

Knowing the Test Takers: Investigating Chinese and Indian EFL/ESL Students' Performance on PTE Academic

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Abstract

The study investigated Chinese and Indian test takers' performance on the Pearson Test of English Academic (PTE Academic) and their motivation and anxiety-related factors and linguistic confidence. The association between the affective variables investigated and test performance was compared between test takers from these two countries that have the highest number of English as second language (ESL) and English as foreign language (EFL) students. The results indicated that: a) Chinese and Indian students differ in their PTE Academic performance; b) observed score differences between test takers from the two countries can be partially explained by the variance in their affective factors in English learning and testing. The study suggests that a score profile which contains not only overall scores but also communicative scores and enabling scores can provide additional relevant information for diagnostic and placement purposes. EFL and ESL teachers need to take affective factors into consideration when understanding their students and placing them in different teaching groups and designing their tailored classroom activities.

Keywords : PTE Academic, Global Scale of English (GSE), affective factors, Chinese and Indian test takers, motivation, anxiety, diagnostic implications

Introduction

The English language is well established as a major international language, and the number of bilingual users of English will far surpass the number of its native speakers

in this century (McKay, 2002). To assess the language ability of users of English as a second language or foreign language (ESL/EFL), a wide range of language tests have been developed and are used internationally. These language tests have become a pervasive phenomenon in educational systems and frequently play a crucial role in political, educational and social contexts (Shohamy, 2007). The increasing demands for English learning and the growing number of test takers have resulted in the expansion of the English testing industry and of English language training schools.

The power of language tests provides a rationale for enquiries into the factors that may potentially influence test performance (Zheng, 2010). Success in learning a second language varies considerably, and individual test taker characteristics can contribute to the explanation of differential learning success (Larsen-Freeman, 2001). Although the relationship between test takers' individual characteristics and their performances on tests has been investigated in numerous studies over the years, its pedagogical implications have rarely been mentioned (Bachman, 1990). Due to the increasing numbers of international students and the rising demand for better language courses, designing a language test that can provide better feedback on test takers' strengths and weaknesses and inform the development of customized courses for learners has become an objective that deserves to be pursued.

As mentioned, a number of studies have been carried out to examine the influence of test taker characteristics on language test performance (e.g., Bachman, 1990; Kunnan, 1995; Purpura, 1999; Zheng, 2010). Kunnan (1995) studied the influence of test takers' characteristics from the perspective of cultural background. Zheng (2010) examined motivation, anxiety, global awareness and linguistic confidence, and their relation to language test performance within the context of Chinese university students taking the College English Test Band 4 in China. Using a mixed methods approach, through survey and interview enquiries, the findings of this study demonstrated that the selected psychological factors contributed in different ways to students' CET performance.

These studies have provided ample empirical evidence to support the claim that many of these characteristics have a significant impact on differential language test performance. Investigating test takers' characteristics can, in this respect, contribute to the field of language testing in theoretical, methodological and practical ways (Kunnan, 1995). Moreover, test takers' affective variables, such as motivation and anxiety, can influence their success or failure in second/foreign language tests (Cohen

& Dörnyei, 2002; Larsen-Freeman, 2001) and determine how well a student will do in his/her language learning process (Chamorro-Premuzic & Furnham, 2003).

In high-stakes testing situations in particular, test takers' motivation and anxiety are found to be two major psychological factors associated with their performance (Gardner, 1985; Horwitz, 2001; MacIntyre, 2002; Zheng, 2008). Previous research has examined these two constructs extensively in achievement contexts; however, the research findings are inconsistent as to the relationships between motivation, anxiety and second/foreign language achievement in different language contexts. For example, although the fundamental influence of the socio-educational model of motivation in the field of second language education is widely acknowledged, researchers have challenged the proposed primacy of integrative motivation and the generalizability of this theory (e.g., Au, 1998; Dörnyei, 1994). Specifically, controversies exist around how to interpret the roles played by integrative and instrumental orientations of learning a second language, and whether or not this model of motivation can be applied in a similar way in different contexts. Dörnyei (1994) suggested that instrumental motivation might be more important than integrative motivation for foreign language learners. This contention led to the underlying language learning differences triggered by environmental differences, among which the fundamental difference is whether it is a second language context or a foreign language context. Meanwhile, linguistic confidence has also been identified as an important variable that interacts with motivation and anxiety variables in studies of this nature (Clément, Dörnyei & Noels, 1994; Csizer & Dörnyei, 2005). The present study, therefore, investigated test takers' motivational variables, anxiety-related variables and linguistic confidence variables.

Chinese and Indian English learners were selected as participants in this study. China and India are the top two sources of international students in the UK (UK Council for International Student Affairs, 2010). Over 200 million Chinese students enrolled in programmes teaching English as a foreign language in the early 1990s (Yong & Campbell, 1995). With China becoming more actively involved in the global economy in the twenty-first century, and with the increased commercial, technological and cultural exchanges with Western society, English learning in China has grown significantly (Gan, Humphreys & Hamp-Lyons, 2004). In 2008, Crystal (2008) estimated that "half of its population" would be capable of speaking English at "a basic level of conversational competence" by the end of the year, which put the

number of English learners in China at over 600 million.

In addition, China and India have very distinctive cultures and quite different language learning and teaching methods. British Council (2009) highlighted some key differences between the two contexts. First, the Chinese learn English as a foreign language, while in India English is perceived as an institutionalized additional language and is the second most widely spoken language (Crystal, 2003; Kachru, 1997; Lotherington, 2004). Secondly, although English proficiency is perceived as necessary for employment in both countries, English is actually used for internal communication in India, especially for business in the rapidly expanding service sector. Meanwhile in China, Chinese is still mainly used for internal communication as business and employers seem reluctant to offer ongoing language support or training opportunities to staff. Moreover, although both India and China teach English as a subject in schools, Indians use English to communicate for everyday purposes (Nayar, 1997), which is clearly not the case in China.

Research Context

This study investigated the relationship of Chinese and Indian test takers between selected affective factors - i.e. motivation, anxiety and linguistic confidence - and their performance in the Pearson Test of English Academic (PTE Academic), a relatively new international computer-based academic English test.

