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*Test Takers' Attitudes
About the TOEFL iBT™*

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Listening.

Learning.

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Test Takers' Attitudes About the TOEFL iBT™

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ETS, Princeton, New Jersey

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Abstract

The principal aims of this study, a conceptual replication of an earlier investigation of the TOEFL[®] computer-based test, or TOEFL CBT, in Buenos Aires, Cairo, and Frankfurt, were to assess test takers' reported acceptance of the TOEFL Internet-based test, or TOEFL iBT[™], and its associations with possible determinants of this acceptance and with test performance; evaluate differences in the pattern of results for test takers from different countries; and compare the findings with those for the TOEFL CBT. A questionnaire concerning attitudes about the test and other relevant variables was administered by the Internet to TOEFL iBT examinees in 4 diverse countries with large testing volumes: China, Colombia, Egypt, and Germany. Overall attitudes about the TOEFL iBT were moderately positive in most countries, but neutral in Germany; attitudes about the Listening and Writing sections of the test were uniformly favorable in every country; but attitudes about the Speaking section were consistently less favorable in all countries and were unfavorable in Germany and Colombia. Attitudes about the test had similar patterns of relationships in the 4 countries: moderate correlations with attitudes about admissions tests in general, slight and inconsistent correlations with TOEFL performance and computer anxiety, and minimal correlations with other variables. All in all, these results were very similar to those in the earlier investigation, with 1 exception: the previous study found uniformly moderate positive attitudes about the TOEFL CBT in the 3 countries surveyed.

Key words: TOEFL iBT, attitudes, survey, China, Columbia, Egypt, Germany

The Test of English as a Foreign Language™ (TOEFL®) was developed in 1963 by the National Council on the Testing of English as a Foreign Language. The Council was formed through the cooperative effort of more than 30 public and private organizations concerned with testing the English proficiency of nonnative speakers of the language applying for admission to institutions in the United States. In 1965, Educational Testing Service (ETS) and the College Board® assumed joint responsibility for the program. In 1973, a cooperative arrangement for the operation of the program was entered into by ETS, the College Board, and the Graduate Record Examinations® (GRE®) Board. The membership of the College Board is composed of schools, colleges, school systems, and educational associations; GRE Board members are associated with graduate education. The test is now wholly owned and operated by ETS.

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Since its inception in 1963, the TOEFL has evolved from a paper-based test to a computer-based test and, in 2005, to an Internet-based test, TOEFL iBT™. One constant throughout this evolution has been a continuing program of research related to the TOEFL test. From 1977 to 2005, nearly 100 research and technical reports on the early versions of TOEFL were published. In 1997, a monograph series that laid the groundwork for the development of TOEFL iBT was launched. With the release of TOEFL iBT, a TOEFL iBT report series has been introduced.

Currently this research is carried out in consultation with the TOEFL Committee of Examiners. Its members include representatives of the TOEFL Board and distinguished English as a second language specialists from the academic community. The Committee advises the TOEFL program about research needs and, through the research subcommittee, solicits, reviews, and approves proposals for funding and reports for publication. Members of the Committee of Examiners serve four-year terms at the invitation of the Board; the chair of the committee serves on the Board.

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What are test takers' attitudes about the TOEFL[®] Internet-based test, or TOEFL iBT[™]? Test takers' reactions may affect their motivation and, in turn, their performance, impacting the tests' validity. Equally important, these reactions may also affect test takers' perceptions of themselves and of the test users. The importance of test takers' attitudes about school and admissions tests, in particular, has been delineated by Nevo (1993). Acceptance by test takers, test users, and the public is essential to the continued viability of the TOEFL.

Although attitudes about the TOEFL iBT have not been investigated heretofore, attitudes about previous versions of the TOEFL have been studied. Jamieson, Taylor, Kirsch, and Eignor (1999) found that a computer-administered tutorial on taking the TOEFL computer-based test (CBT) increased test takers' acceptance of the test. Stricker, Wilder, and Rock (2004), in a 1999 survey of TOEFL CBT test takers at major testing centers in Buenos Aires, Cairo, and Frankfurt, found moderately positive attitudes about the test in the three cities, as well as similar relationships between these attitudes and other variables: slight or moderate relationships with test performance; moderate relationships with general attitudes about admissions tests; slight relationships with test anxiety and computer anxiety; and minimal relationships with computer familiarity, preparation for the test, and experience with admissions tests.

