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# needs of foreign students from developing nations at u.s. colleges and universities

Data Book of Phase II

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NOV 7 1980

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Final Report Contract No. AID/NAFSA 400-21-57  
Submitted to The National Association for Foreign Student Affairs, Washington, D C  
The Agency for International Development, Department of State, Washington, D C

Department of Sociology and Anthropology  
Iowa State University of Science and Technology Ames Iowa

Sociology Report No. 147B March 1980

80 4 30 079

ERRATA

p.1 SUPER CARP (Hidioglou et al, 1979)

p.44, p.45 Footnote c. 4=Social Sciences

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⑨ Data book on Foreign Students

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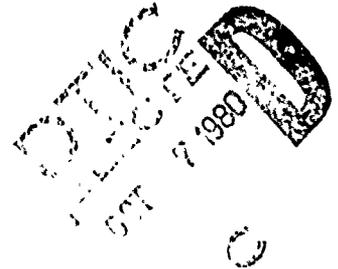
NEEDS OF FOREIGN STUDENTS FROM DEVELOPING NATIONS AT U.S. COLLEGES AND UNIVERSITIES.  
A DATA BOOK OF PHASE II

⑪ Mar 80

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by  
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for

The National Association for Foreign Student Affairs  
Washington, D.C.

The Agency for International Development  
The Department of State  
Washington, D.C.

⑭ SOCIAL 147B

⑮ AID/NAFSA 488-22-57

Sociology Report 147B  
Department of Sociology and Anthropology  
Iowa State University

515-294-6480

March 1980

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Association for Foreign Student Affairs and the Agency for International Development.

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PREFACE

↙ This volume presents data gathered in Phase II of a study to assess needs of foreign students from developing nations at U.S. colleges and universities. The final report of Phase II, Sociology Report No. 147A, presents the summary of the data analysis and reports on the overall Phase II tasks. ↘

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## APPENDIX A: DATA ANALYSIS

### 1. Weighting

Differential sampling rates were applied to the population according to strata, clusters, and substrata (AID, students from Taiwan and Iran, and the rest).<sup>1</sup> Therefore, observations needed to be weighted in order for them to properly represent the population. Through consultation with a survey sampling specialist at the Department of Statistics, Iowa State University (Fuller, 1979) weights were computed. Readers may wish to contact the authors for details.

### 2. Statistical Analyses.

We employed the service of a computer scientist for an algorithm of SUPER CARP (et al., 1979) to be transferred into the SAS system. This operation was necessary in order to obtain unbiased estimators of variances and standard errors of means. Population means were also estimated with the same technique. SUPER CARP was invented by Prof. Fuller and his associates at the Department of Statistics, Iowa State University. It can compute variances for a sample with strata and clusters such as ours, while other known programs such as SAS and SPSS are not able to do so.

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<sup>1</sup>For the details of sampling, see the section of sampling procedure in the Phase II final report.

To test hypotheses where independent variables were categorical measures, tests for unequal sizes and variances were used to compare weighted means between categories of students (pp. 116-117, Ott, 1977). To determine significance of the test results, we used .01 level rather than .05 level (Warren, 1980), since our extremely large sample size tends to produce statistically significant results even when the results may not have substantive significance. Taking a higher level of statistical significance, we attempted to fill the gap between these two types of significance, especially when our interest is to determine whether or not substantive differences existed among students in terms of needs.

Where independent variables were not categorical or nominal, we used correlation coefficients to identify associations between dependent variables (need composites) and independent variables. Use of correlation coefficients should be regarded as a preliminary analysis. We hope to apply other statistical techniques to analyze the relationships of these variables in Phase III, if granted. Due to our large sample size, even a small coefficient was statistically significant such as  $r$  of only .05. However, such a small coefficient means substantively not much of a correlation between the two variables. Therefore, as far as correlation coefficients are concerned, we will report the results from a substantive point of view. Even though most of the coefficients were statistically significant, we will report only those where one variable accounted for 5% of variance in the other (the low category) and 10% or higher (the high category). We consider this approach to be much more meaningful than reporting statistical significance of popular levels, when the size of the sample is extremely large (Warren, 1980).

In the following section, the results of data analyses will be presented. First, the results of univariate analyses will be given. Second, the results of hypothesis testing will be reported. Third, bivariate analyses of other variables besides need composites will be presented.

### 3. Univariate Analyses

The following are univariate tables. All the tables present population estimates which were computed with use of weights. Frequencies with weighted observations are artificially large and might be misleading, therefore only percentages and appropriate statistics (means and standard errors of means), where applicable, are reported in the tables.

Tables 1 through 8 present the data of need items. Table titles coincide with the headings used in the questionnaire (Appendix C). Each table contains weighted percent distribution, estimators of means and standard errors of means. The composites constructed out of these next items will be discussed in the following section of hypothesis testing.

Table 9 shows the data on importance of goals students might have wished to achieve and their assesment of likelihood in achieving those goals when they were leaving their countries for the U.S. Overall, primary academic goals scored high, the highest being the goal of "obtaining the degree." Lowest importance was the goal of learning about the U.S. Students were quite optimistic about achieving their primarily academic goals, particularly obtaining the degree. However, we also note the lowest mean score was for the likelihood to "get to know U.S. professionals in your field." These items were divided into two importance composites and two satisfaction composites. We consider the importance placed on goals reflecting needs of students

when they were leaving for this country, and the perceived likelihood of achieving them as being a reflection of their satisfaction of the progress toward achieving them. Therefore, the composite of importance of goals and perceived likelihood of achieving them will be presented along with the need composites in the section on hypotheses testing.

Among all the needed items presented in Tables 1-9, the ten most important items (listed from the highest) were:

1. Need for having enough money for basic living expenses.
2. Goal of obtaining the degree.
3. Goal of obtaining specialized skills and knowledge in your field.
4. Need for enough money for school.
5. Need for enough money for necessary medical care.
6. Anticipated need for finding a job appropriate to your training upon returning to the home country.
7. Goal of gaining practical experience in your field.
8. Need for work experience in your field before returning home.
9. Need for training to apply knowledge.
10. Anticipated need for receiving the latest professional materials in the field.

The least important items (listed from the lowest) were:

1. Need for having another student to help you with your study.
2. Need for information about dating behavior with U.S. nationals of the opposite sex.
3. Need for getting accustomed to U.S. food.
4. Need for observing your religious practices.
5. Need for borrowing necessary furniture.
6. Need for recreational activities available off campus.

7. Need for sharing housing with U.S. nationals.
8. Need for information about English courses for foreign students.
9. Need for information about available food and spices you are accustomed to using.
10. Need for learning how universities provide assistance to local communities.

With regard to satisfaction of needs, the ten most satisfied need items were:

1. Goal of obtaining the degree.
2. Goal of obtaining a broad education.
3. Goal of obtaining specialized skills and knowledge in your field.
4. Need for information about the registration procedure.
5. Goal of broadening your view of the world.
6. Need for information about the efficient use of the library.
7. Need for obtaining basic knowledge in your area of study.
8. Need for information about clothes needed.
9. Need for understanding course requirements and instructions.
10. Need for information about the procedure to begin your degree program.

The ten least satisfied (listed from the least satisfied) items were:

1. Need for getting a work permit for off-campus jobs.
2. Need for finding a part-time job at the university related to your degree program.
3. Need for exchange of visiting professors between universities of your country and those in the U.S.
4. Need for economic contributions of foreign governments to U.S.
5. Need for having magazines and newspapers from your country available in the university library.

6. Need for work experience in your field before returning home.
7. Need for having publications in your area of study from your country available in the university library.
8. Need for finding a job for your husband or wife.
9. Need for seminars with students from several departments to deal with problems of national development.
10. Need for having U.S. nationals correctly informed about your country.

Table 10 presents the data (percent distribution, means and standard errors) with regard to English language skills. The importance of various English language skills as self-evaluated, and the evaluation of English courses among those who had taken English courses are included. These items were developed into three composites: the importance composite (measure of linguistic needs), the evaluation composite (subjective measure of proficiency), and the course evaluation composite for English remedial courses. They will be discussed in the section on hypothesis testing.

Students placed high importance on all the skills we delineated. The highest mean score was shared among understanding spoken English, reading textbooks and journals, and writing papers and a thesis. Respondents rated the skill to converse with faculty members and other students to be least important, even though still rated highly. They tended to consider interactional linguistic skills to be less important.

They evaluated their own skill of reading being the highest and the skill of participating in class discussion being the lowest. Among those who took English courses, they considered that those courses were most helpful to improve reading skill and least helpful to improve the skill of taking class notes. That is, they considered English remedial courses contributed

Table 1. Needs for Information

Need Items	a. Distribution <sup>a</sup> of Importance Scores <sup>b</sup>							b. Distribution <sup>a</sup> of Satisfaction Scores <sup>c</sup>												
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE
<u>Information about....</u>																				
The registration procedure.	4.3	2.6	4.4	5.5	16.1	26.2	41.1	100.0	5.70	.07	1.5	3.4	7.5	6.8	16.0	29.0	35.8	100.0	5.63	.10
The procedure to begin your degree program.	2.9	1.9	1.7	1.7	11.1	26.5	54.2	100.0	6.12	.04	1.9	3.2	8.3	6.8	19.1	31.9	28.8	100.0	5.49	.07
Examination requirements and regulations for a degree.	2.9	3.5	2.9	2.8	4.9	27.8	45.4	100.0	5.88	.04	2.2	3.7	5.9	7.4	18.8	35.6	26.4	100.0	5.49	.05
English language requirements.	7.3	5.0	3.7	9.0	19.0	22.9	33.2	100.0	5.29	.07	3.9	3.6	5.2	11.0	22.0	26.9	27.5	100.0	5.34	.09
English courses for foreign students.	11.3	6.1	5.5	10.7	20.2	20.2	25.6	100.0	4.85	.08	7.8	6.6	7.9	20.6	15.7	20.9	20.5	100.0	4.74	.11
The efficient use of the library.	2.8	2.9	3.0	9.0	19.2	28.4	34.6	100.0	5.63	.05	2.7	2.2	5.3	7.7	20.4	30.4	31.4	100.0	5.58	.08
The role of the academic advisor.	3.4	2.4	3.6	7.0	16.2	29.2	38.3	100.0	5.71	.05	5.7	6.5	7.5	11.8	19.0	26.8	22.7	100.0	5.03	.09
The role of the major professor.	3.3	3.1	3.4	8.0	18.5	26.9	36.9	100.0	5.63	.05	3.6	4.3	7.7	12.9	23.2	25.9	22.4	100.0	5.15	.07
The role of the foreign student advisor.	3.3	4.1	3.6	9.6	20.7	25.2	33.4	100.0	5.50	.05	8.4	5.3	7.8	14.1	17.5	23.3	23.6	100.0	4.92	.12
The cost of traveling in the U.S.	5.4	4.8	7.3	17.2	23.6	18.8	22.9	100.0	4.97	.06	6.4	4.0	8.4	22.3	19.6	21.6	17.7	100.0	4.81	.06
How much it costs to live here.	2.8	0.7	0.6	5.9	8.4	15.7	65.8	100.0	6.27	.03	8.8	3.1	5.9	16.4	14.0	19.9	31.9	100.0	5.11	.12
Housing facilities.	2.9	0.8	1.0	6.6	11.5	19.2	58.0	100.0	6.12	.06	7.4	3.1	5.8	15.7	15.9	23.3	29.7	100.0	5.15	.06
Housing cost.	2.5	0.9	0.8	4.1	8.8	20.4	62.5	100.0	6.27	.03	11.6	5.5	7.7	14.8	15.2	19.4	25.7	100.0	4.78	.10
Community services available to foreign students and their families.	4.4	2.1	2.3	19.8	16.0	22.1	33.3	100.0	5.40	.05	12.8	6.0	10.0	32.9	14.9	11.8	11.6	100.0	4.13	.08
Recreational activities available on campus.	3.4	2.2	3.3	21.6	25.7	22.9	20.8	100.0	5.16	.04	6.0	2.4	5.5	30.0	16.4	20.8	18.9	100.0	4.86	.12
Recreational activities available off campus.	6.8	4.3	4.0	30.4	23.1	17.1	14.2	100.0	4.67	.06	5.2	5.2	7.7	36.9	17.5	15.4	12.1	100.0	4.51	.04
Availability of food and spices you are accustomed to using.	9.3	2.4	5.0	22.7	18.4	18.1	24.2	100.0	4.89	.06	7.2	4.0	7.2	23.8	15.0	21.3	21.6	100.0	4.86	.06
Health services available.	2.5	0.8	1.5	4.3	8.3	22.8	59.8	100.0	6.23	.03	9.5	3.9	5.8	12.3	17.8	22.5	28.1	100.0	5.05	.12
Health insurance available.	3.4	1.4	1.5	10.5	10.7	21.0	51.6	100.0	5.93	.04	10.8	5.0	5.0	16.2	15.0	20.8	27.1	100.0	4.90	.13

a. % distribution, means and SE (standard error of mean) are population estimates computed with weights assigned to all the observations according to the statistical rules on sampling. Therefore, actual frequencies are not reported.

b. 1 = Very unimportant,  
 2 = quite unimportant,  
 3 = somewhat unimportant,  
 4 = neither unimportant nor important,  
 5 = somewhat important,  
 6 = quite important,  
 7 = very important.

c. 1 = Very unsatisfied,  
 2 = quite unsatisfied,  
 3 = somewhat unsatisfied,  
 4 = neither unsatisfied nor satisfied,  
 5 = somewhat satisfied,  
 6 = quite satisfied,  
 7 = very satisfied.

Table 1. Needs for Information (Continued)

	% Distribution <sup>a</sup> of Importance Scores <sup>b</sup>							% Distribution <sup>a</sup> of Satisfaction Scores <sup>c</sup>													
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE	
Information about....																					
Clothes needed.	4.7	3.5	3.7	18.8	20.6	20.2	28.6	100.0	5.22	.11	2.7	1.1	3.8	10.8	13.9	24.1	34.6	100.0	5.52	.07	
Ways of doing things in the U.S.	3.6	2.2	2.1	16.5	17.7	25.5	32.5	100.0	5.49	.06	4.3	1.9	5.7	23.5	18.9	23.6	22.1	100.0	5.10	.07	
Dating behavior with U.S. nationals of the opposite sex.	14.6	4.5	4.3	26.0	17.5	12.2	21.0	100.0	4.48	.06	1.8	3.0	6.4	35.5	13.6	13.1	16.6	100.0	4.42	.08	
Immigration and visa regulations.	2.7	1.0	0.8	6.1	7.0	19.9	62.4	100.0	6.23	.03	9.6	4.7	7.4	12.7	15.1	21.8	28.7	100.0	4.99	.10	
Information on sponsors' rules about families, medical care, and travel inc.	7.2	1.7	1.9	19.9	17.5	19.6	32.1	100.0	5.26	.06	6.0	3.6	6.3	31.3	18.4	18.0	16.5	100.0	4.73	.07	

Table 2. Needs with Regard to the Degree Programs in the U.S.

Need Items	a. Distribution <sup>a</sup> of Importance Scores <sup>b</sup>							b. Distribution <sup>a</sup> of Satisfaction Scores <sup>c</sup>													
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE	
<u>Need for...</u>																					
Having an academic advisor assigned to you before your arrival.	10.5	3.0	2.7	21.7	11.7	16.2	34.1	100.0	5.06	.09	10.9	3.7	6.9	26.0	15.1	17.7	19.6	100.0	4.62	.07	
Receiving credit for academic work done outside the U.S.	6.0	1.3	1.7	15.4	8.2	15.2	52.1	100.0	5.73	.07	13.9	4.5	6.4	26.4	11.8	15.7	21.2	100.0	4.50	.08	
Sharing responsibility in planning your degree program with your academic advisor.	2.5	1.1	1.5	7.7	9.8	25.6	51.9	100.0	6.05	.04	8.2	4.6	8.4	15.4	14.9	23.2	25.3	100.0	4.95	.07	
Substituting certain requirements with alternative courses more relevant to your country.	4.2	1.7	1.5	15.9	10.7	19.9	46.0	100.0	5.71	.05	14.4	6.6	10.2	28.2	13.5	13.9	13.2	100.0	4.14	.07	
Having your academic advisor available when needed.	1.7	1.6	0.5	8.0	11.2	26.7	50.2	100.0	6.06	.03	7.7	3.8	8.1	14.7	15.8	22.9	27.0	100.0	5.04	.10	
Having faculty members spend enough time with you.	2.9	1.0	1.7	13.3	17.6	25.3	38.1	100.0	5.70	.04	9.3	4.9	7.8	22.9	19.1	20.4	15.7	100.0	4.62	.12	
Having faculty members with international experiences to guide you.	4.1	2.1	2.6	16.2	14.7	22.5	37.7	100.0	5.54	.06	16.1	7.5	9.9	30.2	14.0	12.1	10.2	100.0	3.96	.11	
Having an experience as a teaching assistant.	5.8	2.1	3.0	19.5	17.3	18.4	34.0	100.0	5.31	.05	13.3	7.1	7.7	32.5	11.7	11.3	16.4	100.0	4.22	.15	
Having an experience as a research assistant.	4.6	1.3	2.2	14.6	13.7	23.6	40.1	100.0	5.63	.06	15.5	6.6	6.1	28.7	12.0	13.0	18.0	100.0	4.26	.14	
Opportunities to do some team-work with American students.	4.1	2.5	2.0	14.4	15.7	24.7	36.6	100.0	5.55	.06	15.1	6.7	8.0	25.9	14.6	16.0	13.6	100.0	4.21	.11	
Having another student to help you with your study.	13.7	4.5	5.0	26.4	15.8	15.9	18.7	100.0	4.49	.07	12.0	6.4	5.3	39.7	14.2	10.7	11.7	100.0	4.17	.10	
Having the sponsoring agency accept necessary adjustments in your degree program.	8.6	1.6	1.4	26.0	10.6	17.6	34.2	100.0	5.18	.06	10.7	3.8	5.5	43.0	13.6	11.3	12.2	100.0	4.28	.07	
Coordination between the sponsoring agency and the university.	8.1	2.4	1.4	22.8	11.0	19.7	34.5	100.0	5.23	.06	13.2	4.0	7.8	40.2	12.1	10.4	12.3	100.0	4.14	.06	
Economic contributions of foreign governments to the U.S. universities in order to finance special programs for foreign students.	11.8	2.1	2.0	21.5	10.0	16.5	36.1	100.0	5.10	.12	27.0	6.9	10.1	37.3	8.0	4.1	6.6	100.0	3.31	.09	

a. - c.: See Table 1 footnotes.

Table 3. Needs with Regard to Relevancy of the U.S. Degree Program and Needs for Extracurricular Professional Activities in the U.S.

Need Items	a. % Distribution of Importance Scores <sup>b</sup>							c. % Distribution of Satisfaction Scores <sup>c</sup>													
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE	
<u>Relevancy of the U.S. Degree Program</u>																					
<u>Need for...</u>																					
A program relevant to your future job in your country.	3.6	1.1	0.5	6.9	8.6	21.2	58.1	100.0	6.12	.05	8.6	4.1	6.0	19.9	19.8	21.2	20.4	100.0	4.83	.09	
A program relevant to the present needs of your country.	3.7	1.3	0.5	9.4	8.1	23.1	53.9	100.0	6.02	.05	9.4	4.8	6.0	22.8	19.5	18.8	18.7	100.0	4.69	.12	
Level of technology applicable to the future of your country.	2.8	1.2	0.9	8.2	10.4	24.2	52.4	100.0	6.04	.04	7.9	3.5	6.0	21.7	23.1	20.3	17.5	100.0	4.79	.08	
Obtaining basic knowledge in your area of study.	2.8	0.4	0.4	3.6	5.7	21.4	65.8	100.0	6.36	.03	2.9	2.2	3.7	11.4	19.8	27.6	32.3	100.0	5.55	.11	
Having international materials included in courses.	5.2	1.5	1.7	16.7	12.4	21.6	41.0	100.0	5.58	.08	11.7	7.3	10.0	32.0	16.9	12.5	9.6	100.0	4.11	.06	
Training to apply knowledge.	1.9	0.5	0.4	4.5	5.5	10.0	68.2	100.0	6.41	.04	15.5	7.7	9.6	18.9	18.1	16.3	13.6	100.0	4.20	.11	
Training for leadership role.	6.4	1.5	1.4	21.5	13.4	21.4	34.4	100.0	5.36	.06	9.3	5.2	8.0	31.1	18.1	13.6	7.8	100.0	4.22	.08	
Training to introduce changes in your country.	7.1	2.8	2.8	18.8	17.2	22.2	36.1	100.0	5.33	.06	11.1	7.1	9.3	36.9	16.4	11.5	7.8	100.0	4.06	.07	
Thesis research in your country.	5.7	2.5	2.7	21.6	13.4	19.6	34.3	100.0	5.31	.06	11.7	7.0	8.8	39.2	13.5	10.1	9.6	100.0	4.05	.06	
Seminars with students from several departments to deal with problems of national development.	4.9	2.6	2.3	21.9	17.0	21.6	29.7	100.0	5.27	.05	20.2	8.4	11.3	39.3	10.2	5.9	4.6	100.0	3.47	.06	
Exchange of visiting professors between universities of your country and those in the U.S.	4.5	1.6	1.7	17.8	16.3	20.9	37.3	100.0	5.52	.06	26.1	9.1	11.6	33.9	9.0	5.9	4.5	100.0	3.26	.05	
<u>Extracurricular Professional Activities in the U.S.</u>																					
<u>Need for...</u>																					
Opportunities to give information about your country in educational situations.	5.1	2.3	2.3	10.0	23.7	23.4	24.4	100.0	5.24	.06	15.4	10.2	12.7	35.3	13.7	7.6	5.1	100.0	3.65	.06	
Opportunities to attend off-campus professional meetings.	2.6	1.8	2.3	17.7	18.1	28.1	29.4	100.0	5.49	.06	17.7	8.7	12.7	30.8	14.9	8.8	6.4	100.0	3.69	.08	
Learning how universities provide assistance to local communities.	4.9	3.5	4.7	27.4	18.5	18.9	22.1	100.0	4.96	.06	11.4	7.8	11.4	43.4	14.4	7.3	4.2	100.0	3.80	.07	
Opportunities to put into practice what you learn in class.	1.9	0.7	0.8	4.7	7.6	24.4	59.9	100.0	6.28	.04	20.2	9.7	13.6	19.4	17.2	11.9	7.8	100.0	7.1	.12	
Work experience in your field before returning home.	1.8	0.6	0.9	4.4	5.1	15.6	71.6	100.0	6.43	.04	28.7	9.6	10.1	23.2	10.7	8.5	9.2	100.0	3.40	.13	

a. - c.: See Table 1 footnotes.

Table 4. Needs due to Being a University Student in the U.S.

Need Items	a. Distribution <sup>a</sup> of Importance Scores <sup>b</sup>							c. Distribution <sup>a</sup> of Satisfaction Scores <sup>c</sup>													
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE	
Need for...																					
Understanding the grading system.	3.0	1.7	0.8	10.1	12.3	20.8	51.4	100.0	5.95	.06	3.5	1.6	3.9	12.3	16.7	24.9	37.0	100.0	5.60	.06	
Understanding course requirements of instructors.	1.8	1.0	0.4	4.8	10.6	23.4	58.0	100.0	6.24	.05	2.9	2.2	5.3	12.1	18.0	27.1	32.4	100.0	5.51	.08	
Being able to take class notes well.	1.7	0.5	1.3	4.1	6.8	18.8	66.8	100.0	6.37	.04	4.2	3.7	8.6	14.6	19.5	24.3	25.2	100.0	5.15	.09	
Having extra time in taking exams to compensate for language difficulty.	9.4	2.0	3.1	17.1	10.5	18.0	39.9	100.0	5.31	.07	18.9	7.1	8.2	28.7	12.3	13.6	11.2	100.0	3.94	.10	
Having opportunities to discuss course work with U.S. students.	4.6	2.0	1.9	18.4	18.9	22.9	31.3	100.0	5.39	.05	12.2	8.3	9.2	29.7	16.1	12.5	12.1	100.0	4.15	.11	
Opportunities to discuss course work with faculty members.	1.3	0.8	0.7	7.7	13.2	32.3	43.9	100.0	6.03	.04	7.3	6.2	8.8	22.2	20.6	15.3	15.6	100.0	4.63	.10	
Getting adequate advice from your academic advisor.	1.6	0.8	0.8	5.8	10.5	26.3	54.2	100.0	6.15	.05	12.1	5.1	8.4	17.9	16.8	19.9	19.9	100.0	4.61	.09	
Getting adequate advice from your foreign student advisor.	2.9	1.3	1.2	14.9	17.3	21.2	41.3	100.0	5.71	.07	13.4	6.6	8.0	25.3	13.7	16.4	16.6	100.0	4.35	.14	
Being treated as fairly as U.S. students by faculty members.	1.5	0.6	0.5	5.5	6.2	17.6	68.0	100.0	6.39	.04	10.1	6.0	9.7	16.8	14.2	19.7	23.6	100.0	4.72	.13	
Being respected as a fellow human being by U.S. students.	1.7	0.6	0.5	6.5	6.1	15.6	69.0	100.0	6.38	.04	9.7	4.8	9.7	15.7	15.1	21.5	23.6	100.0	4.80	.10	
Having publications in your area of study from your country available in the university library.	3.1	1.8	1.5	16.0	15.3	18.3	44.0	100.0	5.70	.08	26.2	7.2	12.8	28.7	10.9	7.2	7.0	100.0	3.41	.08	
Having magazines and newspapers from your country available in the university library.	2.5	1.2	1.2	10.6	13.1	22.2	49.2	100.0	5.94	.09	31.0	9.8	8.4	20.2	12.3	8.4	9.7	100.0	3.37	.15	
Having an office space for each graduate student.	4.2	1.4	3.0	18.6	11.0	20.2	41.6	100.0	5.58	.10	15.9	4.1	8.2	24.4	12.4	14.6	20.5	100.0	4.39	.15	

a. - c.: See Table 1 footnotes.

Table 5. Needs with Regard to Money and Jobs in the U.S.

