

The Predictive Validity of IELTS Amongst a Group of MA Syrian Students

Shadi Daher*

(Received 29 / 10 / 2013. Accepted 23 / 1 / 2014)

□ ABSTRACT □

This study is an attempt to evaluate the predictive validity of the IELTS English language proficiency test from a student's perspective. It seeks to shed light on the value of this test as an indicator of the academic skills required for overseas students to function in a Western academic context. A group of Syrian MA students studying in British universities were involved in the study. Questionnaires and interviews were the primary research methods used to conduct this research. The results indicate that MA Syrian students involved in the study perceive their IELTS score- and this test in general- as a generally poor predictor for both their academic performance and the problems that they have in connection with the study skills felt necessary for academia. Furthermore, in terms of the difficulties regarding study skills, the students emphasise the need for these skills to be at an advanced level and to extend to critical reading and writing.

Key words: IELTS, predictive validity, study skills, MA Syrian students.

*Academic Assistant, English Language Department, Higher Institute for Languages, Tishreen University, Lattkia, Syria.

القيمة التنبؤية لامتحان IELTS من وجهة نظر مجموعة من طلبة الماجستير السوريين

شادي ضاهر*

تاريخ الإيداع 29 / 10 / 2013. قبل للنشر في 23 / 1 / 2014

□ ملخص □

تحاول هذه الدراسة تقييم القيمة التنبؤية لامتحان المقدرة اللغوية IELTS من وجهة نظر الطالب حيث تسعى لإلقاء الضوء على قيمة هذا الامتحان كمؤشر للمهارات الأكاديمية التي يحتاجها الطلاب الأجانب ليعملوا في بيئة أكاديمية غربية. يركز البحث على مجموعة من طلبة الماجستير السوريين في جامعات بريطانية. استخدمت الاستبيانات و المقابلات كطرائق للبحث. تشير النتائج إلى أن الطلاب السوريين المشمولين في الدراسة يرون هذا الامتحان عامة أنه ذو دلالة منخفضة في إمكانيته التنبؤ بأدائهم الأكاديمي و مشاكلهم المتعلقة بالمهارات الدراسية المطلوبة أكاديمياً، كما يؤكد هؤلاء الطلاب على الحاجة لتكون هذه المهارات بمستوى أعلى و لتشمل بشكل رئيسي القراءة و الكتابة الناقدة.

الكلمات المفتاحية: IELTS، القيمة التنبؤية، المهارات الدراسية، طلبة الماجستير السوريين.

* قائم بالأعمال - قسم اللغة الانكليزية - المعهد العالي للغات - جامعة تشرين - اللاذقية - سورية.

1- Introduction

The International English Language Testing System (IELTS) is a criterion referenced English language test which is used to assess the English language proficiency of international students whose native language is not English and who wish to study abroad. It continues to be the most widely taken test by overseas students coming to study in British universities and it still has the most preferential status with tutors and selectors (Macrae, 1997). The test consists of four key parts: reading, speaking, listening and writing. An overall IELTS score of band 6.0 indicates that the student is a competent user in English, whilst an overall score of band 6.5 is usually accepted as a good score.

Whilst the system of IELTS has been used as a valid authentication to identify and verify students level of English, students with an IELTS band of 6.0 are supposed to be able to use English competently. However, the experience of many students and lecturers suggests that this may not be the case, despite the students having achieved the required IELTS band of 6.0. A similar issue has been raised by Bayliss & Ingram: "Although the score a student achieves in an IELTS test is meant to indicate whether he/she has a sufficient level of English proficiency to cope with the linguistic demands of the tertiary studies, it does not imply that they will succeed academically or that they will not struggle linguistically

(Bayliss & Ingram 2006:1). Thus, trying to answer the question of to what extent IELTS predicts the ability of overseas students to cope with the academic demands of their coursework becomes important to establish its predictive validity.

1-1 Significance of the Study

All too often, the predictive validity of IELTS has been investigated in association with the grade point average (GPA), in statistical terms. Most studies tackling the issue have based their findings on numerical results, obtained through statistical operations. Usually, the data used is obtained from students in both their English language proficiency test and their grades in their academic work for their first year. The motive for such studies is the need to establish clear cut criteria in numerical terms for the minimum language proficiency level thought to be sufficient for international students to cope with the academic work. In contrast to this, my study aims to find out whether IELTS can be of any direct help in enabling Syrian students to predict their own needs within their departments.