PTE Academic is designed to accurately assess the listening, reading, speaking and writing ability of students who want to study at higher educational institutions where English is the principal language of instruction. PTE Academic features 20 item types, reflecting different modes of language use, different response tasks and different response formats. Each item type assesses one language skill or a combination of language skills, representing the range of functions and situations that students will encounter during academic study in an English-speaking environment. PTE Academic reports scores on the Pearson's Global Scale of English (GSE), ranging from 10 to 90.

The PTE Academic score report includes 11 scores on the GSE, these are an Overall Score, four Communicative Skills scores and six Enabling Skills scores. The Overall Score reflects test takers' overall English language ability. The score is based on performance on all items in the test. Scores for Communicative Skills (Listening, Reading, Speaking, and Writing) are based on all test items (tasks) that assess these skills, either as a single skill or together with other skills. Scores for Enabling Skills

(Grammar, Oral Fluency, Pronunciation, Spelling, Vocabulary, and Written Discourse) are based on test items assessing one or more of these skills. The GSE scores have been empirically designed and developed to align with the Common European Framework of Reference (CEFR) for languages (Pearson, 2010).

Given the fact that university language centres group students based on their overall score, rather than sub-scores in each skill, it is possible that test takers may be at the same level in terms of their overall performance, but actually differ widely in each sub-skill. For example, with a similar overall score, Chinese test takers may generally perform much better or worse than Indian learners in some sub-skills. A test that only reports on overall performance may provide insufficient information to English course providers and thus mislead them. As a result, the test takers may be placed into programmes of inappropriate length and focus. This study investigated performance in the PTE Academic Live Test and the PTE Academic Practice Test of test takers from China and India and their responses to a questionnaire that aimed to measure their motivation and anxiety in relation to English learning. The 11 scores reported on PTE Academic make it possible for a study of this nature to look into test takers' performance not only at the overall performance level, but also at the levels of the four Communicative Skills and six Enabling Skills, and allow it to provide more diagnostic information regarding test takers' English ability. Three research questions were asked:

1. What are the differences in performance between Chinese and Indian test takers in their overall scores and sub-scores in the PTE Academic Live Test and the PTE Academic Practice Test?
2. How do Chinese and Indian test takers differ in the affective factors examined that influence their English learning?
3. How far can the score differences be explained by the affective factors examined?

To collect test takers' academic performance in the PTE Academic Live test and the PTE Academic Practice Test, a random sample of 400 test takers from China and 400 test takers from India was selected from the PTE Academic Live Test database. In addition, 159 Chinese and Indian students took the PTE Academic Practice Test and their responses to a survey were also collected. The questions in the survey were designed to assess the test takers' affective characteristics in order to explain possible differences in overall scores or subscores. In addition to the demographic information,

the survey covered questions in three areas: test takers' motivational variables, anxiety-related variables, and linguistic confidence variables. Three open-ended questions were asked about the test takers' perception of their experience of taking the PTE Academic Practice Test.

Among the students who participated in the PTE Academic Practice Test and the survey study, 121 came from four Chinese universities. These students constituted a representative sample of English learners at university level in China in three respects. First, the sample included students from the most prestigious universities as well as from regular universities. Second, there were students who were studying English as a major and those who were majoring in other subjects. Third, the study included universities located in socio-economically developed areas and some in relatively underdeveloped areas. Four universities agreed to run the experiment, either in their computer labs or at Internet-linked instruction centres. Participants who completed both test and survey were offered a small incentive. There were 38 Indian participants and most of them were at university level, and only four of them came from international high schools. Although none of them claimed that they were English majors, one third of them indicated that most people at their schools spoke English.

To answer the first research question, participants' scores from the Practice Test or Live test, including Overall score, four Communicative Skills scores and six Enabling Skills scores, were plotted against the Pearson's Global Scale of English (10-90) and analyzed using Independent Sample T-tests. Similar analysis was conducted on a random sample of 400 test takers from China and 400 test takers from India. To answer the second research question, descriptive statistics were obtained for all the variables measured from the Practice Test participants, and then Exploratory Factor Analysis was used to examine the

underlying motivational factors. To answer the third research question, multiple regression analysis was performed to examine what factors significantly impact on the performance of Chinese and Indian test takers in the Practice Test. The survey participants' open-ended responses to their test-taking experiences and their scores were analyzed qualitatively and served as complementary data.

Results

This section comprises four parts. The first part outlines the differences between Chinese and Indian test takers' performance. The second part summarizes the survey findings for test takers' affective variables. The third part presents the results of the analyses conducted to investigate the relationship between test takers' test performance and their affective variables. The last part presents the results from the qualitative investigation of test takers' perception of their test-taking experiences and attitudes towards their scores.

Test performance

Table 1 shows the comparisons of Indian and Chinese test takers' score profiles for the Practice Test, including Overall scores, four Communicative Skill scores and six Enabling Skill scores. Table 2 shows the corresponding comparisons of Indian and Chinese test takers' score profiles for the Live Test.

Table 1

Score Comparison for the Practice Test

| | | Chinese Test Takers | | | | Indian Test Takers | | | |
|---------------|---------|---------------------|-----|-------|-------|--------------------|-----|-------|-------|
| | | Min | Max | Mean | SD | Min | Max | Mean | SD |
| Overall score | Overall | 13 | 63 | 37.64 | 11.34 | 10 | 66 | 41.74 | 13.11 |

| | | | | | | | | | |
|--------------------------------|----------------------|----|----|-------|-------|----|----|-------|-------|
| Communicative skills scores | Reading | 12 | 74 | 39.54 | 12.00 | 10 | 69 | 39.47 | 15.41 |
| | Listening | 10 | 59 | 36.62 | 12.98 | 10 | 68 | 42.63 | 14.14 |
| | Speaking | 10 | 59 | 35.56 | 14.26 | 10 | 68 | 46.21 | 12.94 |
| | Writing | 10 | 62 | 36.83 | 12.05 | 10 | 61 | 36.89 | 14.09 |
| Enabling Scores | Oral Fluency | 10 | 57 | 23.13 | 14.75 | 10 | 83 | 40.16 | 19.37 |
| | Pronunciation | 10 | 59 | 19.97 | 12.20 | 10 | 77 | 30.58 | 16.40 |
| | Grammar | 10 | 90 | 30.31 | 24.18 | 10 | 47 | 20.32 | 14.57 |
| | Spelling | 10 | 90 | 28.79 | 17.75 | 19 | 81 | 29.16 | 16.41 |
| | Vocabulary | 10 | 66 | 23.43 | 14.25 | 10 | 66 | 27.26 | 16.67 |
| | Written Discourse | 10 | 90 | 35.78 | 22.12 | 10 | 79 | 32.11 | 20.74 |