Given the dearth of information on attitudes about the TOEFL iBT, the purpose of the present investigation was to replicate conceptually the Stricker et al. (2004) study with this test. More specifically, the aims of the new investigation were threefold: (a) to assess examinees' acceptance of the test, and the associations of this acceptance with possible determinants and with test performance; (b) to evaluate differences in the results for test takers from different countries; and (c) to compare the findings with those from the Stricker et al. study.

Method

Sample

The sample was drawn from registrants for the TOEFL iBT in the summer of 2008 in four countries: China, Colombia, Egypt, and Germany. Two of these countries, Egypt and Germany, had been used in the Stricker et al. (2004) study; the third country in that study, Argentina, could not be used because of low testing volume. Colombia was added as a replacement for Argentina; China was added to increase the range of language groups represented. The four countries have large testing volumes and are diverse, spanning the world and major language groups.

The sample consisted of registrants asked to participate who took the test on schedule, completed the questionnaire within 10 days after the test administration (TOEFL scores are reported 15 working days after the administration), and had usable questionnaire data: 160 test takers in China, 220 in Colombia, 182 in Egypt, and 200 in Germany. The nonrespondents, registrants asked to participate who took the test on schedule but did not complete the questionnaire on time or had unusable questionnaire data, numbered 565 in China, 545 in Colombia, 391 in Egypt, and 489 in Germany. The participation rates were 22% in China, 29% in Colombia, 32% in Egypt, and 29% in Germany.

Measures

Questionnaire. The questionnaire (in English) from the Stricker et al. (2004) study was used, augmented by attitude items concerning global evaluations of the test sections. The questionnaire consisted of the five original scales, the two original single-item measures, and four single-item measures for the sections. Details about the development of the original questionnaire are described in Stricker et al. (2004). Descriptions of the measures follow:

1. TOEFL Acceptance. This is a nine-item scale (“These are statements about the Internet-based TOEFL [Test of English as a Foreign Language]”—e.g., “The TOEFL tells how well people can use English in school”), with *Agree*, *Do Not Agree*, and *Do Not Know* options. (The instructions were to use the *Do Not Know* option “if you do not know whether you agree with the statement or do not understand the statement.”)
2. Acceptance of Admissions Tests. This is a three-item scale (“These are statements about all tests used for admission to universities [for example, TOEFL, SAT[®], ACT, GRE[®]—Graduate Record Examination[®], GMAT—Graduate Management Admission Test]”—e.g., “People who receive high scores on university admissions tests will be successful in school”), with *Agree*, *Disagree*, and *Do Not Know* options.
3. Total Computer Attitude. This is the total score for two subscales adapted from factor subscales (Bandalos & Benson, 1990) on the Computer Attitude Scale (Loyd & Gressard, 1984): “These are statements about computers”—e.g., “I want to use computers” [five-item Computer Liking subscale] and “I feel I know what I am doing when I use computers” [seven-item Computer Confidence subscale]. The items on the scales have

Agree, Disagree, and Do Not Know options. Note that a high score represents low anxiety.

4. Total Test Anxiety. This is the total score for four subscales adapted from the Revised Test Anxiety Scale (Benson & El-Zahhar, 1994; “These are statements about all types of tests: tests for admission to universities and all other types of tests used by schools and employers”—e.g., “When I am taking a test, I often think how difficult the test is” [four-item Worry subscale], “I am nervous about tests” [five-item Tension subscale], “When I am taking a test, I think about things I will do after the test” [four-item Test-Irrelevant Thinking subscale], and “My mouth becomes dry during a test” (five-item Bodily Symptoms subscale). The items on the scales have *Agree, Do Not Agree, and Do Not Know* options.
5. Computer Familiarity. This is a six-item scale adapted from the Computer Familiarity Questionnaire (Eignor, Taylor, Kirsch, & Jamieson, 1998; “These are statements about how often you have a computer to use and how often you use a computer for different things”—e.g., “How often do you use a computer?”), with *Never, Once a Week or Less, More than Once a Week, and Do Not Know* options.
6. Preparation for the TOEFL. This is a single-item measure: “About how many hours did you prepare for the computer-based TOEFL?” with a seven-point scale (*0 Hours-More than 40 Hours*) plus a *Do Not Know* option.
7. Admissions Tests Taken. This is a single-item measure: “About how many different university admissions tests have you taken (for example, TOEFL, SAT, ACT, GRE, GMAT)?” with a five-point scale (*1 Test–5 or More Tests*) plus a *Do Not Know* option.
8. Global Evaluation Items. These are four individual attitude items about global evaluations of the TOEFL iBT sections (“These are statements about the Internet-based TOEFL [Test of English as a Foreign Language]”—e.g., “The TOEFL gave me a good opportunity to demonstrate my ability to read English” [Reading], “The TOEFL gave me a good opportunity to demonstrate my ability to understand spoken English” [Listening], “The TOEFL gave me a good opportunity to demonstrate my ability to write in English” [Writing], and “The TOEFL gave me a good opportunity to demonstrate my ability to speak English” [Speaking]). The items have *Agree, Disagree, and Do Not Know* options.

