



economics

Final Report to:
The Ministry of Education

**THE SATISFACTION OF INTERNATIONAL STUDENTS
IN NEW ZEALAND UNIVERSITIES AND ITPS**

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1 Purpose of the report

The Ministry of Education and Education New Zealand contracted the International Graduate Insight Group (i-graduate) to survey international students at New Zealand institutes of technology and polytechnics (ITPs) and universities in 2011.

This report presents the findings from a descriptive and quantitative analysis of the 2011 i-graduate survey dataset.¹ The findings will provide information on the extent to which New Zealand and its education providers are meeting the needs of international students, as well as the extent to which they are satisfied with their learning, living and support service experience at the institutions where they are studying.

BERL has further analysed the data to explore international student responses to survey questions not fully covered in previous i-graduate reporting, such as nationality, and to discern what factors influence students' satisfaction (or dissatisfaction) with their experiences in New Zealand.

¹ The i-graduate survey used the International Student Barometer survey instrument. This instrument measures international student satisfaction across four key areas: learning, living, support service and overall institution experience.

2 Executive summary

Overall, international students studying at universities and ITPs were satisfied with their experiences of living and learning in New Zealand in 2011.

- 88 percent of university students were very satisfied or satisfied with their experiences.
- 90 percent of ITP students were very satisfied or satisfied with their experiences.
- 78 percent of university respondents and 84 percent of ITP respondents would recommend their New Zealand institution to people who are thinking of studying overseas.

The highest within-nationality proportion² of satisfied students was from Chile for both university and ITP sectors. There were also high proportions of satisfied students from Malaysia, Thailand, India and Japan from the university and ITP sectors. There were high proportions of students who were dissatisfied from Saudi Arabia and South Korea in both sectors.

Overall, the results of the 2011 survey suggested that education providers in both the university and ITP sectors were able to meet learning and living needs of international students very well.

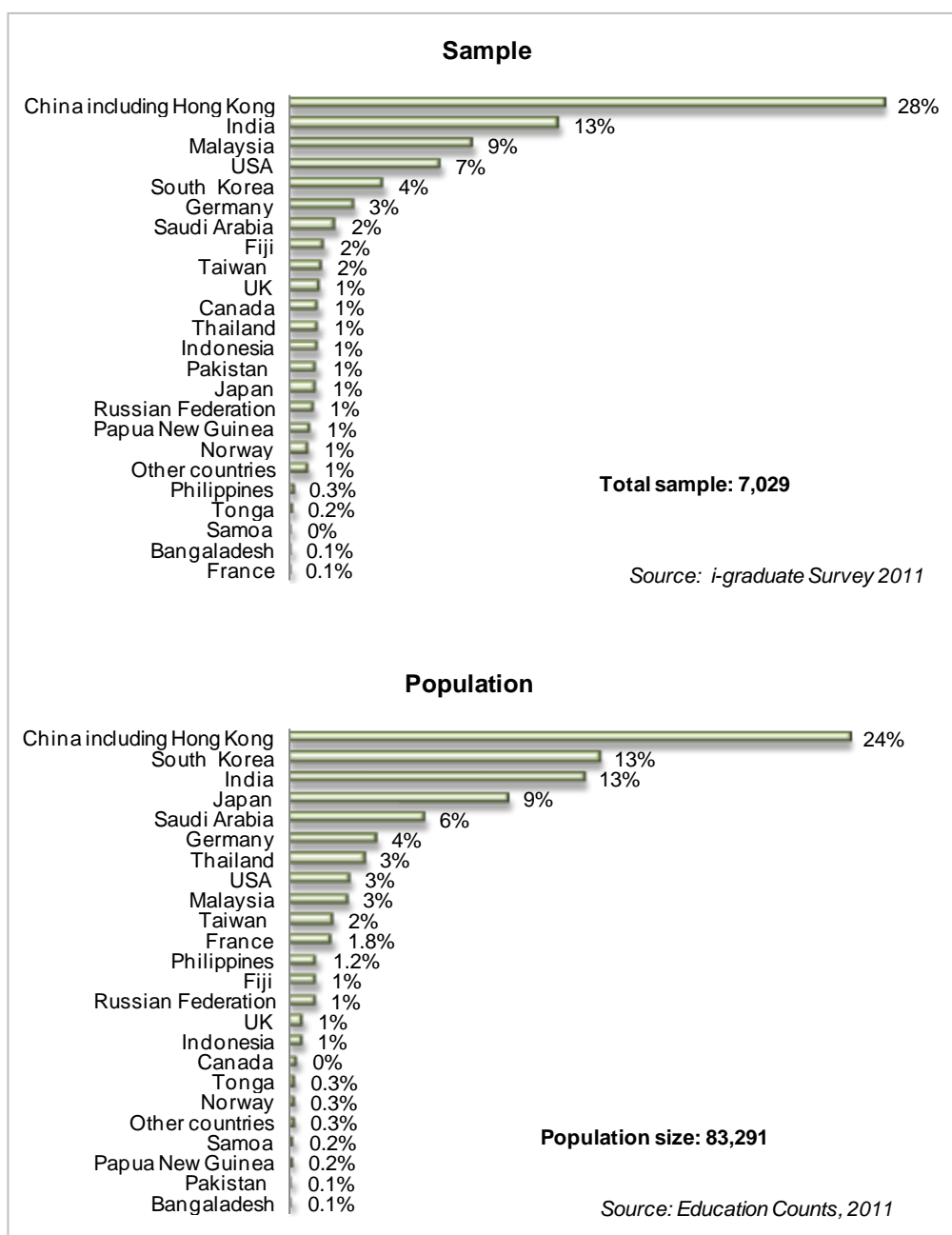
Respondent profile

7,029 respondents participated in the 2011 i-graduate survey. Of this number, 5,886 respondents were students in universities and 1,143 respondents were students in ITPs. The respondents make up eight percent of the 83,291 international students recorded in Export Education Levy data as studying in New Zealand in the period January to August 2011.³ Figure 2.1 shows the proportion of respondents (international students) from 20 different countries in New Zealand.

² A proportion is a snapshot of the population of interest, and consists of a numerator of events (e.g. respondents who were satisfied) and a denominator representing the population of which the events occur (e.g. total number of respondents).

³The 2011 university respondents made up 33 percent of the 18, 223 international students in universities while respondents from ITPs made up three percent of the 37,117 international students in ITPs. The number of international fee-paying students by sector for period 1 January to 31 August (2005 to 2011) is available at http://www.educationcounts.govt.nz/data/assets/excel_doc/0018/102591/Export-Education-Levy-Jan-Aug-2003-2011.xls

Figure 2.1 Top 20 countries represented in the 2011 to survey



- China and India make up 28 percent and 13 percent respectively of the total respondents to the survey. The other countries with significant numbers of respondents were Malaysia (9 percent), USA (7 percent) and South Korea (4 percent).
- The smallest numbers of responses were received from students from American Samoa, Australia, Fiji, Kiribati, the Marshall Islands, Papua New Guinea, the Solomon Islands and Vanuatu.

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- The respondents were predominantly undergraduates between 21 and 30 years old. Similar numbers of male and female students responded.
- Management and commerce were the main areas of study for i-graduate respondents across both sectors. Natural and physical sciences, engineering and related technologies and society and culture were also popular areas of study.
- The majority, 98 percent, of international students who responded to the i-graduate survey in 2011 were studying in New Zealand on student visas.
- In the university sector the majority of students applied directly to the institution via online enrolment, while in the ITP sector 43 percent of students applied with the assistance of an education agent.
- Over half of the students who participated in the survey were not working while studying.

Influences on student satisfaction

The in-depth analysis carried out revealed that learning, living and support service experiences were significant predictors of the overall institution experience of international students in New Zealand. The strongest influence on international student satisfaction, both in New Zealand universities and ITPs, was their learning experience. This suggests that learning experience was more likely to influence international students' experience than living and support service experience.

- Students in the university sector who were very satisfied with their learning experience were 27 times more likely to report higher overall satisfaction ratings than those who were very dissatisfied.
- Students in the ITP sector who were very satisfied with their learning experience were 45 times more likely to report higher overall satisfaction ratings than those who were very dissatisfied.

The overall institution experience of students from key countries such as China, India and Malaysia was also analysed.

- Learning experience was the strongest influence on the overall university and ITP experience of students from China.
- Learning and support service experiences were a significant influence on the overall institution satisfaction of university respondents
- Learning experience had a significant impact on the overall satisfaction ratings of ITP respondents.
- The learning and support service experiences of Malaysian students significantly influenced their overall institution satisfaction ratings.

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While learning experience was the strongest influence on student satisfaction, living and support service experiences should not be ignored. These areas also influenced the overall student experience. They are thus potential improvement areas that could be leveraged in order to raise student satisfaction levels.

Expanding on our investigation into the relationship of learning, living and support experience to overall satisfaction, we considered key characteristics that might have some influence over students' level of satisfaction with their experience. We investigated English proficiency as another factor influencing the overall institutional experience of international students. The analysis revealed that English proficiency does not significantly influence international students' overall institution experience in either the university or ITP sector. Although students with higher IELTS scores tended to report satisfaction with their overall institution experience, the association was weak.

Arrival experience

Most survey respondents reported satisfaction with their arrival experience. The areas of most satisfaction were setting up a bank account in New Zealand, formal welcome at the institution, and meeting academic staff. The areas of dissatisfaction included getting access to email and the internet, meeting students from New Zealand and understanding how their course of study works.

Learning in New Zealand

85 percent and 89 percent of respondents from the ITP and university sectors respectively were *satisfied* or *very satisfied* with their overall learning experience.⁴ The areas where most respondents in both sectors were most satisfied were the quality of academic staff, learning facilities (online and physical) and opportunities to learn with people from other cultures.

Living in New Zealand

International students at New Zealand universities and ITPs rated highly the sense of safety they felt in New Zealand. The ability to make friends from other countries and to experience the culture of New Zealand were also positive aspects of living in New Zealand. However, respondents to the 2011 i-graduate survey were particularly dissatisfied with the cost of living and accommodation in New Zealand, the opportunities to earn money while studying, and the ability to receive financial support.

⁴ Responses to satisfaction questions (e.g. overall institution, learning, and living and support service) were based on weighted samples.

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The survey revealed that international students in New Zealand were generally satisfied with how well they integrated with people in New Zealand. This satisfaction was significantly associated with their ability to build close friendships with people from their own country, from other countries and from New Zealand.

Satisfaction with support services

Overall, international students were satisfied with the support services provided at the institution where they were studying. Food and accommodation were the key areas of concern in terms of support services required by international students at New Zealand universities. The university's account/ finance department and careers advisory service were also rated poorly. International students at ITPs were dissatisfied with the support provided by the accommodation office and halls of residence, and campus eating places.

Expectations of employment and careers support

The most common support that university students expected was advice and guidance around career paths, career options and training. International students at ITPs expected more support to enable them to meet prospective employers and expected the opportunity to network with fellow alumni.

Students' future plans

A significant proportion of the respondents were undecided about what they were going to do after completing their studies at their universities or ITPs. Those who were undecided were mostly from China, India, Malaysia or United States. 22 percent of university respondents were still undecided on their future plans, whilst 31 percent of international students at ITPs were undecided about their future plans at that point in the year.

3 Introduction and background

Export education is a growing industry in New Zealand. Export receipts data, from Statistics New Zealand, indicate that export education accounts for approximately 17 percent of our services receipts.⁵ Between 2006 and 2011 the number of international fee-paying students in New Zealand grew by 6.8 percent, from 77,960 students in 2006 to 83,291 students in 2011.⁶

In this chapter

- International Graduate Insight Group survey
- In-depth analysis of the 2011 i-graduate survey

During this period, the range of international students has also broadened. Currently, around six out of ten international students studying in New Zealand come from Asian countries such as China, Hong Kong, South Korea and India. However, growing numbers of international students are coming from Saudi Arabia, Germany and Brazil. To meet the needs of current and future international students, it is important to understand their expectations of living and learning in New Zealand.

3.1 International Graduate Insight Group survey

The Ministry of Education and Education New Zealand contracted the International Graduate Insight Group (i-graduate) to survey international students at New Zealand institutes of technology and polytechnics (ITPs) and universities in 2011. The survey used i-graduate's International Student Barometer survey instrument, which measures international student satisfaction across several areas:

- the student decision-making process, including key influencers and reasons for choosing New Zealand and their New Zealand institution
- satisfaction with the use of agents, the visa process and the application experience at their institution
- arrival experience (new students only) – satisfaction with the arrival experience in New Zealand and at their institution
- learning experience – satisfaction with their course of study, subject choice, learning environment and resources
- living experience – satisfaction with, for example, accommodation
- support services – satisfaction with and availability of support services

⁵ Retrieved from Statistics New Zealand Infoshare on 18 June 2012. (www.stats.govt.nz/infoshare/)

⁶ Retrieved from Education Counts on 18 June 2012. (www.educationcounts.govt.nz/__data/assets/excel_doc/0018/102591/Export-Education-Levy-Jan-Aug-2003-2011.xls)

- future plans.

For the 2011 survey, the Ministry and Education New Zealand added questions to measure students' perceptions of safety in New Zealand, students' satisfaction with their social integration in New Zealand, and the degree to which New Zealanders positively interacted with international students.

International students in New Zealand ITPs and universities completed the i-graduate survey in June 2011. 5,886 international students in universities responded to the survey. This was approximately 45 percent of all international students studying at participating universities during the period in which the survey took place. In ITPs, the response rate was 35 percent of all students studying at participating ITPs during the period in which the survey took place – 1,143 international students responded. It should be noted, that the Christchurch earthquake in February 2011 and its aftermath might have affected the survey response rate and results negatively.

3.2 In-depth analysis of 2011 i-graduate survey

i-graduate presented the key findings from the survey at the Education New Zealand conference in August 2011. The Executive Summary reports were posted on the Ministry's Education Counts website in September 2011. This report presents the findings from further in-depth analysis of the survey responses, and on special topic areas added by the Ministry to the survey.

3.2.1 Objectives of the analysis

The analysis aims to provide information for:

- government agencies to check international education policy settings and make any necessary changes to the way New Zealand is promoted as an education destination
- education providers to enhance the different aspects of what they offer international students, while also informing marketing strategies.

3.2.2 Structure of the report

The report starts with an explanation of the methodology employed to undertake the data analysis. The remaining sections discuss the factors that influenced overall student institution satisfaction, the profile of the students who responded to the survey, and detailed analysis of student satisfaction with their learning, living and support service experiences.

4 Methodology

On behalf of the Ministry of Education, BERL has further analysed the data to explore international student responses to survey questions not fully covered in previous i-graduate reporting. This includes factors that influenced students' satisfaction (or dissatisfaction), by nationality, with their experiences in New Zealand. This section discusses the methodology employed to undertake this analysis.

In this chapter

- Research questions
- International Graduate Insight Group questionnaires
- Data set
- Method of analysis

4.1 Research questions

The i-graduate survey provided data that enabled us to answer the following questions about international student experience.

- Who are the international students who chose to study in New Zealand universities and ITPs?
- What factors do international students consider important when they decide to study overseas?
- How satisfied are international students with their learning, social support and living experiences in New Zealand?
- Are international students overall satisfied with their experience in New Zealand?

This report provides in-depth information on these questions and on a set of special questions of interest put forward by the Ministry including:

- What visas are international students coming to New Zealand on?
- To what extent are international students using education agents?
- How important is it to international students to study with people of other cultures, and how satisfied are they with the opportunities provided to do so?
- To what extent are international students able to build close friendships with people from their home country, their host country and other countries, while living and learning in New Zealand?

- To what extent do international students feel welcome in New Zealand? How positively or negatively do they perceive they have been treated by different groups in New Zealand?
- What do international students plan to do after their current programme of study?

4.2 International Graduate Insight Group survey questionnaires

To determine what method of data analysis should be used, what data variables⁷ could be explored in our analysis, and whether any variability was present in the data, our first step was to examine the survey questionnaires and corresponding data in the data set.

The questionnaires for international students at universities and ITPs were essentially the same, with the exception of questions about their current areas of study, which were slightly different and allowed for sector-specific detail. The questionnaires also included questions allowing open responses from students. The responses to these questions included a high degree of student- and institution-specific information. The data set provided to the Ministry did not include students' responses to open-ended questions in the survey, and therefore these questions were also excluded from our analysis.

In examining the questionnaires and corresponding data set, we found that the number of student responses varied from question to question. Some questions were responded to by only a small subset of the total respondents from the university and ITP sectors. The response rate was determined for each question to ensure accurate interpretation of the results. There were also multi-response questions, where respondents could choose from several possible response options.

4.3 Data set

The data set arising from the 2011 survey included responses from 5,886 international students in New Zealand universities, and 1,143 international students at New Zealand ITPs. These were anonymised by i-graduate and supplied to the Ministry of Education as Microsoft Excel pivot tables. Subsequently, i-graduate allowed temporary access for the duration of the analysis project to the anonymised data that sits behind the pivot tables, facilitating more robust statistical analysis.

⁷ A variable is a characteristic, an attribute or a value that can change. Some examples of variables analysed in this study were gender, nationality, main area of study or student satisfaction.

4.3.1 *Weights*

Sampling weights were applied to the data set⁸ to ensure that the survey population was representative of the wider population of international students in New Zealand. Information about the population and the sampling procedure are critical in computing sampling weights. Sampling weights that vary by nationality were computed using international student population data from Export Education Levy student enrolment data on Education Counts.

In this report, the results that described the profile of the survey respondents are unweighted. For the rest of the survey information, we analysed the data by weighting it so we could make generalisations about the international student population as a whole.

4.4 **Method of analysis**

Different statistical methods were used to analyse the 2011 i-graduate data set. These methods included descriptive analysis, cross-tabulation analysis and ordered logistic regression techniques.

Descriptive analysis includes identifying frequencies and proportions. Using this method, the pattern of response was analysed to detect the most and least satisfactory items that international students experienced. These experiences were related to living and learning in New Zealand, and the support services provided by universities and ITPs.

Chi-square analysis was used as the method to explore the factors that were related to students' social integration. In particular, the method was used to identify significant proportion difference for the number of close friends from New Zealand that international students have. Three factors were analysed to explain the difference in the number of local friends that international students had – satisfaction with making friends with New Zealanders, perception about the locals being interested in getting to know international students better, and feeling welcome in New Zealand.

Ordered logistic regression was used to investigate the influences on students' overall satisfaction with their experience at their institution. This technique allowed for identification of significant influences, and of the magnitude of the effect of these influences on overall satisfaction of international students. Unlike standard regression analysis, the outputs of this analysis are measured on the ordered categorical scale. This means that the results of this

⁸ A sample is a subset of a corresponding population. The sample should be representative of the population. But sometimes, the sample could be a disproportionate representation of the population if some groups are either over- or under-represented. Applying weights to the sample makes it more like the population at large.

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analysis are in terms of the scale used to rate the level of satisfaction – *very dissatisfied*, *dissatisfied*, *satisfied* and *very satisfied*.

The tasks involved in analysing the data set, and the procedures for building, evaluating, and interpreting ordered logistic regression output is presented in the appendices.

5 Influences on student satisfaction experience

This section analyses the responses from key countries to establish the factors most likely to influence the overall satisfaction levels of the international student population across learning, living and support services. The analyses were undertaken for the most significant countries in relation to total sample size, which were China, India and Malaysia for universities and China and India for ITPs.⁹

Ordered logistic regression was used to analyse the relationship between overall institution satisfaction with English language proficiency, and satisfaction with learning, living and support service experiences of international students. The following sections identified the most significant influences on international student satisfaction, as well as the magnitude of the effect of these influences on overall satisfaction.

In this chapter

- Further investigation on overall institution satisfaction
- Impact of English test scores on student satisfaction
- Focus on China
- Focus on Malaysia
- Focus on India

5.1 Further investigation into the relationship between learning, living and support experience, and overall institution satisfaction

Further investigation into the relationship of learning, living and support experience to overall satisfaction was carried out through ordered logistic regressions.¹⁰ These regressions were used to identify the factors most likely to influence the satisfaction levels of international students across learning, living and support experience.¹¹

The results are reported as odds ratios. The ratios indicate how likely students who are satisfied with their learning, living or support service experiences are to report a satisfied or very satisfied response to their overall institution experience. The ratios can also provide an indication of how strongly an area of student experience may be associated with overall institution satisfaction ratings. The odds ratio of greater (less) than one means that the

⁹ This allows for comparability between ITP and university sectors.

¹⁰ Logistic regression is well suited for describing and testing hypotheses about relationships between categorical (i.e. gender) or continuous (i.e. IELTS score) variables.

¹¹ The data used to model the overall institution satisfaction were the satisfaction ratings across each of the dimensions of student satisfaction, nationality and IELTS score. Due to the total sample size relative to other countries, the analysis focused on China and Malaysia for the university sector while China and India were analysed for the ITP sector. India was also analysed for the university sector to allow for comparison with ITP sector.

explanatory factor (e.g. satisfied with learning experience) increases (reduces) the likelihood of a response falling within the higher satisfaction scale (relative to very dissatisfied) of the overall institution experience.

5.1.1 Odds ratio for universities

The odds ratio refers to the odds of international students reporting satisfaction with overall institutional experience given their satisfaction with learning, living and support service experience at universities.

Table 5.1 Odds of international students reporting satisfaction with overall institution experience given their satisfaction with learning, living and support service experience in universities

Experience	Odds ratio
Learning experience	
Very dissatisfied	1.00
Dissatisfied	0.81
Satisfied	5.11**
Very satisfied	26.92**
Living experience	
Very dissatisfied	1.00
Dissatisfied	0.72
Satisfied	1.21
Very satisfied	2.70**
Support services experience	
Very dissatisfied	1.00
Dissatisfied	0.91
Satisfied	2.15**
Very satisfied	5.75**
LR chi ² (9)=1,392.91**	n=4,345 Source: BERL

** Indicates a highly significant influence on overall satisfaction.

- Learning, living and support services were all significant influences on overall institutional satisfaction.
- However, learning experience was the strongest influence on overall institutional satisfaction.
- Students who were very satisfied with their learning experience were 26.92 times more likely to be very satisfied with their overall experience than those who were very dissatisfied.

5.1.2 Odds ratio for ITPs

The odds ratio refers to the odds of international students reporting satisfaction with overall institutional experience given their satisfaction with learning, living and support service experience at ITPs.

Table 5.2 Odds of international students reporting satisfaction with overall institution experience given their satisfaction with learning, living and support service experience in ITPs

Experience	Odds ratio
Learning experience	
Very dissatisfied	1.00
Dissatisfied	1.76
Satisfied	10.20**
Very satisfied	44.50**
Living experience	
Very dissatisfied	1.00
Dissatisfied	1.54
Satisfied	1.68
Very satisfied	3.74**
Support services experience	
Very dissatisfied	1.00
Dissatisfied	0.53
Satisfied	0.86
Very satisfied	3.24**
LR chi ² (9)=1,392.91**	n=756 Source: BERL

** Indicates a highly significant influence on overall satisfaction.

- Learning, living and support services were all significant influences on overall institutional satisfaction.
- However, learning experience was the strongest influences on overall institutional satisfaction.
- Students who were very satisfied with their learning experience were 44.5 times more likely to be very satisfied with their overall experience than those who were very dissatisfied.

