on a 5-point Likert scale; an average standard deviation of 0.594 is respectively low indicating relatively high inter-rater agreement. The reliability of the measurement for “Japanese Ability” when using the sub-groups “Top 17” and “Bottom 17” is 0.315 in terms of average standard deviation as an indication of inter-rater variability. The average rating of the “Top 17” is 4.705 while that of the “Bottom 17” is 1.617, yielding an average difference between the two groups of 3.08 in terms of their “Japanese Ability” ratings.

### Demographics of Subjects

The mean age of all 86 subjects was 24.31 with a range of 19 to 32 years of age. There was no significant correlation between age and “Japanese Ability” as measured in the experiment (N = 34/86 Pearson Correlation: 0.116/0.089, Sig. 2-tailed: 0.512/0.415).

In light of the so-called “Critical or Sensitive Period” hypothesis, “Age Started to Study a Foreign Language” (ASSFL) was investigated. The variable ASSFL was created by re-coding the ages: age 9 and below = 4, age 10~13=3, age 14~17= 2, and age 19 and above = 1. There is no correlation between the recoded variable and “Japanese Ability” (N = 34/86 Pearson Correlation: -0.018/ -0.100, Sig. 2-tailed: 0.919/0.359).

As for gender, there were 30 male subjects (34.9%) and 56 female subjects (65.1%). There was no significant relationship between gender and “Japanese Ability” (N = 34/86 Pearson Correlation: -0.124/

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–0.045, Sig. 2-tailed: 0.484/0.678). If there were a correlation then a negative number would mean being male may be an advantage since Male = 1 and Female = 2.

The relationship between “age came to Japan” and “Japanese Ability” was also explored. Table 2 gives a summary of the ages of the subjects when they first came to Japan.

There was no significant relationship between “age when came to Japan” and “Japanese Ability” (N = 34/86 Pearson Correlation: 0.089/0.116, Sig. 2-tailed: 0.415/0.512). However, on average the “Top 17” came to Japan at a later age than the “Bottom 17”.

“Months residing in Japan” at the time of the experiment was also recorded and analyzed. The distribution is given in Table 3. There was no significant correlation between “Months residing in Japan” with “Japanese Ability” (N = 34/86 Pearson Correlation: 0.076/0.111, Sig. 2-tailed: 0.668/0.308).

The lack of a significant correlation between “Months residing in Japan” and “Japanese Ability” coincides with my expectations. Almost all the subjects have been in Japan for at least 2 years. This is sufficient time for adept language learners to acquire a high level of Japanese given sufficient motivation. Length of residence tends to decrease in importance as time passes. Notice that 2 out of the 7 longest residents (all subjects included) are in the “Bottom 17”.

The “number of countries visited besides Japan for at least one week” was also noted. The overall majority of the subjects (88.4%) has not been to a foreign country other than Japan. Three of the 10 people who have visited a foreign country besides Japan are in the “Top 17” and one is in the “Bottom 17” in terms of “Japanese Ability.” Furthermore, only one subject had lived in another foreign country besides Japan (Russia) and the subject lived there for six months. This subject is not in the “Top 17” in terms of “Japanese Ability.”

The number of languages spoken by the subjects is listed in Table 4. Though the correlations between

Table 2 : Age of Subjects When They Came to Japan

AGE:	13~17	18~19	20~21	22~24
Top 17 in JA	0 ( 0%)	5 (29.4%)	7 (41.2%)	5 (29.4%)
Bottom 17 in JA	0 ( 0%)	8 (47.1%)	5 (29.4%)	4 (23.6%)
All 86 Subjects	9 (10.5%)	34 (39.6%)	24 ( 28%)	19 (22.1%)

Table 3 : Months Residing in Japan at the Time of Experiment

MONTHS:	18-36	37-48	49-60	61-72	73-122
Top 17 in JA	3 (17.6%)	4 (23.6%)	7 (41.2%)	2 (11.7%)	1 ( 5.9%)
Bottom 17 in JA	4 (29.4%)	4 (23.6%)	5 (29.5%)	1 ( 5.8%)	2 (11.7%)
All Subjects	26 (30.1%)	24 (27.9%)	22 (25.6%)	7 ( 8.2%)	7 ( 8.2%)