Need Items	% Distribution <sup>a</sup> of Importance Scores <sup>b</sup>							% Distribution <sup>a</sup> of Satisfaction Scores <sup>c</sup>													
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE	
need for...																					
Having enough money for school.	1.5	0.3	0.2	3.1	3.8	13.0	78.0	100.0	6.58	.02	8.2	4.2	6.5	16.2	19.1	21.2	24.6	100.0	4.96	.07	
Having enough money for basic living expenses.	1.2	0.4	0.1	2.2	3.9	12.6	79.7	100.0	6.64	.03	6.7	4.6	7.7	15.1	19.9	22.3	23.7	100.0	4.99	.08	
Having enough money to receive necessary medical care.	1.1	0.4	0.8	3.9	5.9	13.2	74.8	100.0	6.52	.02	11.0	5.4	8.5	18.0	17.9	17.7	21.5	100.0	4.65	.09	
Having money for some recreational activities.	2.0	1.5	2.4	14.8	22.0	24.6	32.6	100.0	5.58	.05	7.7	5.7	9.8	27.7	19.5	15.9	13.7	100.0	4.48	.08	
Receiving money from your sponsor without delay.	3.2	0.9	0.2	9.7	7.3	15.6	63.1	100.0	6.16	.04	10.7	4.1	7.2	20.6	13.2	17.6	26.6	100.0	4.81	.09	
Getting help in banking.	5.6	2.3	2.1	22.3	14.3	19.9	32.9	100.0	5.29	.05	11.3	4.0	6.4	28.9	15.7	16.2	17.5	100.0	4.52	.07	
Getting help from Student Financial Aids.	5.3	2.0	1.7	14.7	11.1	20.5	44.7	100.0	5.65	.07	25.2	5.7	9.4	27.1	10.0	11.4	11.3	100.0	3.70	.15	
Finding a part-time job.	5.0	2.0	1.6	15.6	14.1	19.1	42.5	100.0	5.60	.09	23.1	8.3	8.6	30.1	11.6	9.4	9.0	100.0	3.63	.07	
Finding a part-time job at the university related to your degree program.	2.7	1.0	0.5	8.0	8.7	21.3	57.8	100.0	6.14	.05	36.1	9.8	0.1	18.3	7.4	8.8	10.5	100.0	3.19	.12	
Finding a job for your husband or wife.	8.6	1.1	2.1	23.7	10.7	16.8	37.0	100.0	5.25	.08	25.2	7.5	6.8	39.2	8.6	5.9	6.8	100.0	3.44	.07	
Getting a work permit for off campus jobs.	5.1	1.0	1.6	13.4	11.5	19.3	48.2	100.0	5.76	.07	36.0	8.8	8.0	25.7	7.3	6.1	8.1	100.0	3.10	.09	

a. - c.: See Table 1 footnotes.

Table 6. Needs with Regard to Local Community Life and Housing Needs in the U.S.

Need Items	% Distribution <sup>a</sup> of Importance Scores <sup>b</sup>							% Distribution <sup>a</sup> of Satisfaction Scores <sup>c</sup>												
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE
<u>Local Community Life in the U.S.</u>																				
<u>Need for...</u>																				
Getting accustomed to U.S. food.	10.9	2.3	3.5	35.1	17.5	14.8	16.0	100.0	4.54	.07	4.8	1.6	4.6	32.7	15.3	17.8	23.2	100.0	4.99	.05
Observing your religious practices.	16.5	2.6	3.4	26.8	12.8	12.3	25.6	103.0	4.56	.07	5.0	3.0	2.6	35.4	11.7	13.0	29.2	100.0	5.02	.08
Being able to behave according to your values and beliefs.	2.6	1.2	1.3	13.8	13.7	23.1	44.3	100.0	5.81	.05	4.9	2.6	5.5	23.2	14.8	20.6	28.3	100.0	5.15	.08
Having sufficient time for social and recreational activities.	2.3	1.5	1.8	17.7	22.9	25.4	28.5	100.0	5.47	.05	7.1	5.4	12.3	27.2	20.0	15.8	12.3	100.0	4.44	.07
Feeling welcome by U.S. nationals in the local community.	1.4	1.2	1.3	11.8	13.6	27.6	43.1	100.0	5.90	.05	9.4	7.3	8.4	25.6	18.4	15.9	15.0	100.0	4.44	.10
Having recreational activities with U.S. nationals.	3.4	1.3	1.7	20.8	23.4	24.0	25.5	100.0	5.33	.04	9.3	6.8	10.3	30.7	16.9	14.0	11.9	100.0	4.28	.10
Visiting U.S. families.	3.9	1.9	2.5	22.5	21.8	22.4	25.0	100.0	5.24	.04	10.5	7.0	9.5	29.9	16.2	12.6	14.3	100.0	4.29	.10
Having U.S. nationals correctly informed about your country.	2.1	1.0	1.5	10.2	13.4	23.3	48.3	100.0	5.96	.04	23.7	11.0	13.7	21.1	13.8	10.1	6.7	100.0	3.47	.09
Having local people treat foreign students courteously.	2.0	1.1	0.9	11.9	13.8	27.1	43.1	100.0	5.88	.07	11.0	5.1	9.5	27.4	18.0	16.2	12.8	100.0	4.36	.11
Social activities which will give you an opportunity to meet persons of the opposite sex.	6.6	2.1	2.8	21.7	18.2	19.6	29.0	100.0	5.18	.05	9.6	5.8	8.4	35.8	17.0	11.2	12.2	100.0	4.27	.09
Obtaining medical care.	1.5	0.6	0.5	5.3	9.6	21.7	60.9	100.0	5.29	.02	7.3	6.3	7.7	18.7	18.3	21.3	20.4	100.0	4.80	.10
Obtaining medical insurance.	1.0	0.7	1.1	7.3	9.5	22.6	57.7	100.0	6.22	.04	8.2	4.7	6.6	19.1	16.5	19.6	25.4	100.0	4.91	.14
Knowing income tax regulations.	7.8	2.3	2.4	22.3	15.3	20.2	29.8	100.0	5.15	.07	11.0	6.0	9.0	35.6	14.8	11.6	11.9	100.0	4.20	.05
<u>Housing Needs in the U.S.</u>																				
<u>Need for...</u>																				
Having adequate housing facilities on campus.	3.1	1.2	1.0	8.8	7.8	21.2	56.9	100.0	6.08	.04	15.9	5.6	9.8	20.7	15.5	15.6	16.9	100.0	4.29	.17
Having adequate housing facilities off campus.	3.5	0.7	0.6	12.9	12.2	23.9	46.3	100.0	5.86	.06	8.3	4.6	9.1	24.8	18.3	18.6	16.3	100.0	4.61	.09
Obtaining necessary furniture at a reasonable cost.	2.9	1.2	2.8	13.1	13.3	24.9	41.9	100.0	5.75	.06	8.2	6.2	12.0	27.7	18.3	15.3	12.2	100.0	4.37	.05
Borrowing necessary furniture.	11.2	3.1	3.5	32.3	13.2	15.4	21.3	100.0	4.65	.05	12.5	5.7	8.3	48.1	10.4	7.6	7.5	100.0	3.91	.08
Getting housing you want without discrimination.	2.5	1.0	0.6	8.6	9.7	23.0	54.5	100.0	6.09	.04	12.3	5.8	7.3	20.5	13.0	18.7	22.5	100.0	4.62	.09
Sharing housing with U.S. nationals.	9.1	2.6	4.0	32.0	15.9	16.4	20.0	100.0	4.72	.05	8.0	4.2	5.3	47.7	10.3	11.5	12.9	100.0	4.34	.10
Being informed about legal rights and duties when you sign a contract.	1.8	1.2	1.1	6.9	8.9	22.1	57.9	100.0	6.18	.03	11.4	6.5	11.5	20.9	17.2	17.1	15.4	100.0	4.39	.10

a. - c.: See Table 1 footnotes.

Table 7. Needs with Regard to Family Living and Interpersonal Relationships in the U.S.

Need Items	% Distribution <sup>a</sup> of Importance Scores <sup>b</sup>							% Distribution <sup>a</sup> of Satisfaction Scores <sup>c</sup>												
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE
<u>Family Living in the U.S.</u>																				
<u>Need for...</u>																				
Finding enough activities for your spouse (husband or wife).	5.2	0.6	1.3	13.3	8.8	26.6	44.3	100.0	5.77	.09	9.0	9.3	9.3	25.6	15.0	17.3	14.5	100.0	4.38	.12
English language training for your spouse at a reasonable cost.	10.6	0.9	1.9	15.4	8.3	19.4	43.5	100.0	5.42	.14	16.1	6.5	9.8	26.1	10.3	11.4	19.8	100.0	4.21	.17
Appropriate educational opportunities for your spouse.	2.9	1.0	1.4	12.0	10.9	23.3	48.4	100.0	5.90	.08	9.0	6.5	8.7	22.4	17.1	12.8	23.6	100.0	4.65	.08
Social activities which include children.	4.5	0.8	0.9	13.7	10.9	24.9	44.3	100.0	5.78	.07	8.1	7.5	8.3	30.2	14.4	18.1	13.4	100.0	4.43	.07
Finding appropriate child care.	5.6	0.6	2.3	12.6	7.7	19.6	51.6	100.0	5.81	.09	7.8	7.9	9.6	32.1	12.7	14.1	15.8	100.0	4.40	.09
Finding appropriate educational opportunities for children.	4.7	0.4	0.3	11.7	4.0	16.2	62.7	100.0	6.09	.07	4.9	3.2	3.2	30.6	13.3	21.9	22.8	100.0	5.01	.09
Getting to know U.S. neighbors.	3.3	0.7	2.2	18.1	17.7	25.4	32.7	100.0	5.53	.07	11.7	8.2	11.0	27.2	14.9	14.2	12.8	100.0	4.19	.11
<u>Interpersonal Relationships in the U.S.</u>																				
<u>Need for...</u>																				
A good relationship with your advisor.	1.3	1.1	0.2	5.2	9.9	21.6	60.6	100.0	6.29	.04	5.3	3.9	7.1	17.7	14.7	20.8	30.4	100.0	5.16	.10
Good relationships with the degree program committee members.	1.8	1.2	0.7	9.5	10.2	24.6	52.0	100.0	6.07	.05	6.1	3.3	6.1	28.4	16.8	20.6	18.7	100.0	4.83	.13
Good relationships with course instructors.	1.1	0.5	0.7	5.8	10.7	28.6	52.6	100.0	6.20	.04	4.1	2.3	5.3	19.3	21.9	25.8	21.2	100.0	5.15	.09
A good relationship with your foreign student advisor.	2.4	1.1	1.2	12.5	13.2	25.1	44.5	100.0	5.86	.06	8.4	6.0	5.8	23.4	13.1	18.8	24.5	100.0	4.81	.13
Friendly treatment by other university staff members.	1.4	1.0	1.3	11.0	13.2	30.7	41.3	100.0	5.91	.04	4.8	3.0	5.4	27.1	18.7	23.5	17.4	100.0	4.92	.12
U.S. friends.	2.0	1.4	1.1	11.0	18.1	28.1	38.4	100.0	5.80	.03	6.4	6.6	8.0	23.2	18.3	19.5	18.1	100.0	4.71	.11
U.S. friends with whom you can discuss personal problems.	4.5	2.1	1.5	20.4	17.6	25.1	28.8	100.0	5.35	.04	11.9	6.2	8.1	31.5	14.7	13.6	14.0	100.0	4.28	.11
Social activities with U.S. nationals.	2.3	1.7	1.4	19.5	19.6	28.2	27.3	100.0	5.46	.04	9.5	6.0	9.5	30.5	15.3	16.5	12.7	100.0	4.36	.07
Friends from other countries.	2.0	1.7	1.0	18.6	23.1	26.7	26.9	100.0	5.47	.05	2.8	2.5	4.3	26.0	20.6	23.6	20.2	100.0	5.11	.04

a. - c.: See Table 1 footnotes.

Table 8 . Needs for Pre-return Information and Needs with Regard to Anticipated Conditions after Returning Home.

Need Items	% Distribution <sup>a</sup> of Importance Scores <sup>b</sup>							% Distribution <sup>a</sup> of Satisfaction Scores <sup>c</sup>												
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE
<u>Pre-return Information</u>																				
<u>Need for...</u>																				
Knowing how to send books and household items home.	3.5	1.1	0.9	10.6	10.5	22.1	51.2	100.0	5.95	.06	13.3	7.5	9.4	27.5	15.4	13.3	13.5	100.0	4.18	.06
Knowing information, in advance, on tax clearance regulations, sailing permit, etc.	2.8	1.3	0.7	11.9	10.2	22.7	50.4	100.0	5.95	.07	15.9	10.5	12.0	30.4	13.2	9.1	8.9	100.0	3.77	.05
Knowing the cheapest means of transportation to return home.	3.2	0.6	0.4	9.4	8.1	20.2	58.2	100.0	6.12	.04	16.0	7.8	10.8	26.5	11.7	13.3	13.9	100.0	4.06	.07
<u>Anticipated Conditions after Returning Home</u>																				
<u>Need for...</u>																				
Finding a job appropriate to your training.	2.6	0.6	0.1	3.6	3.3	16.0	73.9	100.0	6.48	.03	9.5	4.4	10.4	21.2	15.7	18.3	20.5	100.0	4.66	.13
Adequate salary or wages.	1.7	0.8	0.3	4.7	9.0	22.8	60.8	100.0	6.30	.04	9.3	7.6	10.3	26.5	18.5	15.6	12.1	100.0	4.32	.08
Finding appropriate housing.	2.8	0.9	0.9	8.0	9.9	22.0	55.6	100.0	6.10	.04	9.1	4.0	7.7	26.6	18.9	15.6	18.1	100.0	4.61	.10
Having funds for research.	2.2	1.3	1.1	10.5	10.6	23.3	50.8	100.0	6.00	.07	17.9	8.4	14.9	32.0	13.7	7.1	5.9	100.0	3.60	.08
Having facilities to use U.S. training in future jobs.	1.9	1.5	1.1	6.9	10.3	28.5	49.8	100.0	6.07	.05	12.1	8.6	11.1	29.6	17.5	13.7	7.5	100.0	4.03	.10
Having resources to use U.S. training in future jobs.	1.4	1.5	0.8	7.8	9.6	28.5	50.3	100.0	6.09	.04	11.7	9.1	12.3	31.2	14.3	13.2	8.2	100.0	4.00	.11
Receiving the latest professional materials in the field.	1.0	0.4	0.5	3.8	7.4	23.0	63.8	100.0	6.40	.04	10.5	7.4	12.7	25.2	18.4	14.2	11.5	100.0	4.22	.08
Visiting outside your country at intervals to keep in contact with scholars in your field.	2.0	0.3	0.4	6.7	8.6	26.0	56.0	100.0	6.22	.04	12.0	9.1	11.8	30.3	16.6	10.1	10.2	100.0	4.02	.06
Having scholars visit your country for professional consultations.	1.7	0.6	0.5	7.0	14.1	28.7	47.5	100.0	6.07	.03	10.2	9.1	12.7	30.1	18.4	11.6	7.9	100.0	4.04	.07
Publishing in professional journals abroad.	1.3	0.9	1.4	11.8	13.3	25.2	46.1	100.0	5.95	.07	9.6	7.6	10.4	34.0	16.5	13.5	8.4	100.0	4.14	.04
Publishing in professional journals in your country.	1.6	1.0	1.0	9.2	11.3	25.9	50.0	100.0	6.06	.05	7.4	4.6	6.8	31.2	16.6	18.3	15.1	100.0	4.61	.06

a. - c.: See Table 1 footnotes.

Table 9. Importance of Various Goals and Likelihood of Achieving Them.

Need Items (goals)	Importance of Goals <sup>b</sup> . (% Distribution <sup>a</sup> )							Likelihood of Achieving Goals <sup>c</sup> . (% Distribution <sup>a</sup> )												
	1	2	3	4	5	6	7	Total	Mean	SE	1	2	3	4	5	6	7	Total	Mean	SE
Obtaining the degree.	1.8	0.2	0.1	1.9	3.9	12.7	79.4	100.0	6.62	.04	1.2	0.3	1.1	7.9	8.2	18.3	63.1	100.0	6.29	.06
A broad education.	1.4	0.7	0.8	3.5	7.8	22.4	63.3	100.0	6.36	.04	1.8	0.7	3.6	11.0	17.7	29.0	36.2	100.0	5.74	.07
Specialized skills and knowledge in your field.	1.5	0.4	0.4	1.5	3.1	17.4	75.6	100.0	6.59	.02	2.3	1.6	4.4	8.4	18.0	30.7	34.5	100.0	5.68	.09
Developing research skills.	1.9	0.6	1.5	7.5	10.4	20.4	57.8	100.0	6.16	.04	3.2	3.0	4.1	18.1	21.2	24.4	26.0	100.0	5.28	.11
Improving your command of English.	6.3	1.1	0.9	9.7	9.3	18.7	54.0	100.0	5.87	.07	3.5	2.3	3.8	13.5	18.2	28.0	30.7	100.0	5.48	.07
Gaining practical experience in your field.	1.1	0.3	0.6	2.9	6.2	21.5	67.4	100.0	6.47	.03	10.9	5.1	8.8	15.8	18.8	21.6	19.1	100.0	4.67	.14
Getting to know U.S. professionals in your field.	1.9	1.1	1.2	8.4	12.0	28.3	47.2	100.0	6.01	.04	8.0	5.4	8.2	23.8	20.7	18.8	14.9	100.0	4.60	.13
Seeing different parts of the U.S.	1.7	1.9	1.4	12.4	19.4	24.0	39.0	100.0	5.74	.05	8.0	4.9	6.8	19.4	21.9	19.1	19.8	100.0	4.79	.12
Learning about the U.S.	3.1	2.1	2.1	11.7	18.9	24.7	37.3	100.0	5.65	.06	2.6	2.9	3.5	18.6	19.6	28.6	24.3	100.0	5.33	.04
Broadening your view of the world.	1.3	1.1	0.9	6.0	11.5	24.8	54.4	100.0	6.17	.04	2.4	1.3	3.1	14.3	18.5	25.2	35.2	100.0	5.62	.05

a. and b.: See Table 1 footnotes.

- c. 1 = very unlikely,  
 2 = quite unlikely,  
 3 = somewhat unlikely,  
 4 = neither likely nor unlikely,  
 5 = somewhat likely,  
 6 = quite likely,  
 7 = very likely.

Table 10. Importance and Evaluation of English Language Skills, and Evaluation of English Language Courses.

Need Items	(% Distribution <sup>a</sup> )							Total	Mean	SE	Self-Evaluation of Skills <sup>c</sup>							Total	Mean	SE
	1	2	3	4	5	6	7				1	2	3	4	5	6	7			
<u>English Language Skills</u>																				
Understanding spoken English.	3.5	0.8	0.1	2.9	2.2	9.8	80.6	100.0	6.51	.07	0.7	1.0	2.7	11.2	13.7	30.8	40.0	100.0	5.88	.07
Giving an oral presentation in class.	2.7	0.8	0.5	4.6	8.6	19.3	63.6	100.0	6.28	.05	2.7	2.2	6.5	19.3	20.6	26.4	22.3	100.0	5.21	.09
Reading (textbooks, journals, etc.).	2.4	0.6	0.1	2.5	3.4	14.9	75.9	100.0	6.52	.07	0.8	0.9	1.6	9.9	14.7	31.4	40.6	100.0	5.94	.07
Writing papers and a thesis.	2.0	0.7	0.1	2.2	5.5	14.4	75.1	100.0	6.52	.05	3.5	1.3	5.4	17.6	22.6	25.6	24.0	100.0	5.27	.12
Taking tests.	2.4	0.6	0.7	5.3	8.4	16.7	66.0	100.0	6.31	.04	1.3	1.5	2.1	13.3	19.6	31.2	31.0	100.0	5.66	.06
Taking class notes.	2.5	0.6	0.3	3.2	6.8	18.0	68.6	100.0	6.40	.07	2.1	1.9	5.6	15.1	19.1	25.0	30.2	100.0	5.46	.08
Participating in class discussions.	2.5	0.4	0.4	3.3	8.6	24.1	60.7	100.0	6.30	.05	4.6	3.8	5.9	20.6	18.4	23.0	23.7	100.0	5.08	.09
Conversing with faculty members and other students.	2.0	0.8	0.3	4.7	8.6	25.1	58.5	100.0	6.26	.06	1.7	1.0	5.2	16.3	17.7	29.3	28.7	100.0	5.50	.08

Table 11. Evaluation of English Language Courses for Improvement of Skills

English Language Skills	(% Distribution <sup>a</sup> )							Total	Mean	SE
	1	2	3	4	5	6	7			
Understanding spoken English.	9.5	5.8	6.8	20.5	14.7	14.7	28.0	100	5.24	.18
Giving an oral presentation in class.	12.6	5.3	8.5	23.1	13.4	14.1	23.0	100	5.02	.16
Reading (textbooks, journals, etc.).	9.1	4.7	5.0	23.4	15.1	17.1	25.6	100	5.27	.15
Writing papers and a thesis.	12.1	4.4	6.8	19.6	14.1	21.5	21.5	100	5.07	.16
Taking tests.	10.2	4.5	9.9	23.7	15.6	18.6	17.5	100	5.05	.14
Taking class notes.	17.5	6.9	8.2	21.4	14.0	14.5	17.5	100	4.78	.18
Participating in class discussions.	12.0	9.0	6.8	24.9	15.9	16.0	15.4	100	4.85	.14
Conversing with faculty members and other students.	9.8	7.1	7.2	23.7	16.1	15.8	20.3	100	5.07	.15

a. and b.: See Table footnotes.

c. 1 = very poor,  
 2 = quite poor,  
 3 = somewhat poor,  
 4 = neither poor nor good,  
 5 = somewhat good,  
 6 = quite good,  
 7 = very good.

d. Evaluation was given by those who had taken English language courses. Approximately 35% did not take such courses.

e. 1 = very poorly,  
 2 = quite poorly,  
 3 = somewhat poorly,  
 4 = neither poorly nor well,  
 5 = somewhat well,  
 6 = quite well,  
 7 = very well.

most to improve the very skill which they needed to improve least according to their self evaluation.

Table 11 presents other data regarding English courses. About one half of the students had taken English courses for foreign students. Among those who had not taken such courses, the most frequent reason given was "I was not required to take any of them," followed by, "I do not feel I need to improve my English." An estimated 27% of the population never took the TOEFL examination. Among those who had taken it, one fourth reported scores in the range of 501-550, while nearly one third reported scores over 550.

Table 12 presents data on factors students thought prevented them from establishing good relationships with U.S. nationals. Over all, they did not perceive any one of the listed factors as serious barriers. "Your being a foreigner" received the highest mean score, but it was considered as only "somewhat" preventing them from establishing good relationships, closely followed by "Their attitude toward you." The least important barrier was one's religious background.

In Table 13, data with regard to rating of oneself and prestige accorded to one's country are presented. Students were asked to give ratings on three characteristics of oneself and their home country's prestige, as they themselves perceived, as they thought their friends in home countries would rate, and as they perceived U.S. students would rate. For every item, the mean rating score was highest for their perception of rating by friends in the home country, followed by their own rating, and last by their perception of how U.S. students would rate. Among the four items, (one's academic performance, intelligence, physical appearance, and prestige of home country), the

Table II. English Language Data<sup>a</sup>.

<u>Have you taken any English courses for foreign students on campus?</u>		<u>Percent</u>
Yes:		49.3
No:		50.7
Total		100.0
<u>Reasons for not taking any English courses for foreign students among those who did not take any.</u>		<u>Percent<sup>b</sup></u>
I do not feel I need to improve my English		41.1
I have no time to take them.		12.5
I have no money to take them.		6.1
I do not think they will improve my English.		21.4
I have schedule conflicts.		3.1
I plan to take them later.		2.8
There are no English courses for foreign students on this campus.		4.5
I was not required to take any of them.		69.0
<u>TOEFL score range</u>		
<u>(% Distribution)</u>	<u>Percent</u>	
Never taken	26.7	
Below 400	0.3	
400-450	4.1	
451-500	11.7	
501-550	24.7	
551-600	18.3	
Over 600	14.3	
Total	100.0	

a. The percentages are population estimates computed with weights assigned to all the observations, according to the statistical rules on sampling. Therefore, actual frequencies are not reported.

b. Percentages do not total to 100.0%, since the respondents were allowed to give more than one reason.

Table 12. Barriers to Establish Good Relationships with U.S. Nationals

How much is each factor preventing you from having good relationships with U.S. Nationals?	1 <sup>b</sup>	(% Distribution <sup>a</sup> )					Mean	SE	Total
		2	3	4	5				
Your command of English.	38.4	17.6	25.9	11.1	7.0	2.30	.06	100.0	
Your religious background.	70.1	12.2	11.2	3.8	2.7	1.57	.05	100.0	
Your racial background.	35.3	19.8	24.2	11.6	9.1	2.40	.05	100.0	
Your cultural background.	28.5	19.7	25.6	16.3	9.7	2.59	.06	100.0	
Your political view.	53.2	14.0	18.6	7.3	6.9	2.01	.09	100.0	
Your being a foreigner.	15.4	22.8	28.0	17.6	16.2	2.97	.06	100.0	
Your attitude toward others.	46.1	20.7	17.9	9.5	5.8	2.08	.06	100.0	
Their attitude toward you.	18.3	20.8	29.5	17.7	13.7	2.88	.05	100.0	

a. % distribution, means and SE (standard errors of means) are population estimates computed with weights assigned to all the observations according to the statistical rules on sampling. Therefore, actual frequencies are not reported.

b. 1 = not at all,  
2 = a little,  
3 = somewhat,  
4 = much,  
5 = very much.

Table 13 Self-Rating of Oneself and Country of Origin<sup>a</sup>.

Rated Item	(% Distribution <sup>b</sup> )					Mean	SD	(% Distribution <sup>b</sup> )					Total	Mean	SD	
	1 <sup>b</sup>	2	3	4	5			1 <sup>b</sup>	2	3	4	5				Total
Your academic performance.	0.1	2.1	30.9	46.0	20.8	100.0	3.85	.04	0.5	1.0	23.3	44.5	29.7	100.0	4.01	.03
Your intelligence.	--	0.1	31.6	49.9	18.3	100.0	3.86	.03	--	0.2	21.1	50.3	28.4	100.0	4.07	.03
Your physical appearance.	0.6	3.2	47.1	35.9	13.2	100.0	3.58	.04	0.5	2.7	43.4	36.8	16.5	100.0	3.66	.04
Prestige (status) of your country in the world.	3.7	17.2	39.2	28.1	11.9	100.0	3.27	.06	2.0	12.1	35.4	33.4	17.2	100.0	3.52	.04
<p style="text-align: center;">How do you think U.S. students would rate ...?</p>																
Your academic performance.	0.3	5.1	33.1	40.6	20.9	100.0	3.77	.04								
Your intelligence.	1.2	3.1	32.2	43.8	19.7	100.0	3.78	.05								
Your physical appearance	2.3	9.7	47.9	28.7	11.5	100.0	3.37	.05								
Prestige (status) of your country in the world.	16.5	31.8	31.5	14.6	5.5	100.0	2.61	.05								

a. % distribution, means and SD (standard deviation) are population estimates computed with weights assigned to all the observations according to the statistical rules on sampling. Therefore, actual frequencies are not reported.

b. 1 = Among the lowest  
 2 = Fairly low  
 3 = Average  
 4 = Fairly high  
 5 = Among the highest

prestige of home country received the lowest average score in all three "views," while intelligence and academic performance were rated higher than physical appearance and home prestige.

Table 14-16 present personal characteristics of students. In Table 14, which includes basic demographic data, the majority of students fell in the age range of 23-32, an estimated three fourths of the population were male, the majority of students were single, and nearly 40 percent of students were married and accompanied by their spouses. As to the primary financial sources, an estimated one third of the population were supported by private sources such as parents or relatives. The second and third large categories were those on university assistantships and those on home government scholarships. The table also includes information as to major areas of study, grade point average and academic levels.