In scoring items and obtaining total scores for all scales except Computer Familiarity, items were scored 1 for the keyed response (*Agree* or *Do Not Agree*), -1 for the unkeyed response (*Agree* or *Do Not Agree*), and 0 for the *Do Not Know* response. For Computer Familiarity, items were scored 1 for the *Never* response to 4 for the *More than Once a Week* response; *Do Not Know* responses were not scored. A total score for Computer Familiarity was not obtained if a test taker had any *Do Not Know* responses for this scale.

In scoring the single-item measures, responses on Preparation for TOEFL were dichotomized: *0 Hours - 21-30 Hours* = 0, *31-40 Hours - More than 40 Hours* = 1. Admissions Tests Taken was scored: *1 Test* = 1, *2 Tests* = 2, *3 Tests* = 3, *4 Tests* = 4, and *5 or More Tests* = 5; *Do Not Know* responses were not scored.

Age and gender. Age (age in years at the time of the test administration) and gender were obtained from questions at the beginning of the TOEFL administration.

TOEFL scores. TOEFL scores were obtained from ETS files:

1. TOEFL Listening score. This is a scaled score, ranging from 0–30.
2. TOEFL Reading score. This is a scaled score, ranging from 0–30.
3. TOEFL Speaking score. This is a scaled score, ranging from 0–30.
4. TOEFL Writing score. This is a scaled score, ranging from 0–30.
5. TOEFL Total score. This is the sum of the TOEFL Listening, Reading, Speaking, and Writing scores. The score ranges from 0–120.

Procedure

The survey was conducted via the Internet. Requests to participate in the study were e-mailed to random samples, in the four countries, of registrants to specified TOEFL iBT administrations. The three to six administrations per country (three in Germany, five in Colombia, and six in China and Egypt) began with the May 30-31 administration and ended with the August 23-24 administration. The e-mails, sent to registrants on the weekend of their scheduled test administration, described the purpose of the survey, asked them to complete the questionnaire on a separate Web site, assured them that their questionnaire responses would be confidential and would not affect their TOEFL scores, and offered them, for their participation, a \$10 Amazon.com gift card and an opportunity to win a \$100 Amazon.com gift card. The number

of requests for participation was 1,056 for China, 863 for Colombia, 856 for Egypt, and 881 for Germany. The questionnaire took approximately 15 minutes to complete.

Analysis

Analyses of variance of the means for Age and the TOEFL scores for participants and nonparticipants were carried out for each country. Parallel chi-square tests of the frequency distributions for Gender were also carried out.

One-way analyses of variance of the means for TOEFL Acceptance and Acceptance of Admissions Tests in the four countries were carried out.

Chi-square tests of the frequency distributions of responses for individual Global Evaluation items in the four countries were carried out.

Product-moment correlations of TOEFL Acceptance and Acceptance of Admissions Tests with the other questionnaire variables, Gender, Age, and the TOEFL scores were computed separately for each country, using a pair-wise missing data program. In these analyses, dummy codes were used for Gender (male = 0, female = 1).

The internal-consistency reliability of the questionnaire scales for each country was computed by coefficient alpha.

Both statistical and practical significance were considered in evaluating the results. For statistical significance, the .05 alpha level was used in all analyses. For practical significance, indexes that reflect a small effect size, accounting for 1% of the variance, were used: an η of .10 in the analyses of variance, a W of .10 in the chi-square analyses, and an r .10 in the correlation analyses (Cohen, 1988).