Table 2

Score Comparison for the Live Test

| | | Chinese Test Takers | | | | Indian Test Takers | | | |
|--------------------------------|-------------------|---------------------|-----|-------|-------|--------------------|-----|-------|-------|
| | | Min | Max | Mean | SD | Min | Max | Mean | SD |
| Overall score | Overall | 10 | 83 | 42.95 | 12.84 | 10 | 90 | 53.25 | 12.85 |
| Communicative skills scores | Reading | 10 | 88 | 37.25 | 14.48 | 10 | 90 | 45.49 | 14.21 |
| | Listening | 10 | 85 | 43.84 | 13.50 | 10 | 90 | 55.66 | 13.89 |
| | Speaking | 10 | 90 | 47.97 | 14.07 | 10 | 90 | 64.90 | 15.48 |
| | Writing | 10 | 87 | 38.10 | 14.94 | 10 | 90 | 46.75 | 15.65 |
| Enabling Scores | Oral Fluency | 10 | 90 | 35.78 | 18.61 | 10 | 90 | 60.37 | 17.87 |
| | Pronunciation | 10 | 90 | 39.50 | 21.61 | 10 | 90 | 59.46 | 20.43 |
| | Grammar | 10 | 90 | 34.01 | 21.70 | 10 | 90 | 36.96 | 22.19 |
| | Spelling | 18 | 90 | 33.64 | 18.39 | 18 | 90 | 36.23 | 19.52 |
| | Vocabulary | 10 | 90 | 38.63 | 18.97 | 10 | 90 | 48.25 | 19.33 |
| | Written Discourse | 10 | 90 | 43.98 | 22.45 | 10 | 90 | 46.08 | 22.48 |

As shown in Tables 1 and 2, the Chinese and Indian test takers displayed distinctive score differences on PTE Academic, with the Indian test takers generally outperforming the Chinese. These differences are clearly displayed in the scatter plot in Figure 1, which is a plot of the score profiles against the Pearson's Global Scale of English (GSE) using the Practice Test data, and Figure 2, which is a plot of the score profiles using the Live Test data.

The results indicate that Chinese and Indian test takers' overall scores in the Practice Test are closer than their individual sub-scores in some Communicative and Enabling Skills, especially in Listening, Speaking, Oral Fluency, Pronunciation and Grammar. There appear to be more differences from the Live Test data among Chinese and Indian test takers on the overall score and the four skill scores than those from the Practice Test. In addition, Chinese and Indian test takers' Grammar scores appeared to be closer in the Live Test than in the Practice Test, but there were more differences in their Vocabulary scores.

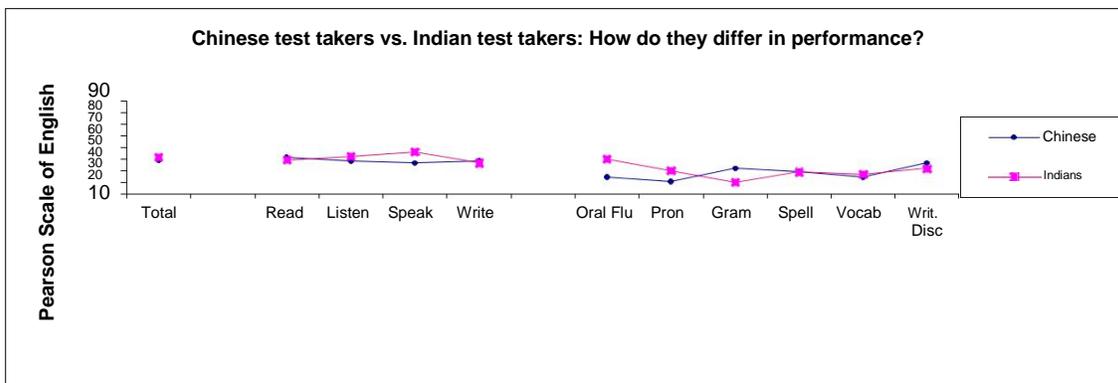


Figure 1. Practice Test Performance Comparison

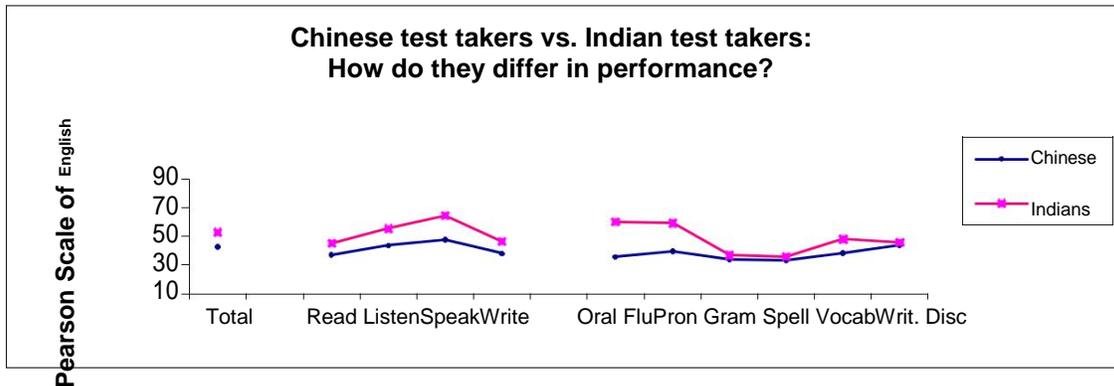


Figure 2. Live Test Performance Comparison

Table 3 shows the results from an Independent Samples T-test. The upper panel contains the results from the Practice Test data. The two groups showed significant score differences in Speaking, Oral Fluency, Pronunciation and Grammar, with Indian test takers scoring higher in the first three skills but lower in Grammar ($p < .05$). The mean score for Speaking is 46.21 for the Indian test takers and 35.56 for the Chinese. The mean score for Oral Fluency is 40.16 for the Indian test takers and 23.13 for the Chinese, and the mean score for Pronunciation is 30.58 for the Indians and 19.97 for the Chinese. On the other hand, the mean score for Grammar is 30.31 for the Chinese and 20.32 for the Indians.