Table 15 presents percent distribution of countries of origin and regions of the world. The largest groups came from Iran, Taiwan, Nigeria, and India. In Table 16, with data on living arrangements, we see nearly one half of this population lived in apartments off campus. Table 17 presents information as to returning home. Two questions were asked, tapping on the students' return intention. Due to the difference in missing cases, the percentages of no intention to remain in the U.S. differ between the two questions. An estimated one fourth of this population had no intention of staying in the U.S. permanently under any circumstances, while approximately one fourth had jobs waiting in home countries. On the other hand, one third had not made any plans about finding jobs.



Table 15. Region and Country of Origin  
(% Distribution<sup>a.</sup>)

<u>Africa</u>	<u>Percent</u>	<u>South and East Asia</u>	<u>Percent</u>
Nigeria	9.7	Taiwan	13.6
Egypt	1.5	India	6.7
Kenya	1.4	Thailand	4.1
Libya	1.0	Korea	3.6
Ghana	0.9	Malaysia	3.2
Sudan	0.8	Indonesia	1.4
South Africa	0.6	Philippines	1.4
Cameroon	0.5	Pakistan	1.3
Algeria	0.4	Bangladesh	0.7
Other	3.2	Singapore	0.4
Region Total	20.0	Other	1.9
		Region Total	38.3
<u>Latin America</u>	<u>Percent</u>	<u>Southwest Asia</u>	<u>Percent</u>
Venezuela	3.6	Iran	18.8
Mexico	2.2	Israel	1.1
Brazil	1.6	Lebanon	1.0
Colombia	1.5	Jordan	0.6
Chile	1.2	Iraq	0.4
Peru	0.9	Other	1.4
Jamaica	0.7	Region Total	23.3
Panama	0.6		
Costa Rica	0.6		
Argentina	0.5		
Other	3.2		
Region Total	16.6		
<u>Europe</u>	<u>Percent</u>		
Portugal	0.2		
Turkey	1.6		
Region Total	1.8		

a. The percentages are population estimates computed with weights assigned to all the observations, according to the statistical rules on sampling. Therefore, actual frequencies are not reported.

Table 16 . Living Arrangements<sup>a</sup>.

<u>Where do you live now?</u>	<u>Percent</u>
In a dormitory.	11.3
In married student housing.	24.5
In a room off campus without cooking privileges.	1.3
In a room off campus with cooking privileges.	9.6
In an apartment off campus.	46.0
In a trailer.	0.8
In a house off campus.	6.5
<b>Total</b>	<b>100.0</b>
<u>Whom do you live with?</u>	
U.S. family	1.9
U.S. student(s).	9.5
Foreign student(s) from another country.	5.3
Student(s) from your country.	16.8
Your spouse (and children).	37.0
Alone.	20.9
Other. <sup>b</sup>	8.6
<b>Total</b>	<b>100.0</b>

a. The percentages are population estimates computed with weight assigned to all the observations, according to the statistical rules on sampling. Therefore, actual frequencies are not reported.

b. Mixture of friends and relatives.

Table 17. Returning Home

(% Distribution<sup>a</sup>)

<u>Intention to stay permanently in the United States</u>	<u>Percent</u>
Definitely not.	25.7
Very unlikely.	18.3
Somewhat unlikely.	9.8
Undecided.	23.1
Somewhat likely.	10.8
Very likely.	8.5
Definitely will.	3.8
Total	100.0
<u>Reasons which might make one remain in the United States permanently</u>	<u>Percent<sup>b</sup> of Respondents Given the Reason</u>
Political conflict at home.	29.2
Not being able to find a job at home.	11.2
A good job offer in the U.S.	25.2
Marriage to a U.S. citizen.	13.6
Family members' advice.	7.3
Nothing would make me stay permanently in the U.S.	28.5
<u>Looking for job in one's country</u>	<u>Percent</u>
Yes, I am.	12.6
No, I am not. But I plan to do so.	28.9
No, I am not. I have not made any plans about finding a job.	34.0
No, I am not, because I have a job waiting for me.	24.5
Total	100.0

a. The percentages are population estimates computed with weight assigned to all the observations according to the statistical rules on sampling. Therefore, actual frequencies are not reported.

b. These figures do not total to 100, since respondents were able to choose more than one reason.

#### 4. Hypothesis Testing

In this section, highlights of the results of hypothesis testing are presented. Each one of the thirty-one hypotheses delineated in the chapter on Theoretical Framework was reduced to empirical hypotheses. As far as hypothesis testing was concerned, importance of needs was operationally measured by 24 importance composites, and satisfaction of needs by 24 satisfaction composites. This replaces individual items which were judged to be too numerous to deal with in this report. Linguistic needs as measured by composites for English language skills will be presented after the results on these need composites are presented. Therefore, in the following tables, English language composites are not included.

Table 18 presents composite codes, their names, and items used to form the composites. Item numbers correspond to the numbers in the questionnaire (Appendix C). Each composite score was the sum of scores of items. Tables are presented only for those hypotheses where independent variables are categorical measures. Otherwise, weighted Pearson's correlation coefficients are given.

Hypothesis 1: Perceived importance of needs is greater than satisfaction of them.

For all need composites, importance scores were found to be significantly higher than satisfaction scores beyond .01 level. Thus, the hypothesis was supported.<sup>2</sup> The data on the difference between importance and satisfaction scores are found in Table 19.

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<sup>2</sup>When the individual need items were examined, only three items had significantly higher satisfaction scores than importance scores, which implied that students were satisfied with these needs more than to the extent they regarded them important. The items were "need to know about clothes needed," "need for getting accustomed to U.S. food," and "need for observing one's religious practices."

Table 18. Composites

Composite Code	Composite Name	Item Numbers <sup>a</sup>	Composite Code	Composite Name	Item Numbers <sup>a</sup>
C1	Importance of needs for university information	109,111,113,115,119,121,123	C23	Importance of financial needs	271,273,275,309,311,313,315,317,319,321
C2	Satisfaction of the above	Satisfaction scores of the above	C24	Satisfaction of the above	Satisfaction scores of the above
C3	Importance of needs for community information	129,131,133,137,139,143,145,149	C25	Importance of needs regarding living in a U.S. community	323,325,327,329,331,337,339,343,345,347
C4	Satisfaction of the above	Satisfaction scores of the above	C26	Satisfaction of the above	Satisfaction scores of the above
C5	Importance of needs for foreign student life information	135,141,155	C27	Importance of needs for activities with U.S. nationals	333,335,359,419,421,423
C6	Satisfaction of the above	Satisfaction scores of the above	C28	Satisfaction of the above	Satisfaction scores of the above
C7	Importance of needs regarding academic planning	157,159,161	C29	Importance of housing needs	349,351,353,355,357,361
C8	Satisfaction of the above	Satisfaction scores of the above	C30	Satisfaction of the above	Satisfaction scores of the above
C9	Importance of needs regarding academic relationships	165,167,169,175	C31	Importance of needs of the spouse	363,365,367
C10	Satisfaction of the above	Satisfaction scores of the above	C32	Satisfaction of the above	Satisfaction scores of the above
C11	Importance of needs for relevancy of education	213,215,217,219,221,223,233	C33	Importance of general family needs	369,371,373,375
C12	Satisfaction of the above	Satisfaction scores of the above	C34	Satisfaction of the above	Satisfaction scores of the above
C13	Importance of needs for training to apply knowledge	225,227,231	C35	Importance of needs regarding relationships with faculty and staff	409,411,413,415,417
C14	Satisfaction of the above	Satisfaction scores of the above	C36	Satisfaction of the above	Satisfaction scores of the above
C15	Importance of needs for extracurricular learning opportunities	235,237,239	C36 <sup>b</sup>	Importance of pre-return information needs	427,429,431
C16	Satisfaction of the above	Satisfaction scores of the above	C40	Satisfaction of the above	Satisfaction scores of the above
C17	Importance of needs for practical experience	241,243	C41	Importance of anticipated post-return needs for material rewards	433,435,437
C18	Satisfaction of the above	Satisfaction scores of the above	C42	Satisfaction of the above	Satisfaction scores of the above
C19	Importance of needs regarding university environment	245,247,255,257,263,267	C43	Importance of anticipated post-return needs for professional opportunities and facilities	439,441,443,445,447,449,451,453
C20	Satisfaction of the above	Satisfaction scores of the above	C44	Satisfaction of the above	Satisfaction scores of the above
C21	Importance of needs for facilitating course work	249,251,253,265	C45	Importance of primary goals	455,457,459
C22	Satisfaction of the above	Satisfaction scores of the above	C46	Likelihood to achieve the above	Likelihood scores of the above
<p><sup>a</sup> The numbers refer to item numbers in the questionnaire (Appendix C).</p>					
<p><sup>b</sup> There were no C37 and C38.</p>					

Hypothesis 2: Importance of educational needs does not differ from importance of other needs.

Hypothesis 3: Satisfaction of educational needs does not differ from satisfaction of other needs.

Table 19 presents detailed data for these hypotheses.

Among twenty-three composites twelve of them are primarily educational, while eleven are not. Composites were divided into two categories according to their mean scores: the high importance category for the top 12 composites and the low importance category for the remaining 11 composites. For both importance and satisfaction composites, the distribution was same. Six of the primarily educational composites fell in the high importance and high satisfaction categories, and likewise, six of primarily non-educational composites fell in the same category. The remaining six educational composites and the remaining five non-educational composites fell in the low importance and low satisfaction categories. The distribution was nearly identical between educational and non-educational composites. Furthermore, non-educational composites in this study are highly associated with educational needs by content due to the very nature of the study. We conclude, as far as the particular types of needs included in this study, that we did not find any significant difference either in terms of importance or in terms of satisfaction between primarily educational and non-educational needs. Educational vs. non-educational dichotomy itself is questionable, when applied to students.

Hypothesis 4: Importance of needs varies by sponsorship categories of students.

Hypothesis 5: Satisfaction of needs varies by sponsorship categories of students.

Table 19. Importance and Satisfaction of Needs and Differences Between Scores: Composite Means, Standard Errors and Item Averages<sup>a</sup>.

Item <sup>b</sup> Number	Importance Composites				Satisfaction Composites				Differences <sup>c</sup>					
	Mean	SE	Item Average	Rank	Item <sup>b</sup> Number	Mean	SE	Item Average	Rank	Item <sup>b</sup> Number	Mean	SE	Item Average	Rank
C1	39.91	.29	5.70	15	C2	37.64	.50	5.38	2	C1-C2	2.33	.58	-.33	23
C3	46.26	.26	5.78	11	C4	39.73	.74	4.97	4	C3-C4	6.62	.77	.83	20
C5	15.54	.14	5.18	22	C6	13.77	.15	4.59	8	C5-C6	1.78	.22	.59	22
C7	16.78	.15	5.59	17	C8	14.04	.21	4.68	7	C7-C8	2.88	.26	.96	17
C9	22.86	.12	4.57	23	C10	17.77	.45	3.55	22	C9-C10	5.15	.51	1.03	16
C11	41.99	.27	6.00	9	C12	31.19	.59	4.46	10	C11-C12	10.97	.57	1.57	7
C13	15.92	.11	5.31	18	C14	11.64	.22	3.88	20	C13-C14	4.39	.21	1.46	10
C15	15.60	.11	5.20	21	C16	11.17	.17	3.72	21	C15-C16	4.50	.21	1.50	8
C17	12.72	.08	6.36	2	C18	7.10	.24	3.55	22	C17-C18	5.62	.28	2.81	1
C19	36.68	.24	6.11	5	C20	28.54	.43	4.76	6	C19-C20	8.15	.44	1.36	12
C21	22.82	.15	5.71	14	C22	16.53	.32	4.13	16	C21-C22	6.44	.37	1.61	6
C23	59.25	.46	5.93	10	C24	40.51	.69	4.05	18	C23-C24	18.59	.95	1.86	4
C25	55.83	.34	6.20	4	C26	45.89	.51	5.10	3	C25-C26	10.03	.39	1.11	15
C27	31.85	.23	5.31	18	C28	26.40	.47	4.40	13	C27-C28	5.71	.52	.95	18
C29	34.62	.21	5.77	13	C30	25.86	.42	4.31	15	C29-C30	8.90	.47	1.48	9
C31	17.09	.24	5.70	15	C32	13.03	.34	4.34	14	C31-C32	4.14	.41	1.38	11
C33	23.15	.28	5.78	11	C34	17.90	.28	4.48	9	C33-C34	5.24	.42	1.31	13
C35	30.29	.17	6.06	7	C36	24.75	.51	4.95	5	C35-C36	5.61	.45	1.12	14
C39	18.03	.15	6.01	8	C40	11.97	.17	3.99	19	C39-C40	6.12	.19	2.04	2
C41	18.87	.10	6.29	3	C42	13.65	.26	4.55	12	C41-C42	5.22	.26	1.74	5
C43	48.79	.30	6.10	6	C44	33.04	.49	4.13	16	C43-C44	15.69	.47	1.96	3
C45	19.57	.08	6.52	1	C46	17.74	.20	5.91	1	C45-C46	1.83	.22	.61	21
C47	42.01	.20	5.25	20	C48	35.68	.61	4.46	10	C47-C48	6.44	.64	.92	19

a. All the figures are weighted population estimates.

b. For names and items included in each composite, see Table 18.

c. All the means were found to be significantly different from zero beyond .01 level. Means and SE are those of differences between importance and satisfaction composite scores of individual observations, weighted.

For most of the composites, sponsorship categories did not differ significantly. Significant differences were noted, however, in seven importance composites and in six satisfaction composites. (See Table 22). Importance composite scores analyzed by sponsorship categories are presented in Table 20, and the data satisfaction composites in Table 21. The results of empirical hypotheses tested are shown in Table 22.

First, the rank order of the categorical means for each composite is presented from high to low reading from left to right. For the remaining hypotheses, the order will not be presented, since the rank order can be easily noted by inspection of tables. Furthermore, significant rank orders are designated under the column of "significantly different categories" in the tables.

A special guide to read the notations under "significantly different categories" is given at this point. Detailed findings of empirical hypotheses tested can be read by following this instruction, which will be applicable to all the tables in this appendix where the heading, "significantly different categories," appears. None means that no categories were found to be significantly different from others in terms of composite means. Where category numbers are written, the category (or categories) with a higher mean is placed on the left side and the one with a lower mean on the right side of "vs." A comma between two category numbers means that the adjacent categories did not differ significantly between themselves, but differed from the category on the other side of "vs.". For example, with regard to importance composite C1 in Table 22, category 2 placed significantly higher importance than category 4 on composite C1. It also shows that category 2, however, was not significantly different from categories 1 and 3, likewise category 4 was not different from categories 1 and 3. Another example: In

Table 20. Importance of Needs: Composite Means and Standard Errors by Sponsorship Categories<sup>a</sup>.

Composite Numbers <sup>b</sup>	AID-Sponsored			Home Government Sponsored			Other Scholarships and Assistantships			Self and Other Private Sources		
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average
C1	40.89	1.07	5.84	40.96	.39	5.85	40.55	.33	5.79	39.35	.40	5.62
C3	46.87	1.26	5.86	47.01	.49	5.88	45.30	.49	5.66	46.37	.34	5.60
C5	16.70	.44	5.57	16.08	.28	5.36	15.06	.35	5.02	15.42	.14	5.14
C7	17.22	.67	5.74	17.28	.28	5.76	16.01	.38	5.34	16.89	.19	5.63
C9	22.86	.82	4.57	22.94	.38	4.59	22.64	.24	4.53	22.91	.19	4.58
C11	42.61	1.27	6.09	42.38	.63	6.05	41.06	.80	5.87	42.11	.28	6.02
C13	16.83	.45	5.61	15.90	.38	5.30	15.31	.23	5.10	16.15	.19	5.38
C15	16.01	.45	5.34	16.05	.33	5.35	15.21	.16	5.07	15.57	.23	5.19
C17	12.52	.25	6.26	12.38	.16	6.19	12.76	.10	6.38	12.88	.08	6.44
C19	36.67	.98	6.11	36.90	.30	6.15	36.35	.30	6.06	36.71	.38	6.12
C21	22.37	.76	5.59	23.17	.28	5.79	21.49	.25	5.37	23.34	.18	5.84
C23	54.91	2.17	5.49	57.94	1.53	5.79	58.60	.61	5.86	60.28	.72	6.03
C25	54.57	1.25	6.06	55.72	.39	6.19	55.50	.43	6.17	55.86	.62	6.21
C27	30.70	.71	5.12	30.87	.71	5.15	31.12	.36	5.19	32.63	.37	5.44
C29	34.05	1.42	5.68	35.32	.38	5.89	34.35	.42	5.73	34.51	.32	5.75
C31	15.77	1.00	5.26	17.51	.45	5.84	17.53	.28	5.84	16.77	.31	5.59
C33	22.02	1.26	5.51	23.14	.49	5.79	23.76	.49	5.94	22.93	.48	5.73
C35	29.68	.95	5.94	30.63	.46	6.13	30.19	.35	6.04	30.19	.28	6.04
C39	18.30	.52	6.10	18.69	.24	6.23	18.09	.16	6.03	17.67	.32	5.89
C41	18.05	.56	6.02	18.92	.22	6.31	18.76	.11	6.25	18.94	.13	6.31
C43	47.41	1.35	5.93	49.59	.62	6.20	49.90	.31	6.24	47.90	.64	5.99
C45	19.14	.42	6.38	19.62	.21	6.54	19.68	.12	6.56	19.51	.10	6.50
C47	40.97	.96	5.12	41.99	.42	5.25	41.93	.23	5.24	42.32	.23	5.29

a. Means and SE (standard errors of means) are weighted population estimates. Each item average was computed by dividing the composite mean by the number of items included in each composite.

b. For the composite names and items included in each composite, see Table 18.

Table 21. Satisfaction of Needs: Composite Means and Standard Errors by Sponsorship Categories<sup>a</sup>.

Composite Numbers	AID-Sponsored			Home Government Sponsored			Other Scholarships and Assistantships			Self and Other Private Sources		
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average
C2	37.81	.80	5.40	39.17	.40	5.60	38.46	.27	5.49	36.70	.93	5.24
C4	38.24	.77	4.78	40.12	.65	5.02	40.65	.70	5.08	39.27	1.34	4.91
C6	13.96	.35	4.65	14.06	.35	4.69	13.78	.20	4.59	13.70	.27	4.57
C8	14.94	.68	4.96	14.93	.29	4.98	14.73	.32	4.91	13.15	.27	4.38
C10	17.93	.68	3.59	18.37	.31	3.67	18.82	.36	3.76	16.97	.72	3.39
C12	31.96	1.47	4.57	32.34	.84	4.62	32.42	.38	4.63	30.30	.87	4.33
C14	12.05	.42	4.02	12.09	.33	4.03	11.43	.19	3.81	11.51	.33	3.84
C16	11.79	.41	3.93	11.08	.22	3.69	11.59	.18	3.86	10.95	.24	3.65
C18	7.02	.39	3.51	7.14	.25	3.57	7.71	.13	3.86	6.77	.38	3.39
C20	26.95	.77	4.49	29.08	.49	4.83	30.75	.35	5.13	27.38	.66	4.56
C22	16.86	.77	4.22	16.70	.27	4.18	17.69	.21	4.42	15.82	.57	3.96
C24	45.74	1.72	4.57	40.46	.94	4.05	43.75	.97	4.38	39.09	1.22	3.91
C26	46.94	1.24	5.22	46.90	.77	5.21	45.73	.59	5.08	45.52	.82	5.06
C28	26.81	.86	4.47	25.81	.59	4.30	25.89	.45	4.31	26.84	.89	4.47
C30	24.01	1.32	4.00	25.81	.63	4.30	26.50	.46	4.42	25.87	.60	4.31
C32	14.33	.76	4.78	12.81	.78	4.27	13.49	.44	4.50	12.61	.49	4.20
C34	17.78	.92	4.44	17.97	.45	4.49	17.30	.45	4.33	17.79	.62	4.45
C36	24.81	.61	4.96	25.57	.51	5.11	26.06	.31	5.21	23.52	.79	4.70
C40	11.97	.67	3.99	11.71	.31	3.90	11.98	.24	3.99	12.11	.20	4.04
C42	14.78	.50	4.93	14.19	.38	4.73	13.47	.28	4.49	13.32	.38	4.44
C44	32.22	1.19	5.93	34.32	.88	4.29	32.22	.60	4.03	32.60	.66	4.08
C46	17.29	.27	5.76	18.37	.20	6.12	18.24	.16	6.08	17.26	.32	5.75
C48	35.77	.93	4.47	36.71	.55	4.59	37.27	.29	4.66	34.58	1.09	4.32

a. Means and SE (standard errors of means) are weighted population estimates. Each item average was computed by dividing the composite mean by the number of items included in each composite.

b. For the composite names and items included in each composite, see Table 18.

Table 22. Comparisons of Importance and Satisfaction Composites of Needs by Sponsorship Categories

Composite Number <sup>a</sup>	Rank Order in Importance Composites	Rank Order in Satisfaction Composites	Composite Number	Rank Order of Sponsorship Categories in Satisfaction Composites	Significantly Different Categories <sup>b</sup>	Significantly Different Categories <sup>c</sup>
C1	2	1	3	4	2 vs. 4	None
C3	2	1	4	3	None	None
C5	1	2	4	3	1 vs. 4, 3	None
C7	2	1	4	3	2 vs. 3	The rest vs. 4
C9	2	4	1	3	None	None
C11	1	2	4	3	None	None
C13	1	4	2	3	1, 4 vs. 3	None
C15	2	1	4	3	None	None
C17	4	3	1	2	4 vs. 2	None
C19	2	4	1	3	None	3 vs. the rest
C21	4	2	1	3	4, 2 vs. 3	3 vs. 2, 4
C23	4	3	2	1	None	1, 3 vs. 4
C25	4	2	3	1	None	None
C27	4	3	2	1	4 vs. the rest	None
C29	2	4	3	1	None	None
C31	3	2	4	1	None	None
C33	3	2	4	1	None	None
C35	3	4	2	1	None	None
C39	2	1	3	4	None	3 vs. 4
C41	4	2	3	1	None	None
C43	3	2	4	1	None	None
C45	1	3	2	4	None	2, 3 vs. 1, 4
C47	4	2	3	1	None	None
C2	2	1	4	3		
C4	3	2	4	1		
C6	2	1	3	4		
C8	1	2	3	4		
C10	3	2	1	4		
C12	3	2	1	4		
C14	2	1	4	3		
C16	1	3	2	4		
C18	3	2	1	4		
C20	3	2	4	1		
C22	3	1	2	4		
C24	1	3	2	4		
C26	1	2	3	4		
C28	4	1	3	2		
C30	3	4	2	1		
C32	1	3	2	4		
C34	2	4	1	3		
C36	3	2	1	4		
C40	4	3	1	2		
C42	1	2	3	4		
C44	1	2	4	3		
C46	2	3	1	4		
C48	3	2	1	4		

a. For the composite names and items included, see Table 18.

b. Categories are: 1 = AID-sponsored, 2 = home government sponsored, 3 = other scholarships and assistantships, 4 = self or private sources. The categories are ranked from high to low reading from left to right.

c. T test (pp. 116-117, Ott, 1977) was used for all the group mean comparisons. The categories designated differed in their means beyond the .01 level of significance. None indicates no significant differences among the categories. For the guide to read this column, see page 31.

the same table, as to C5, category 1 was found to place significantly higher importance on this composite than categories 4 and 3. Even though category 4 had a higher mean than category 3, they were not significantly different from each other. Category 2 was found to be not significantly different from any one of the others.

Even though not all composites showed significant differences among the sponsorship groups, we note some tendency which deserves a mention. Overall, category 3 (predominantly assistantship supported) placed less importance on composites 3 through 21, which are mostly current academic needs. We also noted, even though not all are statistically significant, that this category tended to rank high for the same composites of needs in terms of satisfaction scores. In other words, this category of students appeared to experience least frustration. They were less concerned with these academic needs, while they tended to be more satisfied with the same needs than students in other categories. We attribute this tendency to the experiences on U.S. campuses for those who receive assistantships as being substantively different from those who are not on assistantships. We realize this claim warrants further investigations.

Another striking tendency to be noted on Table 22 is the clustering of category 1 at the lowest rank for importance composites C23 through C47, (except C39 and C45), even though statistically not significant. These are needs related to mostly non-academic issues and post-return conditions. It appears that this category of students (AID sponsored) were less concerned with non-academic needs and needs in terms of future. Once again, we repeat these rank orders, were statistically not significant and should

be taken as trends which need to be further investigated.<sup>3</sup>

Hypothesis 6: Importance of needs varies by age of students.

Hypothesis 7: Satisfaction of needs varies by age of students.

Most of the correlation coefficients between need composites and age were statistically significant. However, none were .2236 or higher, which means age accounted for 5% or more of variance in none of the composites. The three highest coefficients were .17 for C8, .16 for C33, and .14 for C12.

Hypothesis 8: Importance of needs varies by sex of students.

Hypothesis 9: Satisfaction of needs varies by sex of students.

Table 23 presents the results of testing the empirical hypotheses for the above and composite data.

For most of the composites, sex categories showed no significant differences. Only four composites showed significant differences between males and females. In all four composites, female students had significantly higher composite scores than male students. (For the guide to read the data under "significantly different categories," see page 33.)

Hypothesis 10: Importance of needs varies by marital status of students.

Hypothesis 11: Satisfaction of needs varies by marital status of students.

We considered the presence or absence of a spouse would be more relevant to this group than the presence or absence of a family, knowing that

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<sup>3</sup> Even though Fisher's tests can deal with unequal size group comparisons (Ott, pp. 116-117, 1977), a better comparison of AID students would be not with the rest of the entire sample but with those who are at schools in Stratum I where most of the AID students are found. For Phase III, such comparisons will be recommended.

Table 23. Importance and Satisfaction of Needs: Composite Means and Standard Errors by Sex<sup>a</sup>.