5.1.3 Learning, living and support service experiences were significant predictors of overall institution experience

The results of the regression analysis revealed that learning, living and support service experiences are significant predictors of overall institution experience of international students in New Zealand. However, the strongest influence on international students’ overall satisfaction, both in New Zealand universities and ITPs, was their learning experience. This suggests that a student’s learning experience was more likely to influence their overall experience than their living and support service experience.

Other factors are likely to influence students’ satisfaction while living and learning overseas. One of these factors is proficiency in the host country’s language. The following section explores the impact of English proficiency on the overall institution experience of international students in New Zealand.

5.2 The impact of English test scores on student satisfaction

Expanding on our investigation into the relationship of learning, living and support experience to overall satisfaction, we considered key characteristics that might have some influence over students’ level of satisfaction with their experience. We investigated English proficiency as another factor influencing the overall institutional experience of international students. The data was analysed collectively for universities and ITPs due to the small

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sample size by country.¹² This means that we aggregated dissatisfied (satisfied) and very dissatisfied (very satisfied) into one response category- dissatisfied (satisfied). IELTS scores were used as a proxy variable for English proficiency.

5.2.1 Odds ratio

The sample size for English proficiency was 559 respondents for universities and 158 respondents for ITPs.

Table 5.3 Odds of international students reporting satisfaction with overall institution experience given their satisfaction with learning, living, support service experience and English proficiency

Universities		ITPs	
Experience	Odds ratio	Experience	Odds ratio
Learning experience Dissatisfied Satisfied	1.00 4.43**	Learning experience Dissatisfied Satisfied	1.00 32.19**
Living experience Dissatisfied Satisfied	1.00 2.43*	Living experience Dissatisfied Satisfied	1.00 0.99
Support services experience Dissatisfied Satisfied	1.00 1.84	Support services experience Dissatisfied Satisfied	1.00 0.28
English proficiency	1.06	English proficiency	0.73
LR chi ² =39.84**	Source: BERL	LR chi ² =39.84**	Source: BERL

The odds ratios shown in Table 5.3 suggested that students with higher IELTS scores tended to report satisfaction with their overall institution experience.

- An odds ratio of greater than one increased the likelihood of an international student reporting satisfaction. This means that international students with high IELTS scores tended to be satisfied with their overall university experience.
- An odds ratio of less than one decreased the reporting of satisfaction with overall institution experience. This means that international students with

¹² For this analysis, only respondents who indicated their IELTS score were included.

low IELTS score tended to be dissatisfied with their overall university experience. For example, a student with an overall IELTS band score of 6.5 was less likely to report satisfaction compared to a student with a score of 8.0.

- There was a weak association between overall institution experience and English language proficiency. This means that English proficiency did not significantly influence international students' overall institution experience in either the university or ITP sector.

The following section focuses on the top three countries, China, India and Malaysia, in relation to the population of international students in the university sector. In the ITP sector, the analysis of the influences on student satisfaction focused on China and India. These countries made up 58 percent of the total respondents from the ITP sector.

5.3 Focus on China

5.3.1 Universities

Actual observations

The biggest respondent country was China, with 1,570 students representing 27 percent of the total respondents (5,886). The top three areas of study were management and commerce, engineering and related technologies and information technology. Most of the Chinese students were satisfied with their overall university experience (88 percent). Chinese respondents who were dissatisfied with their overall university experience represented 12 percent (151 respondents) of the total respondents from China.

The learning areas with the highest dissatisfaction among 1,570 Chinese students were the following:

- opportunities for work experience
- advice and guidance on job opportunities and careers
- learning that will help them to obtain a good job
- studying with students from other cultures
- help to improve English skills.

In terms of living experience, the areas with the highest dissatisfaction ratings were:

- opportunity to earn money while studying
- making friends in New Zealand
- transport links to other places
- availability of financial support/bursaries

- internet access at accommodation.

Odds ratio

Table 5.4 Odds of students from China reporting satisfaction with overall institution experience given their satisfaction with learning, living, support service experience in universities

Experience	Odds ratio
Learning experience Dissatisfied Satisfied	1.00 6.14**
Living experience Dissatisfied Satisfied	1.00 2.75**
Support services experience Dissatisfied Satisfied	1.00 2.12*
LR chi ² (3)=39.84**	n=1,062 Source: BERL

** Indicates a highly significant influence on overall satisfaction.

- Learning, living and support service experiences were significant influences on overall institutional satisfaction.
- However, learning experience was the strongest influence on overall satisfaction.
- Students who were satisfied with their learning experience were 6.14 times more likely to be satisfied with their overall experience than those who were dissatisfied.

* Indicates that the support service experience was a significant but not a highly significant influence on overall institution satisfaction.

5.3.2 ITPs

China was the second biggest respondent country for ITPs with 224 students representing 20 percent of the total respondents (1,143). The top three areas of study were management and commerce, health, and information technology. Most of the Chinese students were satisfied with their overall ITP experience (91 percent).

The respondents who were dissatisfied with their overall experience had the highest dissatisfaction in the following learning areas:

- opportunities for work experience
- advice and guidance on job opportunities and careers
- the organisation and smooth running of the course
- feedback on coursework
- learning that will help to get a good job.

The areas with the highest dissatisfaction in support service experiences were:

- availability of financial support/bursaries
- cost of accommodation

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- opportunity to earn money while studying
- cost of living
- transport links to other places

Odds ratio

Table 5.5 Odds of students from China reporting satisfaction with overall institution experience given their satisfaction with learning, living and support service experience in ITPs

Experience	Odds ratio
Learning experience Dissatisfied Satisfied	1.00 25.69**
Living experience Dissatisfied Satisfied	1.00 0.93
Support services experience Dissatisfied Satisfied	1.00 4.20*
LR $\chi^2(3)=42.40^*$	N=194 Source: BERL

** Indicates a highly significant influence on overall satisfaction.

- Learning experience was the most significant influence on overall institutional satisfaction.
- Students who were satisfied with their learning experience were 25.69 times more likely to be satisfied with their overall experience than those who were dissatisfied.

* Indicates that support service experience was a significant but not a highly significant influence on overall satisfaction.

Living experience had no significant impact on overall institution satisfaction.

5.4 Focus on Malaysia

5.4.1 Universities

The second biggest respondent country was Malaysia, with 578 students representing 10 percent of the total respondents. The top three areas of study were education, management and commerce, and natural and physical sciences. Malaysia had the highest satisfaction rate out of the three countries (China, India and Malaysia) with 95 percent of respondents satisfied with their overall university experience. Only 5 percent (26 respondents) were dissatisfied.

Malaysian students were most dissatisfied with the following areas of learning experience:

- advice and guidance on job opportunities and careers
- opportunities for work experience
- learning that will help to get a job
- quality of laboratories

- studying with people from other cultures.

The areas with the highest dissatisfaction in support services were:

- campus eating places
- institution account/finance department
- accommodation office
- institution clubs/societies
- career advisory services.

Odds ratio

Table 5.6 Odds of students from Malaysia reporting satisfaction with overall institution experience given their satisfaction with learning, living and support service experience in universities

Experience	Odds ratio
Learning experience Dissatisfied Satisfied	1.00 8.99**
Living experience Dissatisfied Satisfied	1.00 1.43
Support services experience Dissatisfied Satisfied	1.00 3.22*
LR chi ² (3)=32.41**	n=447 Source: BERL

** Indicates a highly significant influence on overall satisfaction.

- Learning experience was the most significant influence on overall institutional satisfaction.
- Students who were satisfied with their learning experience were 8.99 times more likely to be satisfied with their overall experience than those who were dissatisfied.
- Indicates that support service experience was a significant but not a highly significant influence on overall satisfaction.

Living experience had no significant impact on overall institutional satisfaction.

5.5 Focus on India

5.5.1 Universities

The third biggest respondent country was India with 448 students representing 8 percent of the total respondents from universities. The top three areas of study were management and commerce, engineering and related technologies and information technology. 90 percent of students from India were satisfied with their overall experience at New Zealand universities, with 10 percent (30 respondents) dissatisfied.

Among areas of learning experience, Indian students were least satisfied with the following:

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- opportunities for work experience
- advice and guidance on job opportunities and careers
- learning that will help to get a good job
- academic content of programme / studies
- explanation of marking/assessment criteria.

The areas with the highest dissatisfaction in support services were:

- accommodation office
- halls of residence support
- disability support
- career advisory services
- institution clubs/societies.

Odds ratio

Table 5.7 Odds of students from India reporting satisfaction with overall institution experience given their satisfaction with learning, living, support service experience in universities

Experience	Odds ratio
Learning experience Dissatisfied Satisfied	1.00 8.99**
Living experience Dissatisfied Satisfied	1.00 1.43
Support services experience Dissatisfied Satisfied	1.00 3.22*
LR $\chi^2(3)=32.41^{**}$	n=447 Source: BERL

** Indicates a highly significant influence on overall satisfaction.

- Learning experience was the most significant influence on overall institutional satisfaction.
- Students who were satisfied with their learning experience were 8.99 times more likely to be satisfied with their overall experience than those who were dissatisfied.
- Indicates that support service experience was a significant but not a highly significant influence on overall satisfaction.

Living experience had no significant impact on overall institutional satisfaction.

5.5.2 ITPs

India was the biggest respondent country for ITPs with 433 students representing 38 percent of the total respondents from ITPs. The top three areas of study were management and commerce, information technology, and engineering and related technologies. Most of the

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Indian students were satisfied with their overall ITP experience (89 percent). The areas with the highest dissatisfaction were in the following learning areas:

- opportunities for work experience
- learning that will help to get a good job
- advice and guidance on job opportunities and careers
- the organisation and smooth running of the course
- level of research activity.

Odds ratio

Table 5.8 Odds of students from India reporting satisfaction with overall institution experience given their satisfaction with learning, living, support service experience in ITPs

Experience	Odds ratio
Learning experience Dissatisfied Satisfied	1.00 10.75**
Living experience Dissatisfied Satisfied	1.00 1.95
Support services experience Dissatisfied Satisfied	1.00 1.93
LR chi ² (3)=50.02**	n=341 <i>Source: BERL</i>

** Indicates a highly significant influence on overall satisfaction.

- Learning experience was the most significant influence on overall institutional satisfaction.
- Students who were satisfied with their learning experience was 10.75 times more likely to be satisfied with their overall experience than those who were dissatisfied.

Living and support service experience had no significant impact on overall institution satisfaction.

6 Respondent profile

This section of the report provides a profile of the international students who responded to the 2011 i-graduate survey, based on their responses to a number of questions on personal and other characteristics.

- The top five respondent nationalities were China, India, Malaysia, USA and South Korea for universities and India, China, Fiji, South Korea and Germany for ITPs.
- 72 percent of respondents were aged between 21 and 30 years.
- The majority of respondents were full-fee-paying students, 73 percent for universities and 92 percent for ITPs.
- Nearly half of all respondents were funded by their families while living and studying in New Zealand.
- The respondents were predominantly undergraduates with the main areas of study being management and commerce, engineering and related technologies and natural and physical sciences.
- 98 percent of respondents were studying on a student visa.
- 74 percent of respondents indicated that New Zealand was their first choice of study.

In this chapter

- Key demographic characteristics
- Education profile
- Method of application
- Immigration visas
- Previous education
- English language tests
- First choice of international study

6.1 Key demographic characteristics

Students' responses to questions of a demographic nature provide us with a profile of international students who responded to the i-graduate survey in 2011. Table 6.1 shows the nationality of all the respondents. The top five respondent countries were China, India, Malaysia, USA and South Korea.

Table 6.1 shows the breakdown of respondents by nationality.

Table 6.1 Nationality, i-graduate respondents

Nationality*	Sample	
	Number	%
China including Hong Kong	1,940	27.6
India	881	12.5
Malaysia	600	8.5
USA	495	7.0
South Korea	308	4.4
Germany	212	3.0
Saudi Arabia	155	2.2
Fiji	117	1.7
Taiwan	108	1.5
UK	101	1.4
Canada	99	1.4
Thailand	98	1.4
Indonesia	94	1.3
Pakistan	93	1.3
Japan	92	1.3
Russian Federation	83	1.2
Papua New Guinea	74	1.1
Norway	65	0.9
Philippines	19	0.3
Tonga	15	0.2
Bangladesh	10	0.1
Samoa	10	0.1
France	8	0.1
Other countries	1,352	19.2
Total	7,029	100.0

* as stated in passport or in other official documentations

Source: i-graduate 2011 Survey

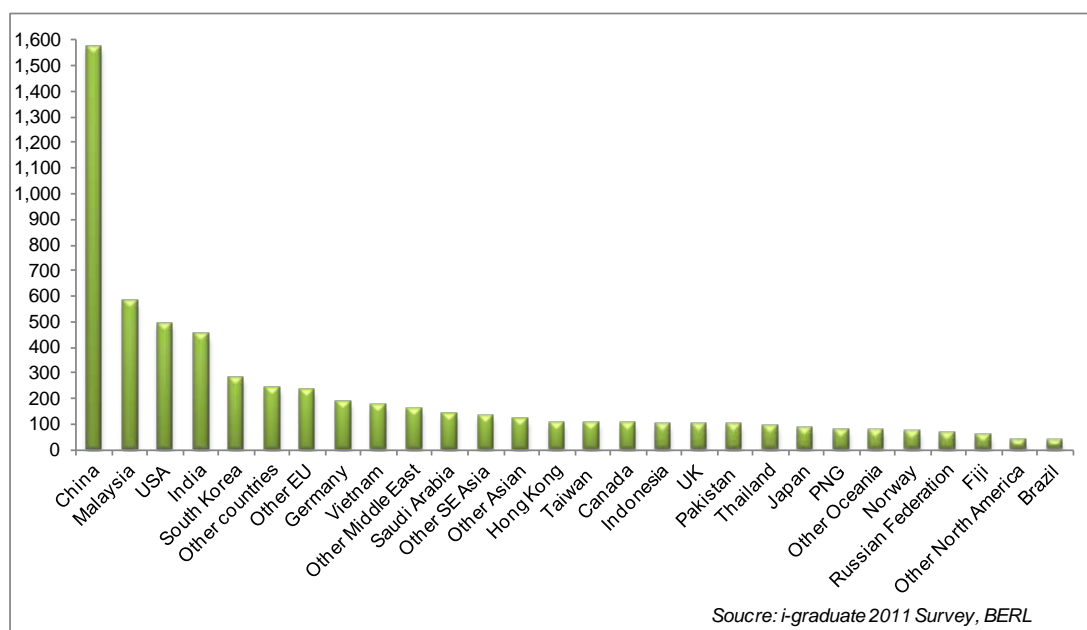
6.1.1 Nationality

Universities

There were 5,886 respondents in the university sector. The nationalities with the highest number of respondents were:

- China (28 percent or 1,570 respondents)
- Malaysia (10 percent or 578 respondents)
- United States of America (8 percent or 487 respondents)
- India (8 percent or 448 respondents)
- South Korea (5 percent or 277 respondents).

Figure 6.1 Nationality, i-graduate university respondents



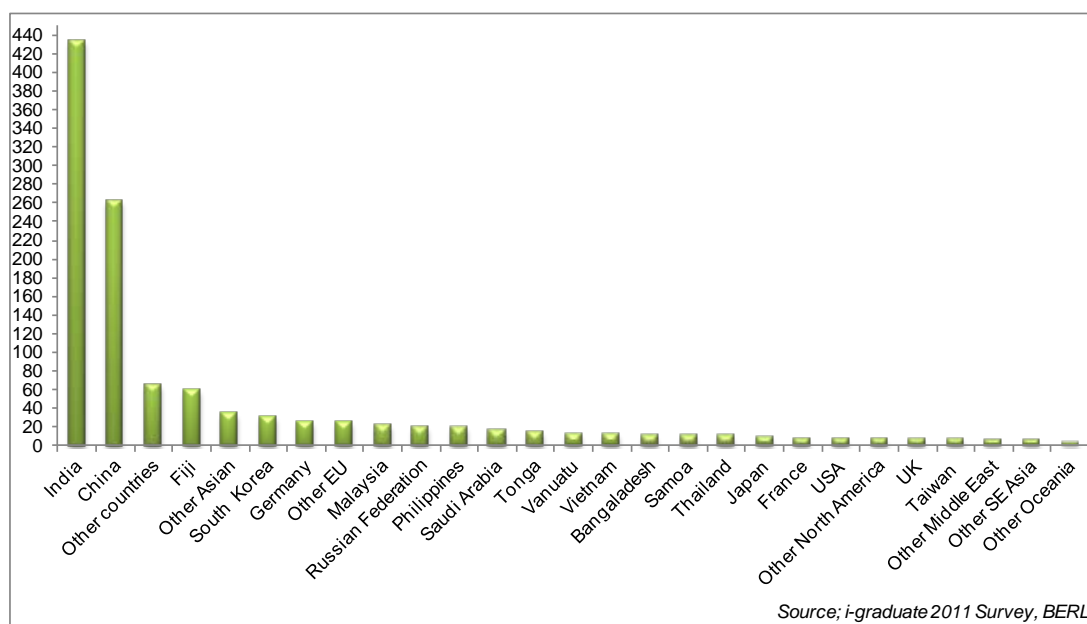
ITPs

There were 1,143 respondents from ITPs. The nationalities with the highest number of respondents were:

- India (38 percent or 433 respondents)
- China (23 percent or 262 respondents)
- Fiji (5 percent or 59 respondents)
- South Korea (3 percent or 31 respondents)
- Germany (2 percent or 26 respondents).

Figure 6.2 shows the breakdown of respondents from ITPs by nationality

Figure 6.2 Nationality, i-graduate ITP respondents



6.1.2 Age of international students

The number of students who answered the question on age was less than the total sample size. Respondents were asked their age, and a dropdown list was provided. Only 6,366 responses were received, as shown in Table 6.2 below.

Table 6.2 Age, i-graduate respondents, 2011

Age	University		ITP		Total	
	Number	%	Number	%	Number	%
Under 21	721	13.5	144	14.0	865	13.6
21 - 30	3,854	72.2	731	70.9	4,585	72.0
31 - 40	629	11.8	114	11.1	743	11.7
41 - 50	111	2.1	34	3.3	145	2.3
Over 50	20	0.4	8	0.8	28	0.4
Total	5,335	100	1,031	100.0	6,366	100.0

Source: i-graduate 2011 Survey, BERL

Of the 6,366 responses, 72 percent or 4,585 students were aged between 21 and 30 years. Of the respondents from the university sector, 72 percent were between the ages of 21 and 30, while in the ITP sector 71 percent of respondents were in this age group.

6.1.3 Gender of international students

Not all of the respondents answered the question on gender. Here, 6,580 responses were received in total, with 51 percent of the respondents being female and 49 percent being male.

For universities, 46 percent of the respondents were male, and for the ITP sector, 58 percent of respondents were male.

6.1.4 Study status and funding of overseas study

Most respondents to the i-graduate survey were full-fee-paying international students. Within the universities sector, 3,612 students or 73 percent of respondents were full-fee-paying international students. Of the ITP respondents, 92 percent or 855 students were full-fee-paying international students.

Figure 6.3 Study status, i-graduate respondents

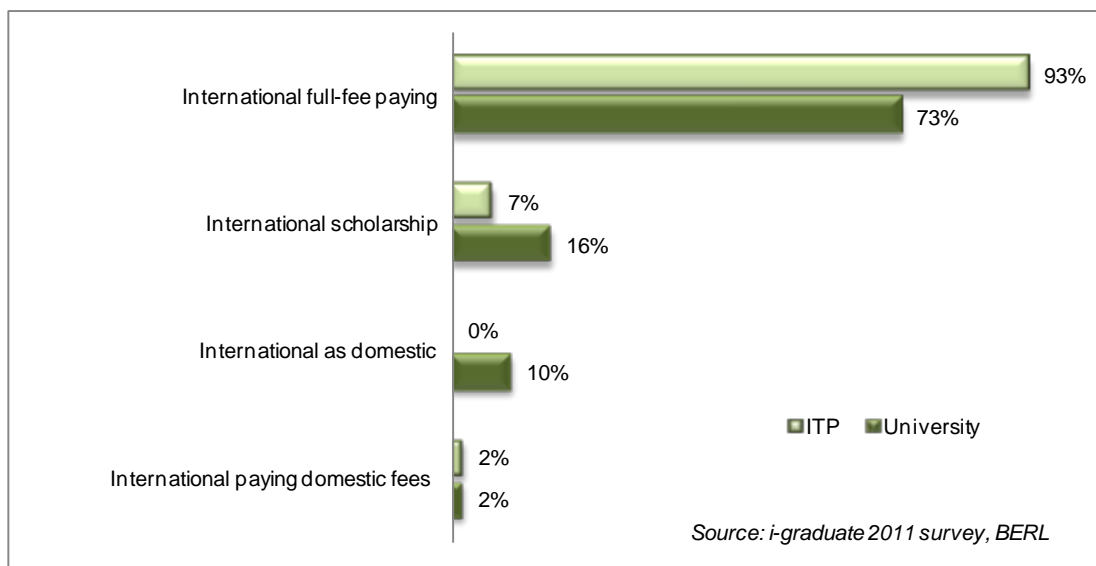
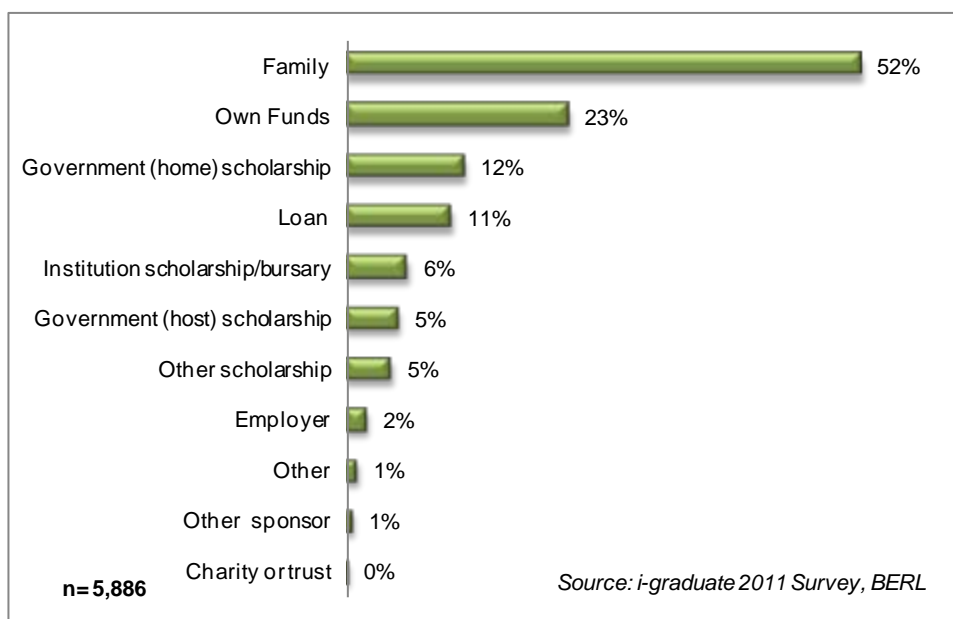


Figure 6.4 and Figure 6.5 show how international students funded their studies in New Zealand.