Results

Comparisons of Participants and Nonparticipants

The means for Age and TOEFL scores of participants and nonparticipants, and analyses of variance statistics for each country, are summarized in Table 1. The frequency distributions of Gender and chi-square tests are reported in Table 2.

Table 1***Means of Age and TOEFL Scores for Participants and Nonparticipants in Each Country***

Variable	Participants		Nonparticipants		<i>F</i>
	Mean	SD	Mean	SD	
China					
Age	21.78	2.96	21.56	3.21	.60
TOEFL Listening	19.21	7.42	17.90	7.71	3.66
TOEFL Reading	22.06	7.10	20.95	7.53	2.74
TOEFL Speaking	18.72	3.40	17.82	3.62	7.90** ^a
TOEFL Writing	21.20	4.51	20.25	4.86	4.92*
TOEFL Total	81.19	19.71	76.92	20.45	5.51*
Colombia					
Age	25.14	6.08	24.35	6.18	2.53
TOEFL Listening	23.40	7.38	19.68	8.96	29.83** ^a
TOEFL Reading	22.69	7.64	18.62	8.61	37.31** ^a
TOEFL Speaking	20.69	3.63	19.35	3.98	18.50** ^a
TOEFL Writing	21.45	4.77	19.19	4.91	33.77** ^a
TOEFL Total	88.24	20.32	76.85	22.99	41.05** ^a
Egypt					
Age	25.86	6.39	23.79	6.69	12.22** ^a
TOEFL Listening	21.27	8.27	18.07	9.11	16.30** ^a
TOEFL Reading	19.44	8.86	16.07	8.77	18.17** ^a
TOEFL Speaking	20.64	3.91	20.08	3.98	2.45
TOEFL Writing	20.80	4.56	19.43	5.07	9.62** ^a
TOEFL Total	82.15	22.16	73.66	23.17	17.17** ^a
Germany					
Age	23.46	4.50	23.06	4.27	1.17
TOEFL Listening	26.32	5.31	24.28	6.50	15.49** ^a
TOEFL Reading	24.73	6.65	21.94	7.94	19.23** ^a
TOEFL Speaking	24.26	3.41	22.81	3.90	21.14** ^a
TOEFL Writing	24.70	3.66	23.10	4.08	23.25** ^a
TOEFL Total	100.02	16.37	92.13	19.09	26.27** ^a

Note. The *Ns* for the participants and nonparticipants are 160 and 565 in China, 220 and 545 in Colombia, 182 and 391 in Egypt, and 200 and 489 in Germany.

^a $\eta > .10$.

* $p < .05$; ** $p < .01$.

Table 2***Percentage Distributions of Gender for Participants and Nonparticipants in Each Country***

Variable	Participants	Nonparticipants	χ^2
China			
<i>N</i>	160	565	
Male	40.0	49.6	4.57*
Female	60.0	50.4	
Colombia			
<i>N</i>	209	474	
Male	54.5	51.3	.63
Female	45.5	48.7	
Egypt			
<i>N</i>	170	368	7.00** ^a
Male	72.4	60.6	
Female	27.6	39.4	
Germany			
<i>N</i>	190	422	1.41
Male	47.9	53.1	
Female	52.1	46.9	

^a $W > .10$.

* $p < .05$; ** $p < .01$.

In every country, differences between participants and nonparticipants were statistically and practically significant for one or more TOEFL sections or the total score (participants always had higher scores than nonparticipants). In China, the differences in Age and Gender were not significant, but the difference in TOEFL Speaking was significant. In Colombia, the differences in Age and Gender were not significant, but differences in all TOEFL scores were significant. In Egypt, the differences in Age and Gender were significant (participants were older and more were men) and differences in four TOEFL scores were significant: Listening, Reading, Writing, and Total. In Germany, the differences in Age and Gender were not significant, but differences in all TOEFL scores were significant.

Comparisons of TOEFL Acceptance and Acceptance of Admission Tests for Countries

The means for TOEFL Acceptance and Acceptance of Admissions Tests for the four countries and analysis of variance statistics are summarized in Table 3.

Table 3

Means of TOEFL Acceptance and Acceptance of Admissions Tests

Variable	China		Colombia		Egypt		Germany		<i>F</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>	
TOEFL Acceptance	1.70	3.77	1.89	3.86	1.04	4.22	-.34	4.16	12.63** ^a
Acceptance of Admissions Tests	-.60	1.85	-.68	2.08	-.77	2.12	-1.28	1.85	4.60** ^a

Note. The *N*s are 160 for China, 220 for Colombia, 182 for Egypt, and 200 for Germany.