1-2 Objectives of the Study

The main objective of the study, hence, is to explore the extent to which IELTS can be of a predictive value for test takers themselves. The study, therefore, seeks answers for the following question:

- Do MA students perceive their IELTS score to be of predictive validity for their academic skills and performance?

2- Literature Review

2-1 Predictive Validity

It is well established in the field of testing that in order to interpret the scores of a certain test as indicators of certain abilities, the scores should be both valid and reliable. These two qualities are essential to the interpretation and use of measures, and "they are primary qualities to be considered in developing and using tests" (Bachman 1990:24).

In the light of the previous claim, defining validity is a major concern in language testing literature. In Messick's terms, "Validity is an integrated evaluative judgement of the extent to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores and other modes of

assessment" (Messick 1988:5). This appropriateness of inferences based on the test scores seems to lie at the heart of validity in testing, and is referred to in the work of a number of researchers (Amstasia 1986, Bachman 1990, McNamara 2000, Weir 2005). It is widely accepted that validity as a concept in language testing is a unitary, though multifaceted one. The comprehensive view of validity as suggested by both Bachman(1990) and Messick (1995) integrates the following types of validity: content, criteria, concurrent, predictive, construct, face, and consequential validity. This can be broadly classified into the following categories: construct validity; internal validity including face and content validity; external validity including concurrent and predictive validity (Weir 2005: 11-17).

Accordingly, predictive validity is classified as one type of external validity that should be taken into consideration when seeking a valid test (Weir, 2005). It is built on the same type of evidence used to establish criterion validity. While this aims to demonstrate the relation between the test score and some of the criteria believed to be indicators of the ability tested, predictive validity attempts to make use of this criterion relatedness based evidence to determine how the test scores predict some future behaviour (Bachman 1990: 290). Predictive validity in language testing involves the comparison of the test scores with some other measures (future behaviour) of the same candidate taken at a later stage of the time than the test first undertaken (Alderson and *et al* 1995). These other measures could be the test-takers themselves, through the candidate's self-assessment of the ability tested, or ratings by their teachers, or other informants, or scores from other tests- not necessarily language, it could be degree results, for instance.

Within this perspective, methodologies for establishing predictive validity evidence make use of a range of tools also used in obtaining evidence for the different facets of validity (Weir, 2005). The most prominent of these is statistical analysis, which seeks to investigate the existence of statistical correlation between the test scores and its interpretation or use in predicting future behaviour. This can be seen, for example, in the research of Milanovic and *et al* (1990), Cotton and Conrow (1998), Kerjestin and Nery (2000), Feast (2002), Bayliss and Ingaram(2006). Other methods of ascertaining predictive validity are through questionnaires and interviews with either the experts in the field or the test takers themselves. These two methods seem to be much more informative in nature, and this can help in achieving a better understanding as well as formulating and reformulating hypotheses relating to the factors involved in the future behaviour sample and their interrelationships.

2-2 Predictive Validity Studies of IELTS

The predictive validity of IELTS as an indicator of academic success has been extensively investigated in annual reports produced by the research body of IELTS-Australia, in addition to other independent studies. Most of these studies (Kerstjens and Nery 2000, Feast 2002) found a positive, albeit weak correlation between IELTS scores and the student's later achievement at an academic level. These studies claim that there is a link between academic success and language proficiency on the one hand, but at the same time, they accept that IELTS remains a good predictor of the latter.

Hill, Storch and Lynch (1999) assert that nobody would argue that English language proficiency for overseas students has no role to play in academic achievement in British universities. Cicarelli (2001) reports that a number of predictive studies have been carried out, and have reached the conclusion that language proficiency is a critical factor in academic success, and that IELTS as a test is a good predictor of a student's ability to cope with academic English . Many of these studies have been conducted in the last two