Figure 6.4 How international students fund their study, i-graduate university respondents



Universities

The top three sources of funds for university respondents were family, own funds and Government (own country) scholarship.

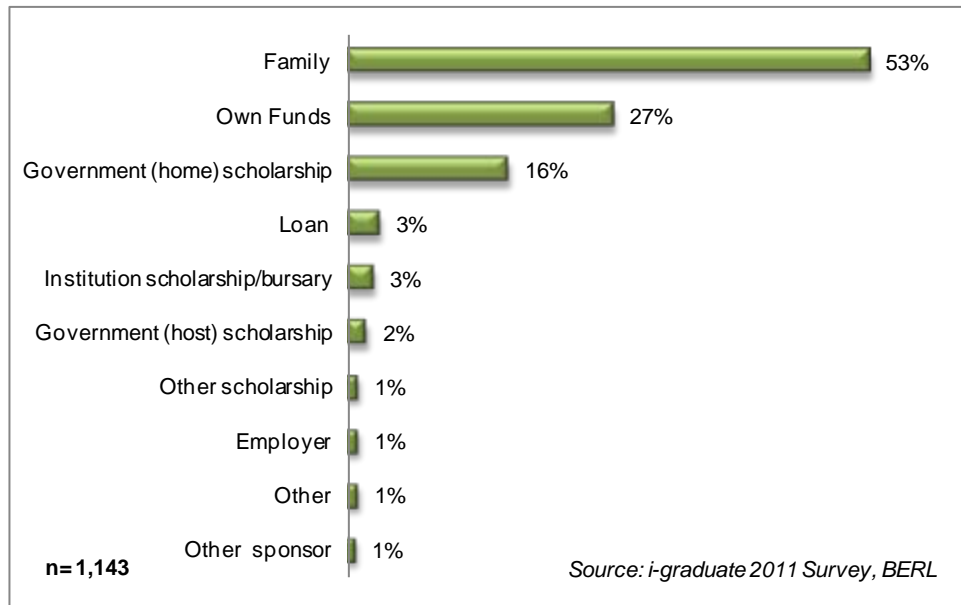
- 52 percent were funded by their families while living and studying in New Zealand, one in five respondents use their own funds while one in ten respondents was funded by their home government.
- Employers, charity or trusts, or other types of scholarship or sponsor funded less than 5 percent of university respondents.

ITPs

The top three sources of funds of ITP respondents were family, own funds and loans.

- 53 percent were funded by their families while living and studying in New Zealand, one in four respondents were using their own funds, and one in ten respondents was funded by their home government.
- Employers, charity or trusts, or other types of scholarship or sponsor funded less than 5 percent of university respondents.

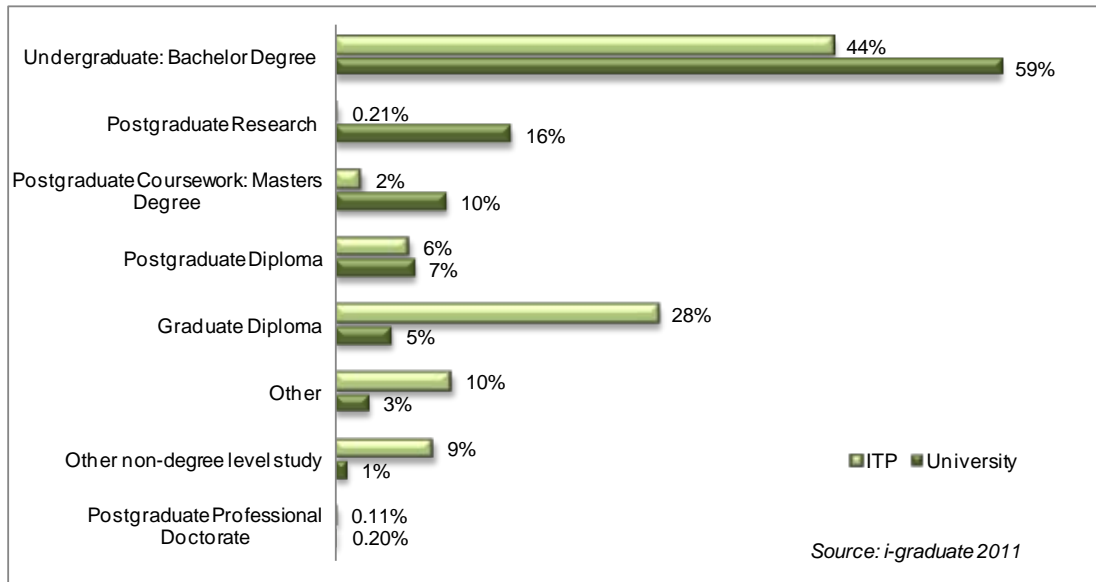
Figure 6.5 How international students fund their study, i-graduate ITP respondents



6.2 Education profile

Respondents to the i-graduate survey in 2011 were predominantly undergraduates. 62 percent of the 5,941 students, both from universities and ITPs, who responded to the question on course level, were studying undergraduate programmes.

Figure 6.6 Level of study, i-graduate respondents



Universities

- Of the 5,002 respondents, 59 percent were undergraduates, 16 percent were completing postgraduate research (i.e. PhD) and 10 percent were in postgraduate coursework (Master's degree).
- Only a small proportion of the university respondents were in postgraduate professional doctorate (one percent) and non-degree (0.2 percent) programmes.

ITPs

- Of the 939 respondents, 56 percent were undergraduates, 13 percent were in the postgraduate research programme, and about 9 percent were in graduate diploma programmes.
- As in the university sector, a few respondents were in postgraduate professional doctorate (0.1 percent) and non-degree (2 percent) programmes.

6.2.1 *Main area of study*

The top three areas of study out of 5,918 responses received (4,986 from the university sector while 932 from the ITP sector) were management and commerce (31 percent), engineering and related technologies (10 percent), and natural and physical sciences (10 percent). Studies about society and culture and information technology were also popular among international students in New Zealand.

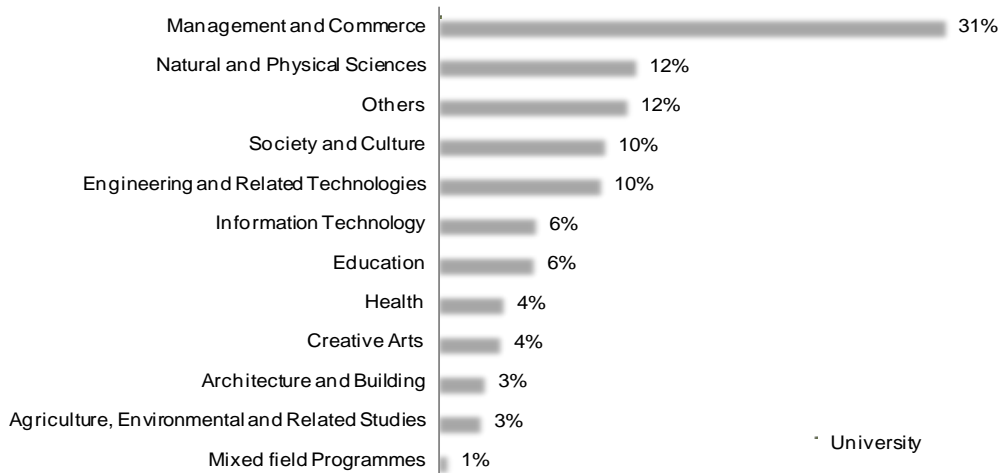
Universities

- Figure 6.7 shows that management and commerce was the most common area of study amongst respondents from the university sector, with 1,548 out of 4,986 respondents undertaking this programme in 2011.
- Natural and physical science,¹³ engineering and related technologies, and society and culture¹⁴ were also popular areas of study within the university sector.

¹³ Subjects within the natural and physical sciences include the biological sciences such as psychology and sports science as well as subjects aligned to medicine.

¹⁴ Society and culture includes subjects such as tourism and hospitality, social studies, and linguistics and languages.

Figure 6.7 Main area of study, i-graduate university respondents



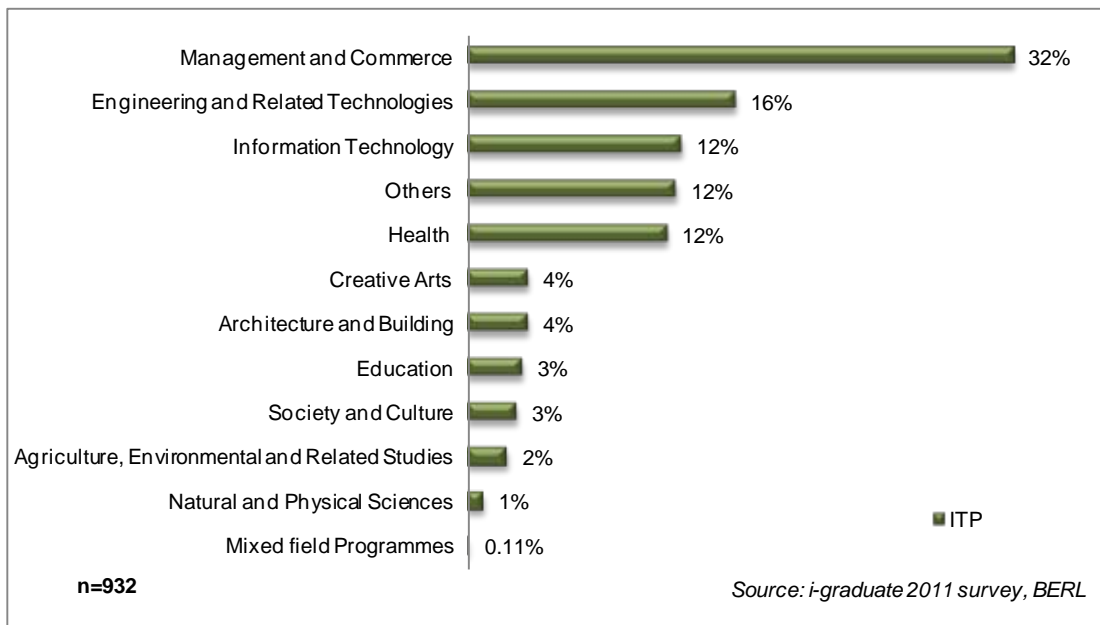
n=4,986

Source: i-graduate 2011 survey, BERL

ITPs

- Management and commerce attracted 295 i-graduate respondents in 2011 in the ITP sector, while 145 respondents were undertaking engineering and related technology subjects, and 116 respondents were taking information technology subjects.
- There were 108 respondents who were enrolled in health and health related programmes.

Figure 6.8 Main area of study, i-graduate ITP respondents



n=932

Source: i-graduate 2011 survey, BERL

6.3 Method of application

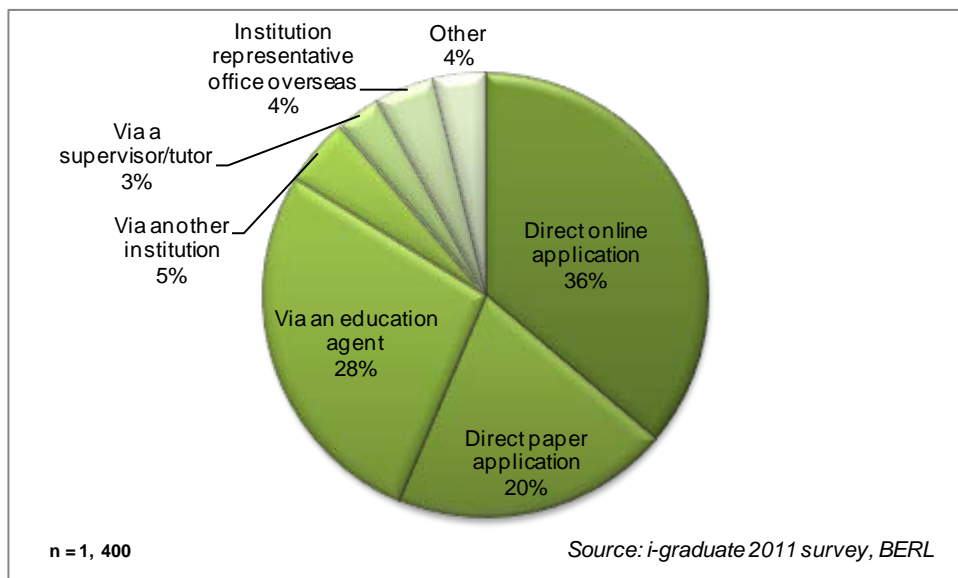
Respondents were also asked about their method of application to their current institution. Of the 1,773 respondents from both universities and ITPs who answered this question, the top three methods of application were direct online application, use of an education agent, and direct paper application.

The preferred method of application varied within nationalities. Chinese students tended to use direct applications while most Indian students tended to apply through education agents.

Universities

- 36 percent of the 1,400 university respondents applied directly, either online or on paper, to their current universities. Five hundred and seven (507) respondents applied directly online while 282 respondents used paper applications.

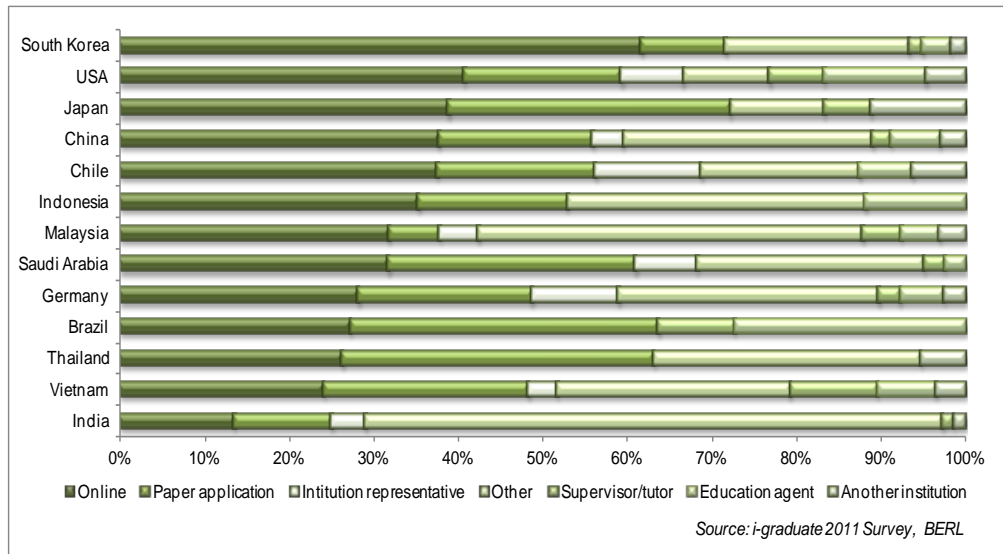
Figure 6.9 Method of application, i-graduate university respondents



- The second most popular method was through an education agent. About 5 percent applied through another institution and another 4 percent through the institution representative office overseas.

Figure 6.10 shows the method of application of selected nationalities. The figure shows that direct application and applying through an education agent were the most common methods of application among Chinese university students. Students from India also applied to their current universities through education agents.

Figure 6.10 Method of application by nationality, i-graduate university respondents

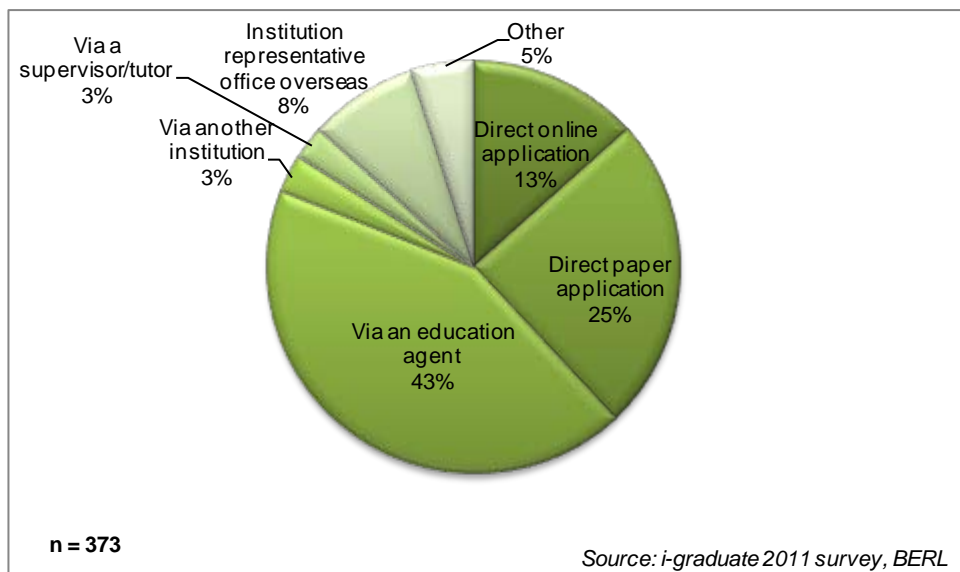


ITPs

- The most common method of application was through an education agent at 43 percent, followed by direct paper applications with 25 percent of the 373 ITP respondents choosing this method.

Figure 6.11 shows the method of application of international students in the ITP sector.

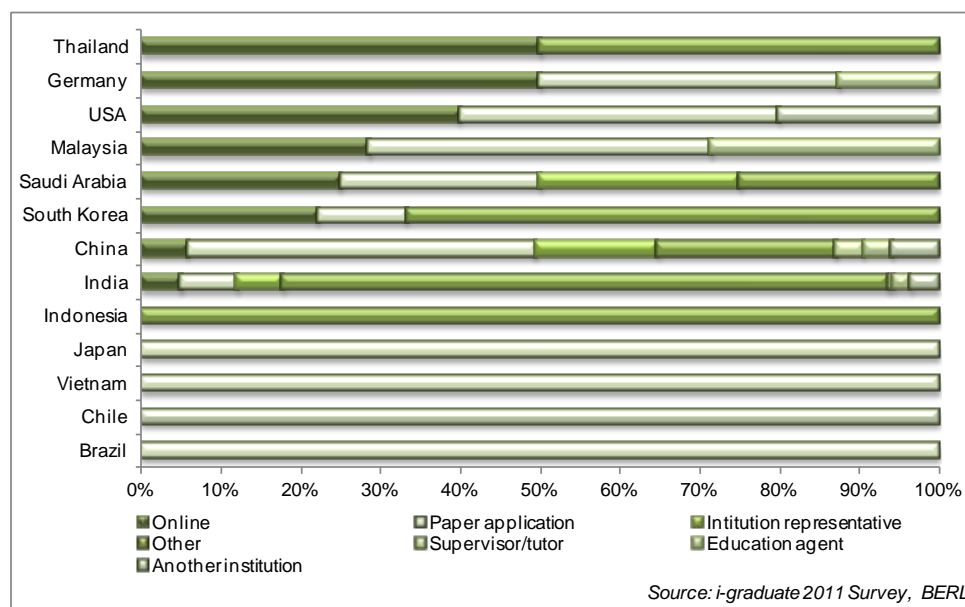
Figure 6.11 Method of application, i-graduate ITP respondents



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Considering the method of application by nationality, Figure 6.10 below shows that all ITP students from Japan, Vietnam and Brazil used paper applications while ITP students from Indonesia applied through education agents.

Figure 6.12 Method of application by nationality, i-graduate ITP respondents



6.4 Immigration visas

Table 6.3 shows the types of visa acquired by respondents. The majority of respondents (98 percent of 5,858 respondents) to the i-graduate survey in 2011 were studying in New Zealand on student visas.

Table 6.3 Type of visa, i-graduate respondents

Type of visa	University		ITP		Total	
	Number	%	Number	%	Number	%
Student visa	4,888	98.3	890	96.0	5,778	97.9
Other work visa (e.g. Family, essential skills)	34	0.7	20	2.2	54	0.9
Visitor visa	26	0.5	10	1.1	36	0.6
Residence visa	13	0.3	5	0.5	18	0.3
Working Holiday	12	0.2	2	0.2	14	0.2
Total	4,973	100.0	927	100.0	5,900	100.0

Source: i-graduate 2011 survey, BERL

6.5 Previous education and English language tests

Table 6.4 shows the previous education of the respondents. The survey reveals that a significant number of the respondents studied in another institution or college (23 percent of 5,858 respondents), had taken preparatory courses and foundation programmes

(13 percent), and went to an international school (12 percent) before undertaking their current programmes.

Table 6.4 Most recent previous study, i-graduate respondents

Previous education	University		ITP		Total	
	Frequency	%	Number	%	Frequency	%
Another institution or college	1,171	23.7	190	20.8	1,361	23.2
Another New Zealand Institution	307	6.2	61	6.7	368	6.3
Foundation programme or preparatory course	726	14.7	28	3.1	754	12.9
International School	551	11.1	156	17.1	707	12.1
Other	762	15.4	192	21.0	954	16.3
Previous study at this institution	414	8.4	112	12.3	526	9.0
Private (fee-paying) secondary education	326	6.6	80	8.8	406	6.9
State-funded (fee-paying) secondary education	486	9.8	67	7.3	553	9.4
State-funded (non-fee paying) secondary education	201	4.1	28	3.1	229	3.9
Total	4,944	100.0	914	100.0	5,858	100.0

Source: i-graduate 2011 Survey, BERL

Universities

- 24 percent of the university respondents had attended another institution or college before their current universities while 15 percent had undertaken foundation and preparatory courses.
- One in ten of the university respondents were in either an international school or in a state-funded secondary school.

ITPs

- One in five ITP respondents had attended another institution or college before attending their current ITPs.
- 17 percent had been to an international school.
- Over ten percent of the ITP respondents had previously studied in their current institution.

6.6 English language tests

Respondents were asked if they had to sit a language test before joining the institution they were studying at and 1, 624 of the 1,786 respondents stated that they did not have to sit a language test.