^a $\eta > .10$.

** $p < .01$.

The differences among the four countries were statistically and practically significant for both scales (Germany's mean scores were appreciably lower on both). The mean scores for TOEFL Acceptance were moderately positive for China, Colombia, and Egypt, ranging from 1.04 for Egypt to 1.70 for China, but were neutral for Germany (-.34). (The corresponding means of the item scores were .19 for China, .21 for Colombia, .12 for Egypt, and -.04 for Germany; the theoretical range of these item means is 1 to -1, and the neutral point is 0.) In contrast, the means scores for Acceptance of Admissions Tests were moderately negative in the four countries, ranging from -.60 for China to -1.28 for Germany. (The corresponding item means were -.20 for China, -.23 for Colombia, -.26 for Egypt, and -.43 for Germany; again, the theoretical range is 1 to -1, and the neutral point is 0.)

Comparisons of Global Evaluation Items for Countries

The frequency distributions of the responses to the individual Global Evaluation items in the four countries and the chi-square tests are reported in Table 4.

Table 4***Percentage Distributions of Responses to Global Evaluation Items in Each Country***

Item	China			Colombia			Egypt			Germany			Participants in countries χ^2
	Agree	Do not agree	Do not know	Agree	Do not agree	Do not know	Agree	Do not agree	Do not know	Agree	Do not agree	Do not know	
The TOEFL gave me a good opportunity to demonstrate my ability to read English.	73.8	16.2	10.0	74.5	20.9	4.5	61.5	35.2	3.3	58.0	34.5	7.5	32.54** ^a
6 The TOEFL gave me a good opportunity to demonstrate my ability to understand spoken English.	81.2	13.1	5.6	85.0	12.3	2.7	86.8	12.6	.5	84.5	11.0	4.5	8.63
The TOEFL gave me a good opportunity to demonstrate my ability to write in English.	80.6	10.6	8.8	89.5	8.6	1.8	86.3	12.1	1.6	82.0	9.0	9.0	21.58** ^a
The TOEFL gave me a good opportunity to demonstrate my ability to speak English.	62.5	28.1	9.4	47.3	44.5	8.2	56.6	40.1	3.3	28.0	63.0	9.0	58.04** ^a

Note. The *N*s are 160 for China, 220 for Colombia, 182 for Egypt, and 200 for Germany.

^a $W > .10$.

** $p < .01$.

Table 5

Correlations of TOEFL Acceptance and Acceptance of Admissions Tests With Other Questionnaire and Background Variables, and TOEFL Scores in Each Country

Variable	China		Colombia		Egypt		Germany	
	TOEFL Acceptance	Acceptance of Admissions Tests	TOEFL Acceptance	Acceptance of Admissions Tests	TOEFL Acceptance	Acceptance of Admissions Tests	TOEFL Acceptance	Acceptance of Admissions Tests
TOEFL Acceptance	—	.38**	—	.36**	—	.37**	—	.46**
Acceptance of Admissions Tests	.38**	—	.36**	—	.37**	—	.46**	—
Total Computer Attitude	.25**	.18*	.18**	.07	.03	-.02	.27**	.13
Total Test Anxiety	-.14	.02	-.09	-.04	-.22**	.05	-.12	-.05
Computer Familiarity	.17*	.20*	-.04	.00	-.11	-.09	.11	.14
Preparation for TOEFL Admissions Tests Taken	-.03	-.06	-.08	-.03	-.14	.05	-.08	-.03
Age	.00	-.06	.06	.01	-.03	.03	-.04	-.06
Sex	-.05	-.04	.02	.02	-.05	-.04	.04	.01
TOEFL Listening	-.02	-.02	-.07	-.05	.01	-.03	-.15	.07
TOEFL Reading	.24**	.04	.22**	-.10	.17*	-.15*	.12	.02
TOEFL Writing	.14	.08	.27**	-.07	.25**	-.19**	.29**	.06
TOEFL Total	.10	-.03	.13	-.08	.11	-.10	.10	.10
	.17*	.09	.17**	-.06	.23**	-.11	.20**	.05
	.20**	.06	.24**	-.09	.23**	-.17*	.22**	.06

Note. Ns range from 147 to 160 for China, 204 to 220 for Colombia, 157 to 182 for Egypt, and 170 to 200 for Germany.