decades, with the aim of investigating whether language proficiency has any major role to play in academic performance. In order to achieve this, studies have tried to use certain statistical procedures to check on whether there is a correlation between the IELTS test scores on the one hand and the GPA (General Point Average) of the student's academic courses on the other. Varied results were obtained in the research: Griper and Davies (1988), Elder (1993), Cotton and Conrow (1998), Kerstjens and Nery (2000), Feast (2002), Humphrey and *et al* (2012) have found a weak positive association between IELTS and GPA. Others, like Graham (1987), Gibson and Rusek (1992), Rusek (1992) have found no statically significant relationship between IELTS and Academic performance. Dooley (1999) reported her results to be inconclusive and that no evidence was found to support the notion that students who did not meet the entry criteria of their institutions were destined to fail; on the contrary most of the failures were students who entered the university with high IELTS scores. However, many criticisms have been highlighted against such kinds of studies, both at the level of design and interpretation. Graham (1987) discusses a number of points relating to what he considers as being the shortcomings/problems in these studies- many of these concerns are shared with other researchers in the field, like Light and Mossop (1987); Bayliss and Raymond (2004). One important concern is that GPA is not always a valid indicator of academic performance. Another one is that it is difficult in the mere use of statistical procedures without a theoretical framework to sustain any kind of interpretations claimed.

3- Methodology

The present study was conducted using a mixed methodology of research including both qualitative and quantitative methods for data collection and analysis. This is in line with the growing tendency in the field which challenges the traditional dichotomy between quantitative and qualitative research methods. It seems that the boundaries between qualitative and quantitative are increasingly blurred and that researchers often end up incorporating methods from two camps in order to answer their research questions. Pring (2002) emphasises that there is no such kind of distinction between these two research paradigms and that no distinction should exist. Moreover, the research nature is frequently described in terms of "fixed design strategy" and "flexible design strategy" (Robson 2002:5). While the first of these adopts one single method when conducted, the other can include collecting both types of quantitative and qualitative data. Thus, this research design is flexible. I made use of a combination of research methods involving both interviews and questionnaires. The importance of this choice springs from the fact that no instrument on its own can provide the necessary validity and reliability desired in a piece of research as asserted by Weir (2005). In accordance with this, the data initially obtained was harnessed by means of a questionnaire (see appendix one) distributed for as many students from the population as were willing to cooperate. On the basis of the questionnaire responses, four interviewees were chosen. This allowed for more-in-depth investigation of the issues raised.

3-1 Participants

The study was conducted with the participation of 30 MA Syrian students in different British universities. All of them were from Syria and speak Arabic as their first language. They were 16 male and 14 female candidates ranging from 22 to 35 in age. They were also from different educational backgrounds. Their IELTS scores' range was between 6 and 7.5.

3-2 Quantitative Part

Based on literature in this field, a questionnaire was prepared. Three broad types of data, as identified by Dornyei (2003), can be harnessed through the use of questionnaires: these are factual, behavioural, and attitudinal. The questionnaire used in this research covers all three aspects, focusing on, for example, the students' attitudes towards their IELTS scores as indicators of predictive validity in terms of their academic performance, and their feelings at the same time as to whether the test helps to diagnose their study skills problems. Most of the questions included in the questionnaire were of the "closed ended" and "fixed response" types, and based on the Likert scale. Furthermore, the respondents' views were solicited through "open ended" questions. The main reason for this is that because though "responses to closed questions are easier to collect and analyze, one often obtains more useful information from open questions" (Nunan: 1992, 143). The questionnaire was split into three parts, to elicit the following data:

A. Background information about the students and in particular, their language proficiency tests and scores;

B. The students' attitudes towards their proficiency test as an indicator of their language and academic ability at the beginning of the course;

C. What the students believe to be essential academic skills on the course.

Before the questionnaire's actual administration, it was studied and revised repeatedly, and then for the purpose of content and linguistic validity, it was piloted with 3 university teachers having the given criteria. Moreover, on the basis of the feedback obtained, some modifications were done and in this stage the questionnaire was finalized. The quantitative data from the questionnaire was analysed by totalling the number of responses in a particular category. This enabled common ideas about the study skills required in the academic setting to be identified.