Table 6.5 English language tests, i-graduate studies

Taken a language test	Total	
	Number	%
IELTS	951	53.2
TOEFL	71	4.0
Other language test	91	5.1
No	673	37.7
Total	1,786	100.0

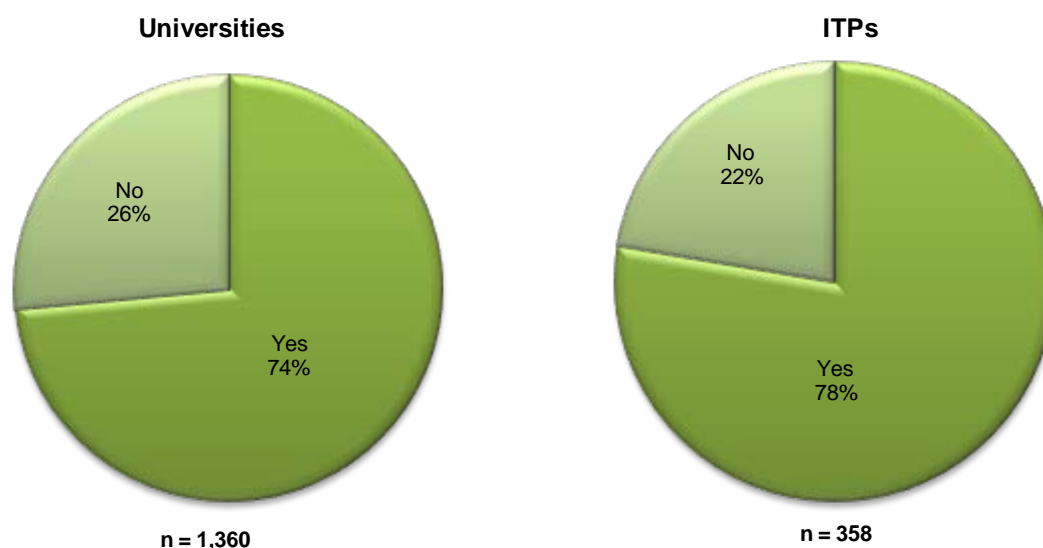
Source: i-graduate 2011 Survey, BERL

Of those who sat a language test, 92 percent took an English language test, most of whom took the International English Language Test System (IELTS). The rest took the Test of English as Foreign Language (TOEFL) and other language tests.

6.7 First choice

Respondents were asked if New Zealand was their first choice of destination for international studies. Of the 1,718 people who responded to this question, 74 percent replied that New Zealand was their first choice of country. This was comparable with the findings for ITPs.

Figure 6.13 New Zealand as first choice of international study, i-graduate respondents



6.7.1 *Aspects that students considered important in when deciding where to study*

Universities

- The top five factors that university students considered important were quality of teaching (96 percent of 1,307 respondents), reputation of the institution (93 percent of 1,295 respondents), value of a qualification from the institution (92 percent of 1,298 respondents), personal safety and security (92 percent of 1,303 respondents) and reputation of the education system (90 percent of 1,289 respondents).
- The least important factors were institution scholarship (70 percent of 1,172 respondents), presence of family or friends already in the country (43 percent of 1,115 respondents and family or friends already studying at their current institution (37 percent of 1,098 respondents).

- Almost 65 percent of respondents were studying or working in their home country prior to studying in New Zealand.
- The two most important factors considered in choosing where to study were reputation of the institution and the value of a qualification from the institution.
- The least important factor was the presence of friends and family living or studying in the country.

ITPs

- The top five factors that ITP students considered important were reputation of the institution (94 percent of 329 respondents), department reputation (91 percent of 325 respondents), quality of research (90 percent of 325 respondents), quality of teaching (95 percent of 335 respondents) and value of qualification from the institution (93 percent of 330 respondents).
- The least important factors were social life (86 percent of 327 respondents), presence of family or friends already in the country (57 percent of 293 respondents), and family or friends already studying at their current institution (44 percent of 280 respondents).

6.7.2 *Other study destinations*

Universities

- University respondents had also considered studying in USA (617 responses) Australia (584 responses), United Kingdom (468 responses), Canada (311 respondents) and Singapore (114 responses).

ITPs

- The other study destinations considered by ITP respondents were Australia (117 responses), USA (105 responses), Canada (100 responses), United Kingdom (85 responses), and Germany (22 responses),

7 Student satisfaction with their experiences

This section of the report discusses the satisfaction levels of 2011 i-graduate survey respondents in relation to various aspects of their experience in New Zealand. The section also presents satisfaction ratings of key markets of both the university and ITP sector. The percentages reported in this section were based on weighted responses.

7.1 Overall satisfaction

The i-graduate respondents were asked to rate their overall satisfaction across the five areas measured, arrival, learning, living, support services and overall institution experience, using a Likert scale from *very dissatisfied* to *very satisfied*.

Overall, 2011 i-graduate respondents were satisfied with their overall experience at their current New Zealand education provider:

- 88 percent of university students were satisfied.
- 90 percent of ITP students were satisfied with their experience at the institution they were studying at.
- Around one in ten respondents from both groups of international students was dissatisfied with their overall institution experience in New Zealand.
- The highest proportion of satisfied students was from Chile for both university and ITP sectors. Compared to other countries, there was a high proportion of dissatisfied students from Saudi Arabia and South Korea in both sectors.

Universities

- 80 percent of respondents from China reported that they were satisfied with their overall experiences at a New Zealand university.
- The three countries with the highest proportion of students who reported dissatisfaction with their overall experience at the university they are studying at were Saudi Arabia, Brazil and South Korea. Over 20 percent of the students from

In this chapter

- Overall satisfaction
- Pre-arrival satisfaction
- Arrival satisfaction
- Learning satisfaction
- Satisfaction with living experience in New Zealand
- Satisfaction with support services and institution amenities

This section also presents findings on:

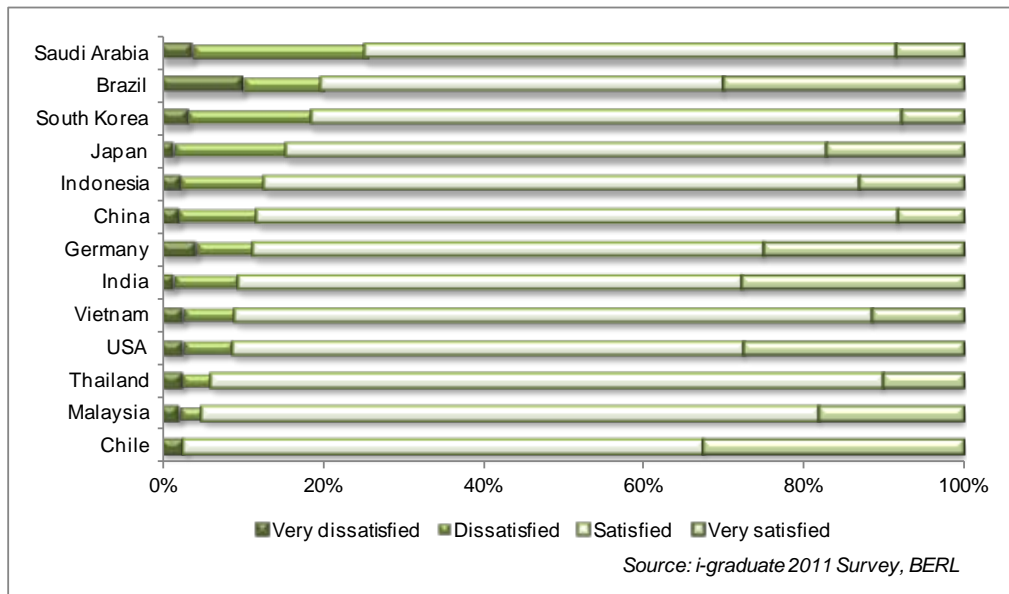
- students working while studying
- expectations of employment and career support
- future plans of international students.

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these countries were dissatisfied with their overall university experience. Figure 7.1 shows overall institution satisfaction ratings in key countries.

- Over 10 percent of the students from Germany, China, Indonesia and Japan were also dissatisfied with their experiences at a New Zealand university.

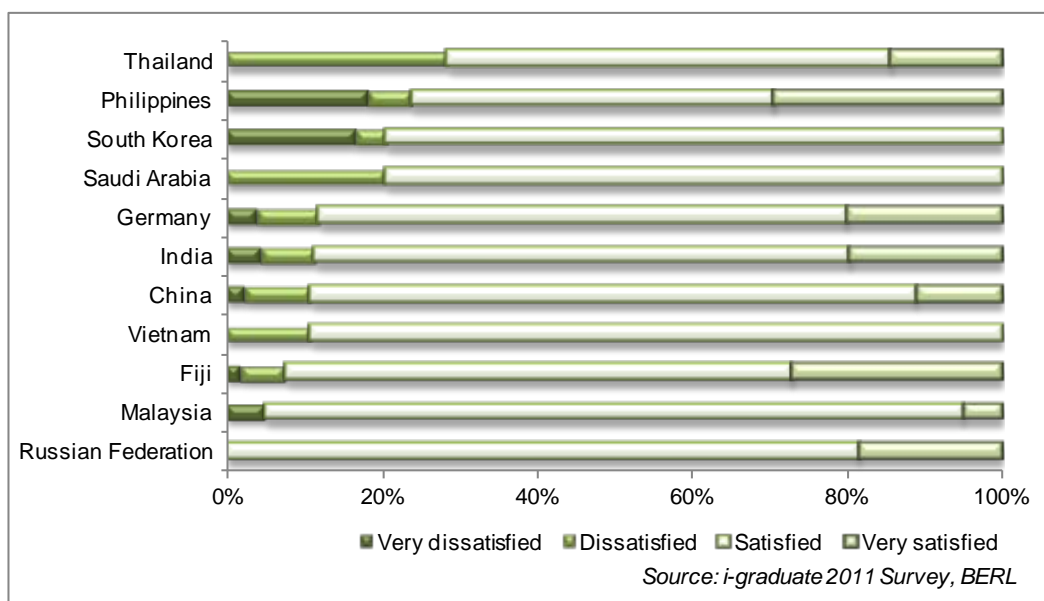
Figure 7.1 Overall institution satisfaction by key country, i-graduate university respondents



ITPs

Figure 7.2 shows overall institution satisfaction of ITP respondents from key countries.

Figure 7.2 Overall institution satisfaction by key country, i-graduate ITP respondents



- 71 percent of Thai students reported being satisfied with their overall experiences.
- Over 20 percent of students from the Philippines, Saudi Arabia and South Korea were dissatisfied with their experiences at the ITP they were studying at.
- One in five students from Saudi Arabia was dissatisfied with their overall ITP experience while about one in ten students from Fiji, Vietnam, China and India were dissatisfied.

7.1.1 Students' willingness to recommend their institution

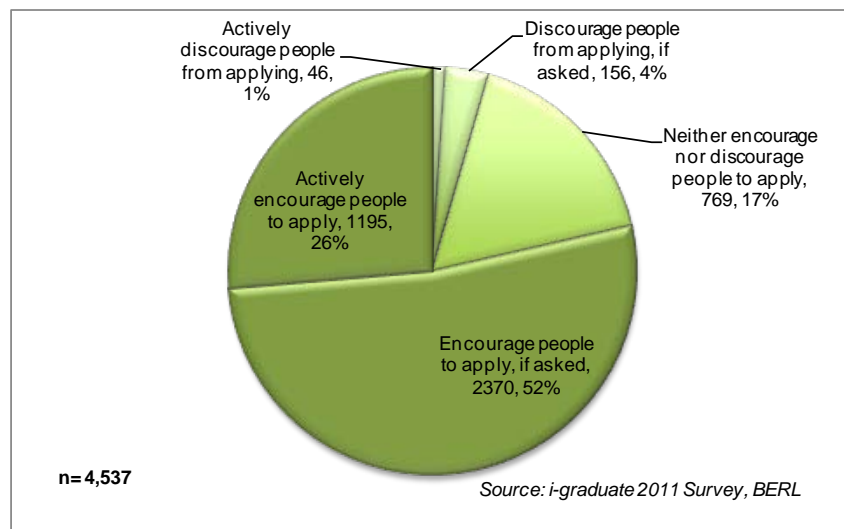
Students were also asked about their willingness to recommend their institution to people who are thinking of studying overseas.

Universities

Figure 7.3 shows the number of i-graduate respondents from New Zealand universities who were likely to recommend their current institution to people thinking of international study.

- The majority of the university respondents would recommend their current institution to other students, with 26 percent of the 4,537 respondents indicating they would actively encourage people to apply to their current institution. 52 percent would encourage people to apply if asked.

Figure 7.3 Recommendation i-graduate university respondents



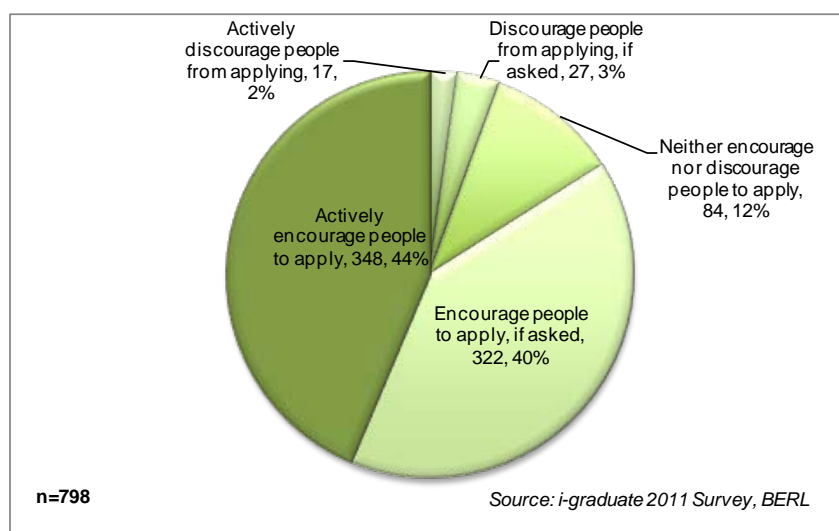
- Over 700 students, or 17 percent, would neither encourage nor recommend other students to apply.

ITPs

Figure 7.4 shows whether ITP respondents would encourage other students to apply to the institution they were currently studying at.

- The majority (84 percent) would actively encourage people to apply and would encourage people to apply if they were asked, reflecting overall satisfaction with their current education provider.
- A small proportion (4 percent) of ITP respondents would discourage other people from applying to their current education provider.

Figure 7.4 Recommendation, i-graduate ITP respondents



7.2 Pre-arrival satisfaction

Most of the students were on student visas as discussed in Chapter 6.4. This section presents the satisfaction of international students with their visa application process. The section also presents findings on their experience with education agents or institution representatives, as well as their willingness to recommend their education agents to other people.

7.2.1 Satisfaction with applying for a visa and other immigration processes

Six key aspects of the visa application process were examined to determine the level of satisfaction of international students with the visa application process. These aspects included:

- time taken to process the visa
- accuracy of visa processing support from the institution

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- level of service the student received from the visa office staff in their own country
- process involved in gathering visa applicants' biometric information at the border
- support with the visa application process from the institution that the student applied to study at
- immigration service on their arrival at the border.

Institution representatives and education agents encourage a greater number of students to study in New Zealand by providing expert advice and information, and promptly responding to student queries.

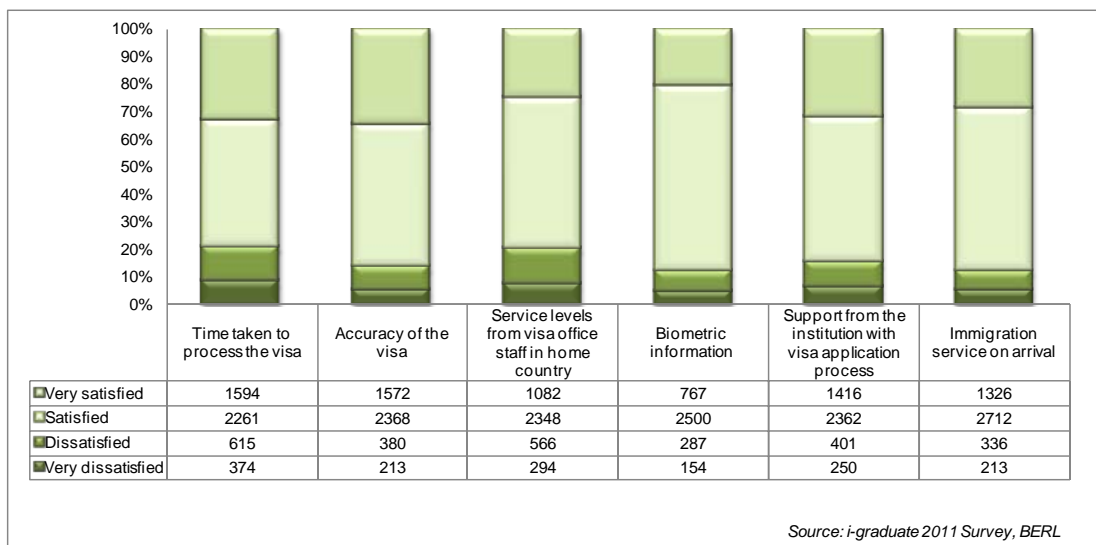
The survey revealed that the respondents, both from universities and ITPs were generally satisfied with their experiences of applying for visas to study and live in New Zealand.

Universities

Figure 7.5 summarises the satisfaction levels of university respondents with their visa application experience.

- University respondents were most satisfied with the time taken to process their visa, the accuracy of the visa process and the support they received from the institution they were applying to study at.
- One in five university respondents were dissatisfied with their experiences related to the time taken to process their visa, and the level of service they received from the visa office in their own country.

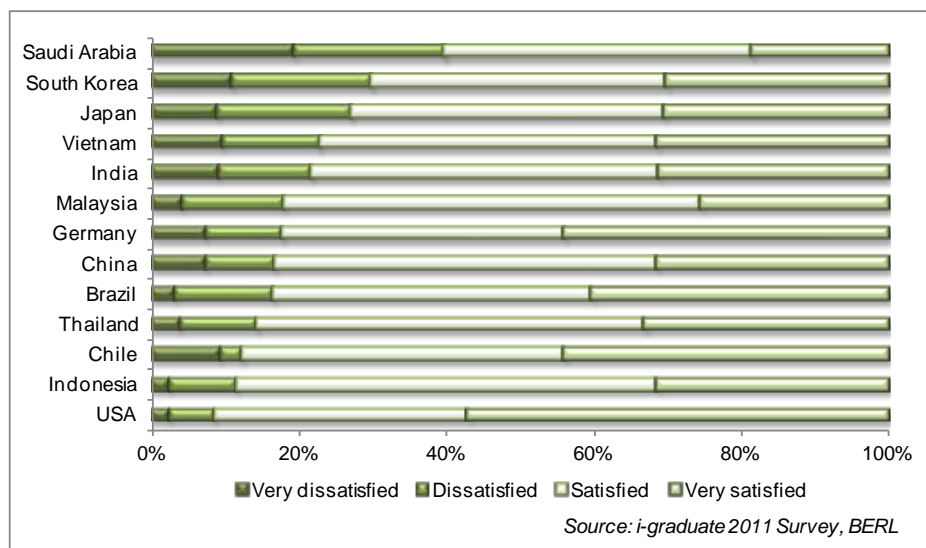
Figure 7.5 Visa satisfaction rating, i-graduate university respondents



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- Figure 7.6 shows the proportion of students in selected countries who were dissatisfied with the time taken to process visa applications. More than one in four students from Saudi Arabia, South Korea and Japan reported dissatisfaction with this aspect of visa application.
- About one in five students from Vietnam and India was also dissatisfied with the time taken to process their visa application.
- Overall, 80 percent of the university students were satisfied with the time taken to process their visa applications.

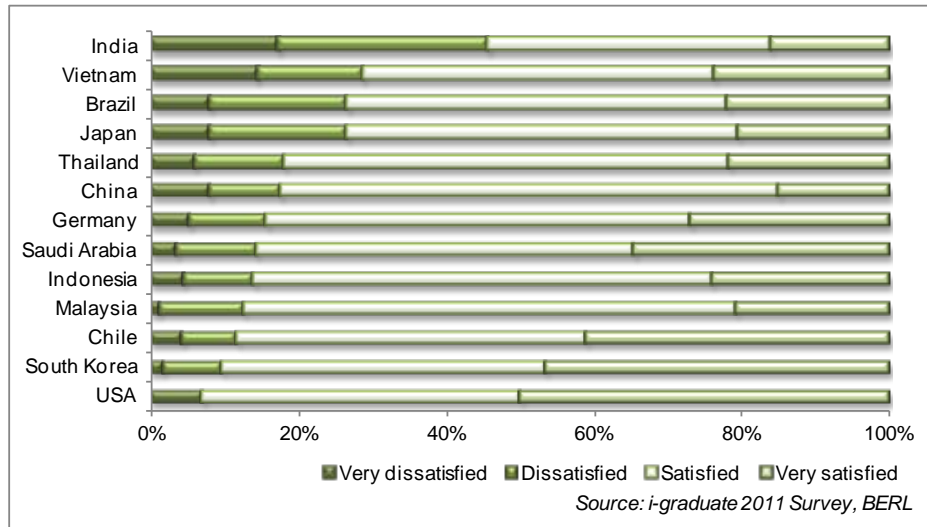
Figure 7.6 Time taken to process visa by key countries, i-graduate university respondents



- Over 25 percent of students from India, Vietnam, Brazil and Japan were dissatisfied with the level of service offered by the visa office in their home country.¹⁵

¹⁵ These percentages were computed by country. Thus the proportions reported here are within country that is based on the total respondents coming from a specific country in the university sector.

Figure 7.7 Home country visa office service by key countries, i-graduate university respondents

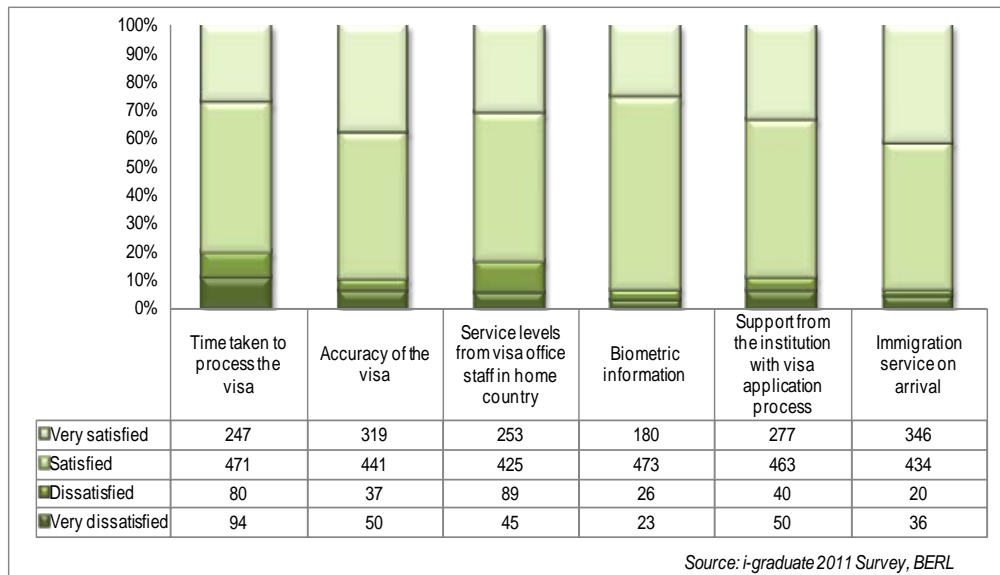


ITPs

Survey respondents from New Zealand ITPs were generally satisfied with their experiences of applying for visas to study and live in New Zealand.

Figure 7.8 summarises their satisfaction levels with their visa experience.