The lower panel in Table 3 shows the results from the Live Test data. The two groups showed significant score differences in all the score profiles, except for the scores in Written Discourse. Indian test takers' mean overall score and mean scores in other skills, i.e. Reading, Listening, Speaking, Writing, Oral Fluency, Pronunciation, Grammar, Spelling and Vocabulary, were all significantly higher than those of the Chinese test takers ($p < .05$).

Table 3*Independent Samples T-Tests*

| | | F | t | df | Sig |
|---------------|---------------|-------|--------|-----|-----|
| Practice Test | Speaking | 0.76 | -2.89 | 134 | .00 |
| | Oral Fluency | 1.49 | -4.20 | 134 | .00 |
| | Pronunciation | 0.63 | -3.20 | 134 | .00 |
| | Grammar | 9.91 | 2.11 | 134 | .04 |
| Live Test | Overall | 0.54 | -11.85 | 879 | .00 |
| | Reading | 0.13 | -8.50 | 879 | .00 |
| | Listening | 1.54 | -12.74 | 879 | .00 |
| | Speaking | 13.90 | -16.86 | 879 | .00 |
| | Writing | 0.38 | -8.34 | 879 | .00 |
| | Oral Fluency | 1.19 | -19.96 | 879 | .00 |
| | Pronunciation | 0.42 | -14.07 | 879 | .00 |
| | Grammar | 1.54 | -1.99 | 879 | .05 |
| | Spelling | 2.48 | -2.02 | 879 | .04 |
| | Vocabulary | 0.01 | -7.42 | 879 | .00 |

Survey findings

The students' responses to the survey are summarized in Appendix A. The first 4 columns contain the results from the Chinese test takers. The next 4 columns contain those from the Indian test takers. The survey items were measured on a 5-point scale, with responses ranging from "strongly disagree" (1 point) to "strongly agree" (4 points). There was a fifth option "I have no opinion" (0 points). Variables that were designed to measure students' motivation to learn English were factor analyzed. Maximum Likelihood was used as the extraction method and two rotation methods were attempted: Oblimin with

Kaiser Normalization and the scree plot method. The analyses were performed on the whole dataset.

Table 4 presents a 6-factor solution with the factor loadings based on a rotated structure matrix. Eigenvalues, individual variance explained and accumulated variance explained are presented at the bottom of the table. The items with common factor loadings larger than .4 were used to determine the label for each factor. They are, from factor 1 to factor 6, *external influence*, *integrativeness*, *English as a compulsory course*, *instrumental motivation*, *effort* and *internal interests*. However, within this matrix, there are several items that had cross loadings. Factor correlation is presented in Table 5. As can be seen, these motivational factors are moderately correlated, which helps explain the cross loading of certain items. Items were grouped into factors based on two criteria: 1) interpretability, i.e., whether the factor loading makes theoretical sense; 2) statistical evidence, i.e., whether the factor loading is the highest for the factor assigned. The six factors accounted for 69.57% of the total variance. The amount of variance explained by these factors ranges from 32.61% for factor 1 *external influence* to 4.62% for factor 6 *internal interest*.

Table 4

Factor Loadings

| | Factor | | | | | |
|---|------------|-----|------|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| In general, I like my English teacher | .99 | .31 | .07 | .30 | .32 | .34 |
| In general, I like my English courses | .77 | .22 | -.07 | .26 | .41 | .61 |
| My English teacher speaks English very well | .71 | .34 | .28 | .28 | .06 | .26 |

| | | | | | | |
|--|------------|------------|------------|------------|------------|------|
| As a current Indian university student, it is my responsibility to learn English well | .48 | .33 | .42 | .37 | .33 | .21 |
| Nowadays, to develop good English skills is an important way of becoming involved in the world | .25 | .91 | .15 | .31 | .21 | .25 |
| Studying English is important because I will be able to communicate more easily with speakers of English | .37 | .72 | .13 | .61 | .32 | .24 |
| Learning English is important because English is a global communicative tool | .46 | .64 | .10 | .34 | .34 | .44 |
| I would like to know more native English speakers | .37 | .63 | .04 | .42 | .23 | .48 |
| My parents expect me to learn English well | .26 | .51 | .14 | .42 | .23 | .10 |
| I would like to speak English well so that I can travel abroad | .34 | .43 | .13 | .42 | .19 | .05 |
| I have to learn English because English is a compulsory course | .11 | .09 | .91 | .17 | -.08 | -.07 |
| I learn English because I need to pass the English course | .06 | .12 | .79 | .17 | -.08 | -.13 |
| I study hard in English because I need a good mark | .26 | .23 | .62 | .57 | -.01 | -.00 |
| I read English books only if I have to | -.01 | .08 | .52 | .23 | -.37 | -.40 |
| Everybody else around me is spending a lot of time learning English, so I have to work hard too | .18 | .13 | .47 | .27 | .20 | -.08 |
| I learn English because it can help me get a good job | .30 | .38 | .31 | .88 | .21 | -.00 |
| I learn English because it can help me get a promotion | .29 | .42 | .13 | .84 | .35 | .17 |
| I learn English because I want to do a graduate degree in an English-speaking country in the future | .34 | .41 | .27 | .55 | .31 | .16 |
| I usually spend more time learning English than my classmates | .22 | .30 | .09 | .37 | .81 | .16 |
| I usually work hard to learn English | .50 | .51 | .01 | .32 | .68 | .54 |
| I enjoy watching English films | .42 | .50 | -.08 | .31 | .55 | .37 |

| | | | | | | |
|---|-------|-------|-------|-------|-------|------------|
| I think learning English is interesting | .43 | .62 | .02 | .29 | .25 | .81 |
| I enjoy learning English | .56 | .36 | -.13 | .37 | .36 | .67 |
| I often read English newspapers | .43 | .18 | .05 | .10 | .36 | .55 |
| Eigenvalue | 7.82 | 3.29 | 1.83 | 1.38 | 1.26 | 1.11 |
| Variance explained (%) | 32.61 | 13.72 | 7.63 | 5.74 | 5.25 | 4.62 |
| Accumulated variance explained (%) | 32.61 | 46.34 | 53.96 | 59.71 | 64.95 | 69.57 |

Table 5

Factor Correlation Matrix

| Factor | 1 | 2 | 3 | 4 | 5 | 6 |
|--------|------|------|------|------|------|------|
| 1 | 1.00 | .35 | .16 | .35 | .30 | .39 |
| 2 | | 1.00 | .15 | .46 | .24 | .27 |
| 3 | | | 1.00 | .28 | -.04 | -.15 |
| 4 | | | | 1.00 | .26 | .07 |
| 5 | | | | | 1.00 | .29 |
| 6 | | | | | | 1.00 |

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.