3-3 Qualitative Part

Interviewing, as stated earlier, was chosen as a supplementary data collection instrument. The argument for this choice is that the interactional nature of the interview situation gives it "adaptability" that can enable the researcher to gain "information that a written response would conceal" (Bell, 1999:98). In order to test the validity of the responses provided by the questionnaires and to explore in more depth issues arising, I selected four respondents to take part in the interviews (see appendix two for the interview questions). The interviewees were selected according to the following initial criteria:

- Their willingness to cooperate further;
- The potential for their responses to be enlightening for my research;
- The need to maintain a balance in terms of the representative subject samples chosen.

The aim of the interviews was to gain a more detailed picture of the students' own thoughts and attitudes regarding their skills, and the degree to which these skills had been predicted by the proficiency tests they took. Of the three types of interview available, namely structured, semi-structured and unstructured (Robson; 2002:270), a semi-structured format was chosen, which "[is] intended to encourage people to speak." and in definition these "are guided conversations and the list of questions on the interview guide is just that: a flexible guide and not a rigid framework." (Arksey and Knight, 1999: 98). The interviews concentrated on the following areas:

- a. The value of IELTS language proficiency test in predicting the students' problems in terms of academic skills;
- b. The students' expectations of the required academic skills;
- c. The students' actual experience concerning study skills on their course;
- d. The students' views of what could be done to enhance these skills.

The qualitative data from both the interviews and the questionnaires was coded, with broad categories being identified. This allowed the frequency of a particular category to be identified at the same time, it enabled the researcher to narrow down the data to themes. The benefit of this is that it made the process of data analysis much a smoother one.

3-4 Procedure

More than 40 questionnaires were administered through face-to-face contact or email by the researcher. Of them, 30 were returned. Thus, the response rates to them were 75 %. In each one, namely the paper version and the electronic one, the purpose of the study and a request for participants were stated. The data were collected over a 3-year period.

4- Findings and Discussions

MA students' responses expressing their attitudes towards the language proficiency test -the IELTS – are shown roughly in figure 1, and detailed in tables one and two. A high percentage of the students, 66.6% in total (columns 1 and 2 in the questionnaire- totally agree and slightly agree), perceived the IELTS score as being an accurate reflection of their language ability(item 1). However, their attitudes to the components of the test and the reflection of these for the real world of academia were less conclusive in general. There was a small difference, in general, concerning whether the speaking section of the test really reflects the ability to handle academic conversations, with 46.6% agreeing and 49.9% disagreeing(item 3). As regards the ability of IELTS to predict effective listening skills- item 4- in terms of following an academic argument, a similar pattern emerges, though with a more significant difference (50% agreeing and 40% disagreeing). The results are more conclusive when we come to the writing section of the test, with 73.3% of the responses disagreeing with the notion that the writing part really tests the students' ability to write academically- item 5. Concerning the reading sub-test, 53.3% of the students did not perceive this as fully demonstrating their ability in critical reading(item 6). The results were much more decisive concerning the test as being an indicator for success in the course, with 63.3% of responses not agreeing with this notion; the same goes for its ability to predict the required academic skills- items 8 and 9. (See figure 1).