Composite Numbers <sup>b</sup>	Importance					Significantly Different Categories <sup>c</sup>	Satisfaction					Significantly Different Categories <sup>c</sup>	
	Female		Male		Item Average		Female		Male		Item Average		
	Mean	SE	Mean	SE			Mean	SE	Mean	SE			
C1	40.86	.49	5.84	.34	5.66	N	36.98	.58	5.28	37.89	.51	5.41	N
C3	46.46	.29	5.81	.30	5.77	N	39.06	.97	4.88	40.00	.75	5.00	N
C5	15.61	.22	5.20	.16	5.17	N	13.30	.27	4.43	13.96	.15	4.65	N
C7	17.38	.27	5.79	.15	5.52	f vs. m	13.59	.34	4.53	14.18	.21	4.73	N
C9	23.13	.34	4.63	.12	4.56	N	17.56	.55	3.51	17.84	.49	3.57	N
C11	42.54	.44	6.08	.34	5.98	N	29.85	.80	4.26	31.61	.57	4.52	N
C13	16.21	.21	5.40	.12	5.27	N	11.06	.28	3.69	11.83	.23	3.94	N
C15	15.81	.23	5.27	.14	5.17	N	11.16	.25	3.72	11.14	.19	3.71	N
C17	12.94	.13	6.47	.08	6.32	N	6.93	.34	3.47	7.14	.24	3.57	N
C19	37.31	.39	6.22	.26	6.08	N	28.25	.89	4.71	28.65	.43	4.77	N
C21	23.70	.24	5.92	.18	5.62	f vs. m	16.02	.52	4.01	16.69	.34	4.17	N
C23	60.34	.86	6.03	.54	5.89	N	39.70	2.04	3.97	40.56	.60	4.06	N
C25	56.27	.79	6.25	.41	6.19	N	45.11	.80	5.01	46.10	.58	5.12	N
C27	31.35	.57	5.23	.34	5.34	N	26.49	.77	4.42	26.36	.56	4.39	N
C29	35.37	.46	5.89	.21	5.73	N	25.97	.62	4.33	25.83	.43	4.31	N
C31	16.39	.51	5.46	.28	5.73	N	13.62	.69	4.54	12.90	.39	4.30	N
C33	23.32	.89	5.83	.23	5.77	N	17.63	.80	4.41	17.94	.35	4.49	N
C35	30.70	.25	6.14	.19	6.03	N	24.43	.57	4.89	24.81	.55	4.96	H
C39	18.34	.31	5.11	.14	5.98	N	12.02	.31	4.01	11.94	.21	3.98	N
C41	19.21	.11	6.40	.11	6.25	f vs. m	13.55	.32	4.52	13.66	.30	4.55	N
C43	49.54	.44	6.19	.38	6.08	N	32.59	.76	4.07	33.13	.60	4.14	N
C45	19.70	.16	6.57	.10	6.52	N	17.92	.24	5.97	17.70	.23	5.90	N
C47	42.86	.28	5.36	.29	5.22	f vs. m	35.58	.91	4.45	35.72	.62	4.47	N

a, b See Footnotes a and b in Table 21.

c. See Footnote d in Table 22.

one half of the pretest sample was single. We analyzed the need composites by three categories of marital status; (1) single, (2) married, the spouse with the student, and (3) married, the spouse at home. There were a small number of students in the fourth category (divorced, separated, or widowed). We did not include this category due to its extremely small size. The results of the tests and data are found in Table 24 for Hypothesis 10 and in Table 25 for Hypothesis 11. Two importance composites were found to be significantly different among the categories, while four satisfaction composites indicated differences.

Hypothesis 12: Importance of needs varies by the command of English students have.

Hypothesis 13: Satisfaction of needs varies by the command of English students have.

The command of English was operationally measured by the TOEFL score ranges. Subjective evaluation (self-evaluation, C50) was also used to determine the association between other need composites and this measure. Even though most of the correlation coefficients between TOEFL ranges and need composites were statistically significant far beyond the .01 level, TOEFL score ranges did not account for 5% or more of variation in any of the composite scores. The three highest coefficients were with C21 ( $r = .14$ ), C22 ( $r = .12$ ), and C33 ( $r = .15$ ).

The subjective measure of the command of English (C50) showed several highly significant and substantive correlations. Those which accounted for more than 10% of variation in the need composite score were correlation with C22 ( $r = .43$ ) and C48 ( $r = .44$ ). Those accounting for less than 10%

Table 24. Importance of Needs: Composite Means and Standard Errors by Marital Status <sup>a</sup>.

Composite Numbers <sup>b</sup> .	Marital Status Categories <sup>c</sup>												Significantly Different Categories <sup>d</sup> .
	Category 1			Category 2			Category 3			Item Average	SE	Item Average	
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average				
C1	39.49	.42	5.64	40.42	.51	5.77	39.76	.91	5.68			N	
C3	46.20	.35	5.77	46.40	.34	5.80	45.39	1.05	5.67			N	
C5	15.10	.18	5.03	15.98	.22	5.33	16.57	.45	5.52			3, 2 vs. 1	
C7	16.79	.19	5.60	16.65	.17	5.55	17.27	.50	5.76			N	
C9	22.71	.16	4.54	22.99	.19	4.60	23.20	.46	4.64			N	
C11	41.71	.39	5.96	42.34	.32	6.05	42.01	1.42	6.00			N	
C13	15.75	.24	5.25	16.08	.19	5.36	16.00	.93	5.33			N	
C15	15.43	.20	5.14	15.79	.11	5.26	15.74	.68	5.25			N	
C17	12.85	.09	6.43	12.58	.10	6.29	11.98	.40	5.99			N	
C19	36.73	.32	6.12	36.56	.24	6.09	36.62	.92	6.10			N	
C21	22.78	.23	5.69	22.87	.18	5.72	22.80	.71	5.70			N	
C23	59.19	.74	5.92	59.31	.73	5.93	58.57	1.35	5.86			N	
C25	56.20	.44	6.24	55.24	.40	6.14	55.64	1.54	6.18			N	
C27	32.69	.29	5.45	30.84	.57	5.14	29.99	.83	5.00			1 vs. 2, 3	
C29 <sup>e</sup> .	34.68	.27	5.78	34.57	.23	5.76	34.85	.62	5.81			N	
C31 <sup>e</sup> .	-	-	-	17.51	.22	5.84	-	-	-			-	
C33 <sup>e</sup> .	-	-	-	23.71	.25	5.93	-	-	-			-	
C35	30.21	.22	6.04	30.43	.31	6.09	29.97	.99	5.99			N	
C39	17.95	.13	5.98	18.16	.21	6.05	17.97	.68	5.99			N	
C41	18.84	.12	6.28	18.97	.17	6.32	18.26	.63	6.09			N	
C43	48.52	.34	6.07	49.15	.46	6.14	48.65	1.85	6.08			N	
C45	19.60	.10	6.53	19.52	.13	6.51	19.76	.25	6.59			N	
C47	42.14	.32	5.27	41.98	.39	5.25	41.28	.84	5.16			N	

a. Means, SE (standard error of means) are weighted population estimates. Each item average was computed by dividing the composite mean by the number of items included in each composite.

b. For the composite names and items included in each composite, see Table 18.

c. Marital categories: 1 = single; 2 = married, the spouse with the student; 3 = married, the spouse at home. The fourth category was not included in this comparison, due to its extremely small size.

d. Categories listed were significantly different at .01 level. None stands for no difference among categories. For the guide to read this column, see page 31.

e. Responded only by category two.

Table 25. Satisfaction of Needs: Composite Means and Standard Errors by Marital Status<sup>a</sup>.

Composite Numbers <sup>b</sup>	Category 1			Category 2			Category 3			Significantly Different Categories <sup>d</sup>
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
C2	37.38	.60	5.34	38.23	.43	5.46	36.03	1.67	5.15	N
C4	39.60	.69	4.95	40.40	.87	5.05	35.01	1.48	4.38	2, 1 vs. 3
C6	13.53	.16	4.51	14.24	.23	4.75	12.61	.68	4.20	N
C8	13.57	.23	4.52	14.53	.28	4.84	14.96	.63	4.99	3, 2 vs. 1
C10	17.68	.33	3.54	17.81	.64	3.56	17.78	1.32	3.56	N
C12	30.47	.48	4.35	32.06	1.03	4.58	31.17	1.02	4.45	N
C14	11.39	.20	3.80	11.99	.42	4.00	11.31	.74	3.77	N
C16	10.95	.17	3.65	11.42	.31	3.81	10.97	.51	3.66	N
C18	6.66	.20	3.33	7.65	.38	3.82	7.37	.37	3.68	N
C20	28.01	.40	4.67	29.33	.51	4.89	27.06	1.79	4.51	N
C22	16.39	.31	4.10	16.75	.43	4.19	15.15	.94	3.79	N
C24	40.15	1.45	4.01	41.04	.86	4.10	37.44	2.74	3.74	N
C26	45.90	.58	5.10	46.15	.59	5.13	42.86	1.86	4.76	N
C28	26.70	.38	4.45	26.30	.82	4.38	22.85	1.50	3.81	N
C30	25.27	.44	4.21	27.03	.57	4.50	23.30	.93	3.88	2 vs. 3
C32 <sup>e</sup>	-	-	-	13.10	.41	4.37	-	-	-	-
C34 <sup>e</sup>	-	-	-	18.07	.31	4.52	-	-	-	-
C36	24.23	.44	4.85	25.39	.63	5.08	24.88	1.27	4.98	N
C40	11.73	.16	3.91	12.31	.26	4.10	12.21	.79	4.07	N
C42	13.39	.20	4.46	13.77	.43	4.59	15.31	.55	5.10	3 vs. 1
C44	32.47	.46	4.06	33.61	.88	4.20	34.02	1.69	4.25	N
C46	17.49	.19	5.83	18.01	.25	6.00	18.16	.34	6.05	N
C48	35.10	.60	4.39	36.51	.57	4.56	34.07	1.91	4.26	N

a. Means, SE (standard error of means) are weighted population estimates. Each item average was computed by dividing the composite mean by the number of items included in each composite.

b. For the composite names and items included in each composite, see Table 18.

c. Marital categories: 1 = single; 2 = married, the spouse with the student; 3 = married, the spouse at home. The fourth category was not included in this comparison, due to its extremely small size.

d. Categories listed were significantly different at .01 level. None stands for no difference among categories. For the guide to read this column, see page 31.

e. Responded only by category two.

but more than 5% were with C2 ( $r = .31$ ), C4 ( $r = .28$ ), C10 ( $r = .23$ ), C26 ( $r = .29$ ), C28 ( $r = .31$ ), C36 ( $r = .29$ ), C46 ( $r = .46$ ), and C52 ( $r = -.24$ ).

Hypothesis 14: Importance of needs varies by graduate vs. undergraduate status of students.

Hypothesis 15: Satisfaction of needs varies by graduate vs. undergraduate status of students.

Undergraduate and graduate students did not differ with regard to most of the need composites. However, with regard to importance composites, the differences were noted in the following: graduate students scored higher in one composite, while undergraduate students scored higher in six composites. As to satisfaction composites, graduate students scored higher than undergraduate students in four composites, while undergraduate students did not exceed graduate students significantly in any one of the satisfaction composites of needs.

Table 26 presents the results of testing empirical hypotheses for the above and data for the need composites.

Hypothesis 16: Importance of needs varies by major field of study.

Hypothesis 17: Satisfaction of needs varies by major field of study.

Major fields of study were grouped into the following five categories for testing purposes: (1) engineering, (2) agriculture, (3) natural and life sciences, and (5) other. (For this report, we considered it would not be feasible to analyze the data in more detailed major categories.)

Table 26. Importance and Satisfaction of Needs: Composite Means and Standard Errors by Classification<sup>a</sup>.

Composite Numbers <sup>b</sup>	Classification Categories <sup>c</sup>										Significantly Different Categories	Significantly Different Categories	
	Importance					Satisfaction							
	Category 1		Category 2			Category 1		Category 2					
Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average		
C1	38.63	.47	5.52	40.70	.24	5.81	37.14	.78	5.31	37.80	.40	5.40	N
C3	46.41	.54	5.80	46.11	.32	5.76	38.99	1.10	4.87	39.90	.62	4.99	N
C5	15.70	.18	5.23	15.45	.17	5.15	13.26	.27	4.42	13.95	.11	4.65	N
C7	17.24	.11	5.75	16.54	.21	5.51	13.19	.24	4.40	14.49	.20	4.83	2 vs. 1
C9	22.77	.23	4.55	22.87	.12	4.57	17.11	.51	3.42	18.09	.42	3.62	N
C11	42.43	.38	6.06	41.75	.39	5.96	30.43	.64	4.35	31.70	.57	4.53	N
C13	16.17	.22	5.39	15.76	.16	5.25	11.52	.33	3.84	11.70	.24	3.90	N
C15	15.77	.23	5.26	15.53	.13	5.18	10.86	.28	3.62	11.25	.17	3.75	N
C17	13.04	.07	6.52	12.51	.12	6.26	6.29	.26	3.14	7.47	.24	3.73	2 vs. 1
C19	37.44	.24	6.24	36.28	.24	6.15	26.81	.60	4.47	29.32	.41	4.89	2 vs. 1
C21	23.55	.19	5.89	22.28	.21	5.57	15.57	.58	3.89	17.08	.20	4.27	N
C23	61.61	.65	6.16	58.22	.56	5.82	38.51	1.67	3.85	41.41	.66	4.14	N
C25	56.75	.73	6.31	55.18	.30	6.13	45.38	.71	5.04	46.0	.51	5.11	N
C27	32.91	.42	5.49	31.06	.41	5.18	26.57	.65	4.43	26.11	.38	4.35	N
C29	35.03	.41	5.84	34.48	.26	5.75	25.53	.71	4.25	25.95	.36	4.32	N
C31	16.53	.44	5.51	17.16	.29	5.72	12.32	.73	4.11	12.87	.38	4.29	N
C33	22.76	.78	5.69	23.14	.24	5.78	17.38	1.00	4.35	17.78	.25	4.44	N
C35	30.51	.20	6.10	30.15	.24	6.03	23.23	.76	4.61	25.54	.45	5.11	2 vs. 1
C39	18.31	.19	6.10	17.90	.19	5.97	11.53	.35	3.84	12.10	.16	4.03	N
C41	19.19	.18	6.40	18.72	.13	6.24	13.88	.32	4.63	13.57	.30	4.52	N
C43	48.57	.54	6.07	48.95	.36	6.12	33.36	.70	4.17	32.76	.53	4.09	N
C45	19.77	.13	6.59	19.49	.12	6.50	17.45	.36	5.82	17.92	.13	5.97	N
C47	42.70	.41	5.34	41.74	.38	5.22	33.98	1.18	4.25	36.51	.35	4.56	N

a. See Footnote a, Table 2/

b. See Footnote b, Table 24

c. Classification categories: 1=Undergraduate, 2=Graduate

d. See Footnote d, Table 24

As to importance, there were significant differences among categories with regard to ten importance composites, while no significant differences were found among thirteen importance composites. As to satisfaction, the hypothesis was supported by only three composites. The results of the tests and data are presented in Table 27 for Hypothesis 16, and in Table 28 for Hypothesis 17.

Hypothesis 18: Importance of needs varies by length of stay in the U.S. and at the school.

Hypothesis 19: Satisfaction of needs varies by length of stay in the U.S. and at the school.

Length of stay in the U.S. and at the school was measured by (1) the total months of stay in the U.S. and (2) the total months of stay at the university of current enrollment. Both measures correlated significantly with most of the composites. However, none explained 5% or more of variation in any composite. Among the correlation coefficients between the total months of stay in the U.S. and the composites, the highest three were with C28 ( $r = .17$ ), C4 ( $r = .16$ ), and C33 ( $r = .15$ ). Among the correlation coefficients between the total months of stay at the university and composite measures, the highest three were with C2, C6, and C26 (all  $r = .14$ ).

Hypothesis 20: Importance of needs varies by the region of the world from which students come.

Hypothesis 21: Satisfaction of needs varies by the region of the world from which students come.

The regions included were Africa, South and East Asia, Southwest Asia, and Latin America. Europe was excluded from this analysis, since only two

Table 27. Importance of Needs: Composite Means and Standard Errors by Major, Recorded<sup>a</sup>.

Composite Number <sup>b</sup>	Major Categories <sup>c</sup>					Significantly Different Categories <sup>d</sup>										
	Category 1		Category 2		Category 3		Category 4		Category 5							
	Mean	SE	Item Average	Mean	SE		Item Average	Mean	SE	Item Average	Mean	SE	Item Average			
C1	39.06	.69	5.58	41.05	.65	5.86	40.45	.84	5.78	39.54	.73	5.65	40.06	.32	5.72	N
C3	46.09	.35	5.76	46.60	.86	5.83	45.34	.92	5.67	43.79	1.16	5.47	46.82	.35	5.85	N
C5	15.33	.17	5.11	15.63	.38	5.21	15.42	.51	5.14	14.92	.60	4.97	15.73	.16	5.24	N
C7	16.28	.24	5.43	17.51	.36	5.84	16.49	.54	5.50	16.21	.63	5.40	17.01	.19	5.67	2 vs. 1
C9	22.53	.32	4.51	23.06	.49	4.61	22.90	.37	4.58	22.85	.66	4.57	22.98	.20	4.60	N
C11	41.48	.45	5.93	43.89	.78	6.27	40.39	.68	5.77	43.24	1.55	6.18	41.97	.29	6.00	2 vs. 1, 3
C13	15.58	.22	5.19	17.30	.49	5.77	14.05	.49	4.68	16.06	.67	5.35	16.15	.16	5.38	2 vs. 1 vs. 3
C15	15.35	.18	5.12	16.67	.36	5.56	15.35	.37	5.12	15.37	.68	5.12	15.62	.15	5.21	2 vs. 5, i, 3
C17	12.80	.12	6.40	12.72	.23	6.36	12.63	.18	6.31	12.41	.26	6.20	12.74	.11	6.37	N
C19	35.83	.31	5.97	37.54	.43	6.26	36.20	.47	6.03	37.07	.68	6.18	36.97	.29	6.16	2, 5 vs. 1
C21	22.01	.19	5.50	23.40	.41	5.85	22.20	.43	5.55	23.01	.57	5.75	23.18	.19	5.79	2, 5 vs. 1
C23	59.56	.57	5.96	59.89	1.17	5.99	57.57	1.05	5.76	60.09	1.52	6.01	59.08	.83	5.91	N
C25	55.45	.52	6.16	57.85	.98	6.43	56.37	1.01	6.26	53.70	1.37	5.97	55.90	.66	6.21	N
C27	32.25	.45	5.38	32.67	.79	5.44	31.66	.61	5.28	30.29	1.02	5.05	31.78	.24	5.30	N
C29	34.29	.34	5.71	36.43	.54	6.07	34.47	.69	5.74	33.69	.89	5.61	34.71	.41	5.79	2 vs. 1, 4
C31	17.54	.22	5.85	18.20	.46	6.07	15.85	.90	5.28	16.73	.46	5.58	17.02	.37	5.67	N
C33	23.14	.39	5.78	24.47	.59	6.12	21.26	1.44	5.31	24.51	.47	6.13	22.86	.49	5.72	N
C35	30.05	.25	6.01	31.01	.42	6.20	30.73	.40	6.15	29.82	.91	5.96	30.29	.21	6.06	N
C39	17.65	.18	5.88	18.92	.20	6.31	18.27	.35	6.09	16.72	.73	5.57	18.23	.16	6.08	2 vs. 5, 1, 4
C41	18.83	.21	6.28	19.63	.14	6.54	18.99	.28	6.33	19.07	.20	6.36	18.68	.14	6.23	2 vs. 1, 5
C43	48.21	.47	6.03	50.58	.64	6.32	50.52	.71	6.32	49.44	.72	6.18	48.30	.40	6.04	2, 3 vs. 5, 1
C45	19.51	.11	6.50	19.83	.12	6.61	19.71	.12	6.57	19.63	.25	6.54	19.53	.12	6.51	N
C47	41.96	.24	5.25	42.62	.74	5.33	42.26	.48	5.28	41.24	1.13	5.16	41.99	.24	5.25	N

a. See Footnote a, Table 24  
 b. See Footnote b, Table 24  
 c. Recorded Major Categories: 1=Engineering, 2=Agriculture, 3=Natural Life Sciences, 4=Social Services, 5=Others.  
 d. See Footnote d, Table 24

Table 28. Satisfaction of Needs: Composite Means and Standard Errors by Major, Recorded<sup>a</sup>.

Composite Number	Major Categories <sup>c</sup>												Significantly Different Categories			
	Category 1			Category 2			Category 3			Category 4				Category 5		
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average		Mean	SE	Item Average
C2	37.50	.56	5.36	39.34	1.00	5.62	38.75	.44	5.54	37.02	.76	5.29	37.31	.69	5.33	N
C4	39.75	.76	4.97	39.49	1.79	4.94	40.13	.81	5.02	39.28	1.23	4.91	39.74	1.03	4.97	N
C6	13.73	.32	4.58	13.93	.34	4.64	13.33	.26	4.44	13.80	.28	4.60	13.85	.19	4.62	N
C8	14.12	.34	4.71	15.18	.45	5.06	14.67	.49	4.89	13.37	.58	4.46	13.79	.27	4.60	2 vs. 5
C10	17.61	.41	3.52	18.91	.32	3.78	18.80	.45	3.76	18.30	.74	3.66	17.37	.75	3.47	N
C12	31.51	.38	4.50	31.57	.66	4.51	32.56	1.01	4.65	30.33	.90	4.33	30.79	1.02	4.40	N
C14	11.40	.29	3.80	12.37	.47	4.12	11.63	.33	3.88	11.50	.28	3.83	11.62	.40	3.87	N
C16	10.98	.35	3.66	11.40	.31	3.80	11.72	.32	3.91	10.52	.53	3.51	11.19	.23	3.73	N
C18	6.67	.23	3.34	7.37	.24	3.68	8.05	.40	4.02	6.92	.37	3.46	7.07	.36	3.53	3 vs. 1
C20	28.69	.53	4.78	28.90	.63	4.82	29.59	.79	4.93	28.66	.85	4.78	28.15	.58	4.69	N
C22	17.17	.40	4.29	16.89	.37	4.22	17.21	.53	4.30	16.06	.69	4.01	16.09	.42	4.02	N
C24	41.32	.93	4.13	40.66	2.42	4.07	44.02	1.77	4.40	37.92	1.83	3.79	39.95	1.05	3.99	N
C26	44.99	1.07	5.00	45.04	1.57	5.00	46.81	.95	5.20	45.80	1.22	5.09	46.30	.41	5.14	N
C28	26.24	.84	4.37	26.08	.82	4.35	27.32	1.03	4.55	26.17	.83	4.36	26.36	.52	4.39	N
C30	26.12	.96	4.35	24.72	1.06	4.12	27.02	.65	4.50	25.81	.97	4.30	26.65	.46	4.27	N
C32	13.97	.36	4.66	14.77	.50	4.92	13.96	.64	4.65	11.61	.59	3.87	12.63	.54	4.21	2, 1, 3 vs. 4, 2 vs. 5
C34	17.56	.83	4.39	18.79	.64	4.70	18.12	.85	4.53	16.91	1.28	4.23	18.01	.51	4.50	N
C36	24.20	.60	4.84	26.38	.80	5.28	25.87	.68	5.17	25.41	.79	5.08	24.45	.75	4.89	N
C40	12.31	.28	4.10	11.90	.31	3.97	12.62	.54	4.21	11.64	.45	3.88	11.75	.29	3.92	N
C42	13.16	.20	4.39	14.18	.42	4.73	13.22	.46	4.41	13.84	.50	4.61	13.84	.43	4.61	N
C44	31.60	.55	3.95	33.14	.85	4.14	32.75	1.63	4.09	35.31	1.82	4.41	33.39	.72	4.17	N
C46	17.34	.27	5.78	17.56	.30	5.85	17.70	.30	5.90	18.03	.35	6.01	17.93	.31	5.98	N
C48	34.71	.54	4.34	36.56	.77	4.57	36.54	1.00	4.57	35.77	.50	4.47	35.82	1.01	4.48	N

a. See footnote a, Table 24

b. See footnote b, Table 24

c. Recorded Major Categories: 1=Engineering, 2=Agriculture, 3=Natural Life Sciences, 4=Social Services, 5=Others.

d. See footnote d, Table 24

countries, Portugal and Turkey, were included in this study and students from these two countries were comparatively very small in number. As to importance of needs, twelve composite scores were significantly different among the regions. As to satisfaction of needs, only three composites showed no significant differences among the regions. The results of the tests and data are presented in Table 29 for Hypothesis 20 and in Table 30 for Hypothesis 21.

Hypothesis 22: Importance of needs varies by whether or not students participated in an orientation program.

Hypothesis 23: Satisfaction of needs varies by whether or not students participated in an orientation program.

Participation in an orientation program was operationalized by using the following four categories: (1) did not attend at all, (2) attended only in the U.S., (3) attended only in home country, and (4) attended orientations both in home country and in the U.S. Hypothesis 22 was supported with regard to only three need composites, and Hypothesis 23 with regard to four composites. The results of the tests and data are presented in Table 31 for Hypothesis 22 and in Table 32 for Hypothesis 23.

Hypothesis 24: Importance of needs varies by the amount of previous international experience students had.

Hypothesis 25: Satisfaction of needs varies by the amount of previous international experience students had.

Operational measures for previous international experience were (1) the total number of foreign countries visited besides the U.S., and (2) the total number of months spent in those countries. Most of the correlation coefficients between each of the above two measures of previous

Table 29. Importance of Needs: Composite Means and Standard Errors by Region<sup>a</sup>.

Composite Number	Region Categories <sup>c</sup> .												Significantly Different Regions
	Region 1			Region 2			Region 3			Region 4			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
C1	40.09	.30	5.73	40.71	.39	5.82	38.88	.83	5.55	39.31	.51	5.62	N
C3	47.43	.38	5.93	45.65	.30	5.71	46.30	.78	5.79	46.69	.99	5.84	1 vs. 2
C5	16.23	.26	5.41	15.69	.15	5.23	14.98	.29	4.99	15.17	.50	5.06	1 vs. 3
C7	17.24	.27	5.75	16.36	.23	5.45	16.80	.33	5.60	17.26	.19	5.75	4 vs. 2
C9	22.92	.25	4.58	22.88	.16	4.58	22.79	.56	4.56	23.05	.28	4.61	N
C11	43.50	.50	6.21	41.93	.24	5.99	40.98	.67	5.85	42.38	.62	6.05	1 vs. 2, 3
C13	16.93	.31	5.66	15.87	.16	5.29	15.08	.28	5.03	15.89	.38	5.30	1 vs. 2, 3
C15	16.94	.17	5.65	15.36	.11	5.12	14.83	.39	4.94	15.59	.37	5.20	1 vs. 4, 2, 3
C17	12.79	.20	6.33	12.66	.10	6.09	12.97	.15	5.99	12.54	.22	6.19	N
C19	37.72	.42	6.29	36.53	.24	6.09	35.93	.44	5.99	37.12	.41	6.19	1 vs. 3
C21	22.38	.54	5.60	22.53	.19	5.63	23.29	.25	5.82	23.40	.43	5.85	N
C23	59.84	1.22	5.98	58.75	.59	5.88	59.99	1.23	6.00	59.11	1.26	5.91	N
C25	58.23	.48	6.47	55.18	.46	6.13	54.49	.70	6.05	56.13	.85	6.24	1 vs. 2, 3
C27	30.84	.69	5.14	31.74	.25	5.29	32.44	.61	5.41	32.62	.41	5.44	N
C29	34.46	.45	5.74	34.51	.26	5.75	34.62	.64	5.77	35.28	.56	5.88	N
C31	16.47	.79	5.49	16.67	.23	5.56	17.99	.61	6.00	17.67	.39	5.89	N
C33	23.26	.68	5.81	22.56	.46	5.64	24.06	1.21	6.01	23.75	.41	5.94	N
C35	30.95	.31	6.19	29.84	.18	5.97	30.12	.40	6.02	30.63	.34	6.13	1 vs. 2
C39	18.84	.28	6.28	17.87	.16	5.96	17.14	.35	5.71	18.75	.29	6.25	1, 4 vs. 2, 3
C41	19.24	.16	6.41	18.50	.21	6.17	19.18	.26	6.39	18.00	.30	6.32	1 vs. 2
C43	50.57	.62	6.32	48.48	.50	6.06	47.26	.56	5.91	48.00	1.10	6.22	1 vs. 2, 3
C45	19.93	.21	6.64	19.45	.09	6.48	19.52	.20	6.51	19.69	.21	6.56	N
C47	41.51	.81	5.19	41.80	.27	5.23	42.12	.47	5.26	43.18	.83	5.40	N

a. See Footnote a, Table 24.

b. See Footnote b, Table 24.

c. Region categories: 1 = Africa, 2 = South and East Asia, 3 = Southwest Asia, 4 = Latin America. Europe was not included due to its extremely small size.

d. See Footnote d, Table 24.