Figure 7.8 Visa satisfaction rating, i-graduate ITP respondents



- ITP respondents were most satisfied with the processing of biometric information, and the level of service they received at immigration on arrival.

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- Approximately 20 percent of respondents studying at New Zealand ITPs were most dissatisfied with the time taken to process their visa, and the level of service they received from the visa office in their nationality.
- One in 10 respondents reported dissatisfaction with the support they received from the institution they applied to study at.

Figure 7.9 shows the pattern of response about the time taken to process visa applications in the key markets of the education providers in the ITP sector.

- Over 30 percent of students from Saudi Arabia, Fiji, Malaysia and South Korea reported dissatisfaction with the time taken to process their visa applications.
- One in five respondents from the Philippines, India and China also expressed dissatisfaction with this aspect of acquiring a visa.
- One in ten students from Vietnam was dissatisfied with the time taken to process their visa application.

Figure 7.9 Time taken to process visa by key country, i-graduate ITP respondents

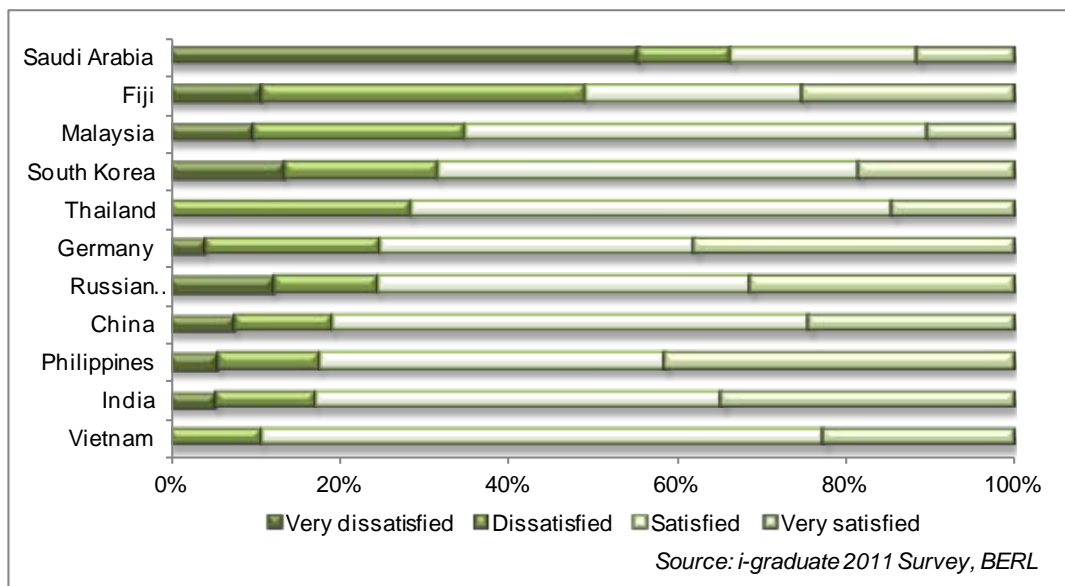
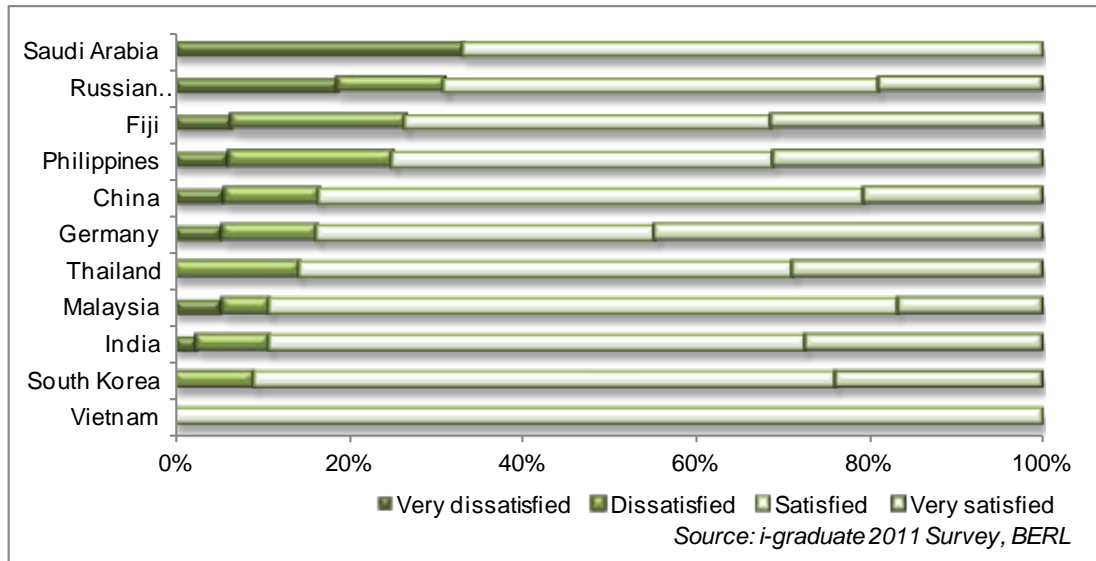


Figure 7.10 shows the pattern of response to service levels from visa office staff in the students' countries.

Figure 7.10 Home country visa office service by key country, i-graduate ITP respondents



- 16 percent of the 811 respondents were dissatisfied with the service received from visa offices in their own countries.
- The countries with a high proportion of students who reported dissatisfaction with the service level of their own country’s visa office were Saudi Arabia, the Russian Federation, Fiji, the Philippines and China.

7.2.2 Satisfaction with institution representatives and education agents

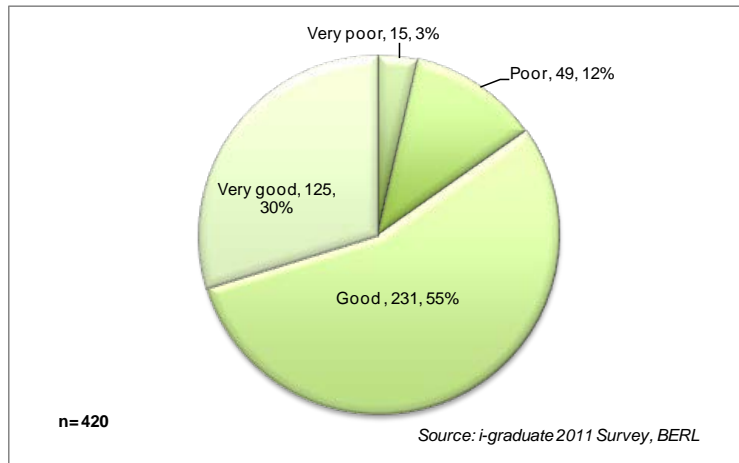
As discussed in Chapter 6.3, applying via education agents and institution representatives overseas was cited as a common method of application among respondents from the universities and ITPs. This finding indicates the importance of institution representatives and education agents in the application process for international students.

There is a noticeable point of difference between the application methods of international students applying to study in New Zealand universities and international students applying to study in the ITP sector. Compared to the university sector, a higher proportion of respondents from the ITP sector applied for programmes of study with the assistance of a representative of the institution.

Universities

Figure 7.11 illustrates how university respondents rated the service they received.

Figure 7.11 Agent/representative satisfaction, i-graduate university respondents

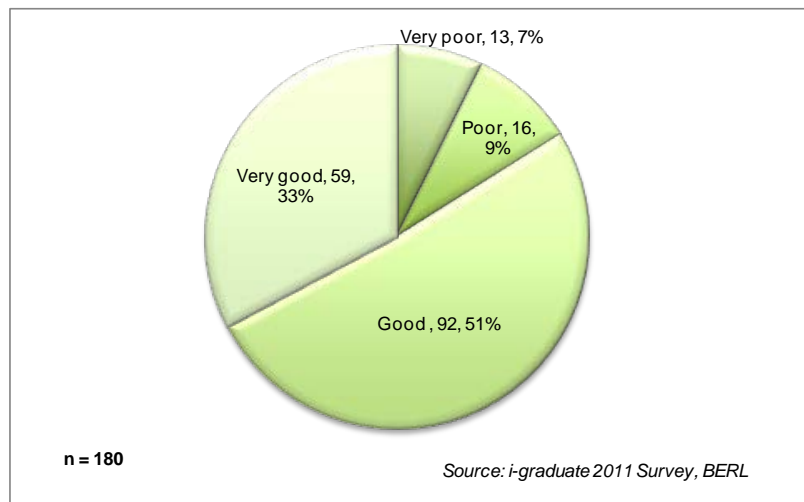


- The majority of respondents who applied to a New Zealand university through an agent or institution representative reported that the service was good.
- About 15 percent of the 420 respondents reported that they received poor service.

ITPs

Figure 7.12 reports how international students rated the service they received from the overseas representative of their New Zealand ITP.

Figure 7.12 Agent/representative satisfaction, i-graduate ITP respondents



- Of the 180 respondents, 84 percent of those who applied through an overseas representative of the ITP or an education agent reported that the service they received was good.
- Sixteen percent of the respondents reported that they had received a poor level of service.

7.2.3 Students' willingness to recommend their representative or agent

Table 7.1 and Table 7.2 report whether those who used institution representatives or education agents would recommend that person to other students thinking of applying to the same institution.

Universities

Table 7.1 shows that 11 percent of respondents would not have applied without the help of an agent, and 41 percent would actively recommend their agent to other students thinking of applying.

Table 7.1 Agent/representative recommendation, i-graduate university respondents

Recommend the agent/overseas representative used to other students of thinking of applying	Would not have applied to this institution without the help of agent				Total
	Disagree strongly	Disagree	Agree	Agree strongly	
Actively discourage people from using my agent/representative	1%	1%	0%	0%	3%
Actively recommend people to use my agent/representative	2%	11%	10%	7%	30%
Neither recommend nor discourage people to use my agent/representative	5%	9%	5%	1%	20%
Discourage people from using my agent/representative, if asked	2%	3%	1%	0%	7%
Encourage people to use my agent/representative, if asked	7%	16%	14%	3%	41%
Total	18%	41%	31%	11%	100%

n=408

Source: i-graduate 2011, BERL

- Of those who agree that their agent had been helpful with their application, one out of 10 of these students was likely to actively recommend using this agent to other students.
- 41 percent (166 of the 408 students who responded to both questions) disagree with the statement, "I would have not applied to this institution without the help of my agent."

ITPs

Table 7.2 shows that 32 percent would actively recommend their agent to other students thinking of applying, while 33 percent would have not applied without the help of their agent.

Table 7.2 Agent/representative recommendation, i-graduate ITP respondents

Recommend the agent/overseas representative used to other students of thinking of applying	Would not have applied to this institution without the help of agent				Total
	Disagree strongly	Disagree	Agree	Agree strongly	
Actively discourage people from using my agent/representative	21%	2%	0%	7%	4%
Actively recommend people to use my agent/representative	17%	31%	33%	53%	32%
Neither recommend nor discourage people to use my agent/representative	29%	16%	25%	0%	20%
Discourage people from using my agent/representative, if asked	17%	8%	0%	0%	5%
Encourage people to use my agent/representative, if asked	17%	43%	42%	40%	39%
Total	14%	30%	47%	9%	100%

n= 171

Source: i-graduate 2011, BERL

- Overall, more than half of the respondents (56 percent) would not have applied to the institution without the help of an agent.

7.3 Arrival satisfaction

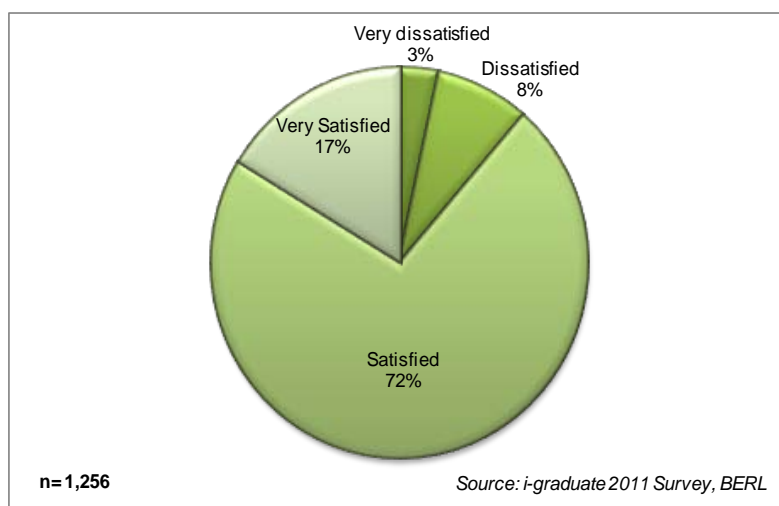
This section focuses on the overall arrival experience, and discusses the areas that students were very satisfied and dissatisfied with.

7.3.1 Overall arrival satisfaction

Universities

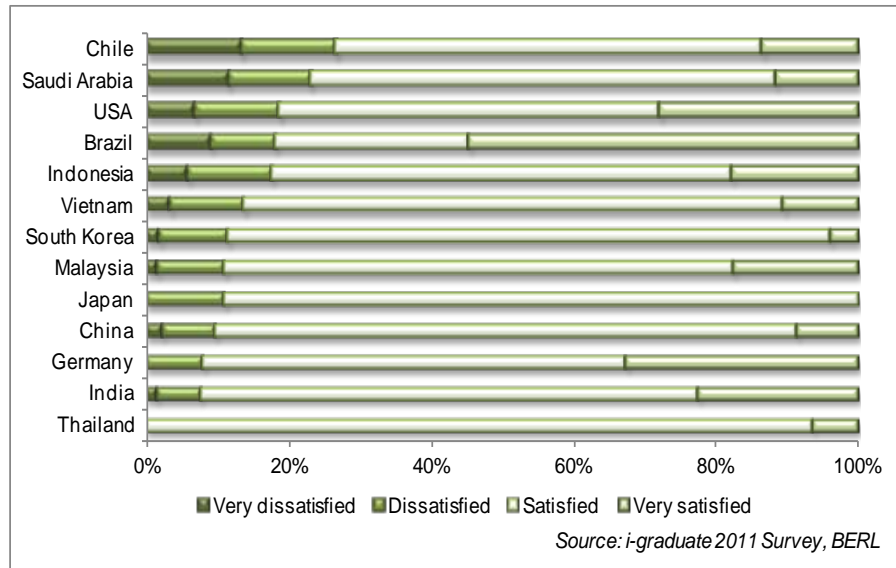
Figure 7.13 shows the arrival satisfaction ratings of international students in universities.

Figure 7.13 Arrival satisfaction ratings, i-graduate university respondents



- 87 percent were satisfied with their arrival experience.

Figure 7.14 Overall satisfaction ratings by key country, i-graduate university respondents

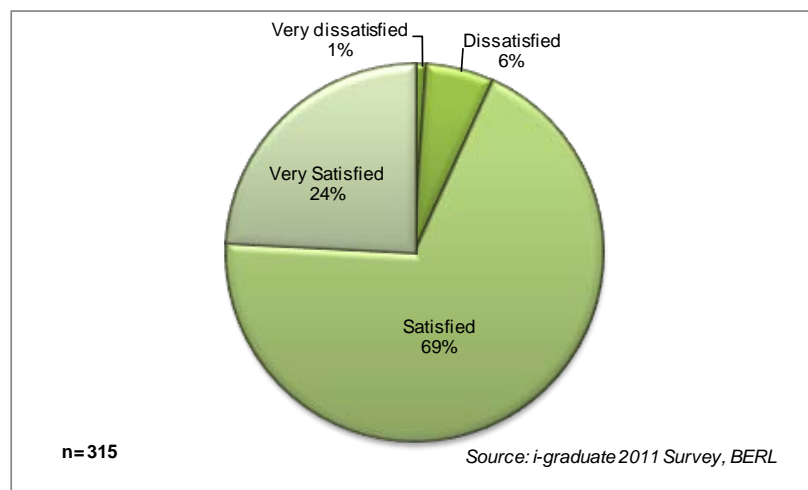


- Chile (27 percent), Saudi Arabia (23 percent) and the United States of America (19 percent) had the highest proportion of students who were dissatisfied with their arrival experiences.

ITPs

Figure 7.15 shows the arrival satisfaction ratings of international students in ITPs.

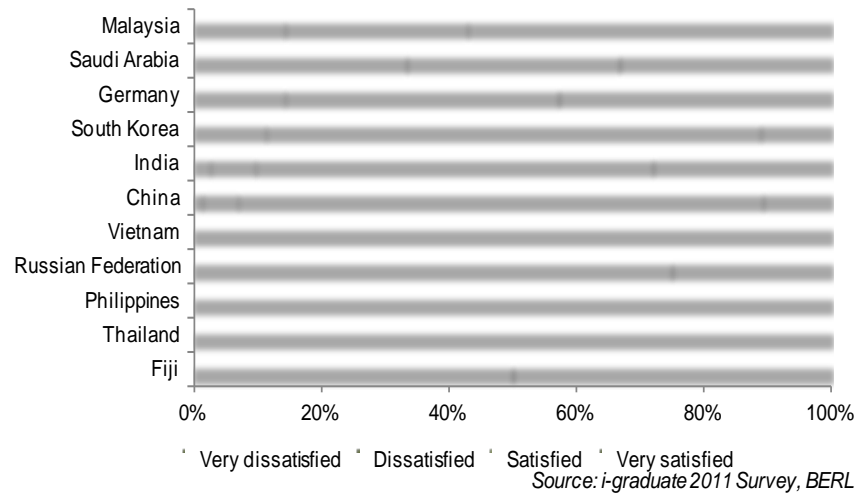
Figure 7.15 Arrival satisfaction ratings, i-graduate ITP respondents



- More than 90 percent of respondents were satisfied with their arrival experience.

Figure 7.16 shows the overall arrival satisfaction ratings in selected countries.

Figure 7.16 Overall arrival satisfaction ratings by key country, i-graduate ITP respondents



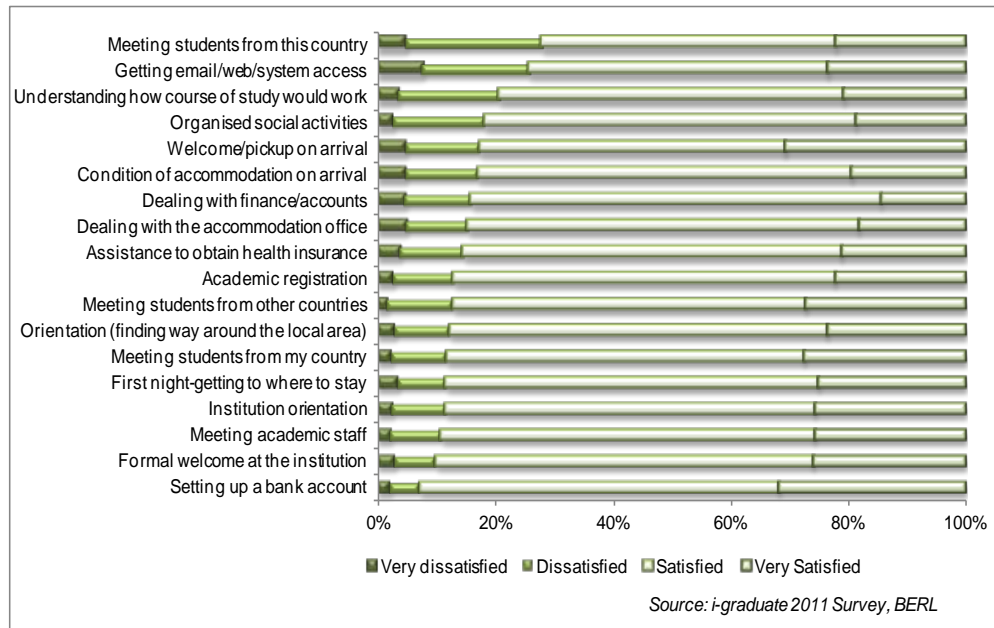
- A high proportion of respondents from Malaysia, Saudi Arabia and Germany were dissatisfied with their arrival experiences in New Zealand.

7.3.2 Students' satisfaction with different aspects of their arrival in New Zealand

Universities

Figure 7.17 summarises the pattern of response of university respondents with different aspects of their arrival experience.

Figure 7.17 Arrival satisfaction ratings, i-graduate university respondents



- The aspects of their arrival experience that university respondents were most satisfied with were setting up a bank account, meeting academic staff and the formal welcome they received at the institution they were studying at.
- The aspects of their arrival experience that respondents were dissatisfied with were meeting students from New Zealand, getting access to email and the internet, dealing with finance/accounts and understanding how their course of study would work.

ITPs

Figure 7.18 summarises the leading areas of satisfaction for international students in ITPs.

What the 2011 i-graduate survey reveals about international students' arrival experiences

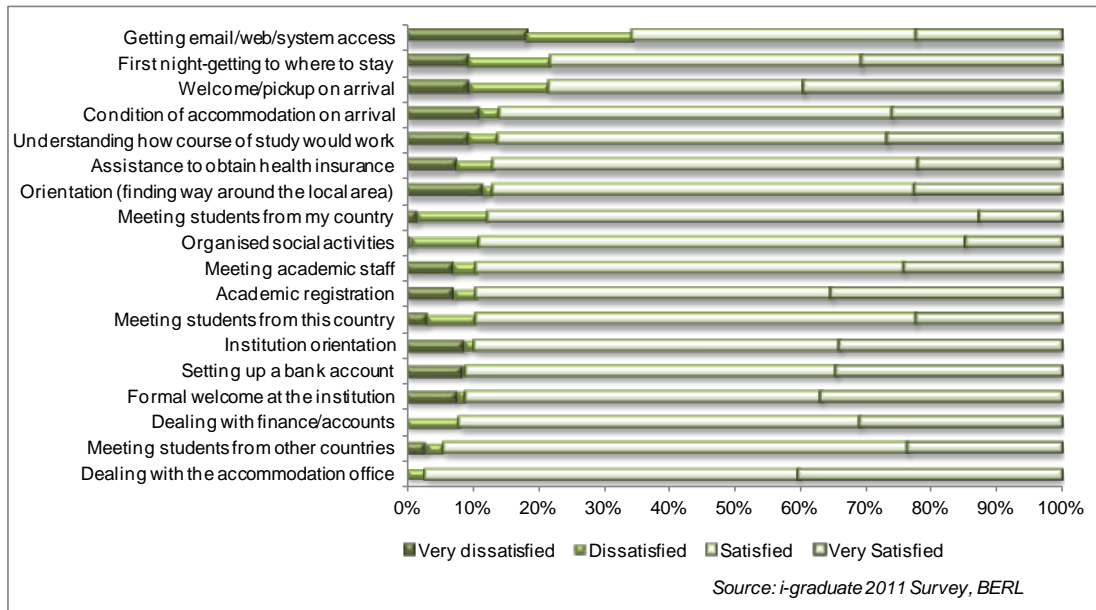
International students were most satisfied with:

- setting up a bank account in New Zealand
- formal welcome at the institution
- meeting academic staff

International students were least satisfied with:

- getting access to email and the internet
- meeting students from New Zealand
- understanding how their course of study works.