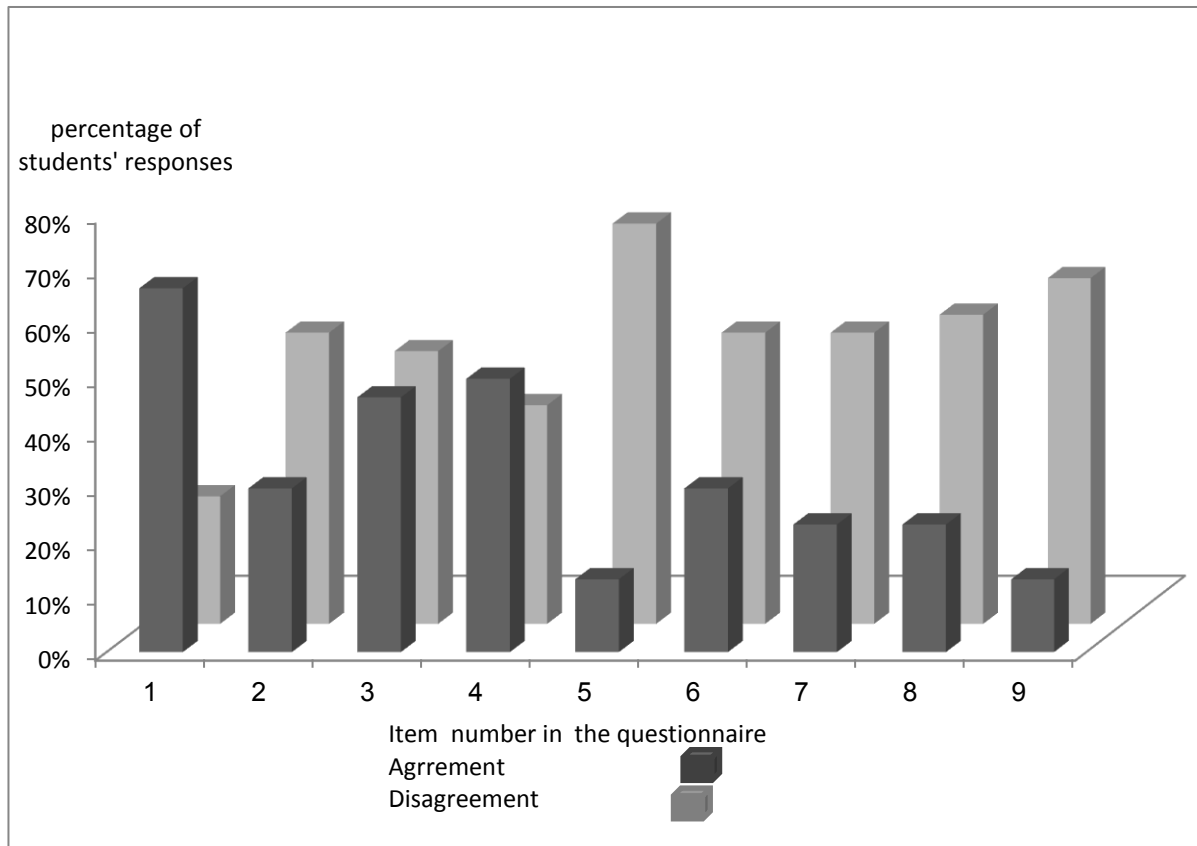


Figure 1: percentage of students' responses for each of the questionnaire items in terms of only agreement and disagreement .

Table 1: detailed number of students' responses to the questionnaire items.

	Totally agree	Slightly agree	Neither agree or disagree	Slightly disagree	Totally disagree
1. The proficiency test score I gained accurately reflected my language ability at the time I joined my course.	9	11	3	4	3
2. My test score also measured my ability to be a good student at this time.	2	7	8	7	6
3. The test measured my ability to express my thoughts well in academic conversations.	4	10	1	11	4
4. The test showed my ability to follow academic arguments in class when others are speaking.	3	12	3	6	6
5. The test showed that I could readily express my thoughts on	4	-	4	13	9

papers in an academic manner.					
6. The test demonstrated that my skills in critical reading were good enough for the course I am following.	5	4	5	7	9
7. The test demonstrated my ability to manage my time well as a student.	3	4	7	6	10
8. All in all, the test predicted what academic skills I needed most for my course.	3	4	6	6	11
9. The test was an indicator for success on the course.	1	3	7	9	10

Table2 : the overall percentage of students' responses to the questionnaire items.

	Totally agree	Slightly agree	Neither agree or disagree	Slightly disagree	Totally disagree
1. The proficiency test score I gained accurately reflected my language ability at the time I joined my course.	30%	36.6%	10%	13.3%	10%
2. My test score also measured my ability to be a good student at this time.	6.6%	23.3%	26.6%	23.3%	20%
3. The test measured my ability to express my thoughts well in academic conversations.	13.3%	33.3%	3.3%	36.6%	13.3%
4. The test showed my ability to follow academic arguments in class when others are speaking.	10%	40%	10%	20%	20%
5. The test showed that I could readily express my thoughts on papers in an academic manner.	13.3%	-	13.3%	43.3%	30%
6. The test demonstrated that my skills in critical reading were good enough for the course I am following.	16.6%	13.3%	16.6%	23.3%	30%
7. The test demonstrated my ability to manage my time well as a student.	10%	13.3%	23.3%	20%	33.3%
8. All in all, the test predicted what academic skills I needed most for my course.	10%	13.3%	20%	20%	36.6%
9. The test was an indicator for success on the course.	3.3%	10%	23.3%	30%	33.3%

A cross survey of all the participants' responses to the last part of the questionnaire identifies two major academic skills thought to be the most important for students at this level. These are critical reading and critical writing. The issue of being critical, cited by more than 70 % of the students, seems to be in accordance with the result obtained by

Richards and Skeleton (1991), Meldrum (2000) and Green (2000). Their studies revealed that the majority of subject tutors thought that international students had difficulty in being critical and evaluative in their academic works. This criticality is seen in terms of the ability to evaluate rather than to describe, and to assert one's a stance rather than only others'.