Table 30. Satisfaction of Needs: Composite Means and Standard Errors by Region<sup>a</sup>.

Composite <sup>b</sup> Number	Region 1			Region 2			Region 3			Region 4			Significantly Different <sup>d</sup> Regions
	Mean	SE	Item Average										
C2	38.21	.74	5.46	36.84	.48	5.26	36.73	.81	5.25	39.49	.49	5.66	4 vs. 2, 3
C4	38.19	.74	4.77	39.49	.72	4.94	37.64	1.03	4.70	40.09	.76	5.51	4 vs. 2, 1, 3
C6	12.99	.30	4.33	13.78	.20	4.53	13.94	.34	4.65	14.39	.27	4.80	4 vs. 1
C8	14.08	.36	4.69	13.95	.31	4.65	13.80	.55	4.60	14.69	.42	4.90	N
C10	17.83	.29	3.57	18.10	.43	3.62	16.15	1.01	3.23	19.03	.36	3.81	4 vs. 1, 3
C12	32.41	.99	4.63	32.20	.42	4.60	28.23	1.54	4.03	31.69	.85	4.53	N
C14	12.48	.29	4.16	11.77	.19	3.92	10.67	.46	3.56	11.70	.36	3.90	1 vs. 3
C16	10.73	.45	3.58	11.62	.22	3.87	10.34	.34	3.45	11.73	.24	3.91	4 vs. 1, 3; 2 vs. 3
C18	6.84	.25	3.42	7.68	.19	3.84	6.05	.63	3.02	7.41	.37	3.70	2 vs. 1
C20	28.57	.71	4.76	29.09	.52	4.85	26.72	.67	4.45	29.85	.44	4.98	4, 2 vs. 3
C22	16.27	.26	4.07	17.38	.20	4.35	14.74	.86	3.68	17.44	.45	4.36	4, 2 vs. 3
C24	36.43	1.48	3.64	42.59	1.07	4.26	38.32	1.73	3.83	42.56	2.29	4.26	2 vs. 1
C26	44.24	.73	4.92	45.75	.52	5.08	43.60	.82	4.84	50.64	.89	5.63	4 vs. 2, 1, 3
C28	24.16	.72	4.03	25.94	.45	4.32	26.01	1.00	4.33	30.31	.62	5.05	4 vs. 3, 2, 1
C30	22.79	.90	3.80	25.66	.51	4.28	25.70	.59	4.28	29.63	.63	4.94	4 vs. 2, 3 vs. 1
C32	12.13	1.07	4.04	13.54	.47	4.51	11.53	.84	3.84	13.83	.40	4.61	N
C34	17.77	.95	4.44	18.07	.38	4.52	16.51	.65	4.13	18.81	.42	4.70	4 vs. 3
C36	25.84	.42	5.17	24.84	.46	4.97	22.43	1.10	4.49	26.19	.50	5.24	4, 1 vs. 3
C40	11.03	.37	3.68	12.60	.28	4.20	11.70	.23	3.90	11.66	.59	3.89	2 vs. 1
C42	14.83	.26	4.94	13.45	.28	4.48	12.52	.58	4.17	14.26	.45	4.75	1 vs. 2, 3
C44	35.02	.74	4.38	32.86	.47	4.11	30.39	.68	3.80	34.55	.85	4.32	1, 4, 2 vs. 3
C46	18.68	.18	6.23	17.75	.21	5.92	16.53	.33	5.51	18.54	.16	6.18	1, 4 vs. 2 vs. 3
C48	35.76	.59	4.47	36.32	.63	4.54	32.69	1.32	4.09	38.31	.49	4.79	4 vs. 1, 3

a. See Footnote a, Table 24.

b. See Footnote b, Table 24.

c. Region categories: 1 = Africa, 2 = South and East Asia, 3 = Southwest Asia, 4 = Latin America. Europe was not included due to its extremely small size.

d. See Footnote d, Table 24.

Table 31. Importance of Needs: Composite Means and Standard Errors by Orientation<sup>a</sup>.

Composite Number	Orientation Categories <sup>c</sup> .												Significantly Different <sup>d</sup> . Categories
	Category 1			Category 2			Category 3			Category 4			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
C1	38.46	.54	5.49	39.81	.63	5.69	39.75	.97	5.68	40.62	.31	5.80	4 vs. 1
C3	46.44	.59	5.81	46.33	.52	5.79	45.86	1.37	5.73	46.04	.27	5.75	N
C5	15.13	.37	5.04	15.54	.31	5.18	14.94	.82	4.98	15.72	.18	5.24	N
C7	16.96	.33	5.65	16.58	.25	5.53	15.97	.48	5.32	16.90	.20	5.63	N
C9	22.90	.40	4.58	22.81	.33	4.56	21.72	.62	4.34	22.87	.20	4.57	N
C11	42.16	.65	6.02	42.73	.60	6.10	40.15	1.37	5.74	41.90	.43	5.99	N
C13	16.26	.44	5.42	16.43	.29	5.48	13.90	.75	4.63	15.77	.26	5.26	2, 1, 4 vs. 3
C15	15.61	.33	5.20	15.97	.27	5.32	15.38	.43	5.13	15.47	.20	5.16	N
C17	12.89	.22	6.44	12.71	.17	6.35	12.63	.32	6.31	12.65	.12	6.32	N
C19	37.07	.45	6.18	37.08	.46	6.18	35.80	.62	5.97	36.55	.39	6.09	N
C21	22.58	.33	5.65	22.69	.20	5.67	21.91	.40	5.48	22.86	.24	5.72	N
C23	60.47	.96	6.05	61.24	.70	6.12	57.40	.96	5.74	58.62	.67	5.86	2 vs. 4, 3
C25	56.18	.84	6.24	56.64	.42	6.29	54.63	.82	6.07	55.51	.50	6.17	N
C27	32.48	.48	5.41	31.58	.66	5.26	31.13	1.22	5.19	31.96	.42	5.33	N
C29	34.69	.80	5.78	34.45	.59	5.74	33.65	.78	5.61	34.72	.29	5.79	N
C31	17.05	.51	5.68	17.23	.59	5.74	15.93	1.19	5.31	17.27	.33	5.76	N
C33	23.79	.51	5.95	21.96	.80	5.49	23.02	1.16	5.76	23.35	.44	5.84	N
C35	30.40	.42	6.08	30.47	.34	6.09	30.00	.77	6.00	30.14	.38	6.03	N
C39	18.46	.31	6.15	18.27	.30	6.09	18.11	.52	6.04	17.93	.22	5.98	N
C41	19.36	.27	6.45	18.98	.12	6.33	18.50	.44	6.17	18.58	.20	6.19	N
C43	49.55	.70	6.19	48.92	.74	6.11	48.06	1.21	6.01	48.59	.51	6.07	N
C45	19.84	.15	6.61	19.78	.11	6.59	19.48	.33	6.49	19.42	.13	6.47	N
C47	42.16	.40	5.27	42.33	.36	5.29	41.10	.53	5.14	41.91	.36	5.24	N

a. See Footnote a, Table 24.

b. See Footnote b, Table 24.

c. Orientation categories: 1 = did not attend any orientation at all, 2 = did not attend in their country but did attend in the U.S., 3 = did attend in their country but did not attend in the U.S., 4 = did attend orientation both in their country and in the U.S.

d. See Footnote d, Table 24.

Table 32. Satisfaction of Needs: Composite Means and Standard Errors by Orientation<sup>a</sup>.

Composite Number	Orientation Categories <sup>c</sup>												Significantly Different Categories <sup>d</sup>
	Category 1			Category 2			Category 3			Category 4			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
C2	37.60	.88	5.37	37.93	.68	5.42	37.45	.70	5.35	37.86	.47	5.41	N
C4	40.91	1.06	5.11	39.41	1.19	4.93	38.18	1.07	4.77	40.08	.64	5.01	N
C6	13.78	.28	4.59	14.11	.31	4.70	13.06	.53	4.35	13.84	.19	4.61	N
C8	13.80	.31	4.60	14.38	.45	4.79	13.97	.62	4.66	14.23	.25	4.74	N
C10	17.90	.78	3.58	17.78	.76	3.56	18.91	.62	3.78	17.90	.33	3.58	N
C12	31.46	.98	4.49	31.47	1.30	4.50	31.92	1.20	4.56	31.41	.39	4.49	N
C14	11.98	.42	3.99	11.54	.54	3.85	11.05	.60	3.68	11.67	.14	3.89	N
C16	11.57	.25	3.86	11.23	.38	3.74	11.35	.42	3.78	11.02	.20	3.67	N
C18	7.41	.48	3.70	6.64	.31	3.32	7.03	.48	3.51	7.30	.19	3.65	N
C20	29.53	.62	4.92	28.88	.68	4.81	28.42	.73	4.74	28.35	.40	4.73	N
C22	16.66	.69	4.17	16.57	.49	4.14	17.60	.48	4.40	16.64	.20	4.16	N
C24	41.94	1.51	4.19	37.86	1.87	3.79	39.45	2.84	3.94	40.96	.81	4.10	N
C26	47.23	.80	5.25	45.71	.92	5.08	46.21	1.81	5.13	45.86	.66	5.10	N
C28	27.73	1.18	4.62	26.57	.75	4.43	27.83	1.71	4.64	25.91	.46	4.32	N
C30	27.28	.89	4.55	25.44	.64	4.24	25.37	1.43	4.23	25.78	.52	4.30	N
C32	14.96	.47	4.99	11.73	1.09	3.91	13.74	.76	4.58	13.47	.36	4.49	N
C34	19.59	.57	4.90	17.13	.79	4.28	19.03	.85	4.76	18.20	.44	4.55	N
C36	25.31	.54	5.06	24.45	.92	4.89	25.90	.77	5.18	24.76	.37	4.95	N
C40	12.03	.34	4.01	12.13	.48	4.04	12.63	.45	4.21	11.64	.28	3.95	N
C42	14.21	.55	4.74	13.23	.58	4.41	13.78	.57	4.59	13.78	.27	4.59	N
C44	34.46	.67	4.31	32.40	1.11	4.05	34.05	1.60	4.26	32.89	.35	4.11	N
C46	18.23	.48	6.08	17.73	.35	5.91	17.60	.46	5.7	17.70	.17	5.90	N
C48	36.24	1.35	4.53	35.79	.60	4.47	35.36	1.13	4.42	35.90	.41	4.49	N

a. See Footnote a, Table 24

b. See Footnote b, Table 24

c. Orientation categories: 1 = did not attend any orientation at all, 2 = did not attend in their country but did attend in the U.S., 3 = did attend in their country but did not attend in the U.S., 4 = did attend orientation both in their country and in the U.S.

d. See Footnote d, Table 24

international experience and need composites were statistically significant. However, neither one of the measures explained 5% or more of variation in any need composite. The highest three correlation coefficients of the total number of foreign countries visited were with C 26( $r = .11$ ), C28 ( $r = .10$ ), and C31 ( $r = .11$ ).

The correlation coefficients of the total number of months spent in those countries were overall very low, even though significant. The only coefficient exceeding the absolute value of .10 was with C5 ( $r = -.10$ ).

Hypothesis 26: Importance of needs varies by whether or not students have jobs waiting for them in home countries.

Hypothesis 27: Satisfaction of needs varies by whether or not students have jobs waiting for them in home countries.

Students' job prospects were measured by asking a question, "Are you trying to find a job in your country now?" The responses were recorded in four categories: (1) trying to find a job, (2) planning to find a job, (3) no plans made for finding a job, and (4) a job waiting at home. We decided to compare all the four categories, even though we expected the difference to be found between the fourth category and the rest according to the hypotheses. The importance scores of seven need composites indicated statistically significant differences among job categories as defined above. As to satisfaction, ten need composites were found significantly different among job categories. With regard to those composites, the students with jobs waiting at home were the most satisfied group. The results and data are found in Table 33 for Hypothesis 26 and in Table 34 for Hypothesis 27.

Table 33. Importance of Needs: Composite Means and Standard Errors by Finding Future Jobs in Home Country<sup>a</sup>.

Composite Number <sup>b</sup>	Finding Future Job Categories <sup>c</sup>												Significantly Different Categories <sup>d</sup>
	Category 1			Category 2			Category 3			Category 4			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
C1	41.15	.60	5.88	39.61	.47	5.66	38.79	.38	5.54	41.14	.54	5.88	1.4 vs. 3
C3	46.00	.52	5.75	46.23	.29	5.78	45.96	.57	5.75	46.70	.54	5.84	N
C5	15.53	.28	5.18	15.51	.24	5.17	15.03	.24	5.01	16.14	.34	5.38	4 vs. 3
C7	16.89	.32	5.63	16.76	.28	5.59	16.45	.29	5.48	17.24	.20	5.75	N
C9	23.02	.37	4.60	23.13	.32	4.63	22.36	.30	4.47	23.16	.18	4.63	N
C11	42.08	.58	6.01	42.42	.64	6.06	41.19	.66	5.89	42.67	.48	6.10	N
C13	16.08	.35	5.36	15.57	.33	5.19	15.77	.37	5.26	16.45	.19	5.48	4 vs. 1, 3
C15	15.81	.38	5.27	15.70	.17	5.23	15.01	.25	5.00	16.25	.17	5.42	4 vs. 3
C17	12.46	.27	6.23	12.83	.13	6.41	12.97	.10	6.48	12.40	.09	6.20	3, 2 vs. 4
C19	36.36	.44	6.06	36.85	.43	6.14	36.16	.52	6.03	37.16	.31	6.19	N
C21	22.64	.41	5.66	23.20	.30	5.80	22.53	.29	5.63	22.61	.17	5.65	N
C23	57.18	1.00	5.72	59.56	1.02	5.96	60.34	.76	6.03	58.42	.87	5.84	N
C25	55.15	.82	6.13	56.29	.74	6.25	55.54	.51	6.17	56.17	.45	6.24	N
C27	31.05	.71	5.18	31.94	.36	5.32	32.20	.46	5.37	31.54	.40	5.26	N
C29	33.99	.81	5.67	34.91	.24	5.82	34.60	.38	5.77	34.62	.32	5.77	N
C31	15.67	.54	5.22	17.17	.46	5.72	16.75	.54	5.58	17.66	.25	5.89	4 vs. 1
C33	22.46	.94	5.62	23.29	.60	5.82	22.23	.65	5.56	23.59	.25	5.90	N
C35	30.14	.46	6.03	30.09	.42	6.02	30.16	.35	6.03	30.84	.25	6.17	N
C39	17.91	.35	5.97	18.11	.23	6.04	17.50	.35	5.83	18.68	.28	6.23	4 vs. 3
C41	19.01	.32	6.34	18.76	.34	6.25	19.05	.14	6.35	18.55	.18	6.18	N
C43	48.49	.97	6.06	48.60	.47	6.09	48.28	.56	6.03	49.61	.45	6.20	N
C45	19.37	.22	6.46	19.44	.23	6.48	19.66	.12	6.55	19.60	.13	6.53	N
C47	41.36	.89	5.17	41.91	.44	5.24	42.40	.37	5.30	41.76	.30	5.22	N

a. See Footnote a, Table 24

b. See Footnote b, Table 24

c. Finding future job categories: 1=Yes, I am. 2=No, I am not, but I plan to do so. 3=No, I am not, I have not made any plans about finding a job. 4=No, I am not, because I have a job waiting for me.

d. See Footnote d, Table 24

Table 34. Satisfaction of Needs: Composite Means and Standard Errors by Finding Future Jobs in Home Country<sup>a</sup>.

Composite Number d.	Finding Future Job Categories <sup>c</sup> .												Significantly Different Categories
	Category 1			Category 2			Category 3			Category 4			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
C2	36.59	1.10	5.23	37.59	.50	5.37	37.27	.56	5.32	38.77	.52	5.54	N
C4	38.79	1.21	4.85	39.99	.87	5.00	39.45	.97	4.93	40.63	.54	5.08	N
C6	13.38	.52	4.46	14.02	.21	4.67	13.25	.25	4.42	14.41	.30	4.80	4 vs. 3
C8	13.74	.48	4.58	13.95	.30	4.65	13.45	.49	4.48	15.01	.43	5.00	N
C10	17.39	.53	3.48	18.07	.39	3.61	16.78	.62	3.36	19.27	.42	3.85	4 vs. 1, 3
C12	29.03	.95	4.15	31.17	.75	4.45	30.11	.67	4.30	33.99	.78	4.86	4 vs. the rest
C14	11.20	.47	3.73	11.63	.31	3.88	11.05	.27	3.68	12.66	.30	4.22	N
C16	10.67	.59	3.56	11.54	.18	3.85	10.45	.28	3.48	11.79	.27	3.93	4 vs. 3
C18	6.79	.35	3.39	7.01	.18	3.51	6.72	.34	2.36	8.06	.30	4.03	4 vs. the rest
C20	27.63	.75	4.61	28.74	.53	4.79	28.03	.63	4.67	29.59	.53	4.93	N
C22	16.69	.60	4.17	16.59	.28	4.15	16.02	.55	4.01	17.25	.25	4.31	4 vs. 3
C24	38.89	1.83	3.89	39.18	1.14	3.92	40.35	1.61	4.03	42.44	1.26	4.24	N
C26	43.40	1.57	4.82	45.52	.61	5.06	45.72	.72	5.08	47.81	.66	5.31	4 vs. 1
C28	24.97	1.20	4.16	26.64	.51	4.44	26.58	.91	4.43	26.48	.53	4.41	N
C30	24.04	1.08	4.01	25.87	.49	4.31	26.57	.70	4.43	26.15	.65	4.36	N
C32	13.03	.74	4.34	13.22	.64	4.41	13.31	.53	4.44	13.31	.35	4.44	N
C34	18.96	.95	4.74	18.18	.62	4.54	17.37	.55	4.34	18.16	.39	4.54	N
C36	24.74	.75	4.95	24.40	.56	4.88	23.93	.53	4.79	26.68	.62	5.34	4 vs. 2, 3
C40	10.80	.40	3.60	11.91	.34	3.97	12.20	.29	4.07	12.32	.41	4.11	4 vs. the rest
C42	12.91	.48	4.30	13.52	.37	4.51	12.70	.35	4.23	15.41	.30	5.14	4 vs. the rest
C44	32.25	.85	4.03	33.56	.80	4.19	31.99	.69	4.00	34.14	.82	4.27	N
C46	17.43	.38	5.81	17.66	.30	5.89	17.69	.21	5.90	18.17	.21	6.06	N
C48	34.37	1.06	4.30	36.38	.45	4.55	35.91	.97	4.38	36.90	.36	4.61	N

a. See footnote a. Table 24

b. See footnote b. Table 24

c. Finding future job categories: 1=Yes, I am. 2=No, I am not, but I plan to do so. 3=No, I am not, I have not made any plans about finding a job. 4=No, I am not, because I have a job waiting for me.

d. See footnote d. Table 24

Hypothesis 28: Importance of needs varies by school size where students are enrolled.

Hypothesis 29: Satisfaction of needs varies by school size where students are enrolled.

Schools of students' current enrollment were measured by six ranges with 10,000 intervals. Correlation coefficients between school size and need composites were mostly statistically significant. However, none accounted for 5% or more of variation in any composite. The three highest correlation coefficients were found with C4 ( $r = .15$ ), C6 ( $r = .13$ ), and C20 ( $r = .15$ ), all positive with satisfaction scores.

Hypothesis 30: Importance of needs varies by living arrangements of students.

Hypothesis 31: Satisfaction of needs varies by living arrangements of students.

Living arrangements of students were measured in two ways: (1) residence and (2) with whom they lived. The first measure was divided into three categories: (a) in a dormitory, (b) in married student housing, and (c) other (off campus). The second measure was broken down into five categories: (a) with U.S. students, (b) with students from other foreign countries, (c) with students from one's own country, (d) with one's spouse, and (e) alone. With regard to residence categories, differences were found in four importance scores of need composites and three satisfaction scores. (See Table 35 for Hypothesis 30 and Table 36 for Hypothesis 31.)

In terms of the second measure of living arrangements, two importance scores were found to be significantly different among the categories. Ten satisfaction scores were significantly different, two of which were also found significantly different in the first measure's categories. (See Table 37 for Hypothesis 30 and Table 38 for Hypothesis 31.)

Table 35. Importance of Needs: Composite Means and Standard Errors by Residence<sup>a</sup>.

Composite <sup>b</sup> Number	Residence Categories <sup>c</sup>												Significantly Different Categories <sup>d</sup>
	Category 1			Category 2			Category 3			Item Average	SE	Item Average	
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average				
C1	39.65	.75	5.66	40.66	.32	5.81	39.72	.39	5.67				N
C3	45.86	.45	5.73	45.91	.47	5.74	46.43	.35	5.80				N
C5	15.24	.18	5.08	15.85	.09	5.28	15.47	.16	5.16				N
C7	16.29	.24	5.43	16.48	.25	5.49	16.96	.15	5.65				N
C9	22.66	.26	4.53	22.61	.32	4.52	22.99	.18	4.60				N
C11	41.83	.57	5.98	42.10	.44	6.01	41.96	.30	5.99				N
C13	15.80	.45	5.27	15.84	.20	5.28	15.95	.12	5.32				N
C15	15.47	.50	5.16	15.43	.22	5.14	15.67	.13	5.22				N
C17	12.52	.26	6.26	12.39	.13	6.19	12.85	.08	6.43				3 vs. 2
C19	36.86	.47	6.14	35.91	.39	5.99	36.90	.29	6.15				N
C21	22.27	.42	5.57	22.50	.34	5.63	23.00	.18	5.75				N
C23	59.27	1.16	5.93	57.77	1.20	5.78	59.96	.61	6.00				N
C25	57.02	1.22	6.34	54.95	.64	6.11	55.91	.29	6.21				N
C27	33.52	.90	5.59	30.12	.60	5.02	32.06	.28	5.34				1, 3 vs. 2
C29	34.91	.74	5.82	34.76	.36	5.79	34.52	.25	5.75				N
C31	14.37	.68	4.79	17.33	.30	5.78	17.01	.36	5.67				2, 3 vs. 1
C33	17.91	.92	4.48	23.75	.44	5.94	23.09	.41	5.77				2, 3 vs. 1
C35	30.50	.22	6.10	30.18	.50	6.04	30.30	.22	6.06				N
C39	18.26	.32	6.09	18.20	.23	6.07	17.93	.19	5.98				N
C41	18.49	.16	6.16	19.00	.21	6.33	18.89	.11	6.30				N
C43	49.18	.73	6.15	49.23	.60	6.15	48.59	.35	6.07				N
C45	19.42	.20	6.47	19.45	.18	6.48	19.63	.09	6.54				N
C47	42.42	.73	5.30	41.31	.40	5.16	42.16	.25	5.27				N

a. See Footnote a, Table 24

b. See Footnote b, Table 24

c. Residence Categories, Recoded: 1=Dormitory, 2=Married Student Housing, 3=Other (off campus).

d. See Footnote d, Table 24

Table 36. Satisfaction of Needs: Composite Means and Standard Errors by Residence<sup>a</sup>.

Composite Number <sup>b</sup>	Residence Categories <sup>c</sup>												Significantly Different Categories <sup>d</sup>		
	Category 1			Category 2			Category 3			Item Average	SE	Mean		SE	Item Average
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average						
C2	37.64	.68	5.38	38.32	.44	5.47	37.42	.68	5.35	37.42	.68	5.35	N		
C4	39.76	.86	4.97	40.10	.54	5.01	39.60	1.00	4.95	39.60	1.00	4.95	N		
C6	12.91	.35	4.30	14.13	.30	4.71	13.80	.19	4.60	13.80	.19	4.60	2 vs. 1		
C8	13.53	.48	4.51	14.65	.25	4.89	13.91	.28	4.64	13.91	.28	4.64	N		
C10	17.37	.72	3.47	17.74	.28	3.55	17.85	.70	3.57	17.85	.70	3.57	N		
C12	30.34	.91	4.33	32.92	.61	4.70	30.76	.83	4.39	30.76	.83	4.39	N		
C14	11.43	.39	3.81	12.33	.23	4.11	11.42	.30	3.81	11.42	.30	3.81	N		
C16	10.66	.45	3.55	11.51	.29	3.84	11.13	.21	3.71	11.13	.21	3.71	N		
C18	6.97	.30	3.48	7.77	.21	3.89	6.90	.32	3.45	6.90	.32	3.45	N		
C20	27.63	1.58	4.61	29.00	.47	4.83	28.50	.59	4.75	28.50	.59	4.75	N		
C22	16.27	.77	4.07	17.16	.21	4.29	16.35	.43	4.09	16.35	.43	4.09	N		
C24	40.01	4.43	4.00	41.82	.95	4.18	39.95	.69	3.99	39.95	.69	3.99	N		
C26	45.33	.75	5.04	46.24	.43	5.14	45.88	.76	5.10	45.88	.76	5.10	N		
C28	25.94	1.18	4.32	25.43	.68	4.24	26.75	.71	4.46	26.75	.71	4.46	N		
C30	25.95	.58	4.32	28.05	.62	4.68	25.16	.47	4.19	25.16	.47	4.19	2 vs. 3		
C32	12.75	.41	4.25	13.53	.47	4.51	12.49	.51	4.16	12.49	.51	4.16	N		
C34	16.11	.71	4.03	18.04	.44	4.51	17.87	.54	4.47	17.87	.54	4.47	N		
C36	24.26	.59	4.85	25.59	.47	5.12	24.57	.76	4.91	24.57	.76	4.91	N		
C40	11.31	.26	3.77	11.86	.48	3.95	12.12	.18	4.04	12.12	.18	4.04	3 vs. 1		
C42	13.67	.34	4.56	14.10	.30	4.70	13.49	.38	4.50	13.49	.38	4.50	N		
C44	31.01	1.64	3.88	33.44	.62	4.18	33.23	.58	4.15	33.23	.58	4.15	N		
C46	17.66	.21	5.89	18.2	.26	6.08	17.60	.27	5.87	17.60	.27	5.87	N		
C48	35.60	.70	4.45	36.98	.43	4.62	35.27	.89	4.41	35.27	.89	4.41	N		

a. See Footnote a, Table 24

b. See Footnote b, Table 24

c. Residence Categories, Recoded: 1=Dormitory, 2=Married Student Housing, 3=Other (off-campus).

d. See Footnote d, Table 24

Table 37. Importance of Needs: Composite Means and Standard Errors by the Persons With Whom Students Lived<sup>a</sup>.