Table 4 : Number of Languages Spoken by the Subjects

Number of Languages	2 Languages	3 Languages
Top 17 in JA	11 (64.7%)	6 (35.3%)
Bottom 17 in JA	15 (88.2%)	2 (11.8%)
All Subjects	63 (73.3%)	22 ( 1.2%)



“Japanese Ability” and “Numbers of Languages Spoken” are only significant at 0.112 (88%) for the Top/Bottom 17 and 0.074 (92%) for all subjects, in general, the author has experienced that learning languages gets easier as the number of languages spoken increases. One reason for the lack of a significant correlation may be the fact that all the subjects obviously spoke at least 2 languages (Chinese and Japanese) and the number of subjects who spoke 3 languages was only about 25% of the total number of subjects. Note that 35.3% of the “Top 17” spoke 3 languages compared to only 1.2% of the total 86 subjects.

The “number of months spent studying in a Japanese languages school in Japan” was also investigated. A summary of the subjects’ language school data is listed in Table 5. There is no significant correlation among all subjects between “months spent studying at a Japanese Language School in Japan” with “Japanese Ability” (Pearson Correlations:  $-0.172$ , Sig. 2-tailed: 0.112); note that though it is not statistically significant it is slightly negative. Ironically, overall the subjects in the “Top 17” have spent less time in a Japanese Language School in Japan than the subjects in the “Bottom 17”. This observation suggests autonomy and self-directed language learning may be a factor in determining the degree of success.

A number of motivational questions were included in the questionnaire. Among these questions two demonstrated a significant relationship with “Japanese Ability”: “I wanted to learn Japanese in order to study at a Japanese University” ( $N = 34/86$  Pearson Correlation:  $0.407/0.220$ , Sig. 2-tailed:  $0.017/0.042$ ) and “I wanted to learn Japanese because I like to learn foreign languages” ( $N = 34/86$  Pearson Correlation:  $0.444/0.291$ , Sig. 2-tailed:  $0.009/0.007$ ). In addition, ANOVA analysis for the Top/Bottom 17 yielded an F of 10.419 and an F of 2.992 for all 86 subjects. It is interesting to note that enjoying learning foreign languages was the most significant factor of all the motivational factors investigated.

The number of hours the subjects watched TV programs in Japanese during their first year in Japan was also noted and analyzed in relation to differences in measured oral/aural Japanese performance. The distribution is presented in Table 6.

The main difference between the “Top 17” compared to the “Bottom 17” and all 86 subjects is that the percentage for zero hours and one hour is about half of the other two groups while the percentage for two

Table 5 : Number of Months Spent Studying at Japanese Language School in Japan

No. of Months	0	1-10	11-17	18	22-24	25-30
Top 17 in JA	2 (11.8%)	1 (5.9%)	1 (5.9%)	5 (29.4%)	8 (47.1%)	0 (0%)
Bottom 17 in JA	0 ( 0%)	0 ( 0%)	0 ( 0%)	8 (47.1%)	9 (52.9%)	0 (0%)
All Subjects	6 ( 7.0%)	4 (4.6%)	3 (3.5%)	28 (32.6%)	43 ( 50%)	1 (1%)

Table 6 : How many hours/week the subjects watched TV programs in Japanese during their first year in Japan

Hours	0	1	2	3-5	6-15	16 or more
Top 17	<u>3</u> (17.6%)	<u>1</u> ( 5.9%)	<u>6</u> (35.3%)	4 (23.5%)	2 (11.8%)	1 (5.9%)
Bottom 17	<u>6</u> (35.3%)	<u>2</u> (11.8%)	<u>3</u> (17.6%)	4 (23.5%)	1 (11.8%)	0 (0%)
All 86	<u>27</u> (31.4%)	<u>11</u> (12.8%)	<u>12</u> (14.0%)	21(24.5%)	10 (11.6%)	5 (5.8%)

hours is about double. In considering these results, keep in mind that watching TV in a foreign language, the target language, is challenging and requires persistence and strong motivation to learn. However, this factor was not significantly correlated with “Japanese Ability” (N =34/86 Pearson Correlation: 0.202/0.174, Sig. 2-tailed: 0.253/0.110).