The interviews sought to investigate these results in greater depth. Nearly identical results were obtained from the respondents for both sections of the IELTS- listening and speaking. Interviewees mostly agree that IELTS is less than perfect indicator in demonstrating one's own listening and speaking abilities. Concerning writing and reading sub-tests of the IELTS, these were seen as poor prognostic indicators by the interviewees. They emphasized the importance of critical writing for their studies and indicated the differences of the skills involved – summarizing, evaluating, and making a stance- compared to the skills required in the IELTS writing sub-test. These same problems seem to appear in the interviewees' views of the reading sub-test. They agree that although the IELTS reading section tests essential sub-skills for reading, such as skimming and scanning, it does not test critical reading considered crucial for postgraduate study. Similarly, the interviewees did not perceive the IELTS as a useful predictor for academic success in their course, nor for their potential problems related to the various study skills. For these students, IELTS is only testing the general language ability but what they need is assessing the advanced intellectual abilities thought essential to western academic context.

Drawing on the above discussion, it could be concluded that the Syrian MA students involved in the study perceive IELTS as a linguistically accepted indicator of their level of English; however it seems to fail in predicting their potential problems concerning critical skills required in academia at a postgraduate level particularly in reading and writing. Moreover, these students do not generally perceive IELTS as a reliable predictor for the academic performance and success.

5- Conclusion

5-1 Implications and Recommendations

The major issue to emerge from this study concerns the construct validation of language proficiency tests. The weak positive qualitative correlation found between the IELTS score and the academic performance/skills, as perceived by the students, is paradoxically seen as a strong clue as to the high construct validity of the test. In other words, this shows that the test is really examining what it is claiming to test: language ability. However, this positive correlation is still there and it brings into the light the relation between language and cognition. The speculation, hence, is that if the relation does exist, built on this and on the Whorfian hypothesis which gives language a deep influence on the cognitive recognition of the world, it seems ambitious for language proficiency tests to try to build into its construction the kind of mental processes associated with the language. This is intended to increase the test validation in terms of the language ability hypothetical model adopted as its theoretical base. Based on the previous notion, a new generation of language proficiency tests might be possible, with the aim of associating specific cognitive processes with the language ability to be assessed. This kind of speculation, of course, necessitates other areas to be further researched, related to the nature of cognition and its specific relation to language.

Moreover, this study indicates that the IELTS courses preparing Syrian students for studying in British universities remains valid to some extent concerning the linguistic aspect, but its value is somewhat lessened in terms of the MA students' academic needs. These needs, emerging from these students, throughout this study tend to be of more intellectual nature related. It seems, especially with postgraduate studies, that attention should be shifted or stretched beyond the usual focus on learning the techniques of NOTE-TAKING and essay-writing to concentrate primarily on developing the student's critical thinking skills. The recommendation would thus be to develop a course of a rather different nature, in English for intellectual purposes (EIP); a notion suggested by Ballard (1996) and Sowden (2003). Ballard (1996:164) argues that such a course should "introduce them to the intellectual skills they will require and the study adjustments they must make if they are to be successful in an unfamiliar foreign language and foreign culture institution". An attempt to develop such a syllabus was held by Walters (1992) but the problem, as she reports, was broadly speaking the difficulty of teaching such insufficient concrete skills. In the light of this research, such a course might introduce students to the two following areas:

- The intellectual demands of university work and on a later stage the department demands;
- The language skills required to perform such skills.

However, much more effort needs to be devoted to researching this poorly investigated area, and it seems essential to find out more about the nature of these skills and to develop substantial methods for teaching them.