Composite Number <sup>b</sup>	Category 1			Category 2			Category 3			Category 4			Category 5			Significantly Different Categories
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
C1	38.91	.75	5.56	38.05	.96	5.44	40.26	.74	5.75	40.21	.56	5.74	40.54	.49	5.79	N
C3	46.16	.73	5.77	44.87	1.27	5.61	47.54	.45	5.94	46.27	.40	5.78	45.89	.48	5.74	N
C5	15.12	.32	5.04	14.75	.56	4.92	16.21	.25	5.40	15.88	.23	5.29	14.96	.27	4.99	3 vs. 1, 5; 4 vs. 5
C7	16.89	.42	5.63	16.35	.52	5.45	16.66	.24	5.55	16.64	.17	5.53	16.89	.33	5.63	N
C9	22.64	.35	4.53	22.31	.56	4.46	23.16	.30	4.63	22.95	.21	4.59	22.81	.25	4.56	N
C11	41.68	.59	5.95	40.97	1.45	5.85	41.80	.43	5.97	42.35	.35	6.05	41.67	.81	5.95	N
C13	15.96	.38	5.32	16.01	.48	5.34	15.82	.25	5.27	16.07	.19	5.36	15.72	.44	5.24	N
C15	15.37	.40	5.12	15.18	.55	5.06	15.80	.28	5.27	15.69	.13	5.23	15.44	.44	5.15	N
C17	12.72	.16	6.36	13.06	.17	6.53	12.70	.19	6.35	12.61	.10	6.30	12.73	.22	6.36	N
C19	36.28	.44	6.05	36.61	.63	6.10	36.48	.54	6.08	36.56	.27	6.09	36.86	.64	6.14	N
C21	21.90	.51	5.47	22.69	.50	5.67	22.94	.43	5.74	22.81	.20	5.70	22.81	.41	5.70	N
C23	59.39	.93	5.94	57.59	1.42	5.76	58.10	1.33	5.81	59.25	.78	5.92	59.60	.80	5.96	N
C25	57.86	1.23	6.43	54.00	1.32	6.00	56.08	.75	6.23	55.31	.37	6.15	56.15	.97	6.24	N
C27	34.73	.66	5.79	37.15	.86	5.19	32.49	.47	5.42	30.62	.57	5.10	31.66	.72	5.28	1 vs. the rest
C29	35.58	.53	5.93	34.35	.87	5.73	34.65	.61	5.77	34.60	.22	5.77	34.81	.47	5.80	N
C31e.	-	-	-	-	-	-	-	-	-	17.47	.22	5.82	-	-	-	-
C33e.	-	-	-	-	-	-	-	-	-	23.68	.25	5.92	-	-	-	-
C35	30.40	.40	6.08	30.84	.64	6.17	29.94	.36	5.99	30.42	.34	6.08	30.13	.56	6.03	N
C39	18.28	.41	6.09	18.25	.35	6.08	17.78	.24	5.93	18.20	.22	6.07	18.16	.17	6.05	N
C41	18.50	.25	6.17	19.16	.32	6.39	18.56	.31	6.19	19.02	.16	6.34	18.92	.18	6.31	N
C43	48.46	.63	6.06	48.54	.59	6.19	48.44	.60	6.06	49.24	.45	6.16	48.68	.80	6.08	N
C45	19.41	.22	6.47	19.46	.33	6.49	19.29	.27	6.43	19.56	.14	6.52	19.77	.24	6.59	N
C47	42.56	.49	5.32	42.10	.43	5.26	41.82	.62	5.23	42.04	.41	5.25	41.71	.62	5.21	N

a, b, and d. See Footnotes a, b, and d in Table 24.

c. Categories: 1=U.S. students, 2=Foreign students from another country, 3=Students from your country, 4=Your spouse (and children), 5=Alone. We did not include the category, U.S. family, for the comparisons due to the extremely small size.

e. Applicable only to Category 4.

Table 38. Satisfaction of Needs: Composite Means and Standard Errors by the Persons With Whom Students Lived<sup>a</sup>.

Composite Number	Categories of Persons With Whom Students Lived <sup>c</sup> .																Significantly Different Categories
	Category 1		Category 2		Category 3		Category 4		Category 5		Item Average	SE	Item Average	SE	Item Average	SE	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE							
C2	39.96	.66	5.71	5.26	36.82	1.00	5.26	38.30	.46	5.47	36.60	.67	5.23	1 vs. 2, 3, 5			
C4	42.96	1.11	5.37	4.98	38.81	1.06	4.85	40.58	.96	5.07	37.79	.73	4.72	1 vs. 3, 5			
C6	13.90	.36	4.63	4.53	13.53	.33	4.51	14.37	.25	4.79	12.76	.21	4.25	4, 1 vs. 5			
C8	13.81	.51	4.60	4.51	13.76	.37	4.59	14.64	.28	4.88	14.09	.37	4.70	N			
C10	18.52	.51	3.70	3.64	17.01	.63	3.40	17.85	.71	3.57	17.66	.41	3.53	N			
C12	32.54	.75	4.65	4.17	30.51	.70	4.36	32.07	1.16	4.58	30.71	.90	4.39	N			
C14	12.51	.29	4.17	3.58	11.55	.24	3.85	12.04	.47	4.01	11.02	.55	3.67	N			
C16	11.20	.27	3.73	3.74	10.87	.25	3.62	11.45	.34	3.82	10.97	.45	3.66	N			
C18	7.29	.34	3.64	3.27	6.19	.22	3.09	7.73	.40	3.86	7.00	.34	3.50	4, 1 vs. 3			
C20	28.60	1.41	4.77	4.92	27.51	.59	4.58	29.41	.57	4.90	27.73	.77	4.62	N			
C22	17.62	.58	4.40	4.24	16.10	.31	4.03	16.90	.50	4.22	16.04	.41	4.01	N			
C24	39.98	2.06	4.00	4.11	41.74	1.22	4.17	41.35	.84	4.14	37.71	1.82	3.77	N			
C26	48.68	.68	5.41	5.29	44.84	1.13	4.98	46.43	.60	5.16	43.78	.73	4.86	1 vs. 4, 3, 5			
C28	30.44	1.12	5.07	4.64	24.90	1.13	4.15	26.18	.86	4.36	25.05	.66	4.18	1 vs. 4, 5, 3			
C30	27.14	1.01	4.52	4.21	24.98	.69	4.16	27.07	.60	4.51	23.91	.69	3.99	1, 4 vs. 5			
C32e.	-	-	-	-	-	-	-	13.07	.43	4.36	-	-	-	-			
C34e.	-	-	-	-	-	-	-	18.03	.36	4.51	-	-	-	-			
C36	25.35	.72	5.07	5.13	23.86	.50	4.77	25.43	.68	5.09	24.17	.67	4.83	4 vs. 5			
C40	11.96	.36	3.99	3.97	11.83	.35	3.94	12.37	.24	4.12	11.45	.43	3.82	N			
C42	14.44	.38	4.81	4.38	13.65	.33	4.55	13.69	.47	4.56	13.62	.27	4.54	N			
C44	34.25	1.85	4.28	3.68	33.06	.64	4.13	33.40	.95	4.17	32.29	1.01	4.04	N			
C46	18.23	.31	6.08	6.07	17.03	.32	5.68	18.01	.26	6.00	17.61	.26	5.87	1, 2 vs. 3			
C48	37.80	.73	4.73	4.54	34.54	.75	4.32	36.54	.61	4.57	34.39	1.23	4.30	1 vs. 3			

a, b, and d. See Footnotes a, b, and d in Table 24.

c. Categories: 1=U.S. students, 2=Foreign students from another country, 3=students from your country, 4=Your spouse (and children), 5=Alone. We did not include the category, U.S. family, for the comparisons due to the extremely small size.

e. Applicable only to Category 4.

Hypothesis 32: Importance of needs varies by prestige accorded to one's country.

Hypothesis 33: Satisfaction of needs varies by prestige accorded to one's country.

Prestige accorded was measured by asking the students how they thought U.S. students would rate their home countries in terms of prestige in the world. Most of the correlation coefficients were statistically significant. None accounted for 5% or more of the variation in any need composite. The three highest correlation coefficients were with C42 ( $r = .20$ ), C44 ( $r = .21$ ), and C48 ( $r = .19$ ), all satisfaction composites. This measure of prestige of one's country accounted for a substantial amount of variation in none of the importance scores.

#### Linguistic Needs

Selected hypotheses were also tested with measures of linguistic needs, i.e. composites of English language skills. Linguistic needs were measured by two composites: (1) Importance of English language skills and (2) self evaluation of English language skills one has. In addition, we included a composite to measure evaluation of English remedial courses.

With regard to sex categories, graduate vs. undergraduate status, regions of the world, fields of study, and living arrangements, five significant differences were found among the three English language composites. The results of the tests and data are presented in Tables 39-42.

Table 39. Importance and Self Evaluation of English Language Skills and Evaluations of Remedial English Course to Improve the Skills: Composite Means and Standard Errors by Sponsorship Categories

English Language Skill Composites <sup>a</sup> .	Sponsorship Categories <sup>b</sup> .												Significantly Different Categories.
	Sponsor 1			Sponsor 2			Sponsor 3			Sponsor 4			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
Importance of English Skills <sup>d</sup> .	50.68	1.18	6.33	51.39	.43	6.42	51.84	.37	6.48	50.82	.56	6.35	None
Self Evaluation of English Skills <sup>e</sup> .	43.54	1.28	5.44	45.64	.53	5.73	44.91	.35	5.61	42.89	.94	5.36	2 vs. 4
Evaluation of Remedial English Courses to Improve the Skills <sup>f</sup> .	42.02	2.32	5.25	42.82	1.51	5.35	39.51	2.26	4.94	39.91	1.65	4.99	None

d. Composites include items 509-530 in the Questionnaire, Appendix C.

e. See footnote b on Table 20.

f. See footnote c on Table 22.

d. Item scores: 1 = very unimportant, ..., 7 = very important.

e. Item scores: 1 = very poor, ..., 7 = very good.

f. Item scores: 1 = very poorly, ..., 7 = very well.

Estimated 40.3% of the population did not take any remedial courses.

Table 40. Importance and Self Evaluation of English Language Skills and Evaluation of Remedial English Course to Improve the Skills: Composite Means and Standard Errors by (A) Sex and by (B) Classification.

English Language Skill Composites <sup>a</sup> .	(A) Sex Categories						Significantly Different Categories
	Female			Male			
	Mean	SE	Item Average	Mean	SE	Item Average	
Importance of English Skills <sup>d</sup> .	52.70	.33	6.53	50.60	.64	6.33	f vs. m
Self Evaluation of English Skills <sup>e</sup> .	42.88	.81	5.36	44.69	.58	5.59	N
Evaluation of Remedial English Courses to Improve the Skills <sup>f</sup> .	39.49	1.55	4.94	41.09	1.14	5.14	N

English Language Skill Composites <sup>a</sup> .	(B) Classification						Significantly Different Categories
	Undergraduate			Graduate			
	Mean	SE	Item Average	Mean	SE	Item Average	
Importance of English Skills <sup>d</sup> .	51.46	.45	6.43	51.03	.78	6.38	N
Self Evaluation of English Skills <sup>e</sup> .	43.93	.73	5.49	44.57	.41	5.57	N
Evaluation of Remedial English Courses to Improve the Skills <sup>f</sup> .	40.93	1.08	5.12	41.07	1.26	5.13	N

a, c-f. See Footnotes a, c-f on Table 39.

Table 41. Importance and Self Evaluation of English Language Skills and Evaluation of Remedial English Course to Improve the Skills: Composite Means and Standard Errors of Means by (A) Fields of Study and (B) Regions of the World.

English Language Skill Composites <sup>a</sup> .	(A) Fields of Study <sup>b</sup> .															Significantly Different Categories <sup>c</sup> .
	Category 1			Category 2			Category 3			Category 4			Category 5			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
Importance of English Skills <sup>d</sup> .	51.17	.21	6.40	52.09	.82	6.51	51.66	.99	6.46	49.23	2.22	6.15	51.25	.46	6.41	N
Self Evaluation of English Skills <sup>e</sup> .	43.98	.53	5.50	45.60	.87	5.70	42.78	1.24	5.35	44.95	1.15	5.62	44.28	.80	5.53	N
Evaluation of Remedial English Courses to Improve the Skills <sup>f</sup> .	38.44	1.76	4.81	40.35	1.74	5.04	41.39	2.50	5.17	42.38	3.17	5.30	41.50	1.21	5.19	N

English Language Skill Composites <sup>a</sup> .	(B) Regions of the World <sup>g</sup> .												Significantly Different Categories <sup>c</sup> .
	Region 1			Region 2			Region 3			Region 4			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
Importance of English Skills <sup>d</sup> .	50.23	1.46	6.28	50.92	.49	6.36	51.75	.50	6.47	51.94	.44	6.49	N
Self Evaluation of English Skills <sup>e</sup> .	48.77	.56	6.10	42.26	.49	5.28	42.17	.99	5.27	46.29	.64	5.79	1 vs. 4 vs. 2, 3
Evaluation of Remedial English Courses to Improve the Skills <sup>f</sup> .	45.66	.81	5.71	40.50	1.54	5.06	34.89	1.94	4.36	43.41	1.56	5.43	1 vs. 2, 3; 4 vs. 3

a, c-f. See Footnotes a, c-f on Table 39.

b. Fields of Study: 1=Engineering, 2=Agriculture, 3=Natural and Life Sciences, 4=Social Sciences, 5=Other.

g. Regions: 1=Africa, 2=South and East Asia, 3=Southwest Asia, 4=Latin America, Europe was excluded due to its small size.

Table 42. Importance and Self Evaluation of English Language Skills and Evaluation of Remedial English Course to Improve the Skills: Composite Means and Standard Errors of Means by (A) Residence and (B) With Whom Students Lived.

English Language Skill Composites <sup>a</sup> .	(A) Residence Categories <sup>b</sup> .												Significantly Different Categories <sup>c</sup> .
	Category 1			Category 2			Category 3			Category 4			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
Importance of English Skills <sup>d</sup> .	52.07	.44	6.51	51.38	.60	6.42	50.92	.61	6.36				N
Self Evaluation of English Skills <sup>e</sup> .	42.33	.62	5.29	45.39	.57	5.67	44.15	.65	5.52				2 vs. 1
Evaluation of Remedial English Courses to Improve the Skills <sup>f</sup> .	39.01	2.97	4.88	41.08	1.89	5.14	40.91	1.19	5.11				N

English Language Skill Composites <sup>a</sup> .	(B) With Whom Students Lived <sup>g</sup> .															
	Category 1			Category 2			Category 3			Category 4			Category 5			
	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	Mean	SE	Item Average	
Importance of English Skills <sup>d</sup> .	51.69	.62	6.46	52.65	.61	6.58	50.95	.56	6.37	50.90	.89	6.36	51.53	.69	6.44	N
Self Evaluation of English Skills <sup>e</sup> .	46.27	.73	5.78	43.99	1.44	5.50	42.30	.77	5.29	44.79	.76	5.60	43.78	.89	5.47	1 vs. 3
Evaluation of Remedial English Courses to Improve the Skills <sup>f</sup> .	43.48	2.22	5.43	41.39	2.61	5.17	39.29	1.29	4.91	41.37	1.75	5.17	39.10	2.58	4.89	N

a, c-f. See Footnotes on Table 39.

b. Categories: 1=Dormitory, 2=Married Student Housing, 3=Other (Off-Campus)

g. Categories: 1=U.S. students, 2=Foreign students from other countries, 3=Students from one's own country, 4=Your spouse (and children), 5=Alone. We did not include the category, U.S. family, for this comparison due to its relatively small size.

With regard to age, length of stay in the U.S. and at the school, and school size, most of the correlation coefficients were significant except the one between school size and evaluation score of the remedial courses. However, none of these independent variables accounted for 5% or more of the English language composites. The only correlation coefficients worthy of mentioning were the one between the total months of stay in the U.S. and self evaluation of English skills ( $r = .17$ ) and the one between the total months of stay at the school and self evaluation of the skills ( $r = .13$ ).

##### 5. Cross-Tabulations of Personal Characteristics.

In this section, we present cross-tabulations of selected personal characteristics with (1) sponsorship categories, (2) regions of the world, (3) fields of study, and (4) sex categories of students. The figures in this table are population estimates with use of weights; therefore, only percentages are presented. (Weighted frequencies might be misleading.) Brief comments on the tables are given below.

Tables 43 through 59 present crosstables of selected characteristics by sponsorship categories. On TOEFL, for example, sponsored students scored over 550, whereas among the other scholarship and assistantship students, 51% scored over 550. Fairly high proportions of students supported by AID, home governments, and self or private sources did not take TOEFL examinations (23.6%, 27.5% and 32.7% respectively), while 15% of students on other scholarships and assistantships did not. (See Table 43.)

Table 44 gives us the comparison of sponsorship categories and living arrangements. For AID students, a majority of them were either living alone (25.6%) or with their spouse (25.3%), while the other three categories of students lived more with their spouses than alone. More AID students resided with U.S. families and students from other countries than did the

Table 43. Percent Distribution<sup>a</sup> of TOEFL Scores by Sponsorship Categories

TOEFL Score Ranges	Sponsorship Categories <sup>b</sup>			
	AID	Home Government	Other Scholarships & Assistantships	Self or Private Sources
Never taken TOEFL	23.6	27.5	15.0	32.7
Below 400	1.1	0.2	0.4	0.2
400-450	1.9	5.7	1.4	4.8
451-500	9.8	14.7	8.0	12.1
501-550	22.9	25.8	24.1	24.3
551-600	31.3	16.2	23.7	15.4
Over 600	9.4	9.9	27.4	10.5
Total	100.0	100.0	100.0	100.0

a. Percentages are population estimates computed with weights. Therefore, actual frequency is not reported.

b. Primary sources of support.

Table 44. Percent Distribution<sup>a.</sup> of Living Arrangements by Sponsorship Categories

With Whom Do You Live?	Sponsorship Categories <sup>b.</sup>				Self or Private Sources
	AID	Home Government	Scholarships & Assistantships		
U.S. Family	6.3	0.4	1.2		2.5
U.S. Student(s)	9.6	5.7	8.7		11.7
Foreign Student(s) from another Country	14.7	3.2	7.5		4.8
Student(s) from your Country	16.3	17.0	14.6		18.5
Your Spouse (and children)	25.3	51.7	41.5		30.7
Alone	25.6	20.4	23.6		17.9
Other <sup>c</sup>	2.2	1.6	2.9		13.9
Total	100.0	100.0	100.0		100.0

a. See footnote a., Table 43.

b. Primary sources of support.

c. A mixture of friends and relatives.

other three sponsorship categories of students. Yet, for all four categories, the top three living arrangements were (1) with spouse, (2) alone, and (3) with student(s) from one's own country.

Table 45 presents another measure of living arrangements tabulated by sponsorship categories. For all the categories, the highest proportion lived in apartments. For grade point average (Table 46), all four categories had the majority of students in the highest range, 3.25 - 4.00 average, students on scholarships and assistantships reporting the largest number (89.5%) in this category. As to sex categories of students (Table 47), for all four categories, students were predominantly males. Proportionally more male students were found among AID and home government sponsored categories than the other two sponsors.

Table 48 shows a striking difference among sponsorship categories. Over 50% of students sponsored by either AID or home government had a job waiting for them in their home countries, while less than one-fifth of scholarships and assistantships students and only 11% of private self-supported students had a job waiting for them. On the other hand, about 45% of self or privately supported students had neither a job waiting nor a plan to look for one in their home countries. These responses were least frequent among home government supported students (10.3%).

Table 49 illustrates the relationship between sponsorship and participation in orientation programs. AID sponsored students showed the highest attendance both in home countries and in the U.S. However, we noted even this category of students had 29% of them not attending any predeparture orientation programs in their home countries. The least attendance of orientation programs was noted among self or privately supported students both in home countries and in the U.S.

Table 45. Percent Distribution<sup>a</sup> of Type of Residence by Sponsorship Categories

<u>Residence</u>	<u>Sponsorship Categories</u> <sup>b</sup>				<u>Self or Private Sources</u>
	<u>AID</u>	<u>Home Government</u>	<u>Scholarships &amp; Assistantships</u>		
Dormitory	16.9	6.7	16.0		10.8
Married Student Housing	17.7	37.3	31.1		10.9
Room off Campus without Cooking	2.2	1.0	1.6	3	1.4
Room off Campus with Cooking	17.5	6.5	10.6		8.9
Apartment	39.3	44.4	35.1		53.0
Trailer	1.5	1.1	0.6		0.9
Other <sup>c</sup>	4.9	3.0	5.0		14.1
Total	100.0	100.0	100.0		100.0

a. See Footnote a., Table 43.

b. Primary sources of support.

c. Included were my own housing and on-campus apartments.

Table 46. Percent Distribution<sup>a.</sup> of Grade Point Average by Sponsorship Categories

Grade Point Average	Sponsorship Categories <sup>b.</sup>			
	<u>AID</u>	<u>Home Government</u>	<u>Scholarships &amp; Assistantships</u>	<u>Self or Private Sources</u>
0.00 - 2.44	0.3	6.0	0.5	4.9
2.45 - 2.84	21.4	13.3	0.8	16.6
2.85 - 3.24	29.4	23.2	9.2	33.2
3.25 - 4.00	48.9	57.5	89.5	45.3
Total	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

b. Primary sources of support.

Table 47. Percent Distribution<sup>a</sup> of Sex by Sponsorship Categories

<u>Sex</u>	<u>Sponsorship Categories</u> <sup>b</sup>		
	<u>AID</u>	<u>Home Government</u>	<u>Scholarships &amp; Assistantships</u>
Female	19.1	17.0	26.9
Male	80.9	83.0	73.1
Total	100.0	100.0	100.0

Self or Private Sources

29.4

70.6

100.0

a. See Footnote a., Table 43.

b. Primary sources of support.

Table 48. Finding Future Jobs by Sponsorship Categories  
(Percent Distribution)

Are You Trying To Find a Job in your Country Now?	Sponsorship Categories <sup>b.</sup>			Self or Private Sources
	AID	Home Government	Scholarships & Assistantships	
Yes, I Am	8.1	11.9	10.2	13.3
No, but Plan to Do So	12.7	21.1	37.1	30.5
No, and no Plans to Do So	23.8	10.3	36.4	45.2
No, because Job Is Waiting	55.4	56.7	16.3	11.0
Total	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

b. Primary sources of support.

Table 49. Participation in the Orientation Programs by Sponsorship Categories  
(Percentages<sup>a</sup> of Students in each Sponsorship Category Who Participated in each Orientation Program)

Who Organized the Orientation Program(s) You Attended?	Sponsorship Categories <sup>b</sup> .			Self or Private Sources
	AID	Home Government	Scholarships & Assistantships	
<u>In Home Country:</u>				
Orientation by Home Government	22.8	35.8	24.5	19.7
Orientation by Sponsor Agency	20.9	10.1	8.0	4.9
Orientation by Others	4.4	3.3	4.0	3.7
Did Not Attend	29.0	29.6	36.3	41.0
<u>In the U.S.:</u>				
Orientation by Sponsor Agency	29.3	7.7	2.9	2.5
Orientation by University of Current Enrollment	40.0	51.1	60.3	45.8
Orientation by Another University	9.0	8.2	5.2	6.4
Orientation by Others	2.6	0.8	0.9	1.0
Did Not Attend	6.7	18.3	19.5	23.4

a. Percentages are population estimates computed with use of weights. Therefore, frequencies are not presented in the table. Percentages do not total to 100.0%, since respondents were allowed to mark more than one orientation.

b. Primary sources of support.

Table 50 and 51 present data on return intention of students by sponsorship categories. Again, a striking difference is noted among sponsorship categories in this area. About one half of both AID sponsored and home government sponsored students responded they would definitely not remain in the U.S., while the proportion for the other two categories dropped drastically to near one-fifth. For the hypothetical question as to the possible reasons for remaining in the U.S. permanently (Table 51), the most frequently mentioned reason was political conflict at home among AID, home government, and self or privately supported students, while it was a good job offer in the U.S. among scholarship and assistantship students.

Table 52 presents sponsorship categories by fields of study. The students appear to be well distributed with 28.2% being the highest concentration in one area (engineering scholarship and assistantship students). AID and home government sponsored students showed higher concentration in agriculture in contrast to the other two categories of students. For all four categories, engineering encompassed the most students, except among self or privately supported students, business and management had an equal concentration of students.

In comparing regions of origin with sponsorship categories (Table 53), we notice that nearly 70% of the scholarship and assistantship students were from South and East Asia. For AID sponsored, about 80% came from Africa and South and East Asia while for home government sponsored, 65% came from Africa and Latin America. Self or privately supported figures show that a large majority came from all parts of Asia (70%). Marital status and classification was also compared with sponsorship categories (Tables 54 and 55). The majority of students tend to be single among those supported by AID, scholarships and assistantships, and self or private

Table 50. Percent Distribution<sup>a</sup> of Possibility of Remaining in the U.S. by Sponsorship Categories

How Likely that You Might Remain in the U.S.?	Sponsorship Categories <sup>b</sup>			
	AID	Home Government	Scholarships & Assistantships	Self or Private Sources
Definitely Not	50.0	47.2	18.1	17.2
Very Unlikely	17.4	23.6	19.1	14.6
Somewhat Unlikely	4.8	6.8	13.5	9.9
Undecided	12.6	12.0	25.9	28.5
Somewhat Likely	13.1	7.2	14.2	11.5
Very Likely	0.1	1.8	6.6	12.6
Definitely Will	2.0	1.4	2.6	5.7
Total	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

b. Primary sources of support.

**Table 51. The Reasons One Might Remain Permanently in the U.S. by Sponsorship Categories (Percentages<sup>a</sup> of Students in each Sponsorship Category Who Marked each Reason)**

Which of the Following Might Make You Stay Permanently in the U.S.? <sup>c</sup>	Sponsorship Categories <sup>b</sup>			Self or Private Sources
	AID	Home Government	Scholarships & Assistantships	
Political Conflict at Home	17.4	22.5	24.8	36.4
Not Being Able to Find a Job at Home	9.3	6.9	15.7	11.1
A Good Job Offer in the U.S.	5.7	16.5	32.7	28.2
Marriage to a U.S. Citizen	5.9	5.0	13.1	18.3
Family Members' Advice	14.3	3.1	5.6	9.7
Nothing Would Make Me Stay Permanently in the U.S.	45.3	50.5	23.3	21.0

a. Percentages are population estimates computed with use of weights. Therefore, frequencies are not presented in the table. Percentages do not total to 100.0%, since respondents were allowed to mark more than one reason.

b. Primary sources of support.

c. Respondents were allowed to circle more than one reason. Therefore, column percentages do not add up to 100.0.