Figure 7.18 Arrival satisfaction ratings, i-graduate ITP respondents, 2011

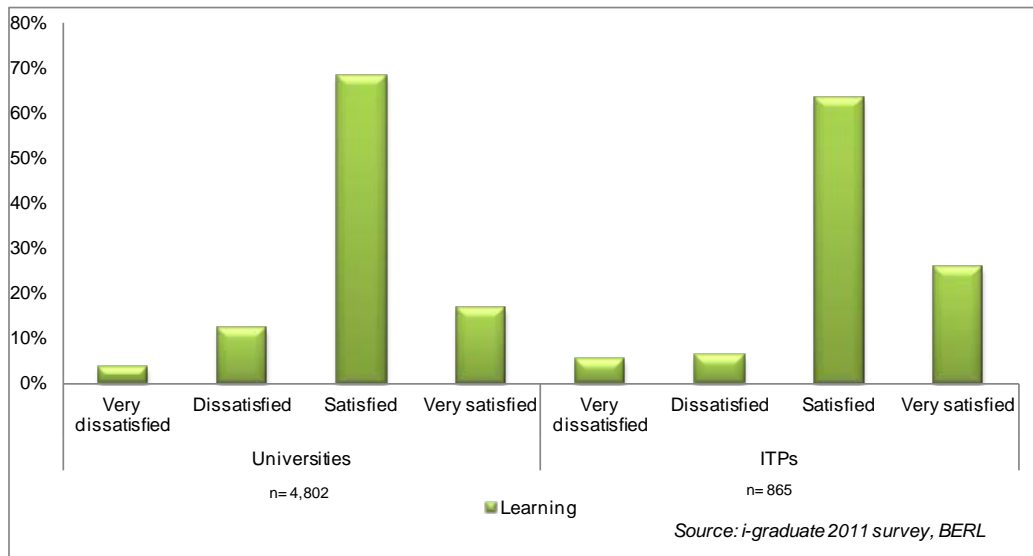


- The aspects of their arrival experience that ITP respondents were most satisfied with were dealing with the accommodation office, meeting students from other countries and dealing with the finance/account department.
- The aspects of their arrival experience that students were dissatisfied to very dissatisfied with included meeting students from New Zealand, getting access to email and the internet and getting to where they were staying on their first night in New Zealand. A high proportion of respondents also reported dissatisfaction on, the welcome or pick-up they received at the airport, railway or bus station, the condition of their accommodation upon arrival and on understanding how their course of study would work.

7.4 Learning satisfaction

Figure 7.19 shows that over 80 percent of respondents from both university (85 percent) and ITP (89 percent) sectors were satisfied to very satisfied with their overall learning experience. Figure 7.19 shows that the proportion of students who were dissatisfied to very dissatisfied with their learning experience was higher in the university sector than the ITP sector.

Figure 7.19 Overall learning experience satisfaction ratings, i-graduate respondents



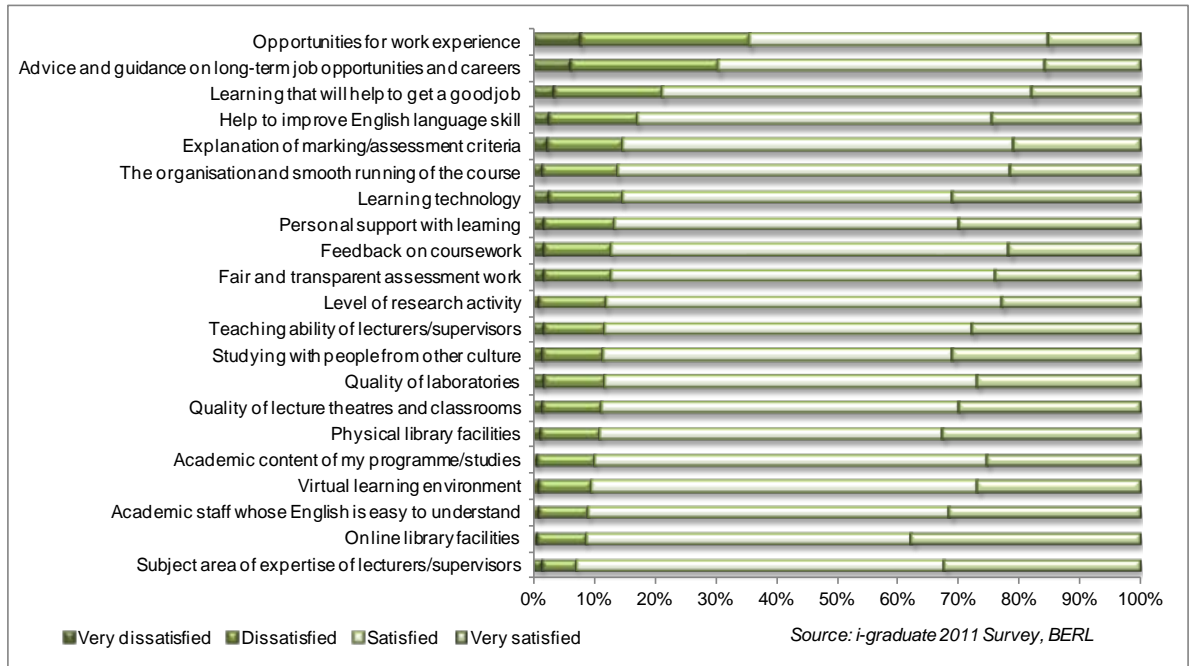
7.4.1 Satisfaction with different aspects of students’ learning in New Zealand

This section examines each sector separately in terms of satisfaction with their learning experience.

Universities

Figure 7.20 shows the university respondents’ satisfaction with their learning experience.

Figure 7.20 Learning experience satisfaction ratings, i-graduate university respondents



- The aspects of learning experience that international students at New Zealand universities were most satisfied with were related to qualities of the academic staff, facilities and academic content of programmes/ studies.
 - 93 percent were satisfied with subject area of expertise of lecturers/supervisors
 - 91 percent were satisfied with online library facilities
 - 90 percent were satisfied with their universities virtual learning environment
- The areas that students were most dissatisfied with were opportunities for work experience and advice or guidance related to career and future employment.
 - 36 percent were dissatisfied with opportunities for work experience
 - 30 percent expressed dissatisfaction with the advice and guidance provided about long-term job opportunities and careers.

What the 2011 i-graduate survey reveals about the learning experience of international students

International students were:

- most satisfied with academic staff whose English was easy to understand, and with the learning facilities at their institution
- least satisfied with opportunities for work experience, and advice and guidance on future career and employment.

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- 22 percent were dissatisfied with their course being unable to help the respondent attain a good job.
- One in five university respondents was dissatisfied with the help they received to improve their English language skills.
- One in ten university respondents was dissatisfied with how their assessments were marked.

ITPs

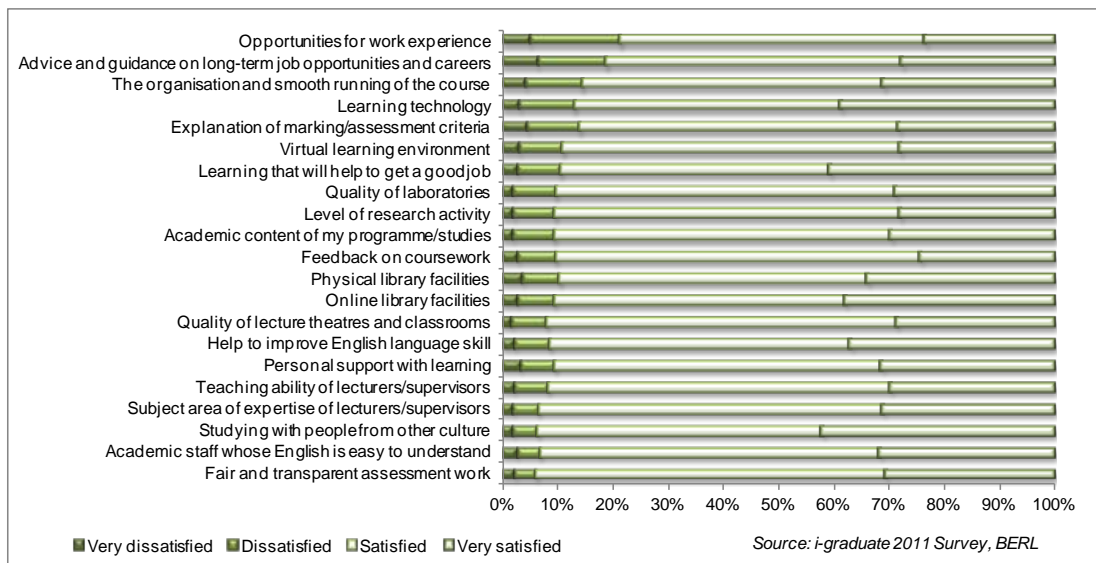
Figure 7.21 shows the ITP respondents' satisfaction with their learning experience.

- The aspects of their learning experience that ITP respondents were most satisfied with were the fair and transparent assessment of work, and academic staff whose English is easy to understand.
- The aspects of their learning experience that ITP respondents were most dissatisfied with were opportunities to gain work experience, and the advice and guidance received about long-term job opportunities and careers.
- There was also a high proportion of international students in the ITP sector who were dissatisfied with the running of their courses and the feedback they received on their course work.

Compared to respondents from universities, those from ITPs believe that:

- their current programme helps them to improve their English language skills
- they are learning skills that will help them get a good job.

Figure 7.21 Learning experience satisfaction rating, i-graduate ITP respondents



7.5 Satisfaction with their experience of living in New Zealand

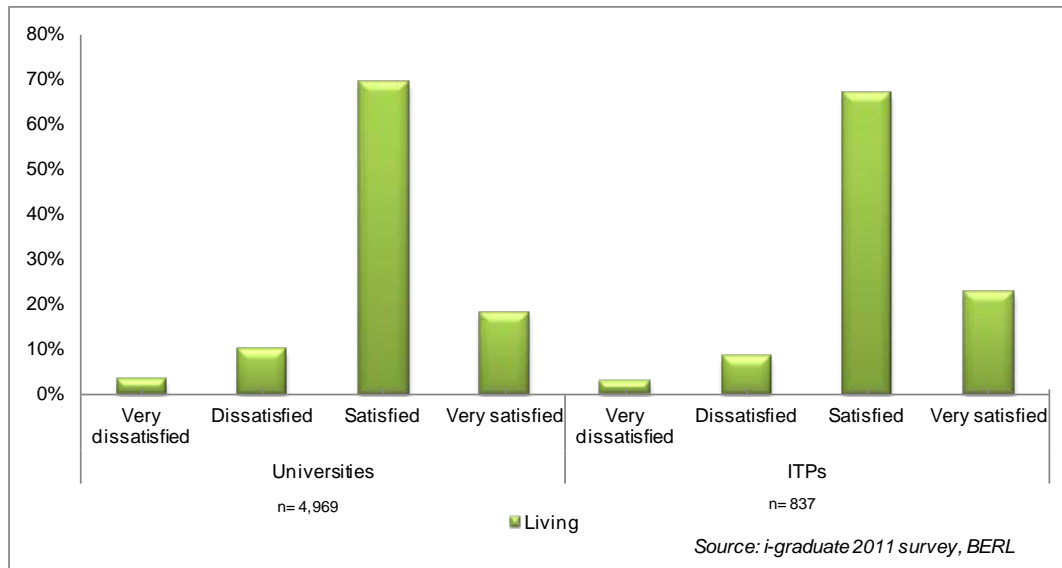
The 2011 i-graduate survey also asked respondents to rate their living experience in New Zealand, including their social integration, how they were perceived and treated in New Zealand, and the perceived reasons for any negative treatment.

7.5.1 Overall living satisfaction

Figure 7.22 shows the overall living experience ratings of international students who participated in the survey.

- Respondents to the survey were generally satisfied with living in New Zealand.
- About one in ten of the respondents in the university and ITP sector reported dissatisfaction.
- Safety and security was a positive aspect of living and studying in New Zealand.
- Cost of living and accommodation were the least satisfying aspect of the respondents' living experience.

Figure 7.22 Living satisfaction ratings, i-graduate respondents



7.5.2 Satisfaction with different aspects of life in New Zealand

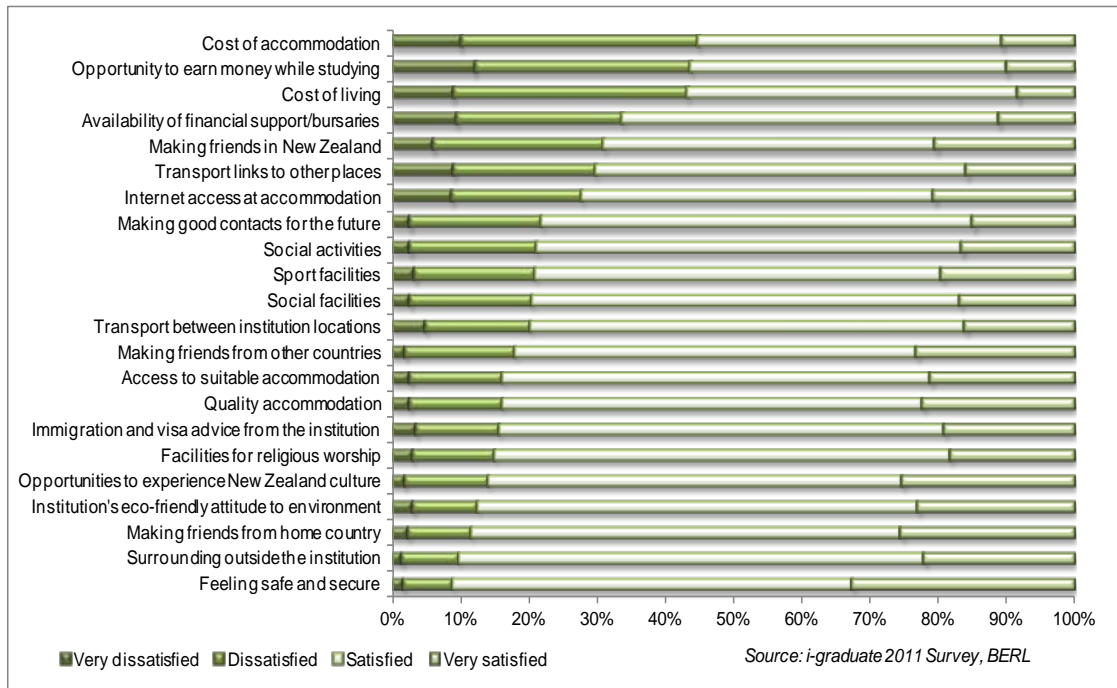
For the international students who participated in the survey:

- Feeling safe and secure received the top score in terms of satisfaction.
- Cost of living and accommodation in New Zealand received the top score in terms of dissatisfaction.

Universities

Figure 7.23 shows the university respondents' pattern of response to various aspects of their living experience.

Figure 7.23 Living experience satisfaction ratings, i-graduate university respondents



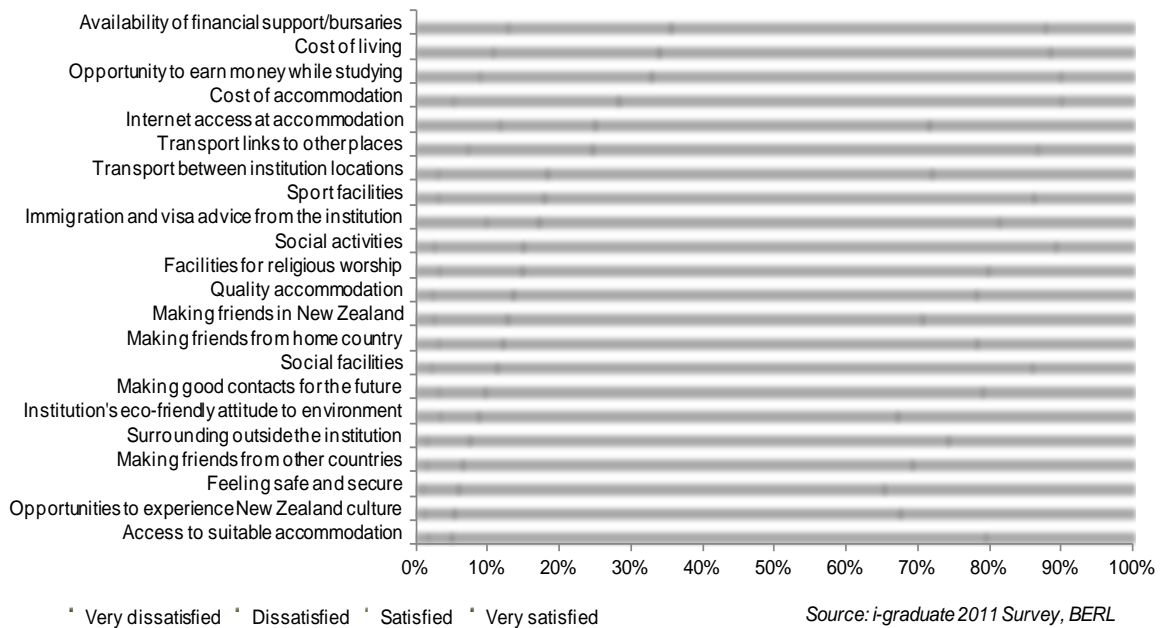
- International students at New Zealand universities were very satisfied with safety and security at the universities. They were also highly satisfied with the opportunities to make friends with people from their own country and experience New Zealand culture.
- Cost of accommodation, opportunity to earn money while studying, cost of living, availability of financial support and making friends in New Zealand were the most dissatisfying aspects of their living experience for international students in the universities.

ITPs

Figure 7.24 shows the ITP respondents' pattern of response to various aspects of their living experience.

- Access to suitable accommodation, opportunities to experience New Zealand culture and safety and security were the most satisfying aspects of living in New Zealand.
- Students at ITPs also rated the ability to make friends from other countries as being a very satisfactory aspect of living in New Zealand, along with the ability to experience and learn about the culture of New Zealand.
- Over 20 percent of ITP respondents were dissatisfied with the cost of living and accommodation, the opportunity to earn money and receive financial support, and transport links to other places.

Figure 7.24 Living experience satisfaction ratings, i-graduate ITP respondents



7.5.3 Student social integration

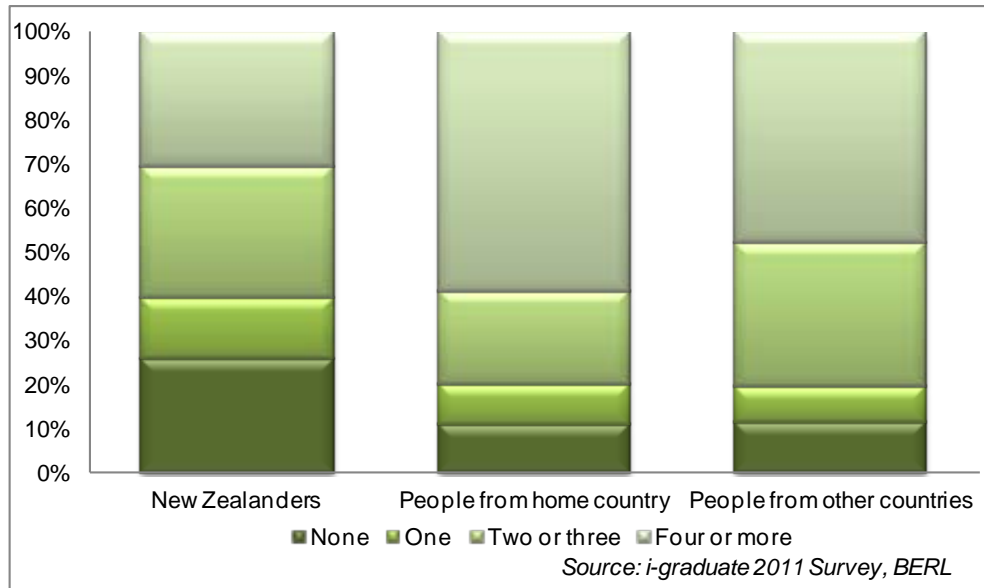
Friendships

Most international students have at least one close friend whom they spend social and study time with. International students were also more likely to have close friends from their own countries and from other countries than New Zealand

University

Figure 7.25 shows the breakdown of close friends that international students in universities have from New Zealand, their own countries and from other countries.

Figure 7.25 Close friendships formed in New Zealand, i-graduate university respondents



75 percent of 4,553 respondents have at least one close friend from New Zealand. Of these, 31 percent (1,390 respondents) were close to four or more people.

Figure 7.25 shows that international students have a bigger circle of close friends from their own countries.

- Of the 4,084 students who were close to at least one person from their own countries, 66 percent were close to four or more people, while one in five was close to two or three people.
- 81 percent of the 4,577 respondents had at least one close friend from other countries. Of these, more than half had more than four friends. On the other hand, 11 percent (517 respondents) did not have a close friend from other countries.
- A higher proportion of respondents did not have a close friend from New Zealand.
 - One in four respondents (1,176 out of 4,553) did not have a local close friend. This compares with 11 percent of people from their own countries (496 out of 4,580) and other countries (517 out of 4,577).

International students' ability to build closer friendships with New Zealanders is strongly related to:

- satisfaction with making friends in New Zealand
- how welcome they feel
- their perception that New Zealanders are interested in getting to know them better.

We explored three factors to explain why some students did not have close friends from New Zealand: their experience making friends in New Zealand, their perception of New

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Zealanders being interested in getting to know international students better and feeling welcome in New Zealand.

Table 7.3 shows the number of close friends from New Zealand by satisfaction with making friends with the locals of international students in the universities.

Table 7.3 Number of local friends by satisfaction with making friends in New Zealand i-graduate university respondents

Number of close friends from New Zealand	Satisfaction with making friends in New Zealand				Total
	Very dissatisfied	Dissatisfied	Satisfied	Very satisfied	
None	166	483	417	54	1121
One	54	196	305	51	606
Two or three	41	337	718	229	1325
Four or more	14	83	697	555	1349
Total	276	1099	2136	889	4401

Pearson Chi² = 1,082.28**

F(3,37) = 51.16**

Source: i-graduate 2011 Survey, BERL

**highly significant at $\alpha = 0.01$

The table shows that satisfaction with making friends in New Zealand was strongly related to the number of locals that international students were close to.

- Those who were satisfied with making friends in New Zealand tended to have more friends.
- Those who were dissatisfied with making friends in New Zealand tended to have fewer close local friends.

Another factor we explored as to why some international students in universities did not have friendships with people from New Zealand: their perception of New Zealanders being interested in getting to know them better. Table 7.4 shows the number of close friends from New Zealand by their perception of New Zealanders being interested in getting to know international students better.