Affective factors and test performance

The relationship between affective factors and PTE Academic test performance was examined in two steps. First, eight items that measured students' anxiety levels were regressed on the 11 PTE Academic scores for the Chinese group and Indian group separately. Secondly, factor scores from Exploratory Factor Analysis (EFA) were generated, and these motivational factors, together with the factor scores for anxiety and linguistic confidence, were used as independent variables, with the 11 PTE Academic scores as the dependent variables. The factor scores for anxiety and linguistic confidence were the sum of all scores that measured anxiety and linguistic confidence. The analyses were carried out separately for the Chinese group and the Indian group.

Two survey items, designed to measure test takers' comfort levels when taking a computer-based test, were recoded to be consistent with the coding of other anxiety items. These were: 1) "I am comfortable taking the test using a computer"; 2) "I am comfortable doing the speaking test using a computer". The results show that none of the anxiety variables were significant in predicting any of the scores for the Indian test takers. For the Chinese participants, on the other hand, *classroom anxiety* was a significant predictor for Overall ($\beta = -.18, p < .05$), Reading ($\beta = -.26, p < .05$), Writing ($\beta = -.21, p < .05$), Pronunciation ($\beta = -.35, p < .05$) and Spelling scores ($\beta = -.27, p < .05$). Moreover, *speaking anxiety* was a significant negative predictor for Oral Fluency ($\beta = -.30, p < .05$) and Speaking scores ($\beta = -.22, p < .05$).

The results suggest that an increase of one SD in classroom anxiety for Chinese test takers will lead to an overall score difference of $-.18 \times \text{SD}$ ($-.18 \times 11.34$). A similar interpretation can be made for speaking anxiety, e.g., an increase of one SD in speaking anxiety for Chinese test takers will lead to an Oral Fluency score difference of $-.30 \times \text{SD}$ ($-.30 \times 14.75$). This seems to suggest that some traditionally perceived characteristics of Chinese learners (e.g., lack of communication in the classroom and teacher-centred instruction) and a very widespread teaching methodology (e.g., giving priority to vocabulary and grammar instruction) may cause classroom anxiety and, to some extent, lead to relatively low scores in some sub-skills. In the presence of classroom anxiety and speaking anxiety, other anxiety variables, including the anxiety of taking a computer-based test, listening to materials only once and skill-specific anxieties, were not significant predictors for the Chinese test takers (see Table 6 for excluded variables).

Table 6*Regression Coefficients of Anxiety Variables in PTE Academic Scores for Chinese Test**Takers*

| | | Unstandardized | | Standardized | | T | Sig. |
|----------------------|--------------------------|----------------|--------------|--------------|----------------|------------|------|
| | | Coefficients | | Coefficients | | | |
| | | B | Std. Error | Beta | | | |
| Classroom Anxiety | Overall | -2.10 | 1.43 | -.18 | -2.10 | .04 | |
| | Reading | -4.88 | 1.58 | -.26 | -3.10 | .00 | |
| | Writing | -3.96 | 1.99 | -.21 | -2.00 | .05 | |
| | Pronunciation | -6.86 | 1.92 | -.35 | -3.57 | .00 | |
| | Spelling | -7.71 | 2.82 | -.27 | -2.74 | .01 | |
| Speaking Anxiety | Oral Fluency Speaking | -6.15 -4.94 | 2.08 2.28 | -.30 -.22 | -2.95 -2.17 | .00 .03 | |

Excluded Variables

I got nervous because I could only hear the listening sections once.

I got nervous on the reading section of the test.

This computer-based Practice Test made me more nervous than a paper-based test.

I am comfortable taking the test using a computer.

I am comfortable doing the speaking test using a computer.

I often get anxious when speaking English.

I get very nervous when I have to write in English.

Table 7 shows the results from the factors that significantly predicted PTE Academic performance. For the Chinese test takers, anxiety in English classrooms was a significant negative predictor for the Overall and Speaking scores ($\beta = -.28, p < .05$; $\beta = -.36, p < .05$), and effort made in learning English was a significant positive predictor for the Listening scores. For the Indian test takers, *effort* in learning English was, however, a significant negative predictor of students' scores in Reading ($\beta = -.69, p < .05$), but *internal interest* in learning English had a positive association ($\beta = .49, p < .05$). In predicting Indian test takers' Writing scores, *effort* was negatively associated with the

Writing scores ($\beta = -.83, p < .05$) and *linguistic confidence* was a significant positive predictor ($\beta = .47, p < .05$). The results suggest that a one SD increase in classroom anxiety for Chinese test takers will lead to an Overall score difference of $-.28 \times SD$ ($-.28 \times 11.34$). Similarly, a one SD increase in effort will lead to a Speaking score difference of $.28 \times SD$ ($.28 \times 14.26$). The Indian test takers' scores in Reading and Writing can be interpreted in a similar way.

Table 7

Significant Factors Predicting PTE Academic Test Performance

| | Chinese Test Takers | Indian Test Takers |
|---------------|--------------------------------------|---|
| Overall score | Classroom anxiety ($\beta = -.28$) | n/a |
| Listening | Effort ($\beta = .28$) | n/a |
| Speaking | Classroom anxiety ($\beta = -.36$) | n/a |
| Reading | n/a | Effort ($\beta = -.69$); Internal interest ($\beta = .49$) |
| Writing | n/a | Effort ($\beta = -.83$); Linguistic confidence ($\beta = .47$) |

Qualitative investigation of test takers' perception of the test

This section provides further evidence for the differences identified between the Chinese and Indian test takers. Although both groups (55% agree and 9% strongly agree) suggested they had a good testing experience, the Indian and Chinese test takers in this study commented on their experiences from different perspectives. Most Indian participants tended to emphasize the diagnostic function of the test, while most Chinese participants expressed their excitement at the computerized test and innovative oral tasks.