5-2 Limitations

The study in question is necessarily small in scale in terms of the number of participants. In this sense, I cannot claim that my data was sufficient to establish statistically well-founded generalizations concerning these students, even though it acts as a useful starting point in focussing on these areas. Subsequently, further research is required on a larger scale.

Furthermore, the focus of the study has been on the MA Syrian students' perceptions of their IELTS score as a real predictor of success and potential problems in the academic context. This limited focus of the study to the students' perceptions raises the issue of how reliable are their attitudes? Especially in relation to making judgements about their abilities where it is very common to students to either overestimate or underestimate their skills and problems. Consequently, a wider study that includes in addition to the students' perceptions their tutors' views towards the issues in question will help to overcome the previous problem.

Bibliography:

1. ADERSON, C. CLAPHAM, C. and D. WALL. *Language Test Construction and Evaluation*. Cambridge: Cambridge University Press.1995.
2. AMASTASIA, A. *Evolving concepts of test validation*. Annual Review of Psychology 37: 1-15. 1986.
3. ARKSEY, H. and P. KNIGHT. *Interviewing for Social Scientists: An introductory resource with examples*. London: SAGE.1999.
4. BACHMAN, L. V. *Fundamental Considerations in Language Testing*. Oxford: Oxford University Press.1990.
5. BALLARD, B. *Through language to learning: preparing overseas students for study in Western universities*. In Coleman, H (Ed.). *Society and the Language Classroom*. Cambridge: Cambridge University Press.1996.
6. BALLARD, B and J.CLANCHY. *Teaching Students from Overseas: A brief guide for lectures and supervisors*. Melbourne: Longman Cheshire.1991.
7. BAYLISS, D and P. RAYMOND. *The link between academic success and L2 proficiency in the context of second professional programs*. Canadian Modern Language Review 61:1 pp 29-51.2004.
8. BAYLISS, A. & INGRAM, D. E. *IELTS as a Predictor of Academic Language Performance*. Australian International Education Conference. 2006,p1-12.
9. BELL, J. *Doing Your Research Project: A guide for first-time researchers in education and social science*. Buckingham/Philadelphia: Open University Press.1999.
10. BLUE, G. M. *Language learning within academic constraints*. In P.ADAMS, B, HEATON and P. HOWARTH (Eds.) *Socio-Cultural Issues in English for Academic Purposes*. London: Macmillan Publishers Limited.1991.
11. BLUE, G. M. *Nothing succeeds like linguistic competence: the role of language in academic success*. In BLUE, M. G. (Ed.) *Language, Learning and Success: Studying through English*. London: Macmillan Publishers Limited.1993.
12. BURNS, R. *Study and stress among first year overseas students in an Australian University*. Higher Education Research and Development. 10:1 pp 61-77.1991.
13. BURTON, M. and M. WANG. *Predicting long-term success in graduate-school: a collaborative validity study*. TOEFL Research Report. No. RR. 05-03.2005.
14. CICARELLI, A. *IELTS issues for University Admission*. A paper for senior Management Group, University of South Australia, Aldelaide.2001.
15. COTTON, F. and CONROW. F. *An investigation of the predictive validity of IELTS amongst a group of international students studying at the University of Tasmania*. In English Language Testing System Research Reports. 1, 72-115.1998.
16. CRIPER, c. and A, DAVIES. *IELTS Validation Project Report*. The British Council, University of Cambridge Local Examinations Syndicate, London.1988.
17. DAVIES, A. *Principles of Language Testing*. Oxford: Basil Blackwell.1990.
18. DEVILLE, M. and C.E. TURNER. *What to look for in ESL admission tests*. System 28:4 pp 523-539.2000.
19. DOOEY, P. *An investigation into the predictive validity of the IELTS test as an indicator of future academic success*. In MRTIN, C and et al (Eds.) *Teaching in Disciplines pp 114-118*. Proceedings of the 8th Annual Teaching Forum, University of Western Australia, February 1999.