The self-reported ability in Japanese of the subjects was also analyzed. Table 7 lists the reported results. There is no significant correlation between the subject’s “Japanese Ability” when they first came to Japan and their present measured “Japanese Ability” (N =34/86 Pearson Correlation: -0.010/0.0051, Sig. 2-tailed: 0.956/0.664).

Table 7 : Ability in Japanese when Came to Japan

	1: Not at All	2: A Few Words	3: Enough to Have a Short Conversation	4: Enough to Talk about Most Subjects	5: Enough to Study at University in Japanese
Top 17	4 (23.5%)	7 (41.2%)	6 (35.3%)	0 ( 0%)	0 (0%)
Bottom 17	2 (11.8%)	11 (64.7%)	4 (23.5%)	0 ( 0%)	0 (0%)
All 86	18 (20.9%)	36 (41.9%)	27 (31.4%)	5 (5.8%)	0 (0%)

## (6) Results of Experiment

### The Results for the GCI Summary Variable

The results clearly indicate that the GCI as a whole is a very powerful predictor of oral/aural performance in foreign languages. First, the analysis of variance for the “Top 17” and “Bottom 17” in terms of oral/aural ability in Japanese supports the validity of the results for the correlation analysis and analysis for the difference between the means. As seen in Table 8, the F Value of 51.648 indicates that the differences in GCI scores between the “Top 17” and “Bottom 17” is much greater than the differences between the individuals within these groups.

Additionally, as shown in Table 9, the analysis of variance of GCI scores based on “Japanese Ability”

Table 8 : ANOVA of GCI Scores Based on “Japanese Ability”

Top 17 versus Bottom 17

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.494	1	3.494	51.648	.000
Within Groups	2.165	32	6.766E-02		
Total	5.659	33			

Table 9 : ANOVA of GCI Scores Based on “Japanese Ability”

All Five Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.068	4	1.017	16.967	.000
Within Groups	4.855	81	5.994E-02		
Total	8.922	85			

for the five groups yielded an F Value of 16,967 indicating that the differences between the groups are much greater than the differences between the individuals within these groups.

As seen in Table 10, there is a high significant positive correlation between Overall Global Competency scores and “Japanese Ability” in the case of the “Top 17” versus the “Bottom 17” as well as for all 86 subjects. Therefore, the null hypothesis that the correlation between the scores for Overall Global Competency with “Japanese Ability” is 0 or negative is rejected.

Furthermore, as shown in Table 11, the “Top 17” subgroup mean score for the Overall Global Competency is significantly greater than that of the “Bottom 17”. Thus, the null hypothesis that there is no significant difference between the mean of the “Top 17” subgroup’s scores for Overall Global Competency and that of the “Bottom 17” subgroup is rejected.

Table 10 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and GCI Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Global Competency Score	0.779**/0.624**	0.000/0.000	34/86

Table 11 : Differences of Means of the GCI Summary Variable between “Top 17” & “Bottom17” in “Japanese Ability”

GCI Summary Variable	N	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Std. Error	Inter 95% Conf.
Top 17	17	3.4687	0.2912	7.06E-02	0.000**	0.6412**	8.92E-02	0.4594 to
Bottom 17	17	2.8275	0.2248	5.45E-02				0.8229

**The Results for the Perception Management Factor Variable**

The analyses of the Perception Management Factor Variable (PMFV) indicate that it predicts foreign language oral/aural performance; however, the PMFV is the weakest of the three factor variables since two of the competencies in this variable did not demonstrate any predictive power on their own.

The ANOVA analysis of the PMFV scores yielded an F Value of 20.808 (Sig.: =0.000) for the “Top 17” versus the “Bottom 17” and an F Value of 7.451 (Sig.: =0.000) for all five groups. As seen in Table 12, there are significant correlations between the PMFV scores and Japanese ability for both the “Top 17” and “Bottom 17” as well as for all 86 participants. The null hypothesis that the correlation between the scores for PMFV with “Japanese Ability” is 0 or negative is rejected.

Furthermore, the “Top 17” subgroup mean score for the PMFV is significantly greater than that of the “Bottom 17” as shown in Table 13. The null hypothesis that there is no significant difference between the mean of the “Top 17” subgroup’s scores for PMFV and that of the “Bottom 17” subgroup is rejected.