For example:

It is really very nice. I came to know how much I know and where I'm lacking. Now I will work more on those things in which I'm lacking (Indian test taker # 013)

It gives me a confidence that I can do it. And it also measures my preparation (Indian test taker #028)

Helpful in training listening skills (Indian test taker #121)

It is a very useful test for knowing about my English learning (Indian test taker #230)

Compared with the traditional test, this test gives more emphasis on the use of English (Chinese test taker # 290)

I felt less stressful and anxious in completing oral tasks on this computer-based test, comparing to my previous testing experiences in oral tasks (# Chinese test taker #570)

Oral tasks in this computer-based test was quite straightforward, I can organize my words freely and with less pressure (Chinese test taker #706)

These differences indicate the different attitudes towards the English test held by Chinese and Indian test takers. In this study, Indian test takers were more likely to treat the English test as an opportunity to measure and identify their own strengths and weaknesses of their English, while Chinese test takers seemed to take this as a chance to experience a test with a new format and content. Interestingly, in line with the findings of the quantitative analysis, anxiety seems to be perceived as the biggest barrier to Chinese candidates speaking English. Their different attitudes towards the test suggested that the Indian test takers tended to take an English test as part of their learning experience, in other words, they were looking for areas in which their language needed further development, while Chinese test takers were unlikely to appreciate the diagnostic function of the test and how the test could inform their further or future English learning. They seemed to be more worried about the final results.

When commenting on the negative aspects of the test, some Indian test takers complained about its format, suggesting that they believed it might not reflect their language proficiency properly, while Chinese test takers tended to highlight anxieties caused by their unfamiliarity with the computerized test, which might have a negative impact on their scores. For example:

I feel the topics in listening and reading passage are too academic, which contains too many technical terms. I would like to read and hear more daily topics (Chinese test taker #624)

The listening recordings have a variety of accents and I am not used to it. (Chinese test taker #698)

I think the time length of writing tasks is too short. I cannot type words in the computer while I was organizing my thoughts. For the test takers who were unable to type English words fast enough, they might feel stressful, and then they were likely to write a good passage. (Chinese test taker # 761)

To summarize, Indian and Chinese test takers in this study seemed to hold different attitudes towards the test, which can probably be explained by their respective expectations of an English test. Moreover, anxiety during speaking tasks seemed to be perceived as one significant factor, which might influence Chinese candidates' performance in the speaking test.

Discussion

This study took a close look at the English learning and testing behaviors of two groups of Asian students, namely, Chinese and Indian students. To be specific, this study examined the association between the affective variables investigated and test performance on PTE Academic, comparing test takers from China, the country from

which comes the highest number of ESL students, and those from India, the country from which comes the highest number of EFL students. The results of this study demonstrate that Chinese and Indian test takers had score differences for their PTE Academic performance, with Indian students scoring higher in Speaking and Listening, as well as some of the Enabling skills, such as Oral Fluency and Pronunciation, but with less difference in reading and writing skills. This can partly be explained by the fact that English is a foreign language in China, but an institutionalized additional language in India.

Researchers have found Asian students present different learning behaviors from Western students in terms of classroom participation or discussion (Jones, 1999) and learner or learning autonomy (Littlewood, 1999). Asian learners seem to be less aware of the cultural difference between Western and Asian education systems. In general, Asians are pictured as silent note-takers, reluctant to answer questions and participate in classroom discussions, and there is a lack of communication between teachers and students. Jones (1999) maintained that Asian students are not inclined to challenge teacher's authority; rather they are considered to be a group of students who are quiet and respectful of knowledge owing to their cultural backgrounds and previous learning experiences.

Oxford (1999) noted that "behaviors vary across cultures, and what might seem like anxious behavior in one culture might be normal behavior in another culture" (p. 64). Chinese and Indian test takers from this study demonstrated differences in the affective factors examined, especially in anxiety-related variables, where classroom anxiety and speaking anxiety were identified as two significant predictors for the Chinese. This result is in line with Zheng's (2010) investigation into the association between anxiety and

Chinese test takers' College English test performance, where she found anxiety was the best predictor of Chinese university students' linguistic confidence and also the best predictor of language achievement. Zheng's (2010) study also indicated that her participants expressed strong anxiety toward oral English in the classroom. None of the anxiety-related variables, however, was a significant predictor for the Indian test takers' performance.

These results further confirmed earlier findings that students from different ethnic groups perceive their target language(s) and purpose of acquiring a foreign language differently (Dewaele, 2005), and would therefore be influenced by different affective factors. Rueda and Cheng (2005) also pointed out that test takers' idiosyncrasies, such as motivational constructs, are influenced by cultural factors. Chamorrow –Premuzic and Furnham's (2003) study provides evidence that, among other variables investigated, personality traits can predict academic performance to a certain extent. Furthermore, second language acquisition literature suggests that the development of second/foreign language proficiency may differ in important ways in relation to differences in exposure to the target language and in second language instruction (Kunnan, 1995).

Chinese and Indian test takers in this study also differed in impact that effort had on their performance. Effort is a significant positive predictor for the Chinese. For the Indian test takers, however, effort is a significant negative predictor, while internal interest and linguistic confidence can positively predict their performance in the PTE Academic Practice Test. These observed differences can probably be accounted for by the different social influences in the two countries. In China, the long-term influence of Confucianism and the civil service examination have helped to shape teaching and learning. Ma (2005) examined motivation and attribution based on a nationwide study in China. She incorporated the effort element from attribution theory with motivation, and

she found that learning effort among Chinese English learners directly affected foreign language achievement, whereas motivation only exerted its influence via effort. Her argument was grounded on a Confucian doctrine in China, which states there is little one can achieve by simply thinking about doing it without concrete actions and efforts. Chinese learners, the majority of whom are part of the Confucian-heritage culture (CHC) group, possess orientations in their cognitive learning which are remarkably different from the Western ones. For example, rote learning may have been negatively documented in Western settings, but may be effective or meaningful learning for Chinese students. Work ethics or effort expenditures are more emphasized among CHC learners than among Western learners (Watkins & Biggs, 1996). Chinese learners either implicitly or explicitly contend that a weak-willed person who makes no effort is doomed to failure (On, 1996).