20. DORRNYEI, Z. *Questionnaires in Second Language Research: Construction, administration and processing*. New Jersey: Lawrence Erlbaum Associates.2003.
21. ELDER, C. *Language proficiency as a predictor of performance in teacher education*. Melbourne papers in Language Testing 2:1 pp 68-87.1993.
22. FEAST, V. *The impact of IELTS scores on performance at university*. International Educational Journal 3:4 pp 70-85.2002.
23. GRAHAM. *English language proficiency and the prediction of academic success*. TESOL Quarterly 21:3 pp 505-521.1987.
24. GIBSON, C. and W. RUSED. *The Validity of an Overall Band Score of 6.0 on the IELTS Test as a Predictor of Adequate English Language Level Appropriate for Successful Academic Study*. Unpublished Masters of the Arts thesis, Macquaire University, New South Wales.1992.
25. HILL, K., STORCH, N. and B. LYNCH. *A comparison of IELTS and TOEFL as predictors of success*. English Language Testing System Research Reports, no. 2 pp 52-63.1999.
26. HUMPHRYES, P. and et al. *Tracking International Students' English Proficiency Over the First Semester of Undergraduate Study*. IELTS Research Reports Volume 13, IELTS Australia Pty and British Council, Canberra.2012.
27. JORDAN, R. R. *Study skills: experience and expectations*. In BLUE, M. G. (Ed.) *Language, Learning and Success: Studying through English*. London: Macmillan Publishers Limited.993.
28. JORDAN, R.R. *English for Academic Purposes: A guide and resource book for teachers*. Cambridge: Cambridge University Press.1997.
29. KERSTJENS, M. and C. NERY. *Predictive validity in the IELTS test: a study of the relationship between IELTS scores and students' subsequent academic performance*. In English Language Testing System Research Reports. 3, 85-105.2000.
30. KINNEL, M. (Ed.). *The Learning Experience of Overseas Students*. Open University: Open University Press.1990.
31. LIGHT, XU and MOSSOP. *English proficiency and academic performance of international students*. TESOL Quarterly 21:2 pp 251-261.1987.
32. MACRAE, M. *The induction of international students to academic life in the UK*. In MCNAMARA, D and R. HARRIS. (Eds.) *Overseas Students in Higher Education: Issues in Teaching and Learning*. London:Routledge.1997.
33. MCNAMARA, T. *Language Testing*. Oxford: Oxford University Press.2000.
34. MELDRUM. *I know I have to be critical, but how?*. In BLUE, G, M. MILTON, J. and J, SAVILLE (Eds.) *Assessing English for Academic Purposes*. Bern; Oxford: Peter Lng.2000.
35. MESSICK, S. *The once and future issues of validity: assessing the meaning and consequences of measurement*. In WAINER, H. and H. BRAUN (Ed.) *Test Validity*. Hillsdale, NJ: Lawrence Erlbaum. 1988.
36. NUNAN, D. *Research Methods in Language Learning*. Cambridge: Cambridge University Press.1992.
37. PRING, R. *Philosophy of Educational Research*. London: Continuum.2000.
38. RICHARDS, K. and J. SKELTON. *How critical can you get?*. In P.ADAMS, B, HEATON and P. HOWARTH (Eds.) *Socio-Cultural Issues in English for Academic purposes*. London: Macmillan Publishers Limited.1991.
39. ROBSON, C. *Real World Research. A Resource fro Social Scientists and Practioner-Researchers*, 2nd Edition. Oxford: Blackwell. 2002.

40. RUSEK, W. 1992. *IELTS: Does it predict success at the university?* Proceedings of the 5th Annual Education Conference, Aldelaide.1992.
41. SAVILLE-TROIKE, M. *What really matters in second language teaching for academic achievement?*.TESOL Quarterly 18:2 pp.1984.
42. SOWDEN, C. *Understanding academic competence in overseas students in the UK*.ELT Journal 57:4 pp 377-385.2003.
43. TONKYN, LOCKE, ROBINSON. *The EAP teacher: prophet of doom or eternal optimist? - EAP teachers' prediction of students' success*. In BLUE, M. G. (Ed.) *Language, Learning and Success: Studying through English*. London: Macmillan Publishers Limited.1993.
44. WALTERS. *Study skills and study competence: getting the priorities right*. ELT 46:3 pp 264-273.1992.
45. WEIR, J. C. *Communicative Language Testing*. Hemel Hempstead: Prentice Hall International.1990.
46. WEIR, J. C. *Language Testing and Validation: An evidence-based approach*. Basingstoke; New York: Palgrave Macmillan.2005.