Table 12 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and PMFV Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Perception Management	0.613**/0.416**	0.000/0.000	34/86

Table 13 : Differences of Means of the PMFV Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Perception Management	N	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.5126	0.4713	7.06E-02	0.000**	0.7311	0.1603	0.4046 to
Bottom 17	17	2.7815	0.4632	5.45E-02				1.0576

**The Results for the PM Component Variable Nonjudgmentalness**

The null hypothesis that the correlation between the scores for Nonjudgmentalness with “Japanese Ability” is 0 or negative is not rejected since, as shown in Table 14, there is no significant positive correlation for the “Top 17” and “Bottom 17” as well as for 86 subjects.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Nonjudgmentalness and that of the “Bottom 17” subgroup is not rejected since, as seen in Table 15, there is no significant difference between the means.

Table 14 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Nonjudgmentalness Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Number of Subjects
Nonjudgmentalness	-0.185/-0.069	0.295/0.527	34/86

Table 15 : Differences of Means of the Nonjudgmentalness Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Nonjudgmentalness	N	Mean	Std. Deviation.	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	2.6928	0.5069	0.123	0.388	-0.1438	0.1644	-4.876 to
Bottom 17	17	2.8366	0.4498	0.1091				.1910

**The Results for the PM Component Variable Inquisitiveness**

The null hypothesis that the correlation between the scores for Inquisitiveness with “Japanese Ability” is 0 or negative is not rejected since, as shown in Table 16, there is no significant positive correlation for the “Top 17” and “Bottom 17” as well as for 86 subjects.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Inquisitiveness and that of the “Bottom 17” subgroup is not rejected since, as seen in Table 17, there is no significant difference between the means.

Table 16 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Inquisitiveness Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Number of Subjects
Inquisitiveness	0.076/0.015	0.671/0.894	34/86

Table 17 : Differences of Means of the Inquisitiveness Scores between “ Top 17” & “ Bottom 17” in “Japanese Ability”

Inquisitiveness	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	2.8301	0.5094	0.1235	0.672	-0.0654	0.1529	-3.768 to
Bottom 17	17	2.8954	0.3716	0.0090				0.2461

**The Results for the PM Component Variable Tolerance of Ambiguity**

The ANOVA results for Tolerance of Ambiguity yielded an F Value of 19.146 (Sig =0.000) between the “Top 17” and “Bottom 17” and 5.623 (Sig. =0.000) for all five groups. Thus, it is clear that the correlations and difference of means are valid. As seen in Table 18, there is a high significant positive correlation between Tolerance of Ambiguity scores and “Japanese Ability”, so the null hypothesis that the correlation between the scores for Tolerance of Ambiguity with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Tolerance of Ambiguity and that of the “Bottom 17” subgroup is rejected since, as seen in Table 19, there is a significant difference between the means.

Table 18 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Tolerance of Ambiguity Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Tolerance of Ambiguity	0.583**/0.410**	0.000/0.000	34/86

Table 19 : Differences of Means of the Tolerance of Ambiguity Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Tolerance of Ambiguity	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	4.0412	0.4417	0.1071	0.000	0.6026	0.1377	0.3221 to
Bottom 17	17	3.4386	0.3569	0.0865				0.8831

**The Results for the PM Component Variable Cosmopolitanism**

The results of the ANOVA for Cosmopolitanism yielded an F Value of 6.206 (Sig. = .018) between the “Top 17” and “Bottom 17” and 2.675 (Sig. =0.036) for all five groups. These F Values are not as high as those for the previous variable but are significant enough to support the validity of the analyses for correlations and differences of the means. Table 20 reports that the correlation between Cosmopolitanism scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Cosmopolitanism with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Cosmopolitanism and that of the “Bottom 17” subgroup is rejected since, as seen in Table 21, there is a significant difference between the means.