However, it has also been noticed that along with the publication of the new national teaching curriculum and the availability of modern educational hardware, new educational concepts (e.g., communicative language teaching) and new teacher-student relationships have started to influence instructional practices in the classrooms in China (Hu, 2005). Researchers (e.g., Hu, 2003; Nunan, 2003) have indicated that teachers from more developed areas have begun to implement English-medium instruction in schools and placed more emphasis on the communicative function of language. Although the traditional teaching methods and beliefs can still be observed in the teachers' classroom teaching, it is evident that some germs of official promoted methodology and teachers' attempts at implementing the new methods can be observed in these English classes (Zheng & Adamson, 2003). Some economically developed regions have started to use video, multimedia systems, and Internet to teach English and facilitate classroom

discussion. These measures will, however, take years or decades to have a positive impact on teaching and learning English as a foreign language in the society as a whole (Jin & Martin, 2002).

In India, however, although officially the medium of instruction in schools is the regional language (Tully, 1997) and, historically speaking, classroom teaching methodologies, such as grammar translation, have been fully implemented by Indian teachers (Patel, 1958), English-medium schools have always been supported by learners and their parents. Tully (1997) argued that many Indian people in the younger generation are being deprived of familiarity with their cultural heritage and community language, such as Hindi. Similarly, Gupta (2004) claimed that the liberalization of the Indian economy has called for more fluent English speakers to fill the gaps in the growing English-speaking local job markets; and with the emergence of a new generation who travel, work and study in an English-speaking environment, communicative language teaching methods have gradually become more acceptable to both teachers and learners.

Pedagogical Implications and Conclusion

The implications of the study point to the need for a better understanding of test takers in the context of their social and individual characteristics. The findings provide further empirical evidence that knowing the test takers' background, characteristics and test performance can lead to a better interpretation of test scores, and thus have potentially positive backwash effects on classroom teaching and learning. By comparing Indian and Chinese test takers' performances in PTE Academic and their affective anxiety variables and motivation towards learning English, this study argues that some similarities in overall scores do not necessarily mean that these test takers need similar courses or

classroom activities. To be specific, in view of the score differences displayed by the Chinese and Indian test takers, this study suggests that curriculum designers and textbook writers need to be fully aware of the sociolinguistic differences displayed by EFL and ESL learners, and to develop accordingly divergent syllabus materials for specific contexts.

Taking into account the different predictors examined in the two groups, language teachers need to design and support more communicative tasks for students in China, e.g., they need to spend more time in the classroom organizing pair or group work with Chinese students, and teachers in China also need to be aware that reducing classroom anxiety is a crucial factor in helping Chinese learners improve their oral English. Moreover, it is important to maintain Chinese EFL learners' level of effort and motivation, even outside the classroom. This finding echoes some recent development of the national English teaching curriculum in China, where motivation, interest and confidence have been specifically highlighted as the main learning and teaching objectives (Wang & Lam, 2009). Moreover, some empirical studies have also demonstrated a positive relationship between Chinese EFL learners' increased level of motivation/interest and their progress in developing writing skills (Tang, Zhang, & Dong, 2009) and vocabulary knowledge (Gu, 2003). For example, Tang et al. (2009) found that the genre-based approach in writing classes forced Chinese EFL learners to "stand out" and "be proud of fighting for the whole group" (2009, p. 106).

For Indian students, however, it would be more beneficial for language teachers to focus on promoting an internal interest in learning by analyzing their areas of interest and selecting learning materials focusing on specific topics. Gupta (2004) offered further evidence as to why the content of teaching materials for Indian students needs to be

specifically designed. He argued that there are the two main reasons why the Communicative Language Teaching (CLT) syllabus failed to work at the university level in India. One is the ignorance of people's own views of who they are and what they want, and the other is the assumption that "communicative language teaching is the whole and complete solution" (2004, p. 266). In addition, as Murali (2009) explained, because Indian ESL learners and their parents are motivated to learn English for professional purposes (e.g., technical English), the university has "to design the syllabus and adopt methods to test their English language proficiency" to meet learners' needs. Teachers can also guide their students' learning effort by addressing their weaknesses in English development as shown by the PTE Academic score profile. More attention can be given to help improve Indian test takers' language skills in certain areas, for example, grammar, which is the Enabling Skill in which Indian test takers obtain their lowest scores.

Furthermore, curricular developments and textbook writing for different ESL/EFL settings deserve more attention. As researchers (e.g., Breen, 1987; Clarke, 1991; Nation, 2000) have pointed out, curricula and textbooks should reflect or align with "learners' needs into necessities (what the learner has to know to function effectively), lacks (what the learner knows and does not know already), and wants (what the learners think they need)" (Nation, 2000, p. 4). From EFL learners' perspective, previous studies (e.g., Liu, Chang, Yang, & Sun, 2011) demonstrated "discrepancies between the students' perceptions of needs and the actual courses they took" and highlighted the importance of alignment between school language curricula and EFL learners' "complex, multiple, and conflicting" needs (2011, p. 271). The findings of the current study suggest that teaching curricula and textbooks for Chinese students in language programs need to reflect their needs by developing more specific teaching materials and activities in the classrooms,

e.g., priority should be given to offering support in developing their communicative skills, and less time spent on, or fewer tasks involving, grammar instruction and vocabulary explanations.

Regarding the curricula or teaching materials for Indian ESL learners, internal motivation and linguistic confidence are highlighted as the two main affecting factors. This finding is in line with the findings from previous studies. For example, Moghaddas (2011) investigated the effect of students watching a video as a pre-writing activity for Indian ESL learners. He found that background schemata and other linguistic input from video can raise students' linguistic confidence. Nickerson (2008) pointed out that given the increasing demands of English-speaking business people in India, curricula and textbooks for Indian ESL learners need to be tailored to meet their needs from three perspectives: lexical discourse, communicative tasks and cultural content.

At least two limitations should be noted at the end of this paper. First, the numbers of participants in the Practice Test and survey were relatively small, especially the numbers of the Indian test takers. Second, even though the PTE Academic Practice Test has exactly the same test composition and item banking system, it is still different from the PTE Academic Live Test situation in terms of the stakes involved and test takers' motivation to do well in the test; therefore, the conclusions need to be interpreted with caution. To understand test takers better, further studies need to be carried out along the lines of investigating test takers' backgrounds, affective factors and test performances. Moreover, curriculum designers and language teachers should take these characteristics into account when understanding ESL/EFL students' needs, interpreting their test results and designing teaching activities. More studies also need to examine the effects of proper alignment between ESL/EFL curriculum development, language teaching and testing.