Table 52. Percent Distribution<sup>a.</sup> of Fields of Study according to Sponsorship Categories

Fields of Study	Sponsorship Categories <sup>b.</sup>			
	<u>AID</u>	<u>Home Government</u>	<u>Scholarships &amp; Assistantships</u>	<u>Self or Private Sources</u>
Engineering	21.2	21.2	28.2	23.8
Agriculture	19.1	18.6	5.5	3.9
Natural and Life Sciences	11.6	6.0	19.9	5.9
Business and Management	16.2	11.3	6.0	23.8
Education	2.8	4.8	4.7	3.0
Humanities	2.4	0.4	1.0	2.3
Health Professions	1.2	3.8	2.0	5.3
Social Sciences	3.7	7.5	11.3	7.4
Other	21.8	26.4	21.4	24.6
Total	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

b. Primary sources of support.

Table 53. Percent Distribution<sup>a</sup> of Regions by Sponsorship Categories

Regions <sup>c</sup>	Sponsorship Categories <sup>b</sup>		
	AID	Home Government	Scholarships & Assistantships
Africa	39.3	38.1	12.3
South and East Asia	36.2	19.3	69.5
Southwest Asia	9.2	13.4	6.5
Latin America	13.8	27.4	9.8
Europe	1.5	1.8	1.9
Total	100.0	100.0	100.0
			Self or Private Sources
			12.9
			32.5
			36.3
			15.2
			3.1
			100.0

a. Percentages are population estimates computed with weights assigned to all the observations according to statistical rules on sampling. Therefore, frequencies are not reported, since they are not actual but weighted.

b. Primary sources of support.

c. For countries included in each region, see Q.566 in Appendix

Table 54. Percent Distribution<sup>a.</sup> of Marital Status by Sponsorship Categories

<u>Marital Status</u>	<u>AID</u>	<u>Sponsorship Categories</u> <sup>b.</sup>			<u>Self or Private Sources</u>
		<u>Home Government</u>	<u>Scholarships &amp; Assistantships</u>		
Single	55.2	37.6	51.2	64.7	
Married (spouse here)	24.4	54.1	43.1	31.9	
Married (spouse in home country)	19.7	8.2	3.5	2.2	
Other	0.7	0.1	2.2	1.2	
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	

a. See Footnote a., Table 43.

b. Primary sources of support.

Table 55. Percent Distribution<sup>a.</sup> of Classification by Sponsorship Categories

<u>Classification</u>	<u>AID</u>	<u>Sponsorship Categories</u> <sup>b.</sup>			<u>Self or Private Sources</u>
		<u>Home Government</u>	<u>Scholarships &amp; Assistantships</u>		
Freshman	0.5	0.1	0.0	2.6	
Sophomore	5.4	5.9	0.6	9.2	
Junior	5.0	10.1	1.3	15.1	
Senior	18.0	18.1	1.3	24.2	
Master's Student	52.6	35.8	30.4	31.0	
Ph.D. Student	18.3	28.8	65.5	10.2	
Special Non-Degree Student	0.1	0.2	0.0	1.4	
Other	0.1	1.0	0.9	6.3	
Total	100.0	100.0	100.0	100.0	

a. See Footnote a., Table 43.

b. Primary sources of support.

sources. The government category was the only exception with the majority of students indicating that they were married (54.1%).

Among those who were married, AID students were more likely to leave spouses at home, while the other students were much more likely to have their spouses with them. As to classification, for all the categories except scholarships and assistantships, master's students were most numerous. Among AID sponsored students, they amounted to more than half of this category. On the other hand, the category of scholarships and assistantships was, by virtue of its category definition, predominantly Ph.D. students, since assistantships tend to be awarded to Ph.D. candidates, particularly so among foreign students.

Table 56 presents cross-tabulation of secondary sources of support by primary sources of support.

In addition to cross-tabulations, we conducted comparisons of sponsorship categories with regard to their views of barriers in establishing good relationships with U.S. nationals (Table 57), their perception of self and prestige of their home country (Table 58), and some demographic characteristics (Table 59). These tables can be read in the same manner as the tables presented in Section C of this appendix. Briefly, as to their perceptions of barriers, the four sponsorship categories were mostly similar except in two factors: political view and the foreign student's attitude toward others. AID sponsored students did not differ from other categories in their perception of any one of the listed barriers. As to one's academic performance and intelligence as rated by oneself, perceived rating by friends in one's home country, and perceived rating by U.S. students, students on scholarships and assistantships consistently indicated higher ratings than other categories of students. We attribute this significant

Table 56. Percent Distribution<sup>a</sup> of Secondary Sponsorship Categories by Primary Sponsorship Categories

Secondary Source	Primary Sponsorship Categories								Employment on Campus	Employment off Campus
	AID	Scholarships from Government	Ford or Rockefeller Scholarship	Fulbright Scholarship	University Assistantships	Parents or Relatives	Savings	Employment on Campus		
Scholarship from Government	10.4	0.0	0.0	0.0	0.0	0.1	0.0	3.7	0.0	
Fulbright Scholarship	4.7	0.7	0.0	0.0	0.9	0.2	0.0	1.6	0.0	
University Assistantship	0.9	10.6	13.3	69.4	10.7	9.6	20.9	6.1	27.5	
Parents or Relatives	36.4	49.2	16.1	30.6	37.2	38.4	29.1	52.4	44.7	
Savings	11.2	15.7	2.0	0.0	29.0	21.9	9.8	3.7	13.5	
Employment on Campus	10.2	11.2	68.6	0.0	9.9	10.7	10.6	3.9	7.7	
Employment off Campus	26.2	12.6	0.0	0.0	12.3	19.1	29.6	28.6	6.6	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

a. See Table 43.

Table 57. Means and Standard Errors of Importance Scores for Barriers to Good Relationships  
By Sponsorship Categories<sup>a</sup>.

How Much Do You Think Each Factor Is Preventing You from Having Good Relationships with U.S. Nationals?	Sponsorship Categories <sup>b</sup> .								Significantly Different Categories <sup>c</sup> .
	Sponsor 1 Mean	SE	Sponsor 2 Mean	SE	Sponsor 3 Mean	SE	Sponsor 4 Mean	SE	
Your Command of English	2.17	.11	2.16	.08	2.34	.09	2.38	.08	None
Your Religious Background	1.54	.13	1.55	.06	1.48	.06	1.62	.10	None
Your Racial Background	2.61	.13	2.40	.10	2.43	.08	2.34	.09	None
Your Cultural Background	2.57	.16	2.43	.06	2.55	.06	2.68	.11	None
Your Political View	1.86	.14	1.75	.08	1.78	.06	2.20	.13	4 vs. 3, 2
Your Being a Foreigner	2.94	.09	2.95	.09	2.84	.08	3.02	.10	None
Your Attitude toward Others	2.10	.29	1.85	.07	2.19	.05	2.10	.14	3 vs. 2
Their Attitude toward You	2.99	.19	2.86	.13	2.76	.06	2.90	.09	None

a. All figures are weighted population estimates.

b. Sponsor 1= AID sponsored, 2= Home government sponsored, 3= Scholarships and assistantships, 4= Self or private sources.

c. The group means differ beyond .01 level of significance.

d. Scores: 1= Not at all, 2= A little, 3= Somewhat, 4= Much, 5= Very much.

Table 58. Means and Standard Errors of Perceived Ratings of Academic Performance, Intelligence, Physical Appearance, and Prestige of One's Country by Sponsorship Categories<sup>c</sup>.

How Do You Rate and How Do You Think Others Would Rate...?	Sponsorship Categories <sup>b</sup>								Significantly Different Categories <sup>c</sup>
	Sponsor 1 Mean <sup>d</sup> SE	Sponsor 2 Mean SE	Sponsor 3 Mean SE	Sponsor 4 Mean SE					
1. Your Academic Performance									
Self Rating	3.64	3.86	4.19	3.70	.10	.05	.03	.05	3 vs. the rest
Rating by Friends in your Country	3.90	4.09	4.25	3.87	.12	.05	.04	.04	3 vs. the rest 2 vs. 1,4
Rating by U.S. Students	3.68	3.77	4.07	3.62	.10	.05	.04	.08	3 vs. the rest
2. Your Intelligence									
Self Rating	3.86	3.78	4.03	3.82	.08	.07	.02	.06	3 vs. 4,2
Rating by Friends in your Country	4.10	4.05	4.20	4.02	.11	.05	.03	.04	3 vs. 2,4
Rating by U.S. Students	3.69	3.65	3.98	3.72	.13	.06	.04	.09	3 vs. the rest
3. Your Physical Appearance									
Self Rating	3.68	3.58	3.50	3.60	.07	.06	.05	.07	None
Rating by Friends in your Country	3.70	3.65	3.57	3.70	.10	.05	.04	.08	None
Rating by U.S. Students	3.33	3.44	3.32	3.36	.07	.06	.05	.11	None
4. Prestige of your Country									
Self Rating	3.21	3.36	3.17	3.30	.11	.05	.06	.09	None
Rating by Friends in your Country	3.13	3.59	3.37	3.59	.09	.06	.07	.07	2,4 vs. 1
Rating by U.S. Students	2.28	2.63	2.61	2.62	.07	.06	.07	.10	The rest vs. 1

a., b., c. See Footnotes a., b., c., Table 57.

d. Scores: 1= Among the lowest, 2= Fairly low, 3= Average, 4= Fairly high, 5= Among the highest.

Table 59. Means and Standard Errors of Personal Experience Data by Sponsorship Categories<sup>a</sup>.

	Sponsorship Categories <sup>b</sup>								Significantly Different Categories <sup>c</sup>
	Sponsor 1 Mean	SE	Sponsor 2 Mean	SE	Sponsor 3 Mean	SE	Sponsor 4 Mean	SE	
Age	28.19	.44	29.06	.64	28.39	.25	26.13	.40	The rest vs. 4
Length of Stay in the U.S. (months)	30.96	4.20	33.94	1.76	38.94	2.39	37.71	2.30	None
Length of Stay at the School of Current Enrollment (months)	23.36	2.02	26.89	1.55	29.25	1.37	24.48	1.13	3, 2 vs. 4, 1
Number of Countries Visited besides the U.S.	2.90	.49	3.45	.23	2.56	.15	3.70	.25	The rest vs. 3
Length of Stay Abroad in the Above (months)	12.60	2.67	9.79	1.36	6.69	.66	11.27	.80	The rest vs. 3

a. All figures are weighted population estimates.

b. Sponsor 1= AID sponsored, 2= Home government sponsored, 3= Scholarships and assistantships, 4= Self or private sources.

c. The group means differ beyond .01 level of significance.

difference to the advantageous positions, in being accepted in the system by virtue of being assistants. Overall, they indicated they had much better images of themselves with regard to academic performances and intelligence. On the other hand, the four categories were not significantly different regarding their rating of physical appearances. As to the rating of prestige of one's country, AID sponsored students showed significantly lower ratings than other categories in terms of their perception of rating by friends at home and rating by U.S. students. We are not in the position to speculate the reason for these differences at this point.

Table 59 also presents some significant differences among sponsorship categories.

Tables 60 and 61 present cross-tabulations of marital status and fields of study by regions of origin. For Africa and Latin America, there was an approximately equal distribution of married and single students. However, for South and East Asia, Southwest Asia, and Europe, more students tended to be single rather than married. For Africa, 11% of the students had spouses still in their home country while less than 5% of all the other regions indicated this situation. Fairly even distribution of fields of study was noted by regions except for Southwest Asia where 35.5% of these students are in engineering.

Tables 62 through 65 present cross-tabulations of selected characteristics of fields of study. In Table 62 some variation in return intention exists by fields of study. Students in education indicated the highest intention of not remaining in the U.S. permanently (52.9%), while those in business and management had the lowest percentage (16.9%). As to the possible reasons for remaining in the U.S., for every field listed, the top two reasons were political conflict at home and a good job offer in

Table 60. Percent Distribution<sup>a</sup> of Marital Status of Students by Regions of Origin

<u>Marital Status</u>	<u>Regions</u>				
	<u>Africa</u>	<u>South and East Asia</u>	<u>Southwest Asia</u>	<u>Latin America</u>	<u>Europe</u>
Single	44.9	57.5	66.1	47.2	77.2
Married (spouse here)	43.0	36.5	30.9	50.4	19.4
Married (spouse in home country)	10.7	4.6	2.4	1.0	1.3
Other	1.4	1.4	0.6	1.4	2.1
Total	100.0	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

Table 61. Percent Distribution<sup>a</sup> of Fields of Study by Regions of Origin

<u>Fields of Study</u>	<u>Regions</u>				
	<u>Africa</u>	<u>South and East Asia</u>	<u>Southwest Asia</u>	<u>Latin America</u>	<u>Europe</u>
Engineering	17.0	24.7	35.5	16.1	15.3
Agriculture	12.4	4.8	5.7	12.8	3.6
Natural and Life Sciences	7.1	12.6	6.5	8.7	0.0
Business and Management	16.3	17.3	14.8	20.6	17.3
Education	6.2	2.7	2.4	4.3	8.4
Humanities	1.2	0.9	0.2	3.7	7.8
Health Professions	7.5	4.3	1.0	3.5	11.8
Social Sciences	10.2	6.9	9.1	7.3	8.4
Other	22.1	25.8	24.8	23.0	27.4
Total	100.0	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

Table 62. Likelihood to Remain Permanently in the U.S. by Fields of Study  
(Percent Distribution<sup>a</sup>)

Remaining Permanently in the U.S.	Fields of Study								
	Engineering	Agriculture	Natural & Life Sciences	Business & Management	Education	Humanities	Health Professions	Social Sciences	Others
Definitely Not	19.1	43.5	24.9	16.9	52.9	28.6	28.1	32.8	25.6
Very Unlikely	19.8	25.3	14.8	14.3	15.1	14.8	8.5	21.7	19.3
Somewhat Unlikely	10.4	6.9	5.9	15.9	6.0	4.1	2.4	6.9	10.9
Undecided	25.2	13.4	24.2	29.3	16.1	22.0	26.5	22.0	20.6
Somewhat Likely	13.6	8.9	13.1	10.3	2.1	1.3	16.8	2.9	11.8
Very Likely	8.5	1.4	12.9	8.4	7.8	20.5	12.6	10.2	7.2
Definitively Will	3.4	0.6	4.2	4.9	0.0	8.7	5.1	3.5	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

Table 63. The Reasons One Might Remain Permanently in the U.S. by Fields of Study  
(Percentages<sup>a</sup> of Students in Each Field of Study who Marked Each Reason)

Which of the Following Might Make You Stay Permanently in the U.S.? <sup>b</sup>	Fields of Study								
	Engineering	Agriculture	Natural & Life Sciences	Business & Management	Education	Humanities	Health Professions	Social Sciences	Others
Political Conflict at Home	30.4	33.0	22.6	28.4	27.2	27.8	28.3	29.6	30.8
Not Being Able to Find a Job at Home	12.8	9.0	13.9	7.3	10.6	23.2	13.1	5.4	12.9
A Good Job Offer in the U.S.	29.8	12.2	24.2	31.0	11.5	25.2	24.2	21.7	24.7
Marriage to a U.S. Citizen	13.3	4.0	14.2	18.7	5.0	30.4	8.0	11.6	15.3
Family Members' Advice	7.1	2.4	11.9	8.5	5.1	0.0	11.5	7.8	6.2
Nothing Would Make Me Stay Permanently in the U.S.	24.7	44.8	29.8	15.3	44.3	34.1	34.2	32.1	30.8

a. Percentages are population estimates computed with use of weights. Therefore, frequencies are not presented in the table. Percentages do not total to 100.0%, since respondents were allowed to mark more than one reason.

b. Respondents were allowed to circle more than one reason. Therefore, column percentages do not add up to 100.0.

the U.S., except for students in humanities where marriage to a U.S. citizen was the most mentioned reason. For all the fields listed, except engineering and business and management, one-third to one-half of the students indicated nothing would make them stay permanently in the U.S. As to TOEFL score ranges (Table 64), most fields showed similar distributions, concentrating in the top three categories, i.e., scores over 500. Humanities had a rather different distribution including its 44% for not taking the exam at all. Table 65 presents job situations. Agriculture had the highest proportion of students (over one half) with jobs waiting for them, followed by education (42.9%). On the other hand, engineering had the highest proportion of students, nearly 40%, who had no plans to look for jobs in home countries, followed by those in health professions (38%).

In engineering, agriculture, natural and life sciences, business and management, health professions and others, the majority of students were single (Table 66), whereas in education, humanities, and social sciences, the majority of students were married.

Tables 67 through 69 present a number of personal characteristics cross-tabulated by sex categories. The highest percentages of males were in engineering (29.9%) while the highest percentage of females was found in others (Table 67). The highest percentage of both males and females was at the master's level (31.4% and 36.3% respectively). However, 30.3% of the males were at the Ph.D. level, with only 19.0% of females at this level (Table 67).

As to the regions of the world, a large share of female students was from South and East Asia (45.7%), while 35.4% of males came from the same region (Table 68). The majority of students, both female and male,

Table 64. Percent Distribution<sup>a</sup> of TOEFL Scores by Fields of Study

TOEFL Score Ranges	Fields of Study								
	Engineering	Agriculture	Natural & Life Sciences	Business & Management	Education	Humanities	Health Professions	Social Sciences	Others
Never Taken TOEFL	23.4	29.0	17.9	30.1	22.1	44.3	26.4	35.6	27.3
Below 400	0.2	0.6	1.3	0.0	0.0	0.0	0.0	0.0	0.5
400-450	3.0	5.8	4.5	3.9	2.3	0.0	7.5	5.0	4.3
451-500	9.4	13.9	10.7	17.6	12.3	6.4	8.5	9.4	10.4
501-550	25.0	23.6	30.3	20.5	33.2	9.4	26.6	16.3	27.4
551-600	22.0	16.3	15.7	18.0	11.7	8.1	17.9	23.8	15.8
Over 600	17.0	10.8	19.6	9.9	18.4	31.8	13.1	9.9	14.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

Table 65. Finding Future Jobs by Fields of Study  
(Percent Distribution<sup>a</sup>)

Are You Trying To Find a Job in Your Country Now?	Fields of Study								
	Engineering	Agriculture	Natural & Life Sciences	Business & Management	Education	Humanities	Health Professions	Social Sciences	Others
Yes, I Am	13.9	16.2	16.4	10.1	6.3	13.4	10.3	12.1	11.4
No, but Plan to Do So	25.4	18.5	33.6	39.5	29.2	32.5	22.3	27.7	28.7
No, and no Plans to Do So	39.9	2.8	35.6	36.4	21.6	21.4	38.0	34.4	34.6
No, because Job Is Waiting	20.8	51.5	14.4	14.0	42.9	32.7	29.4	25.8	25.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

Table 66. Percent Distribution<sup>a</sup> of Marital Status by Field of Study

Marital Status	Major								
	Engineering	Agriculture	Natural & Life Sciences	Business & Management	Education	Humanities	Health Professions	Social Sciences	Others
Single	66.4	46.5	63.3	59.8	59.3	40.2	54.7	40.3	53.3
Married (spouse here)	28.7	42.4	29.6	36.8	63.2	52.1	35.8	53.4	41.6
Married (spouse in home country)	4.4	8.5	6.6	1.6	7.4	4.6	9.3	4.3	3.7
Other	0.5	2.7	0.6	1.8	0.1	3.1	0.1	2.1	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a. See Footnote a., Table 43.

Table 67. Percent Distribution<sup>a.</sup> of Fields of Study and Classification by Sex Categories

Field of Study	Sex Categories		Classification	Sex Categories	
	Female	Male		Female	Male
Engineering	6.2	29.9	Freshman	2.1	1.4
Agriculture	3.8	9.5	Sophomore	8.2	5.4
Natural and Life Sciences	10.3	8.6	Junior	12.0	10.2
Business and Management	18.1	16.7	Senior	16.4	17.4
Education	6.1	2.9	Master's Student	36.3	31.4
Humanities	4.1	0.8	Ph.D. Student	19.0	30.3
Health Professions	8.7	2.7	Special Non degree student	2.2	0.4
Social Sciences	9.9	7.8	Others	3.8	3.5
Others	32.8	21.1			
Total	100.0	100.0		100.0	100.0

a. See Footnote a., Table 43.

Table 68. Percent Distribution<sup>a</sup> of Regions of Origin and Marital Status by Sex Categories

Region	Sex Categories		Marital Status	Sex Categories	
	Female	Male		Female	Male
Africa	10.7	23.0	Single	60.1	54.1
South and East Asia	45.7	35.4	Married, spouse here	35.9	39.4
South and West Asia	19.8	24.3	Married, spouse in home country	1.4	5.7
Latin America	19.4	15.5	Other	2.6	0.8
Europe	4.4	1.8			
Total	150.0	100.0	Total	100.0	100.0

a. See Footnote a., Table 43.

was single, 60.1% and 54.1% respectively. As to the types of residence, the largest portion of both male and female students were residing in an apartment (45.9% and 44.9% respectively). The majority of both male and female students lived with their spouses (and children) (37.8% and 35.3% respectively) (Table 69).

Table 69. Percent Distribution<sup>a</sup> of Type of Residence and of Living Arrangements by Sex Categories

Residence	Sex Categories		With Whom Do You Live?	Sex Categories	
	Female	Male		Female	Male
Dormitory	14.4	10.6	U.S. Family	4.0	1.2
Married Student Housing	19.7	22.1	U.S. Student(s)	10.2	9.3
Room off Campus without Cooking	0.9	1.5	Foreign Student(s) from another Country	6.5	4.9
Room off Campus with Cooking	7.3	10.2	Student(s) from your Country	13.0	17.9
Apartment	44.9	45.9	Your Spouse (and children)	35.3	37.8
Trailer	0.7	0.9	Alone	19.7	21.3
Other	12.1	8.8	Other	11.3	7.6
Total	100.0	100.0	Total	100.0	100.0

a. See Footnote a., Table 43.

APPENDIX B: OTHER RESPONSES<sup>1</sup>

Following each category of need items on the questionnaire, an item called other needs was inserted. Many respondents availed themselves of the opportunity to articulate additional needs and concerns not fully tapped by the questionnaire. Out of 1856 respondents, only a small fraction of them wrote in other responses. However, we found some of their responses rather revealing and thought provoking. A summary of the responses to each category follows.

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<sup>1</sup> The material presented in this appendix was organized by Barbara Munson, one of our data assistants, who also acted as our editor based on her training and experience in English language instruction. The authors wish to acknowledge Mrs. Munson for her special contribution to this section.

Information (75 responses):

The foreign students wanted to know about availability of transportation (within the community and to airports), safety of cities, regulations on driving, racial attitudes and prevalence of discrimination among U.S. nationals, and opportunities for jobs. Expense evidently entered into many of their concerns, because information as to costs of travel and availability of an emergency cash/loan fund were mentioned.

More detailed information about universities was desired. Respondents felt it would be advantageous to know in advance about universities and their specialities, plus more details on the entire college system (exams, credits, majors). A need for further English courses was mentioned as the courses currently offered are too rudimentary, e.g. intermediate English courses for graduate students would be helpful.

Degree program (45 responses):

Additional responses within the degree program fell into two categories-- money and applicability of the program. Foreign students seemed to feel that they are overcharged by universities (because they pay 3-4 times the in-state tuition) and that more and higher-paying assistantships should be available.

Course requirements need to be more flexible, because courses like American history and political science are not of much use to a foreign student. Most research was seen as geared to the department's research program, not to the students' needs. Foreign students also felt that information about research going on in the home country was of great importance.

Relevancy of the degree program (20 responses):

Comments in this area were best summarized by this student: "Classroom learning is very ok, but practical experience is not there. Even co-op, though allowed is not in practice." Apparently practical experience

for two to three years in the U.S. before returning to the home country is a major unfulfilled need of foreign students. Another concern was continuing communication between the U.S. universities and the student's home country after the student's return. Even though we included items tapping these issues, some students still emphasized them by restating in their own words.

**Extracurricular professional activities (33 responses):**

Again the need for practical work experience before leaving the U.S. was stressed. This could be accomplished through post-doctoral fellowships, internship programs, or even by working during breaks and summer vacations. Such work would be helpful in applying knowledge to the home country and allowing the student to work out "doubts or problems" as his/her study progresses. Immigration regulations were perceived as the big problem in attaining these goals.

Professional activities were also seen as a help in bridging the gap between the theoretical and the practical. As several respondents wrote, there is a big difference in techniques involved and basic technology and its application from the U.S. to developing nations.

**Being a university student (31 responses):**

Being respected as a human being and being treated without discrimination concerned many respondents in this area. "Academic segregation" apparently does exist and was seen as a major problem. Cultural exchanges were suggested as a possible remedy. Furthermore, some frustration has resulted from contacts with some foreign students' advisors, because of their lack of personnel and/or understanding.

Again more understanding of the entire U.S. university system was desired, as well as more time to adjust to that system and more freedom to change within it.

Money and jobs (44 responses):

Inflation and immigration regulations were seen as the culprits in money and job problems. Immigration restrictions were judged to be unfair and the immigration officials to be unenlightened and arbitrary in wielding power by some respondents.

Inflation has made it necessary to obtain both financial aid and a job. Many students are married and have a family to support. Both the student and the spouse need to work but are unable to because of visa restrictions or unavailability of jobs. In addition, money sources from the home country have been interrupted at times, causing further money problems for the foreign students. Deferred payment of fees and reduction in non-resident tuitions were suggested as remedies.

A poignant remark came from one respondent: "Question: how to get enough money for air-ticket to visit home just one Christmas holiday during my course of study?" (This came from a young married man whose spouse remained in his home country.)

Local community life (21 responses):

Bias and hypocrisy toward foreign students were reiterated in this area. Respondents spoke of feeling victimized--by segregation, by hostility (caused by current problems in Iran), by fear of crime. The need is to be treated courteously. As one student wrote, "Generally, students and people understand and accept us....Government and institutions are the problem."

Money is also part of the problem. Medicine, medical care, and insurance are available but too expensive. The large deposits required for housing and utilities create hardships.

**Housing needs (20 responses):**

Availability of housing was seen as a major need. Housing needs to be close to campus to accommodate those without cars and inexpensive enough that students can manage it financially. In addition, discrimination in obtaining housing was a problem, because of racial reasons or having children.

Students felt they were taken advantage of in obtaining housing. Contracts and leases were not explained and were incredibly complicated. Legal assistance (free) could alleviate this problem.

**Interpersonal relationships (14 responses):**

Relationships with other foreign students were the easiest to attain. Apparently there a natural camaraderie exists. U. S. friends were slightly less attainable, especially as friends with whom one could become close.

Advisors and professors were judged to be sympathetic and understanding, but sometimes lacking appreciation of foreign student needs.