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Table 20 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Cosmopolitanism Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Number of Subjects
Cosmopolitanism	0.456**/0.366**	0.007/0.001	34/86

Table 21 : Differences of Means of the Cosmopolitanism Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Cosmopolitanism	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.0686	0.3362	0.0816	0.018	0.2598	0.1043	0.0473 to
Bottom 17	17	2.8088	0.2680	0.0650				0.4722

### The Results for the PM Component Variable Interest Flexibility

The results of the ANOVA for Interest Flexibility yielded an F Value of 9.830 (Sig. = .004) between the “Top 17” and “Bottom 17” and 3.266 (Sig. = 0.016) for all five groups. These F Values indicate a fairly high validity for the correlation and difference of means analyses. Table 22 shows that the correlation between Interest Flexibility scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Interest Flexibility with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Interest Flexibility and that of the “Bottom 17” subgroup is rejected since, as seen in Table 23, there is a significant difference between the means.

Table 22 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Interest Flexibility Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Number of Subjects
Interest Flexibility	0.471**/0.238**	0.005/0.027	34/86

Table 23 : Differences of Means of the Interest Flexibility Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Interest Flexibility	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.9024	0.7248	0.1758	0.004	0.7143	0.2278	0.2502 to
Bottom 17	17	2.3782	0.5975	0.1449				1.1783

### The Results for the Relationship Management Factor Variable

Based on the analyses, of the three summary variables, the Relationship Management Factor Variable (RMFV) is the second strongest predictor of foreign language oral/aural performance. The ANOVA analysis of the RMFV scores yielded an F Value of 25.601 (Sig. = 0.000) for the “Top 17” versus the “Bottom 17” and an F Value of 10.836 (Sig. = 0.000) for all five groups. As seen in Table 24, there are significant correlations between the RMFV scores and Japanese ability for both the “Top 17” and “Bottom

17” as well as for all 86 participants. The null hypothesis that the correlation between the scores for RMFV with “Japanese Ability” is 0 or negative is rejected.

Additionally, the “Top 17” subgroup mean score for the RMFV is significantly greater than that of the “Bottom 17” as shown in Table 25. The null hypothesis that there is no significant difference between the mean of the “Top 17” subgroup’s scores for RMFV and that of the “Bottom 17” subgroup is rejected.

Table 24 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and RMFV Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Relationship Management	0.661**/0.523**	0.000/0.000	34/86

Table 25 : Differences of Means of the RMFV Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Relationship Management	N	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.3295	0.2813	6.82E-02	0.000**	0.4370	0.0864	0.2611 to
Bottom 17	17	2.8924	0.2184	5.30E-02				0.6130

**The Results for the RM Component Variable Relationship Interest**

The results of the ANOVA for Relationship Interest yielded an F Value of 32.558 (Sig. = .000) between the “Top 17” and “Bottom 17” and 8.906 (Sig. = 0.000) for all five groups. These high F Values confirm the validity of the correlation and difference of means analyses. Table 26 shows that the correlation between Relationship Interest scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Relationship Interest with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Relationship Interest and that of the “Bottom 17” subgroup is rejected since, as seen in Table 27, there is a significant difference between the means.

Table 26 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Relationship Interest Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Relationship Interest	0.798**/0.509**	0.000/0.000	34/86

Table 27 : Differences of Means of the Relationship Interest Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Relationship Interest	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.6150	0.3864	0.0937	0.000	0.6738	0.1181	0.4333 to
Bottom 17	17	2.9412	0.2962	0.0719				0.9143

**The Results for the RM Component Variable Interpersonal Engagement**

The results of the ANOVA for Interpersonal Engagement yielded an F Value of 15.708 (Sig. = .000) between the “Top 17” and “Bottom 17” and 6.473 (Sig. = 0.000) for all five groups. These high F Values confirm the validity of the correlation and difference of means analyses. Table 28 shows that the correlation between Interpersonal Engagement scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants and thus the null hypothesis that the correlation between the scores for Interpersonal Engagement with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Interpersonal Engagement and that of the “Bottom 17” subgroup is rejected since, as seen in Table 29, there is a significant difference between the means.