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Appendix A: Descriptive Statistics of the Survey Questions

| | | Chinese Test Takers | | | | Indian Test Takers | | | |
|--|---|---------------------|-------|----------|----------|--------------------|-------|----------|----------|
| | | Mean | SD | Skewness | Kurtosis | Mean | SD | Skewness | Kurtosis |
| Motivational Variables | I read English books only if I have to | 2.21 | 0.87 | 0.52 | -0.22 | 2.58 | 0.93 | -0.16 | -0.75 |
| | I often read English newspapers | 2.44 | 0.66 | -0.03 | -0.19 | 3.27 | 0.70 | -0.43 | -0.86 |
| | In general, I like my English courses | 2.84 | 0.66 | -0.07 | -0.16 | 3.44 | 0.50 | 0.24 | -2.02 |
| | In general, I like my English teacher | 2.90 | 0.68 | -0.54 | 0.82 | 3.52 | 0.58 | -0.74 | -0.41 |
| | I enjoy learning English | 3.05 | 0.69 | -0.70 | 1.22 | 3.56 | 0.50 | -0.23 | -2.02 |
| | I learn English because it can help me get a good job | 2.98 | 0.67 | 0.02 | -0.70 | 3.15 | 0.85 | -0.71 | -0.22 |
| | I learn English because it can help me get a promotion | 3.16 | 0.67 | -0.42 | 0.20 | 3.14 | 0.85 | -0.68 | -0.24 |
| | I study hard in English because I need a good mark | 2.88 | 0.73 | -0.16 | -0.33 | 3.13 | 0.74 | -0.22 | -1.12 |
| | I would like to speak English well so that I can travel abroad | 3.12 | 0.74 | -0.38 | -0.45 | 3.37 | 0.76 | -0.75 | -0.86 |
| | I learn English because I want to do a graduate degree in an English-speaking country in the future | 2.57 | 0.81 | 0.55 | -0.65 | 3.30 | 0.74 | -0.55 | -0.98 |
| | I have to learn English because English is a compulsory course | 2.19 | 0.77 | 0.42 | 0.05 | 2.71 | 1.01 | 0.14 | -1.33 |
| | I learn English because I need to pass the English course | 2.34 | 0.78 | 0.04 | -0.39 | 2.65 | 1.03 | 0.12 | -1.27 |
| | Many of my friends speak English better than I do | 2.94 | 0.74 | -0.42 | 0.10 | 2.63 | 0.77 | 0.15 | -0.43 |
| | Everybody else around me is spending a lot of time learning English, so I have to work hard too | 2.48 | 0.82 | 0.13 | -0.47 | 2.84 | 0.77 | 0.28 | -1.23 |
| | My parents expect me to learn English well | 3.23 | 0.70 | -0.95 | 1.69 | 3.32 | 0.56 | -0.05 | -0.59 |
| | Nowadays, to develop good English skills is an important way of becoming involved in the world | 3.59 | 0.50 | -0.36 | -1.91 | 3.66 | 0.48 | -0.70 | -1.59 |
| Studying English is important because I will be able to communicate more easily with speakers of English | 3.35 | 0.59 | -0.25 | -0.66 | 3.61 | 0.58 | -1.17 | 0.47 | |

| | | | | | | | | | |
|---------------------------------|---|------|------|-------|-------|------|------|-------|-------|
| | I think learning English is interesting | 3.14 | 0.64 | -0.42 | 0.60 | 3.65 | 0.48 | -0.66 | -1.64 |
| | I would like to know more native English speakers | 3.35 | 0.67 | -0.77 | 0.48 | 3.46 | 0.50 | 0.18 | -2.06 |
| | I usually work hard to learn English | 3.08 | 0.63 | -0.34 | 0.70 | 3.37 | 0.65 | -0.53 | -0.60 |
| | I usually spend more time learning English than my classmates | 2.79 | 0.65 | -0.55 | 0.82 | 2.88 | 0.88 | -0.21 | -0.84 |
| | As a current Indian university student, it is my responsibility to learn English well | 2.82 | 0.68 | -0.70 | 1.01 | 3.34 | 0.66 | -0.49 | -0.64 |
| Linguistic Confidence Variables | I enjoy watching English films | 3.36 | 0.61 | -0.67 | 1.20 | 3.46 | 0.59 | -0.52 | -0.63 |
| | Learning English is important because English is a global communicative tool | 3.43 | 0.50 | 0.28 | -1.97 | 3.67 | 0.47 | -0.77 | -1.48 |
| | I am confident about my English listening ability | 2.24 | 0.74 | 0.10 | -0.29 | 3.17 | 0.57 | 0.02 | -0.03 |
| | I am confident about my English speaking ability | 2.21 | 0.72 | 0.38 | 0.20 | 3.17 | 0.71 | -0.26 | -0.93 |
| | I am confident about my English reading ability | 2.69 | 0.68 | -0.18 | -0.01 | 3.23 | 0.80 | -1.01 | 0.94 |
| | I am confident about my English writing ability | 2.43 | 0.71 | -0.05 | -0.22 | 3.09 | 0.74 | -0.87 | 1.39 |
| | I got nervous because I could only hear the listening section once | 2.99 | 0.57 | -0.37 | 1.46 | 2.50 | 0.72 | -0.37 | -0.15 |
| | I got nervous on the reading section of the test | 2.30 | 0.48 | 0.60 | -0.87 | 2.24 | 0.77 | 0.18 | -0.22 |
| Anxiety Variables | This computer-based Practice Test made me more nervous than a paper-based test | 3.04 | 0.70 | -0.26 | -0.28 | 2.43 | 0.83 | -0.03 | -0.49 |
| | I am comfortable taking the test using a computer. | 3.00 | 0.73 | -0.18 | -0.55 | 3.09 | 0.71 | -0.54 | 0.56 |
| | I am comfortable doing the speaking test using a computer | 2.69 | 0.75 | 0.08 | -0.47 | 3.09 | 0.76 | -0.47 | -0.10 |
| | I often get anxious when speaking English | 2.74 | 0.70 | 0.01 | -0.30 | 2.64 | 0.78 | 0.75 | -0.93 |
| | I usually feel anxious in my English class | 2.19 | 0.62 | 0.43 | 0.71 | 2.46 | 0.81 | 0.54 | -0.26 |
| | I get very nervous when I have to write in English | 2.27 | 0.63 | 0.26 | 0.21 | 1.89 | 0.67 | 1.04 | 2.87 |