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Table 7.4 Number of local friends by satisfaction with making friends in New Zealand, i-graduate university respondents

Number of close friends from New Zealand	New Zealanders are interested in getting to know me better				Total
	Strongly disagree	Disagree	Agree	Strongly agree	
None	241	573	330	22	1165
One	49	275	275	23	623
Two or three	77	435	745	82	1339
Four or more	39	230	854	258	1381
Total	406	1513	2204	385	4508

Pearson Chi² = 890.03**

F(3,45) = 49.09**

Source: i-graduate 2011 Survey, BERL

**highly significant at $\alpha = 0.01$

The analysis shows that the number of close friends from New Zealand that international students have and their perception of New Zealanders being interested in getting to know them better are directly related.

- Those who perceived that New Zealanders were interested in getting to know them better were likely to have more close friends from New Zealand.
- Those who perceived that locals were less interested in getting to know them better tended to have fewer close friends from New Zealand.

The feeling of being welcome was also strongly related to international students' ability to establish closer relationships with domestic students. Table 7.5 shows the number of close friends from New Zealand by how welcome international students felt in New Zealand.

Table 7.5 Number of close friends from New Zealand by feeling welcome in New Zealand, i-graduate university respondents

Number of close friends from New Zealand	Feeling welcome in New Zealand				Total
	Strongly disagree	Disagree	Agree	Strongly agree	
None	65	265	755	78	1163
One	7	101	439	76	623
Two or three	18	150	977	200	1345
Four or more	8	99	841	435	1382
Total	98	615	3012	789	4514

Pearson Chi² = 473.20**

F(3,43) = 44.39**

Source: i-graduate 2011 Survey, BERL

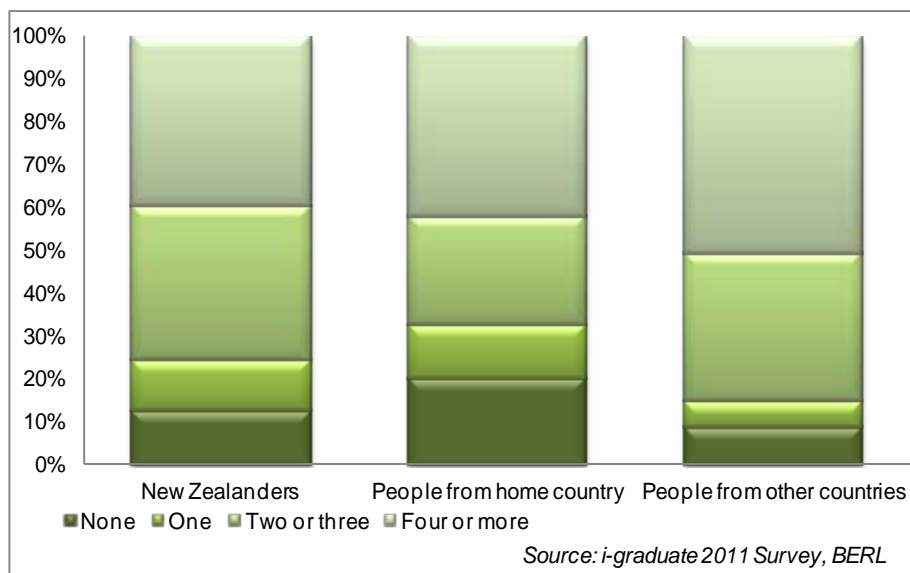
**highly significant at $\alpha = 0.01$

The findings suggest that those who felt welcome in New Zealand tended to have more close friends. Those who felt that they were less welcome had no close friends or fewer close friends from New Zealand.

ITPs

Figure 7.26 shows the breakdown of the close friends that international students in the ITP sector had from New Zealand, their own countries and from other countries.

Figure 7.26 Close friendships formed in New Zealand, i-graduate ITP respondents



- The patterns of response suggest that international students in ITPs tended to have cross-cultural friendships.
- Most international students in ITPs had close friends outside their own culture.

Figure 7.26 shows that 86 percent of the 803 respondents had at least one close friend from New Zealand.

- Of those, 46 percent (321 out of 702 respondents) had four or more close friends from New Zealand.
- Most (92 percent of 804 respondents) of those who were asked how many close friends they had from other countries said that they were close to at least one. Within this group, 55 percent had four or more friends.

Figure 7.26 also shows that the proportion of respondents reporting to have no close friends from their own countries was higher in the ITP sector.

- One in five (161 out of 809 respondents) had no friend from his/her country. This compares with 13 percent (101 out of 803 respondents) from New Zealand and 8 percent (67 out of 804 respondents) from other countries.

THE SATISFACTION OF INTERNATIONAL STUDENTS IN NEW ZEALAND

The survey also found that 87 percent (n=795) and 93 percent (n=788) of international students in ITPs were satisfied with making friends in New Zealand and from other countries, respectively.

Table 7.6 shows the breakdown of international students who were able to build close friendships with people from New Zealand by level of satisfaction with making friends in New Zealand.

Table 7.6 Number of close friends from New Zealand by level of satisfaction with making local friends, i-graduate ITP respondents

Number of close friends from New Zealand	Satisfaction with making friends in New Zealand		
	Very dissatisfied to dissatisfied	Satisfied to very satisfied	Total
None	26	62	87
One	35	59	94
Two or three	26	254	280
Four or more	11	303	314
Total	98	678	776

Pearson $\chi^2 = 156.29^*$ $F(3,20) = 4.13^*$

*significant at $\alpha = 0.05$

Source: i-graduate 2011 Survey, BERL

These results suggest that the number of locals that international students were close to was strongly related with the level of satisfaction with making friends in New Zealand.

- Those who were satisfied with making friends in New Zealand were also likely to have more friends from New Zealand.
- Those who were dissatisfied with making friends in New Zealand tended to have fewer close friends from New Zealand.

One reason why international students in ITPs were likely to build close friendships with locals was that they felt welcome in New Zealand. Table 7.7 shows the breakdown of the number of close friends from New Zealand by how welcome international students in ITPs feel in New Zealand.

Table 7.7 Number of close friends from New Zealand by their feeling of being welcome in New Zealand, i-graduate ITP respondents

Number of close friends from New Zealand	Feel welcome in New Zealand		Total
	Strongly disagree to disagree	Agree to strongly agree	
None	15	154	169
One	25	87	111
Two or three	8	191	199
Four or more	16	292	308
Total	64	724	788

Pearson $\chi^2 = 62.09^{**}$ $F(2,14) = 11.24^{**}$

*significant at $\alpha = 0.01$

Source: i-graduate 2011 Survey, BERL

These results show that the number of close friends from New Zealand was directly related to how welcome international students felt.

- Those who felt more welcome tended to have more friends from New Zealand while those who felt less welcome tended to have fewer local friends.

Another reason was related to the international students' perception of New Zealanders' interest in getting to know them better. Table 7.8 summarises the number of close friends from New Zealand by their perception of New Zealanders being interested in getting to know international students better.

Table 7.8 Number of close friends from New Zealand by their perception of locals being interested in getting to know international students better, i-graduate ITP respondents

Number of close friends from New Zealand	New Zealanders are interested in getting to know me better		Total
	Strongly disagree to disagree	Agree to strongly agree	
None	35	65	100
One	37	56	93
Two or three	67	213	280
Four or more	54	261	314
Total	192	596	788

Pearson $\chi^2 = 27.47$

$F(2,12) = 2.29$

Source: i-graduate 2011 Survey, BERL

Table 7.8 suggests that those who perceived that New Zealanders were interested in getting to know them better tended to have more friends. We expected that those who perceive locals were less interested in getting to know international students better would have fewer friends from New Zealand. However, the findings did not support this expectation.

7.5.4 Frequency of social and study time with people from different groups

This section presents the frequency at which international students spent social and study time with people from New Zealand, their own countries and other countries. The survey revealed that international students tended to spend social time with those they study with.

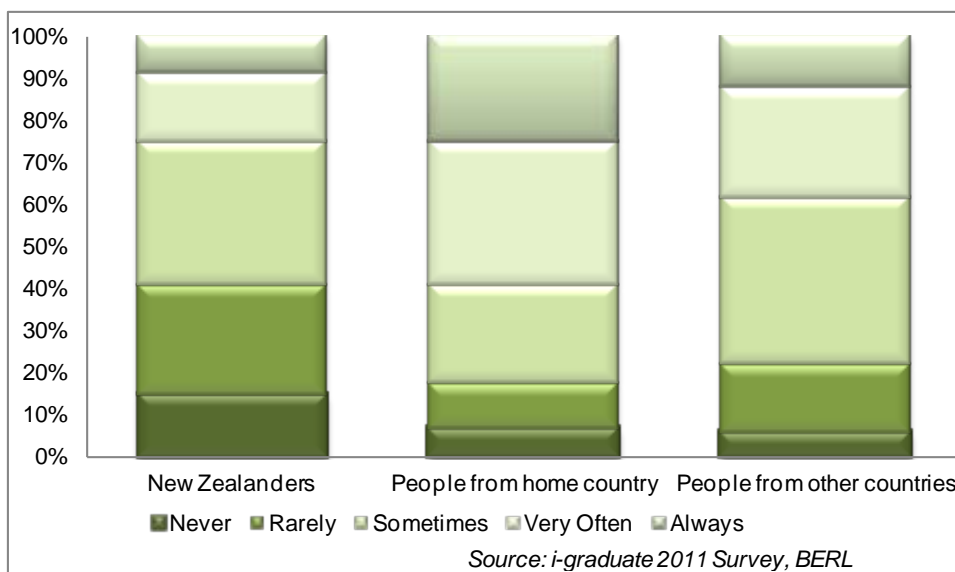
- University respondents tended to spend more social and study time with people from their own countries than with people from other countries and from New Zealand.
- ITP respondents usually spent social and study time with students outside their home country.

University

Social time

Figure 7.27 shows the frequency at which international students in universities spent social time with people from their own countries and other countries.

Figure 7.27 Frequency of spending social time, i-graduate university respondents



The figure shows that social time with people from their own countries was most frequent.

- 60 percent of 4,589 respondents frequently spent social time with people from their own countries.
- Of the 4,577 respondents, 38 percent tended to socialise frequently with people from other countries, while 40 percent sometimes did. Only 5 percent reported that they never spent social time with people from other countries.

THE SATISFACTION OF INTERNATIONAL STUDENTS IN NEW ZEALAND

Figure 7.27 also shows that international students in universities tended to spend less social time with New Zealanders.

- 60 percent of the 4,475 respondents had less frequent (rarely to sometimes) social interaction with locals, while 15 percent had never had social interaction with locals.
- International students in universities tended to socialise more frequently (very often to always) with people from their own countries and other countries.

We looked at how the frequency of spending social time with New Zealanders relates to the number of close friends from New Zealand that international students in universities have. Table 7.9 shows the breakdown of frequency of social time with New Zealanders with the number of local friends international students in universities have.

Table 7.9 Frequency of spending social time with close friends from New Zealand, i-graduate university respondents

Number of close friends from New Zealand	Frequency of spending social time with New Zealanders					Total
	Never	Rarely	Sometimes	Very Often	Always	
None	541	449	172	11	0	1173
One	66	268	239	46	9	628
Two or three	47	355	700	206	48	1355
Four or more	13	110	439	491	338	1391
Total	666	1182	1550	754	394	4547

Pearson $\chi^2 = 2,737.71^{**}$ $F(4,51) = 123.74^{**}$

Source: i-graduate 2011 Survey, BERL

**highly significant at $\alpha = 0.01$

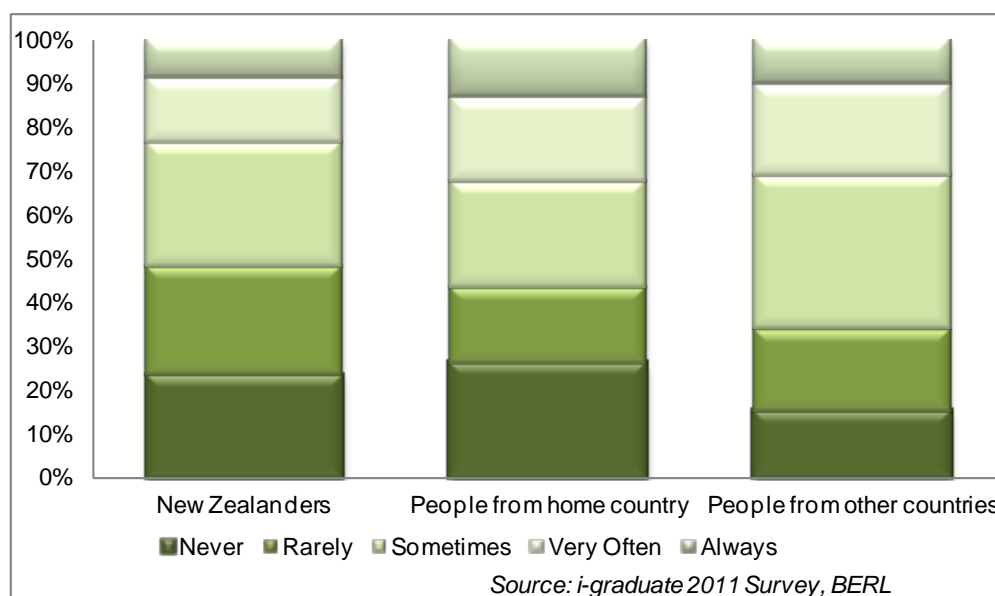
Table 7.9 shows that the number of close friends from New Zealand that international students have directly relates to the frequency of spending social time with New Zealanders:

- Those who have more close friends from New Zealand tended to spend social time with New Zealanders more often.
- Those who have fewer close friends from New Zealand rarely spend social time with people from New Zealand.
- One in eight respondents has never spent social time with New Zealanders due to lack of close friends from New Zealand.

Study time

Figure 7.28 shows how often international students in universities spent study time with people from their own countries, New Zealand and other countries.

Figure 7.28 Frequency of spending study time, i-graduate university respondents



Unlike social time, study time with students from New Zealand and other countries tended to be more frequent.

- Of the 3,507 respondents who studied with students from New Zealand, 32 percent (1,138 respondents) rarely studied with them while 30 percent (or 1,072 respondents) often did.
- 23 percent (1,062 out of 4,573) never spent their study time with New Zealanders.

Of those who reported spending study time with students from other countries,

- 36 percent (1,416 of 3,893) frequently studied with them. Of those, one in three students reported that they always studied with students from other countries.
- Over half of the 4,581 respondents spent study time with students from other countries less often. Of those, 35 percent sometimes spent study time with students from other countries.

International students in universities tended to:

- spend social time more often with students from their own countries.
- spend study time more often with students from other countries

Social and study time with New Zealanders tended to be less frequent.

THE SATISFACTION OF INTERNATIONAL STUDENTS IN NEW ZEALAND

Table 7.10 summarises international students in universities' patterns of interaction with people from their own culture and other cultures. The findings suggested that international students in universities tended to spend social time more often with groups of people they more often spent study time with.

Table 7.10 Frequency of social and study time with people from their own countries, New Zealand and other countries, i-graduate university respondents

New Zealanders						
Social	Study					Total
	Never	Rarely	Sometimes	Very Often	Alw ays	
Never	415	150	60	24	19	668
Rarely	319	468	305	73	13	1178
Sometimes	208	381	639	242	87	1557
Very Often	85	113	205	262	88	753
Alw ays	35	26	70	72	189	392
Total	1062	1138	1280	672	396	4549

Pearson $\chi^2 = 2,126.53^{**}$ $F(4,53) = 50.19^{**}$

****highly significant at $\alpha = 0.01$**

People from other countries						
Social	Study					Total
	Never	Rarely	Sometimes	Very Often	Alw ays	
Never	168	47	25	12	12	264
Rarely	139	290	230	53	22	733
Sometimes	205	369	868	291	86	1819
Very Often	118	122	381	455	120	1196
Alw ays	54	30	113	144	222	563
Total	684	858	1617	954	462	4575

Pearson $\chi^2 = 1,790.91^{**}$ $F(3,42) = 36.64^{**}$

****highly significant at $\alpha = 0.01$**

People from home country						
Social	Study					Total
	Never	Rarely	Sometimes	Very Often	Alw ays	
Never	293	6	0	0	0	300
Rarely	315	121	36	12	0	484
Sometimes	290	262	388	92	41	1073
Very Often	208	279	471	502	89	1548
Alw ays	86	112	204	288	466	1156
Total	1193	780	1099	894	596	4562

Pearson $\chi^2 = 2,697.53^{**}$ $F(3,40) = 74.75^{**}$

****highly significant at $\alpha = 0.01$**

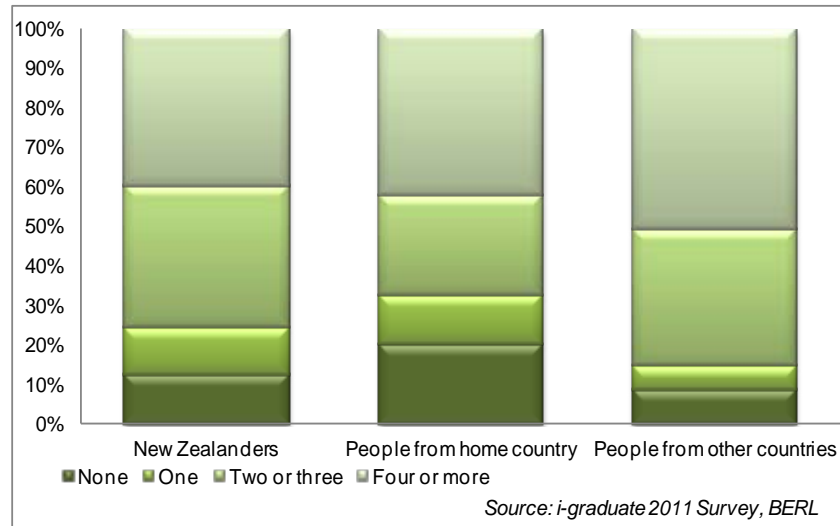
Source: i-graduate 2011 Survey, BERL

ITPs

Social time

Figure 7.29 shows how often international students in ITPs spent social time with people from their own and other countries.

Figure 7.29 Frequency of spending social time, i-graduate ITP respondents



This figure (or Figure 7.29) shows that international students spent less social time with people from their own culture than people from New Zealand and other countries.

- 14 percent (116 out of 812) rarely spent social time with New Zealanders, while seven percent never did.

Figure 7.29 also shows that international students in ITPs tended to socialise more frequently with people from other countries.

- 37 percent (306 out of 809) tended to socialise frequently with people from other countries, while one in three reported that they sometimes do.
- Only 8 percent never spent social time with people from other countries.

International students in ITPs were more likely to:

- spend more social and study time with students from New Zealand and other countries.

Social and study interaction with people from their own countries tended to be less frequent.

Social time spent with people from their home country is less frequent than with people from other countries.

THE SATISFACTION OF INTERNATIONAL STUDENTS IN NEW ZEALAND

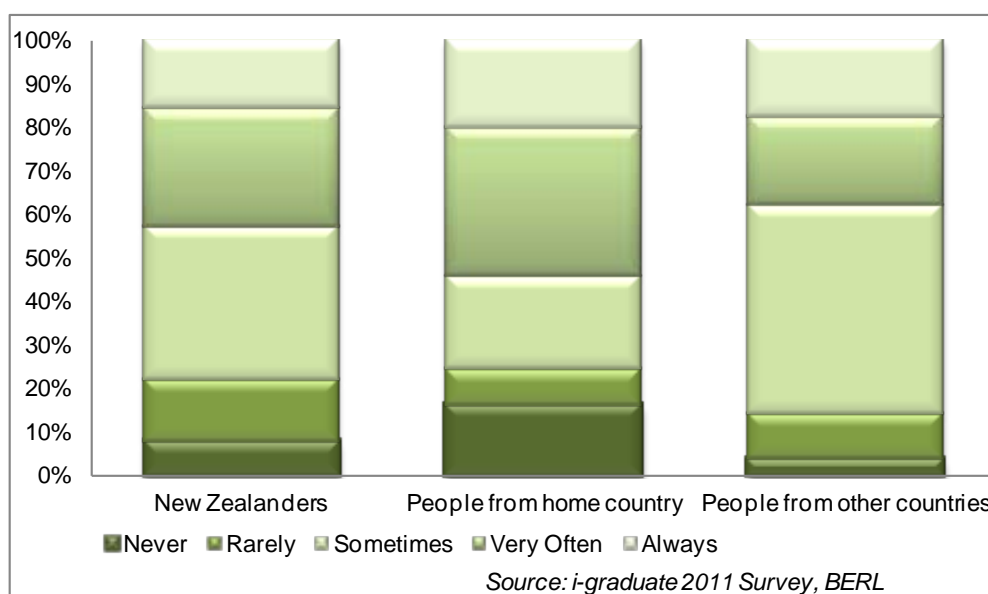
- 40 percent of the 608 respondents those who spent social time with friends from their home countries did so very often.
- 6 percent (132 out of 812) had never spent social time with friends from their home countries.

In general, international students in ITPs tended to spend social time with New Zealanders and students from other countries more often, because they had close friends from those countries. Most respondents had at least one close friend from New Zealand and or other countries.

Study time

Figure 7.30 shows how often international students spent study time with people from their own countries, New Zealand and other countries. Study time also tended to be more frequent with people from other countries.

Figure 7.30 Frequency of spending study time, i-graduate ITP respondents



International students in ITPs frequently spent time with other students from New Zealand and other countries.

- 40 percent (325 of 812) reported that they never studied with students from their own countries.
- Half (364 of 728) of those who studied with New Zealanders, studied with them often.
- Of the 809 respondents, 41 percent studied less frequently with students from other countries. Of those, one in four sometimes did. This compared with about one in 10 who had never studied with students from other countries.

THE SATISFACTION OF INTERNATIONAL STUDENTS IN NEW ZEALAND

Table 7.11 summarises these patterns of interaction with people from their own culture and other cultures.