Table 28 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Interpersonal Engagement Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Interpersonal Engagement	0.600**/0.453**	0.000/0.000	34/86

Table 29 : Differences of Means of the Interpersonal Engagement Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Interpersonal Engagement	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.7279	0.4640	0.1125	0.000	0.6544	0.1651	0.3181 to
Bottom 17	17	3.0735	0.4982	0.1208				0.9007

**The Results for the RM Component Variable Emotional Sensitivity**

The results of the ANOVA for Emotional Sensitivity yielded an F Value of 33.283 (Sig. = .000) between the “Top 17” and “Bottom 17” and 11.910 (Sig. = 0.000) for all five groups. These high F Values confirm the validity of the correlation and difference of means analyses. Table 30 shows that the correlation between Emotional Sensitivity scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants and thus the null hypothesis that the correlation between the scores for Emotional Sensitivity with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Emotional Sensitivity and that of the “Bottom 17” subgroup is rejected since, as seen in Table 31, there is a significant difference between the means.

Table 30 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Emotional Sensitivity Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Emotional Sensitivity	0.707**/0.535**	0.000/0.000	34/86



Table 31 : Differences of Means of the Relationship Interest Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Emotional Sensitivity	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.8382	0.4755	0.1153	0.000	0.7721	0.1338	0.4995 to
Bottom 17	17	3.0663	0.2799	0.0679				1.0447

**The Results for the RM Component Variable Self Awareness**

The results of the ANOVA for Self Awareness yielded an F Value of 11.187 (Sig. = .000) between the “Top 17” and “Bottom 17” and 4.308 (Sig. =0.000) for all five groups. These high F Values confirm the validity of the correlation and difference of means analyses. Table 32 shows that the correlation between Self Awareness scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Self Awareness with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Self Awareness and that of the “Bottom 17” subgroup is rejected since, as seen in Table 33, there is a significant difference between the means.

Table 32 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Self Awareness Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Self Awareness	0.527**/0.395**	0.000/0.000	34/86

Table 33 : Differences of Means of the Self Awareness Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Self Awareness	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.6863	0.5763	0.1398	0.000	0.5621	0.1681	0.2198 to
Bottom 17	17	3.1242	0.3847	0.0933				0.9044

**The Results for the RM Component Variable Social Flexibility**

The results of the ANOVA for Social Flexibility yielded an F Value of 31.551 (Sig. = .000) between the “Top 17” and “Bottom 17” and 6.806 (Sig. =0.000) for all five groups. These high F Values confirm the validity of the correlation and difference of means analyses. Table 34 shows that the correlation between Social Flexibility scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants and thus the null hypothesis that the correlation between the scores for Social Flexibility with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Social Flexibility and that of the “Bottom 17” subgroup is rejected since, as seen in Table 35, there is a significant difference between the means.

Table 34 : Correlation between “ Japanese Ability ” in Terms of Oral/Aural Performance and Social Flexibility Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Social Flexibility	0.691**/0.450**	0.000/0.000	34/86

Table 35 : Differences of Means of the Social Flexibility Scores between “ Top 17 ” & “ Bottom 17 ” in “ Japanese Ability ”

Social Flexibility	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.6667	0.4101	0.0995	0.000	0.6993	0.1245	0.4457 to
Bottom 17	17	2.9637	0.3087	0.0748				0.9530

### The Results for the Self Management Factor Variable

Based on the analyses, of the three factor variables, the Self Management Factor Variable (SMFV) is the strongest predictor of foreign language oral/aural performance. The ANOVA analysis of the SMFV scores yielded an F Value of 43.810 (Sig.: =0.000) for the “Top 17” versus the “Bottom 17” and an F Value of 16.543 (Sig. =0.000) for all five groups. As seen in Table 36, there are significant correlations between the SMFV scores and Japanese ability for both the “Top 17” and “Bottom 17” as well as for all 86 participants. The null hypothesis that the correlation between the scores for SMFV with “Japanese Ability” is 0 or negative is rejected.

Additionally, the “Top 17” subgroup mean score for the SMFV is significantly greater than that of the “Bottom 17” as shown in Table 37. The null hypothesis that there is no significant difference between the mean of the “Top 17” subgroup’s scores for SMFV and that of the “Bottom 17” subgroup is rejected.