**Before going home (22 responses):**

Lots of questions arose about getting oneself and one's goods home by the cheapest means. Information about student rates and charter flights would be helpful, as would an increase in the book allowance to allow more books to go back. A booklet with this information would certainly help those students who are soon to return home.

The conversion problems of electrical appliances were a nuisance. Students would like to be able to buy electrical items with the voltage they need or at least get converters for them.

**Anticipated conditions after returning home (18 responses):**

Most needs in this category dealt with hopes and plans for the future. An often-expressed need was to have adequate equipment and personnel to equip

a lab or research area properly. An additional hope was for ongoing communication through the student returning to the U.S. at intervals or U.S. professionals visiting the developing nation. It would also be helpful to know of organizations within the U.S. with which to maintain contact and receive information about progress and research in the field of study.

Goals on coming to the U.S. (28 responses):

Major goals to be achieved in the U.S. ranged from individual to worldwide. Individual goals included attaining emotional and intellectual maturation, learning self-discipline, being receptive to others' ideas regardless of color, race, or religion.

Many respondents held a world view of their U.S. experiences--to help U.S. nationals to understand my country, to use knowledge cross-culturally, to entice Americans to visit my country, to inform the U.S. of foreign politics, culture and prejudice, and to be able to discuss differing ideologies in a meaningful way. In short, foreign students wanted to show the U.S. that the U.S. is not the whole world.

English skills (30 responses):

Many students responded that they already knew English well before coming to the U.S. However, they could increase their skill in following different accents and learning American slang. Even more, skills are needed beyond the usual English as a foreign language courses--the basics of "writing papers, from research to typing, from punctuation to format." The need is for intermediate English courses not just the remedial courses.

English courses for foreign students (66 responses):

Most of the reasons for not taking English courses for foreign students dealt with having prior knowledge of the language. Many students felt they

were sufficiently proficient in English by virtue of having taken English courses before, taking all high school courses in English, or English being the home country's official language. Several respondents thought practice was the best remedy for any problems, that listening and comprehension needed work, but not grammar.

Factors which prevent relationships with U.S. nationals (88 responses):

Although many foreign students indicated that they have good relationships with U.S. students, many more cited factors which prevented good relationships. Lack of time and being too busy with studies were factors which covered all groups, but basically reasons fell into two categories--"them" and "us".

"They" (meaning U.S. students) were prejudiced against foreigners, uninformed about other countries, superior-acting, too individualistic in attitude, unwilling to make the effort, or generally friendly and polite but not willing to get close. The foreign students were unable to form relationships because they tended to stick together, were uninterested, didn't like the U.S. system, did not know American culture, or spoke accented English and didn't know American slang.

Orientation programs (90 responses):

The Washington International Center (Washington, D.C.) has evidently conducted many orientation programs for incoming foreign students. In addition, student clubs, such as Arab Students Club, Chinese Student Club, and Malaysian Student Association, were another source of orientation programs, as were ex-students, family, and friends. Lastly, U.S. embassies in the student's home country were mentioned by several students as the source of their orientation.

Reasons one might stay in the U.S. permanently (78 responses):

Many students responded with aspects which they liked about living in the U.S.--"good education and good country", better future, personal and professional achievement, advanced society, opportunities. Many just "like it" here. Family considerations were also important. If the children or family wanted to stay, if the student's parents came over here, or if death occurred in the family at home, the student would be more likely to stay here. Religion was mentioned as a factor several times. Several students also feared problems in re-adapting to their home environment and social conditions.

Extra responses (93 responses):

Many of the respondents wrote notes on the questionnaires which provided interesting and lively reading. The most common perhaps was thanking us for our interest and hoping that some help for foreign students would result. Apparently the questionnaire items tapped into wells of feeling because many students almost literally wrote us books of information on their needs and desires.

As might be expected there were complaints about the research methods employed: the questionnaire was too long, answers were modelled, answers needed more flexibility, some items were unnecessary while other crucial questions were missed.

Suggestions were also made:

- 1) Each foreign student should spend 1-2 hours per day with a U.S. student.
- 2) U.S. students should receive similar questionnaires to determine their attitudes toward foreign students.
- 3) Results of this study should be made available to foreign student advisors.
- 4) Foreign student advisors or representatives should visit the ex-students

in their home country. Dialogue between hosts and guests could be helpful.

- 5) U.S. government or universities should intervene with the home country on behalf of foreign students, especially to get them more money.

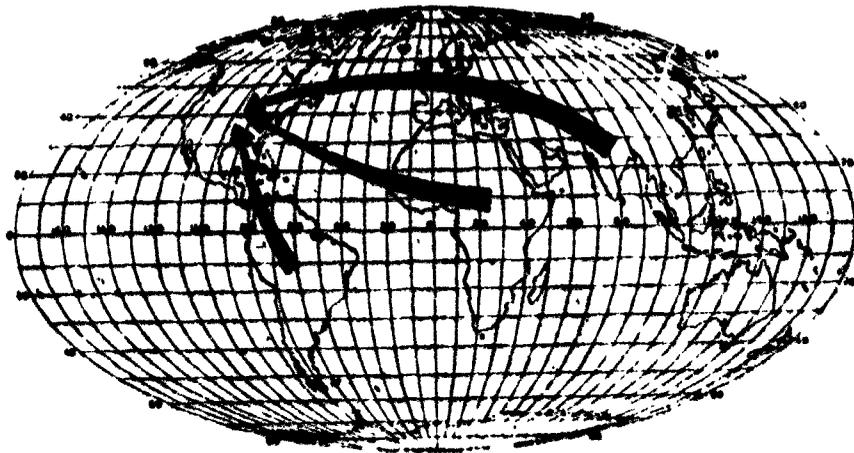
**APPENDIX C: QUESTIONNAIRE**

The actual size of the questionnaire was reduced to one half by the Printing Office. The questionnaire was printed back-to-back in booklet form.

**A Study to Assess the Needs  
of Foreign Students**

# **What do you need?**

**Wherever you come from, we are interested  
in your opinion.**



**Principal Investigator:**

**M. Y. Lee  
Assistant Professor  
Department of Sociology & Anthropology  
Iowa State University  
Ames, Iowa 50011**

**This study is sponsored by the National  
Association for Foreign Student Affairs  
(NAFSA).**

Confidential  
Please do not put your name.

We would like to find out what foreign students need so that U.S. universities and local communities can make necessary adjustments to make the study here more pleasant to foreign students.

You will need about half an hour to complete this questionnaire. Your assistance will be of great value to us. Please complete the questionnaire now and simply put it in a nearby mail box. No postage needed. By helping us, you will be helping students from your country and other countries who are yet to come. Thank you for your participation in this survey.

M. Y. Lee (515)-294-8440  
Mokhtar Abd-Ella (515)-294-8417  
Linda Burks Thomas (515)-294-8417  
Department of Sociology & Anthropology  
Iowa State University  
Ames, Iowa 50011



A. Circle one number to indicate how important it was for you to know the item.

Very unimportant 1 2 3 4 5 6 7  
 Neither important nor unimportant 1 2 3 4 5 6 7  
 Very important 1 2 3 4 5 6 7

B. Circle one number to indicate how satisfied you are with your knowledge of the item now.

Very unsatisfied 1 2 3 4 5 6 7  
 Neither satisfied nor unsatisfied 1 2 3 4 5 6 7  
 Very satisfied 1 2 3 4 5 6 7

Information about....

- 129. How much it costs to live here.
- 131. Housing facilities.
- 133. Housing cost.
- 135. Community services available to foreign students and their families.
- 137. Recreational activities available on campus.
- 139. Recreational activities available off campus.
- 141. Availability of food and spices you are accustomed to using.
- 143. Health services available.
- 145. Health insurance available.
- 147. Clothes needed.
- 149. Ways of doing things in the U.S.
- 151. Dating behavior with U.S. nationals of the opposite sex.
- 153. Immigration and visa regulations.
- 155. Information on sponsors' rules about families, medical care, and traveling.

Other things you need to know (please specify):

II. The following is a list of needs you may have during your stay in the U.S. Please read each item and then answer A and B. (Note: if the item does not apply to you, please skip it.)

The degree program in the U.S.

Need for...

- 157. Having an academic advisor assigned to you before your arrival.
- 159. Receiving credit for academic work done outside the U.S.
- 161. Sharing responsibility in planning your degree program with your academic advisor.
- 163. Substituting certain requirements with alternative courses more relevant to your country.
- 165. Having your academic advisor available when needed.
- 167. Having faculty members spend enough time with you.
- 169. Having faculty members with international experiences to guide you.
- 171. Having an experience as a teaching assistant.
- 173. Having an experience as a research assistant.
- 175. Opportunities to do some team-work with American students.
- 177. Having another student to help you with your study.

A. Circle one number to indicate how important the need is to you.

Very unimportant  
Neither important  
nor unimportant  
Very important

1 1 1  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7

B. Circle one number to indicate how much the need is satisfied in your case.

Very unsatisfied  
Neither satisfied  
nor unsatisfied  
Very satisfied

1 1 1  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7  
1 2 3 4 5 6 7

A. Circle one number to indicate how important the need is to you.

Very unimportant  
Neither important  
nor unimportant  
Very important

Need for...

179. Having the sponsoring agency accept necessary adjustments in your degree program.

209. Coordination between the sponsoring agency and the university.

211. Economic contributions of foreign governments to U.S. universities in order to finance special programs for foreign students.

Other needs (please specify):

Relevancy of the U.S. Degree program

Need for...

213. A program relevant to your future job in your country.

215. A program relevant to the present needs of your country.

217. Level of technology applicable to the future of your country.

219. Obtaining basic knowledge in your area of study.

221. Having international materials included in courses.

223. Training to apply knowledge.

B. Circle one number to indicate how much the need is satisfied in your case.

Very unsatisfied  
Neither satisfied  
nor unsatisfied  
Very satisfied

A. Circle one number to indicate how important the need is to you.

B. Circle one number to indicate how much the need is satisfied in your case.

Very unimportant  
Neither important  
or unimportant  
Very important

Very unsatisfied  
Neither satisfied  
nor unsatisfied  
Very satisfied

Relevancy of the U.S. degree program

- Need for...
- 225. Training for leadership role.
- 227. Training to introduce changes in your country.
- 229. Thesis research in your country.
- 231. Seminars with students from several departments to deal with problems of national development.
- 233. Exchange of visiting professors between universities of your country and those in the U.S.
- Other needs (please specify):

Extracurricular professional activities in the U.S.

- Need for...
- 235. Opportunities to give information about your country in educational situations.
- 237. Opportunities to attend off-campus professional meetings.
- 239. Learning how universities provide assistance to local communities.
- 241. Opportunities to put into practice what you learn in class.
- 243. Work experience in your field before returning home.
- Other needs (please specify):

A. Circle one number to indicate how important the need is to you.

B. Circle one number to indicate how much the need is satisfied in your case.

	Very unimportant	Neither important nor unimportant	Very important
Being a university student in the U.S.	1	2	3
Need for...	1	2	3
245. Understanding the grading system.	1	2	3
247. Understanding course requirements of instructors.	1	2	3
249. Being able to take class notes well.	1	2	3
251. Having extra time in taking exams to compensate for language difficulty.	1	2	3
253. Having opportunities to discuss course work with U.S. students.	1	2	3
255. Opportunities to discuss course work with faculty members.	1	2	3
257. Getting adequate advice from your academic advisor.	1	2	3
259. Getting adequate advice from your foreign student advisor.	1	2	3
261. Being treated as fairly as U.S. students by faculty members.	1	2	3
263. Being respected as a fellow human being by U.S. students.	1	2	3
265. Having publications in your area of study from your country available in the university library.	1	2	3
267. Having magazines and newspapers from your country available in the university library.	1	2	3

	Very unsatisfied	Neither satisfied nor unsatisfied	Very satisfied
Being a university student in the U.S.	1	2	3
Need for...	1	2	3
245. Understanding the grading system.	1	2	3
247. Understanding course requirements of instructors.	1	2	3
249. Being able to take class notes well.	1	2	3
251. Having extra time in taking exams to compensate for language difficulty.	1	2	3
253. Having opportunities to discuss course work with U.S. students.	1	2	3
255. Opportunities to discuss course work with faculty members.	1	2	3
257. Getting adequate advice from your academic advisor.	1	2	3
259. Getting adequate advice from your foreign student advisor.	1	2	3
261. Being treated as fairly as U.S. students by faculty members.	1	2	3
263. Being respected as a fellow human being by U.S. students.	1	2	3
265. Having publications in your area of study from your country available in the university library.	1	2	3
267. Having magazines and newspapers from your country available in the university library.	1	2	3

B. Circle one number to indicate how much the need is satisfied in your case.

A. Circle one number to indicate how important the need is to you.

Very unsatisfied 1 2 3 4 5 6 7  
Neither satisfied nor unsatisfied -  
Very satisfied -

Very unimportant 1 2 3 4 5 6 7  
Neither important nor unimportant -  
Very important -

Need for...

269. Having an office space for each graduate student.

Other needs (please specify):

Money and jobs in the U.S.

Need for...

271. Having enough money for school.

273. Having enough money for basic living expenses.

275. Having enough money to receive necessary medical care.

277. Having money for some recreational activities.

309. Receiving money from your sponsor without delay.

311. Getting help in banking.

313. Getting help from Student Financial Aids.

315. Finding a part-time job.

317. Finding a part-time job at the university related to your degree program.

319. Finding a job for your husband or wife.

321. Getting a work permit for off campus jobs.

Other needs (please specify):

A. Circle one number to indicate how important the need is to you.

B. Circle one number to indicate how much the need is satisfied in your case.

Local community life in the U.S.

Need for...

323. Getting accustomed to U.S. food.

325. Observing your religious practices.

327. Being able to behave according to your values and beliefs.

329. Having sufficient time for social and recreational activities.

331. Feeling welcome by U.S. nationals in the local community.

333. Having recreational activities with U.S. nationals.

335. Visiting U.S. families.

337. Having U.S. nationals correctly informed about your country.

339. Having local people treat foreign students courteously.

341. Social activities which will give you an opportunity to meet persons of the opposite sex.

343. Obtaining medical care.

345. Obtaining medical insurance.

347. Knowing income tax regulations.

Other needs (please specify):

	Very unimportant	Neither important nor unimportant	Very important
	1	2	3
	4	5	6
	7		

	Very unsatisfied	Neither satisfied nor unsatisfied	Very satisfied
	1	2	3
	4	5	6
	7		

A. Circle one number to indicate how important the need is to you.

B. Circle one number to indicate how much the need is satisfied in your case.

Very unimportant      Neither important nor unimportant      Very important

1      1      1

2      2      2

3      3      3

4      4      4

5      5      5

6      6      6

7      7      7

Very unsatisfied      Neither satisfied nor unsatisfied      Very satisfied

1      1      1

2      2      2

3      3      3

4      4      4

5      5      5

6      6      6

7      7      7

Housing needs in the U.S.

- Need for...
- 349. Having adequate housing facilities on campus.
- 351. Having adequate housing facilities off campus.
- 353. Obtaining necessary furniture at a reasonable cost.
- 355. Borrowing necessary furniture.
- 357. Getting housing you want without discrimination.
- 359. Sharing housing with U.S. nationals.
- 361. Being informed about legal rights and duties when you sign a contract.
- Other needs (please specify):

Family living in the U.S.

Note: For only those who have their families with them. (Others: please go to Interpersonal relationships on page 10).

Need for...

- 363. Finding enough activities for your spouse (husband or wife).
- 365. English language training for your spouse at a reasonable cost.

A. Circle one number to indicate how important the need is to you.

Very unimportant	1	2	3	4	5	6	7
Neither important nor unimportant	1	2	3	4	5	6	7
Very important	1	2	3	4	5	6	7

- Need for...
- 367. Appropriate educational opportunities for your spouse.
- 369. Social activities which include children.
- 371. Finding appropriate child care.
- 373. Finding appropriate educational opportunities for children.
- 375. Getting to know U.S. neighbors.
- Other needs (please specify):

Interpersonal relationships in the U.S.

Very unimportant	1	2	3	4	5	6	7
Neither important nor unimportant	1	2	3	4	5	6	7
Very important	1	2	3	4	5	6	7

- Need for...
- 409. A good relationship with your advisor.
- 411. Good relationships with the degree program committee members.
- 413. Good relationships with course instructors.
- 415. A good relationship with your foreign student advisor.
- 417. Friendly treatment by other university staff members.

B. Circle one number to indicate how much the need is satisfied in your case.

Very unsatisfied	1	2	3	4	5	6	7
Neither satisfied nor unsatisfied	1	2	3	4	5	6	7
Very satisfied	1	2	3	4	5	6	7

A. Circle one number to indicate how important the need is to you.

Very unimportant  
1 2 3 4 5 6 7  
Neither important  
or unimportant  
1  
Very important  
1

Need for...

419. U.S. friends.

421. U.S. friends with whom you can discuss personal problems.

423. Social activities with U.S. nationals.

425. Friends from other countries.

Other needs (please specify):

Before going home

Need for...

427. Knowing how to send books and household items home.

429. Knowing information, in advance, on tax clearance regulations, sailing permit, etc.

431. Knowing the cheapest means of transportation to return home.

Other needs (please specify):

B. Circle one number to indicate how much the need is satisfied in your case.

Very unsatisfied  
1 2 3 4 5 6 7  
Neither satisfied  
nor unsatisfied  
1  
Very satisfied  
1

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V. The following is a list of English skills you may need. Please answer A, B and C.

English skills

- 509. Understanding spoken English.
- 512. Giving an oral presentation in class.
- 515. Reading (textbooks, journals, etc.).
- 518. Writing papers and a thesis.
- 521. Taking tests.
- 524. Taking class notes.
- 527. Participating in class discussions.
- 530. Conversing with faculty members and other students.

Other skills (please specify):

A. Circle one number to show how important the skill is to you.

Very unimportant	1	2	3	4	5	6	7	
Neither important nor unimportant	1	2	3	4	5	6	7	
Very important	1	2	3	4	5	6	7	

B. Circle one number to show how good your English is in this skill.

Very poor	1	2	3	4	5	6	7	
Neither poor nor good	1	2	3	4	5	6	7	
Very good	1	2	3	4	5	6	7	

C. If you have taken English courses in the U.S., circle one number to show how well they helped to improve the skill.

Very poorly	1	2	3	4	5	6	7	9	
Neither poorly nor well	1	2	3	4	5	6	7	9	
Very well	1	2	3	4	5	6	7	9	
No English courses taken	1	2	3	4	5	6	7	9	124

VI. Many universities offer English courses for foreign students. Please answer A and B below.

A. Have you taken any English courses for foreign students on campus? Please circle one number.

533. 1. Yes, (please go to VII.).

2. No (please answer B below).

B. Why have you not taken any English courses for foreign students? Please circle the number(s) applicable to you. (You may have more than one reason.)

534.1 I do not feel I need to improve my English.

535.2. I have no time to take them.

536.3. I have no money to take them.

537.4. I do not think they will improve my English.

538.5. I have schedule conflicts.

539.6. I plan to take them later.

540.7. There are no English courses for foreign students on this campus.

541.8. I was not required to take any of them.

Other reasons (please specify):

VII. Did you take TOEFL? If so, what was your score? Please circle one number.

542. 1. No, I did not. (Please go to Question VIII.)

Yes, I did. My score was:

2. Below 400

5. 501-550

3. 400-450

6. 551-600

4. 451-500

7. Over 600.

VIII. The following factors may prevent you from establishing good relationships with U.S. nationals. Please circle one number to indicate how much you think each factor is preventing you from having good relationships.

	Not at all	A little	Somewhat	Much	Very Much
543. Your command of English	1	2	3	4	5
544. Your religious background	1	2	3	4	5
545. Your racial background	1	2	3	4	5
546. Your cultural background	1	2	3	4	5
547. Your political view	1	2	3	4	5
548. Your being a foreigner.	1	2	3	4	5
549. Your attitude toward others	1	2	3	4	5
550. Their attitude toward you.	1	2	3	4	5

Other factors (please specify):

XII. Please circle one number to identify your home country. Due to the limited space the list includes only those countries with large numbers of students in the U.S.

- 566. Africa
  - 1.1 Nigeria
  - 1.2 Ethiopia
  - 1.3 Libya
  - 1.4 Ghana
  - 1.5 Egypt
  - 1.6 Kenya
  - 1.7 Sudan
  - 1.8 Other (please specify):
- South and East Asia
  - 2.1 Taiwan
  - 2.2 India
  - 2.3 Korea
  - 2.4 Thailand
  - 2.5 Malaysia
  - 2.6 Indonesia
  - 2.7 Philippines
  - 2.8 Pakistan
  - 2.9 Other (Please specify):
- Southwest Asia
  - 3.1 Iran
  - 3.2 Lebanon
  - 3.3 Israel
  - 3.4 Jordan
  - 3.5 Iraq
  - 3.6 Other (please specify):
- Latin America
  - 4.1 Mexico
  - 4.2 Venezuela
  - 4.3 Cuba
  - 4.4 Brazil
  - 4.5 Colombia
  - 4.6 Chile
  - 4.7 Panama
  - 4.8 Peru
  - 4.9 Other (please specify):
- Europe
  - 5.1 Portugal
  - 5.2 Turkey
  - 5.3 Other (please specify):

IX. We would like to know how you rate the following, and how you think others would rate them. Please answer A, B and C below by circling one number for each item for each question. (If you are not at all sure, you may skip the item.)

	A. How do you rate them?	B. How do you think your friends in your country would rate them?	C. How do you think U.S. students would rate them?
551. 1. Your academic performance.	Among the lowest Fairly low Average Fairly high Among the highest	Among the lowest Fairly low Average Fairly high Among the highest	Among the lowest Fairly low Average Fairly high Among the highest
554. 2. Your intelligence.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
557. 3. Your physical appearance.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
560. 4. Prestige (status) of your country in the world.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
X. What was your age on your last birthday?			
563. ( ) years.			

XI. What is your sex? Circle one number.

- 565. 1. Female
- 2. Male

XIII. What is your marital status? Circle one number.

568. 1. Single
2. Married: The spouse is with me.
3. Married: The spouse is in my country.
4. Other

XIV. What is your present university classification?  
Circle one number.

569. 1. Freshman
2. Sophomore
3. Junior
4. Senior
5. Master's Student
6. Ph.D. Student
7. Special - Non degree student
8. Other (please specify):

XV. On the following list, identify your area of study. Circle one number.

570. 01. Agriculture and Natural Resources
02. Architecture and Environmental Design
03. Area Studies
04. Biological Sciences
05. Business and Management
06. Communications
07. Computer and Information Services
08. Education
09. Engineering
10. Fine and Applied Arts
11. Foreign Languages
12. Health Professions
13. Home Economics
14. Law
15. Letters
16. Library Science

XV. Area of study (cont.)

570. 17. Mathematics
18. Military Sciences
19. Physical Sciences
20. Psychology
21. Public Affairs and Services
22. Social Sciences
23. Theology
24. Interdisciplinary Studies
25. Undeclared
26. Double major (please specify):
27. Other (please specify):

XVI. Please answer A and B below by circling the numbers applicable to you.

A. Is 4.00 the maximum grade point average at the university you are attending now?

572. 1. Yes (please answer B)  
2. No (please answer C)

B. My grade point average is...

573. 1. Between 0.00 and 2.44  
2. Between 2.45 and 2.84  
3. Between 2.85 and 3.24  
4. Between 3.25 and 4.00

C. What is the maximum grade point average at the university you are attending now?

( )

What is your grade point average?

( )

XVII. Please circle one number to indicate where you live now.

574. 1. In a dormitory.
2. In married student housing.
3. In a room off campus without cooking privileges.
4. In a room off campus with cooking privileges.
5. In an apartment off campus.
6. In a trailer
7. Other (please specify):

XVIII. Whom do you live with? Please circle one number.

575. 1. U.S. family
2. U.S. student(s).
3. Foreign student(s) from another country.
4. Student(s) from your country.
5. Your spouse (and children).
6. Alone.
7. Other (please specify):

XIX. What are the primary and secondary sources of your financial support now? Please circle one number for each source.

	Primary source	Secondary source
	1	2
576. AID, LASPAU or AAI(AIFGRAD) scholarship	1	
Scholarship from your government	2	
Rockefeller or Ford scholarship	3	4
Fulbright scholarship	4	5
University assistantship	5	6
Parents or relatives (gifts, loans)	6	7
Savings	7	8
Employment off campus	8	9
Employment on campus	9	
Other sources (please specify):		

XX. Please circle the number(s) in the following table to indicate who organized the orientation programs you attended in your country and in the U.S.

	Home country	government	Sponsor agency	This university	Another university	Other (specify below)	
	1	2	3	4	5	6	
609. In your country:	1	2					6
613. In the U.S.		2	3	4	5	6	

Other organizers:

XXI. How long have you been in the United States? Please enter the total months of stay if this is not the first time you have been in the U.S.

618. ( ) months

XXII. How long have you been at this university? Please enter the total months.

620. ( ) months

XXIII. How many foreign countries besides the U.S. have you visited and/or lived in?

622. (     ) countries

How many months in total were you in those countries?

624. (     ) months.

XXIV. How likely is it that you might remain permanently in the U.S.? Please circle one number.

626. 1. Definitely not  
2. Very unlikely  
3. Somewhat unlikely  
4. Undecided  
5. Somewhat likely  
6. Very likely  
7. Definitely will.

XXV. Which of the following might make you stay permanently in the U.S.? Please circle the number(s) applicable to you.

627. 1. Political conflict at home.  
628. 2. Not being able to find a job at home.  
629. 3. A good job offer in the U.S.  
630. 4. Marriage to a U.S. citizen.  
631. 5. Family members' advice.  
632. 6. Other situations (please specify):  
7. Nothing would make me stay permanently in the U.S.

XXVI. Are you trying to find a job in your country now? Please circle one number.

633. 1. Yes, I am.  
2. No, I am not. But I plan to do so.  
3. No, I am not. I have not made any plans about finding a job.  
4. No, I am not, because I have a job waiting for me.

XXVII. Have you registered with the Home Country Employment Registry of NAFSA (the National Association for Foreign Student Affairs)? Please circle one number.

634. 1. Yes, I have.  
2. No, I have not but I am aware of it, and I intend to register.  
3. No, I have not. I have a job waiting for me in my country.  
4. No, I have not. I know about it, but I will not register with it because (please specify):

635. 5. No, I have not. I do not know about it. (Please see your foreign student advisor, if you would like to know about it.)

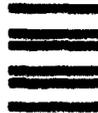
---- THANK YOU VERY MUCH ----

Please do not write your name on this questionnaire.

Please drop this today in a mail box!

No envelope, no postage needed.

P-624



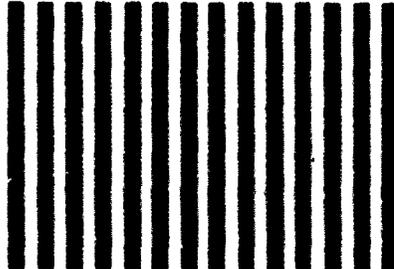
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