* $p < .05$ (two-tail); ** $p < .01$ (two-tail).

The differences among the countries were statistically and practically significant for three items (the Listening item was the exception), with appreciably fewer favorable responses to the Reading item in Germany and Egypt and appreciably fewer favorable responses to the Speaking item in Germany. Most test takers in the four countries gave favorable responses to the items, with two exceptions: most examinees in Colombia and Germany gave unfavorable responses to the Speaking item. Appreciably fewer favorable responses were made to the Speaking item than to the Listening and Writing items in every country.

Correlations of TOEFL Acceptance and Acceptance of Admissions Tests With Questionnaire and Background Variables, and TOEFL Scores in Each Country

The correlations of TOEFL Acceptance and Acceptance of Admissions Tests with the other questionnaire and background variables, and TOEFL scores in the four countries, are reported in Table 5. The internal-consistency reliability of the questionnaire scales is shown in Table 6, and their means appear in Table 7.

Reliability of questionnaire scales. The reliability of all the questionnaire scales was generally modest. The reliability of TOEFL Acceptance ranged from .67 to .73 for the four countries; the reliability of Acceptance of Admissions Tests ranged from .45 to .72.

Table 6
Reliability of Questionnaire Scales in Each Country

Scale	China		Colombia		Egypt		Germany	
	<i>N</i>	<i>r_{xx}</i>	<i>N</i>	<i>r_{xx}</i>	<i>N</i>	<i>r_{xx}</i>	<i>N</i>	<i>r_{xx}</i>
TOEFL Acceptance	160	.67	220	.72	182	.73	200	.72
Acceptance of Admissions Tests	160	.45	220	.68	182	.72	200	.61
Total Computer Attitude	160	.77	220	.71	182	.80	200	.82
Total Test Anxiety	160	.75	220	.71	182	.78	200	.69
Computer Familiarity	148	.51	204	.54	161	.68	170	.54

Table 7***Means for Questionnaire Variables in Each Country***

Variable	China			Colombia			Egypt			Germany		
	<i>N</i>	Mean	<i>SD</i>	<i>N</i>	Mean	<i>SD</i>	<i>N</i>	Mean	<i>SD</i>	<i>N</i>	Mean	<i>SD</i>
Total Computer Attitude	160	7.26	4.70	220	9.08	3.78	182	8.87	4.09	200	7.13	4.68
Total Test Anxiety	160	-3.90	6.89	220	-2.66	6.53	182	-2.93	7.45	200	-4.18	6.12
Computer Familiarity	148	15.90	1.44	204	16.51	1.47	161	15.94	1.89	170	15.52	1.65
Preparation for TOEFL	147	.78	.42	208	.40	.49	164	.60	.49	194	.29	.45
Admissions Test Taken	155	1.52	.67	204	1.43	.65	157	1.69	1.02	192	1.34	.75

Note. Corresponding statistics for TOEFL Acceptance and Acceptance of Admissions Tests appear in Table 3.

TOEFL Acceptance correlates. TOEFL Acceptance had statistically and practically significant correlations in every country with three variables: Acceptance of Admissions Tests, TOEFL Writing, and TOEFL Total. All of these correlations were positive. The scale's other significant correlations were less consistent, often involving Total Computer Attitude and TOEFL sections. In China, TOEFL Acceptance correlated significantly and positively with Total Computer Attitude, Computer Familiarity, and TOEFL Listening. In Colombia, it correlated positively with Total Computer Attitude and TOEFL Listening. In Egypt, it correlated negatively with Total Test Anxiety and positively with TOEFL Listening and TOEFL Reading. And in Germany, it correlated positively with Total Computer Attitude and TOEFL Reading.

Acceptance of Admissions Tests correlates. Acceptance of Admissions Tests, besides its consistent correlations with TOEFL Acceptance in the four countries, had few statistically and practically significant correlations with other variables. In China, this scale correlated positively with Total Computer Attitude and Computer Familiarity. And in Egypt, it correlated negatively with TOEFL Listening, TOEFL Reading, and TOEFL Total.