Table 36 : Correlation between “ Japanese Ability ” in Terms of Oral/Aural Performance and SMFV Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Self Management	0.769**/0.622**	0.000/0.000	34/86

Table 37 : Differences of Means of the SMFV Scores between “ Top 17 ” & “ Bottom 17 ” in “ Japanese Ability ”

Self Management	N	Mean	Std. Deviation	Std. Error Mean	Sig. (2-tailed)	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.6788	0.2813	8.37E-02	0.000**	<b>0.6788</b>	0.1025	0.4699 to
Bottom 17	17	2.8924	3	5.92E-02				0.8876

### The Results for the SM Component Variable Optimism

The results of the ANOVA for Optimism yielded an F Value of 23.447 (Sig. =.000) between the “Top 17” and “Bottom 17” and 8.444 (Sig. =0.000) for all five groups. These high F Values confirm the validity of the correlation and difference of means analyses. Table 38 shows that the correlation between Optimism scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for

all 86 participants, and thus the null hypothesis that the correlation between the scores for Optimism with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Optimism and that of the “Bottom 17” subgroup is rejected since, as seen in Table 39, there is a significant difference between the means.

Table 38 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Optimism Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Optimism	0.659**/0.521**	0.000/0.000	34/86

Table 39 : Differences of Means of the Optimism Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Optimism	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.4748	0.5119	0.1242	0.000	0.7059	0.1458	0.4089 to
Bottom 17	17	2.7689	0.3149	0.0764				1.0028

**The Results for the SM Component Variable Self Confidence**

The results of the ANOVA for Self Confidence yielded an F Value of 32.666 (Sig. = .000) between the “Top 17” and “Bottom 17” and 8.779 (Sig. =0.000) for all five groups. These high F Values confirm the validity of the correlation and difference of means analyses. Table 40 shows that the correlation between Self Confidence scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Self Confidence with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Self Confidence and that of the “Bottom 17” subgroup is rejected since, as seen in Table 41, there is a significant difference between the means.

Table 40 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Self Confidence Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Self Confidence	0.712**/0.490**	0.000/0.000	34/86

Table 41 : Differences of Means of the Self Confidence Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Self Confidence	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.7861	0.2447	0.0593	0.000	0.5455	0.0954	0.3511 to
Bottom 17	17	3.2406	0.3082	0.0748				0.7399

**The Results for the SM Component Variable Self Identity**

The results of the ANOVA for Self Identity yielded an F Value of 70.531 (Sig. = .000) between the “Top 17” and “Bottom 17” and 17.499 (Sig.=0.000) for all five groups. These F Values are the highest for all the variables and confirm the validity of the correlation and difference of means analyses. Table 42 shows that the correlation between Self Identity scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Self Identity with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Self Identity and that of the “Bottom 17” subgroup is rejected since, as seen in Table 43, there is a significant difference between the means.

Table 42 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Self Identity Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Self Identity	0.801**/0.589**	0.000/0.000	34/86

Table 43 : Differences of Means of the Self-Identity Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Self Identity	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.6529	0.3184	0.0772	0.000	0.8294	0.0988	0.6282 to
Bottom 17	17	2.8235	0.2538	0.0616				1.0306

**The Results for the SM Component Variable Emotional Resilience**

The results of the ANOVA for Emotional Resilience yielded an F Value of 15.295 (Sig. = .000) between the “Top 17” and “Bottom 17” and 3.643 (Sig.=0.009) for all five groups. These F Values confirm the validity of the correlation and difference of means analyses. Table 44 shows that the correlation between Emotional Resilience scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Emotional Resilience with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Emotional Resilience and that of the “Bottom 17” subgroup is rejected since, as seen in Table 45, there is a significant difference between the means.

Table 44 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Emotional Resilience Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Emotional Resilience	0.508**/0.349**	0.002/0.001	34/86

Table 45 : Differences of Means of the Emotional Resilience Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Emotional Resilience	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.4779	0.4244	0.1029	0.000	0.4926	0.1260	0.2361 to
Bottom 17	17	2.9853	0.2994	0.0726				0.7492

**The Results for the SM Component Variable Non-Stress Tendency**

The results of the ANOVA for Non-Stress Tendency yielded an F Value of 17.640 (Sig. = .000) between the “Top 17” and “Bottom 17” and 7.179 (Sig. = 0.000) for all five groups. These F Values confirm the validity of the correlation and difference of means analyses. Table 46 shows that the correlation between Non-Stress Tendency scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Non-Stress Tendency with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Non-Stress Tendency and that of the “Bottom 17” subgroup is rejected since, as seen in Table 47, there is a significant difference between the means.