Discussion

Level of TOEFL Acceptance

A key finding is that reported attitudes about the TOEFL iBT are not monolithic, but vary markedly by country and by section of the test. The contrast is remarkable between the moderately positive attitudes in most countries and the neutral or negative attitudes in Germany, as well as between very favorable attitudes about the listening and writing components of the test and the less favorable or even unfavorable attitudes about the speaking component. The differences in attitudes about the sections of the test could not be anticipated, for the sections had not been studied before. However, the national differences are surprising, in view of the Stricker et al. (2004) findings of uniformly moderate positive attitudes in testing centers in Buenos Aires, Cairo, and Frankfurt. Of course, any comparisons of the results for the two studies are complicated by several potentially important differences. Besides a host of differences in the two versions of the TOEFL themselves (most notably, the TOEFL CBT was computer adaptive and did not have a speaking section), the participants in the Stricker et al. study had received their test scores before they completed the questionnaire, whereas the participants in the present study had not; there are a variety of cohort effects; and the Stricker et al. study used samples of

test takers from certain cities (e.g., Cairo, Frankfurt) and the present study used samples from entire countries (e.g., Egypt, Germany).

These national differences are mirrored by the results for attitudes about admissions tests in general, Germany again having the least favorable attitudes. However, in contrast to the consistently negative attitudes across the four countries, the Stricker et al. (2004) study found negative attitudes in only two of the three cities.

The divergent attitudes in Germany about the TOEFL and other admissions tests raise the question, unanswerable at this point, of whether these attitudes are somehow peculiar to that country and if so, why, or whether they are widespread in other European countries.

The less favorable attitudes about the Speaking section in all countries are noteworthy. Again, the unanswered question is whether these attitudes are common to all speaking tests or are triggered by unusual features of the TOEFL section, such as the absence of interaction.

It would be highly desirable to put these results about attitudes towards the TOEFL in perspective by considering them in the context of attitudes about other English as- a second language tests and other kinds of admissions tests. Unfortunately, relevant data about current attitudes are sparse. It is noteworthy that attitudes about the TOEFL were more favorable than those about admissions tests in general in all four countries in this study and in two of the three countries (Egypt was the exception) in the Stricker et al. (2004) study. Only one study of another specific admissions test is pertinent. A 1998 survey of the Graduate Management Admission Test found moderately negatively attitudes about whether the test was valid (Stricker, Wilder, & Bridgeman, 2006).

In interpreting the findings concerning the level of attitudes about the TOEFL, it is important to realize that they overestimate, to some extent, how positive these attitudes are in the TOEFL populations that were studied. Survey participants performed slightly better on the TOEFL than other test takers, and test performance and attitudes are weakly related. (This same phenomenon occurred in the Stricker et al. [2004] study.)

Correlates of TOEFL Acceptance

The moderate correlations between attitudes about the TOEFL and about admissions tests in general (even when corrected for attenuation, they only ranged from .51 in Colombia to .70 in Germany), accompanied by the different patterns of correlations with the other measures,

suggest, as in the Stricker et al. (2004) study, that the two kinds of attitudes are distinguishable. This is remarkable, for many of the test takers' firsthand experience with admissions tests is confined to the TOEFL: between 47.3% in Egypt to 73.4% in Germany reported that they had taken only a single admissions test, and that would have included the TOEFL. Attitudes about admissions tests are in the air for students bound for college or graduate school, and hence their attitudes about the TOEFL and about admissions tests in general need not be identical.

The slight and inconsistent correlations with other possible determinants of TOEFL acceptance are congruent with the sparse correlations of these variables in the Stricker et al. (2004) study.

And, like the equally slight or moderate but positive correlations of TOEFL Acceptance with TOEFL scores in the Stricker et al. (2004) study, the slight correlations in the present study seem to rule out the concern that test takers' attitudes about the test represent an important source of irrelevant variance in their performance on it. In any event, these correlations may also reflect, to some degree, a self-serving bias: test takers attribute their poor performance to the test being invalid (Chan, Schmitt, Jennings, Clause, & Delbridge, 1998).

Conclusion

An obvious lesson to be gleaned from this study is the need for fine-grained analyses of test takers' attitudes about the TOEFL. An investigation of the attitudes of test takers aggregated across countries and focused on the test in general would miss important differences among national groups and among sections of the test. An appraisal of the generality of the present results to a wider sampling of countries is in order, followed, if warranted, by an examination of the reasons for problems they spotlight and means of addressing them. Periodic monitoring of these attitudes would be prudent; the present study and the Stricker et al. (2004) study can serve as baselines for such efforts.

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