Table 46 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Non-Stress Tendency Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Non-Stress Tendency	0.602**/0.494**	0.000/0.000	34/86

Table 47 : Differences of Means of the Non-Stress Tendency Scores between “Top 17” & “Bottom 17” in “Japanese Ability”

Non-Stress Tendency	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	3.3922	0.5894	0.1430	0.000	0.7974	0.1899	0.4107 to
Bottom 17	17	2.5948	0.5151	0.1249				1.1841

**The Results for the SM Component Variable Stress Management**

The results of the ANOVA for Stress Management yielded an F Value of 4.631 (Sig. = .039) between the “Top 17” and “Bottom 17” and 3.098 (Sig. = 0.020) for all five groups. These F Values confirm the validity of the correlation and difference of means analyses. Table 48 shows that the correlation between Stress Management scores and “Japanese Ability” are significant for the “Top 17” and “Bottom 17” as well as for all 86 participants, and thus the null hypothesis that the correlation between the scores for Stress Management with “Japanese Ability” is 0 or negative is rejected.

Likewise, the null hypothesis that there is no significant difference between the mean of the “Top 17” in “Japanese Ability” subgroup’s scores for Stress Management and that of the “Bottom 17” subgroup is rejected since, as seen in Table 49, there is a significant difference between the means.

Table 48 : Correlation between “Japanese Ability” in Terms of Oral/Aural Performance and Stress Management Scores

Scale	Pearson Correlation	Significance (2-Tailed)	Subjects
Stress Management	0.399*/0.309**	0.019/0.004	34/86

Table 49 : Differences of Means of the Stress Management Scores between “Top 17” &amp; “Bottom 17” in “Japanese Ability”

Stress Management	N	Mean	Std. Deviation	Std. Error Mean	Sig. 2-tailed	Mean Difference	Std. Error	Interval 95% Conf.
Top 17	17	2.9902	0.7488	0.1816	0.039	0.4510	0.2096	0.02413 to
Bottom 17	17	2.5948	0.4311	0.1046				0.8778

## (7) Discussion of Results and Conclusion

This empirical study has demonstrated that many of the important psychological traits that facilitate cultural adaptation (or the ability to function in a cross-cultural environment) also facilitate achievement of superior foreign language oral/aural performance. Furthermore, the GCI appears to be a strong predictor of oral/aural performance in foreign languages. High scores on all but two of the 16 global competencies were significantly associated with high ratings of the Chinese subjects' oral/aural performance in Japanese. Of the three GCI factors, Self Management was the strongest predictor followed by Relationship Management. Of all the 16 global competencies, Self Identity was by far the strongest predictor.

This study confirms the importance of psychological and affective factors in oral/aural performance in foreign languages. Meaningful and reliable results have been obtained by effectively controlling for and measuring demographic and other variables that might account for differences in the Chinese subjects' oral/aural performance in Japanese. As demonstrated in the analysis of the subjects' demographics, these factors have been sufficiently considered and accounted for.

In regard to the need for more complex theoretical constructs, I argue that language and culture are so interrelated that investigating one without sufficiently considering the other creates a theoretical weakness in any construct. This is especially true in the case of FLA where one is not just acquiring knowledge of and experiences in a new language but also a new culture. Thus, logically the psychological traits, personality traits, attitudes and other affective factors that would facilitate successful active participation in a new culture should also facilitate active use (oral/aural performance) of a foreign language. Among these factors one's self-identity in terms of the role taken on when participating in the culture and/or engaging in oral/aural interaction should be of the utmost importance. The results of the study offer empirical support for this view.

It was also argued in the review of the literature that many of the SPA factors related to FLA potentially come together when examining individual differences in cultural adaptation. It is clear then that communicative competence in the target language facilitates cultural adjustment and vice versa. The results of this study support Schumann's (1986) assertion that learners will acquire the target language to the degree they acculturate to the target language group. Furthermore, the study demonstrates that

the GCI, a validated psychometric instrument that focuses on the psychological traits associated with success in cultural adaptation, also can predict differences in success in achieving high levels of oral/ aural performance in foreign languages.

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