Table 7.11 Frequency of social and study time with people from home, New Zealand and other countries, i-graduate ITP respondents

New Zealanders				
Social	Study			Total
	Never	Rarely	Sometimes to Always	
Never	30	15	17	62
Rarely	16	57	43	116
Sometimes	23	27	237	287
Very Often	15	6	196	217
Always	2	4	124	129
Total	85	109	617	812

Pearson $\chi^2 = 589.73^{**}$ $F(4,35) = 12.30^{**}$

**highly significant at $\alpha = 0.01$

People from other countries				
Social	Study			Total
	Never	Rarely	Sometimes to Always	
Never	10	4	16	31
Rarely	9	26	49	84
Sometimes	25	48	313	386
Very Often	6	16	138	161
Always	15	0	129	143
Total	66	94	645	805

Pearson $\chi^2 = 391.25^{**}$ $F(4,30) = 7.21^{**}$

**highly significant at $\alpha = 0.01$

People from home country				
Social	Study			Total
	Never	Rarely	Sometimes to Always	
Never	127	4	0	131
Rarely	45	4	17	66
Sometimes	82	33	58	173
Very Often	41	42	193	277
Always	28	20	114	163
Total	324	104	382	810

Pearson $\chi^2 = 490.51^{**}$ $F(3,40) = 7.41^{**}$

**highly significant at $\alpha = 0.01$

Source: i-graduate 2011 Survey, BERL

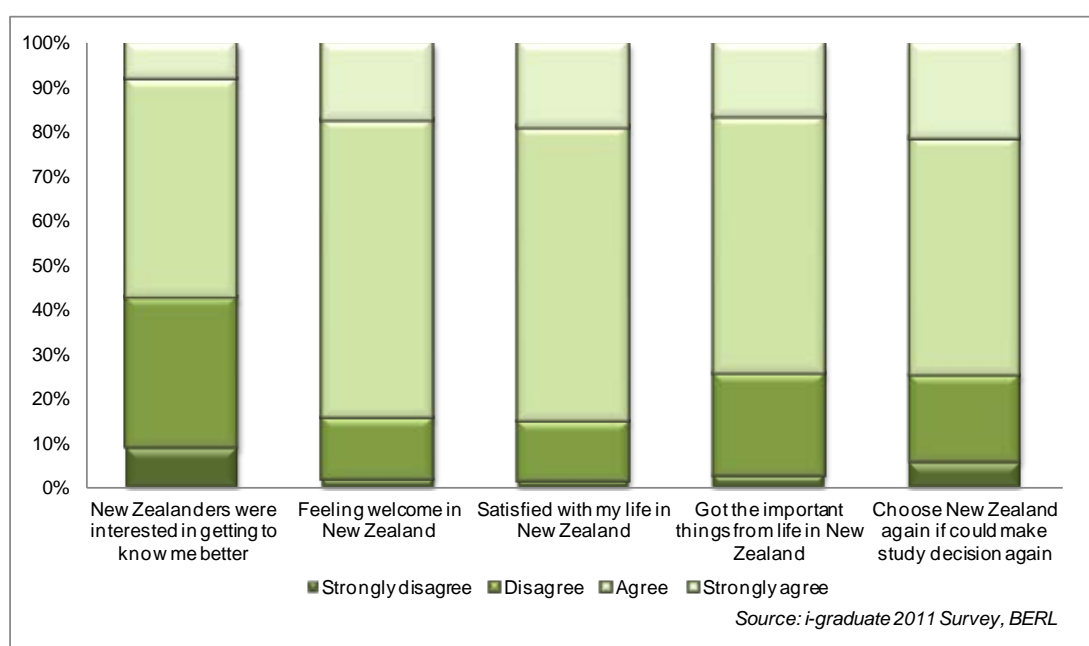
The findings suggest that study time directly related to social time. International students in ITPs studied more often with people they frequently spent social time with.

7.5.5 Students' level of positivity about life in New Zealand

University

Figure 7.31 shows the breakdown of international student perception regarding New Zealand as a study destination and living in their host country.

Figure 7.31 Student perception regarding New Zealand as host country, i-graduate university respondents



The survey revealed that the majority of international students in universities felt welcome in New Zealand. Most were also satisfied with living in New Zealand.

- 84 percent (3,842 of 4,564) said that they felt welcome in New Zealand.

International students in universities had a positive perception about living in New Zealand.

- 75 percent of 4,556 respondents to this question perceived that they were getting important things in life from New Zealand.
- Three in four respondents (from a total of 4,557) said they would choose New Zealand again if they could make another study decision.

There were also international students in universities who felt unwelcome and were not satisfied with their life in New Zealand.

THE SATISFACTION OF INTERNATIONAL STUDENTS IN NEW ZEALAND

- 16 percent of the respondents (722 out of 4,564) felt that they were unwelcome while 15 percent (683 of 4,544 respondents) were dissatisfied with their life in New Zealand.
- 43 percent (or 1,938 students) of the 4,556 respondents perceived that New Zealanders were not interested in getting to know them better. This is higher than the proportion of respondents who felt unwelcome in New Zealand and the proportion who were dissatisfied with their life in New Zealand.
- One in four international students (n=4,557) in universities said they would not choose to study in New Zealand again.

ITPs

The perception of international students in ITPs regarding their experience living in New Zealand followed the pattern observed in the responses of international students in universities. Figure 7.32 shows the perception of international students in universities regarding living in New Zealand.

Figure 7.32 Student perception regarding New Zealand as host country, i-graduate ITP respondents



International students in ITPs were satisfied with their life in New Zealand.

- 89 percent (716 of 803) reported that they were satisfied with their life in New Zealand.
- 85 percent (679 of 802) were also getting the most important things in life from New Zealand.
- 91 percent of 802 respondents felt welcome in New Zealand.

On the other hand, a high proportion of respondents perceived that New Zealanders were not interested in getting to know them better.

- One in four international students (196 of 802) in ITPs perceived that New Zealanders were not interested in getting to know them better.
- One in four respondents (203 of 801) would not choose New Zealand if they had to make their study decision again.

7.5.6 Students' perception of their treatment by others

International students in New Zealand were satisfied with their life in New Zealand. The responses also suggested that international students felt welcome in New Zealand and that New Zealanders were interested in getting to know them better.

7.5.7 Treatment

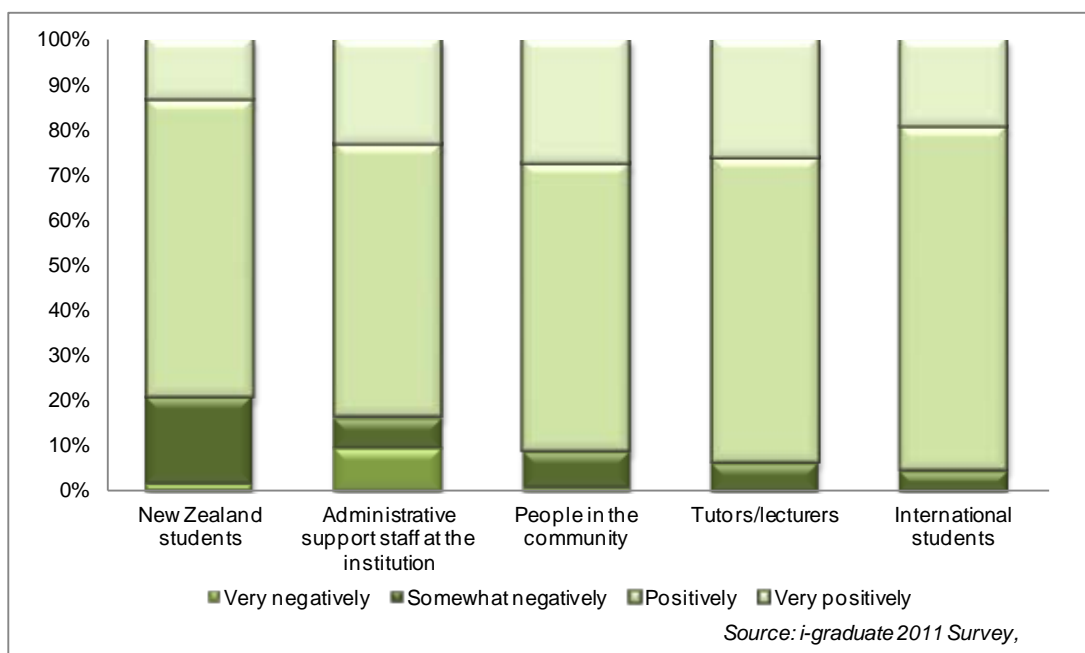
The results from the survey suggested that international students were positively treated in New Zealand. The survey revealed that international students thought they received positive treatment from their tutors/lecturers, other international students and from the people in the community.

Some international students thought they were treated negatively. More than 10 percent of international students in New Zealand universities and ITPs thought that they were negatively treated due to their accent/language ability and nationality. This experience was with domestic students, people from the community and administrative support staff at their universities and ITPs.

University

Figure 7.33 shows international students in universities perception of how they were perceived by certain groups. The figure shows that international students generally perceive they were positively treated in New Zealand.

Figure 7.33 How international students are perceived, i-graduate university respondents



- One in five respondents (942 of 4,559) from universities perceived that New Zealand students treated them negatively.
- One in five respondents (848 of 4,556) perceived that administrative support staff at their universities treated them negatively

There were also international students who perceived that they were negatively treated by other international students and tutors/lecturers. The proportions were marginal (four percent of 4,565 and six percent of 4,560, respectively) compared to those who perceived that they were positively treated.

The survey also asked the international students to identify possible reasons for negative treatment. Figure 7.34 shows the perceived reasons for negative treatment of university respondents.

Figure 7.34 Perceived reasons for negative treatments, i-graduate university respondents

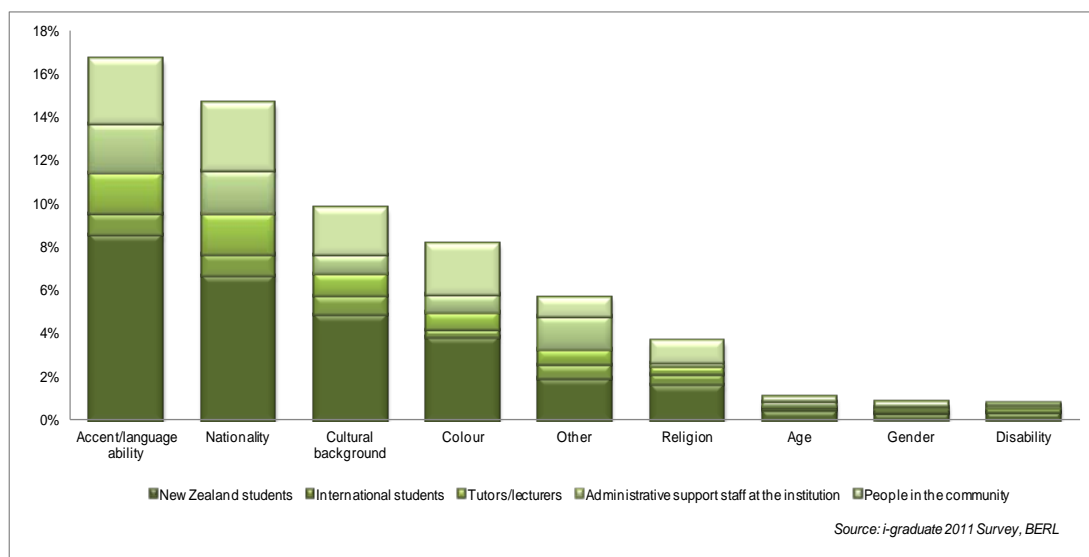


Figure 7.34 shows that the three most common perceived reasons for negative treatment were:

- accent/language ability (17 percent or 982 responses)
- nationality (15 percent or 862 responses)
- cultural background (10 percent or 575 responses).¹⁶

The least common perceived reasons for negative treatment were age, gender and disability. International students perceived that:

- New Zealand students treated them negatively because of their accent or language ability (9 percent or 503 responses), nationality (7 percent or 392 responses) and cultural background (5 percent or 286 responses).
- People in the community treated them negatively because of their accent or language ability (3 percent or 176 responses), nationality (three percent or 184 responses) and colour (two percent or 137 responses).
- Administrative support staff in their universities treated them negatively because of their nationality (2 percent or 134 responses).
- Tutors or lecturers at their universities also treated them negatively due to their nationality (2 percent or 117 responses).

¹⁶ This question is a multiple response item. Percent is calculated as total responses divided by the total number of respondents (5,886).

ITPs

International students in ITPs also perceived that they were positively treated in New Zealand. Figure 7.35 confirms this perception.

Figure 7.35 How international students are perceived, i-graduate ITP respondents

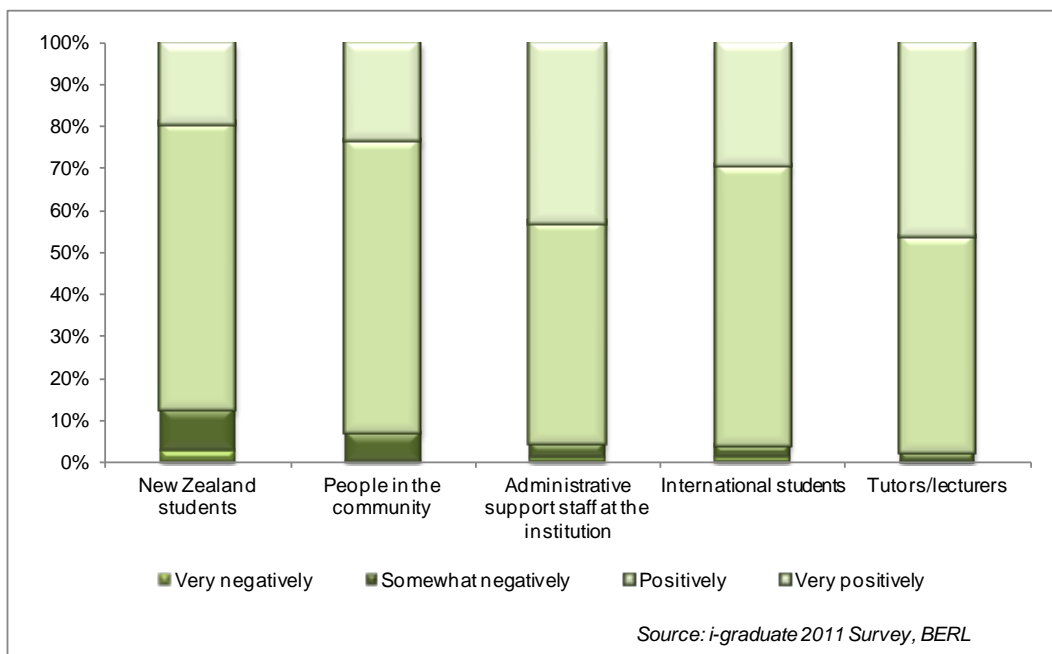
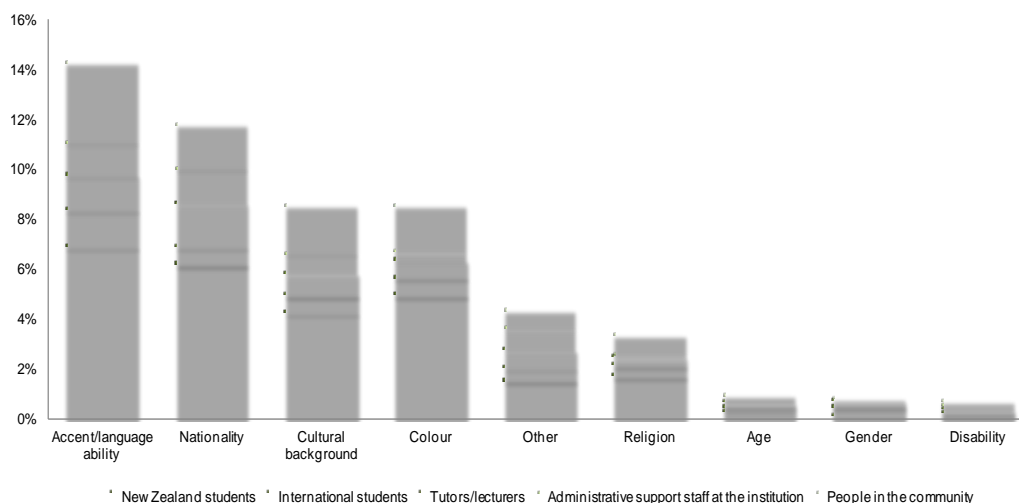


Figure 7.35 shows that most (> 95 percent of the respondents) international students in ITPs perceived that academic and administrative support staff in their institution treated them positively. Only a small proportion of the respondents reported that they experienced negative treatment.

In terms of perceived reasons for negative treatment, the most common reasons were similar to those cited by international students in universities. In the ITP sector, international students also identified nationality, accent/language ability and cultural background as reasons for negative treatment.

Figure 7.36 shows the perceived reasons for negative treatment that international students felt they had received from certain groups of people.

Figure 7.36 Perceived reasons for negative treatment, i-graduate ITP respondents



Source: i-graduate 2011 Survey, BERL

- Among the 1,143 ITP respondents, the following were the common perceived reasons for negative treatment of international students:
 - Nationality (14 percent or 163 responses)
 - Accent/language ability (12 percent or 135 responses)
 - Colour (9 percent or 98 responses)
 - Cultural background (9 percent or 98 responses)
- Those who thought they received negative treatment because of their accent or language ability were mostly from New Zealand students (52 percent or 71 responses), tutors or lecturers (15 percent or 20 responses) and from people in the community (15 percent or 20 responses).

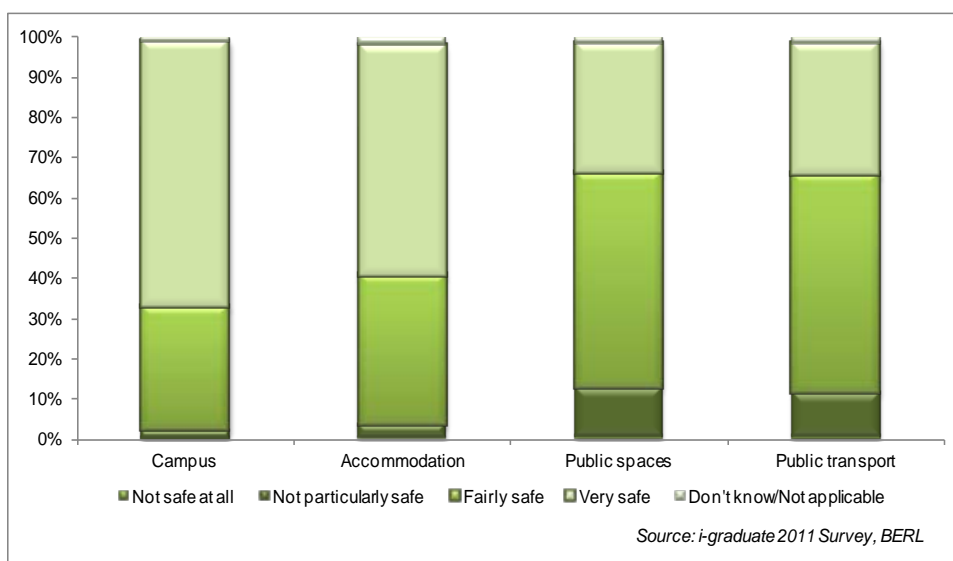
7.5.8 Students' feeling of safety in New Zealand

Most international students felt safe on campus and in accommodation. International students also felt safe in public spaces and on public transport.

University

Figure 7.37 summarises the extent to which international students in universities said they would feel safe on campus, in accommodation, in public spaces and on public transport in New Zealand.

Figure 7.37 Students' feeling of safety, i-graduate university respondents

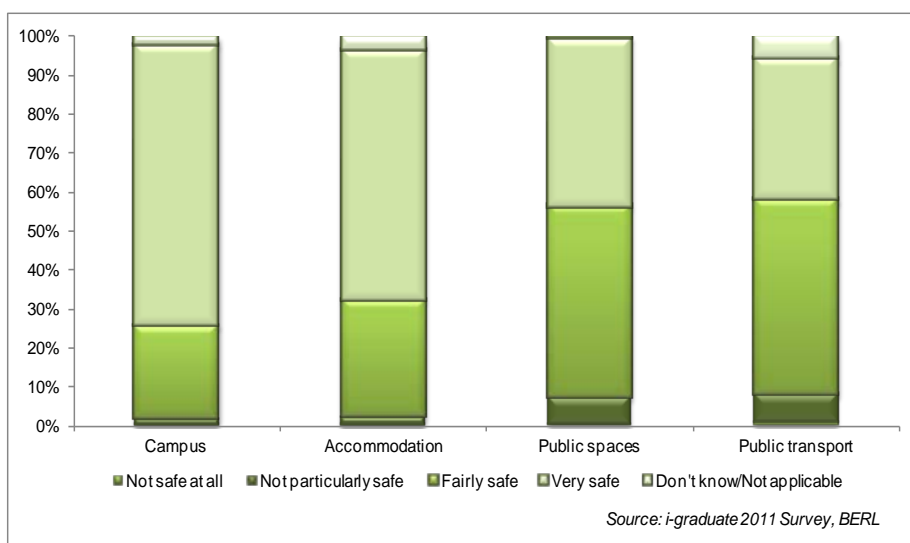


- 96 percent of 4,556 respondents felt safe on campus.
- 57 percent (2,605 of the 4,559) of the respondents felt safe in their accommodation while another 37 percent felt fairly safe.
- Only 4 percent said that they were not safe in their accommodation.
- One in ten respondents felt unsafe in public spaces like malls, the city and off-campus sites.
- Of the 4,555 respondents, one in ten said they are not safe on public transport.

ITPs

Like international students in universities, those in ITPs also said they felt safe in New Zealand. Most of the respondents (> 95 percent) said that they would be safe on campus and in places off campus. Figure 7.38 summarises the responses of ITP students on whether they would feel safe on campus, in accommodation, in public spaces and on public transport.

Figure 7.38 Students' feeling of safety, i-graduate ITP respondents



- 96 percent of 803 respondents felt safe on campus.
- 94 percent of the 800 respondents felt safe in their accommodation.
- 7 percent of 801 respondents felt unsafe off campus while 8 percent of the 803 felt unsafe on public transport.

Overall, the results suggest that most international students in ITPs feel safe in New Zealand, whether on campus or off campus.

7.6 Satisfaction with the support services and institution amenities

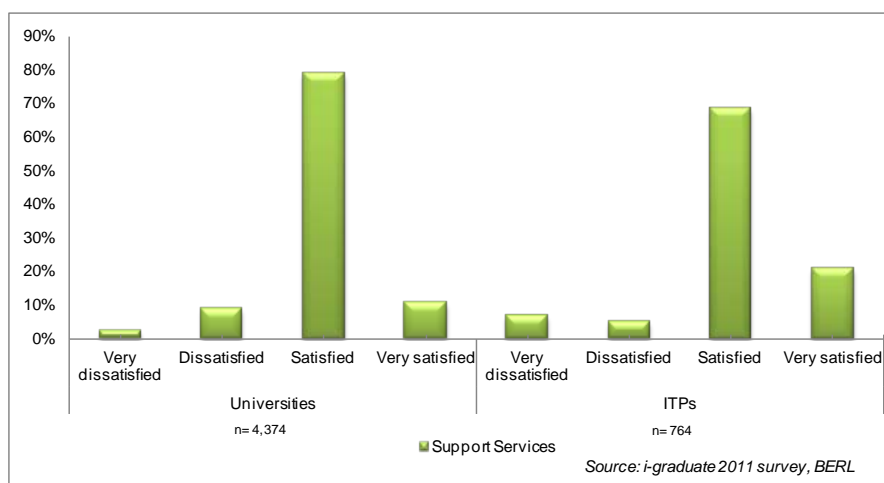
Support services in an institution were considered as part of the i-graduate survey. Here, support services included services that provided advice and guidance on health and well-being, finance, accommodation and employment. Support services also included the international office, student advisory service, health centres and the student union.

7.6.1 Overall support satisfaction

International students at New Zealand universities and ITPs were very satisfied or satisfied with the support services they had received to date at this stage in the academic year.

Figure 7.39 shows satisfaction of the respondents with support services in universities and ITPs in New Zealand.

Figure 7.39 Overall support satisfaction ratings, i-graduate respondents



7.6.2 Satisfaction with different types of support and amenities available to students

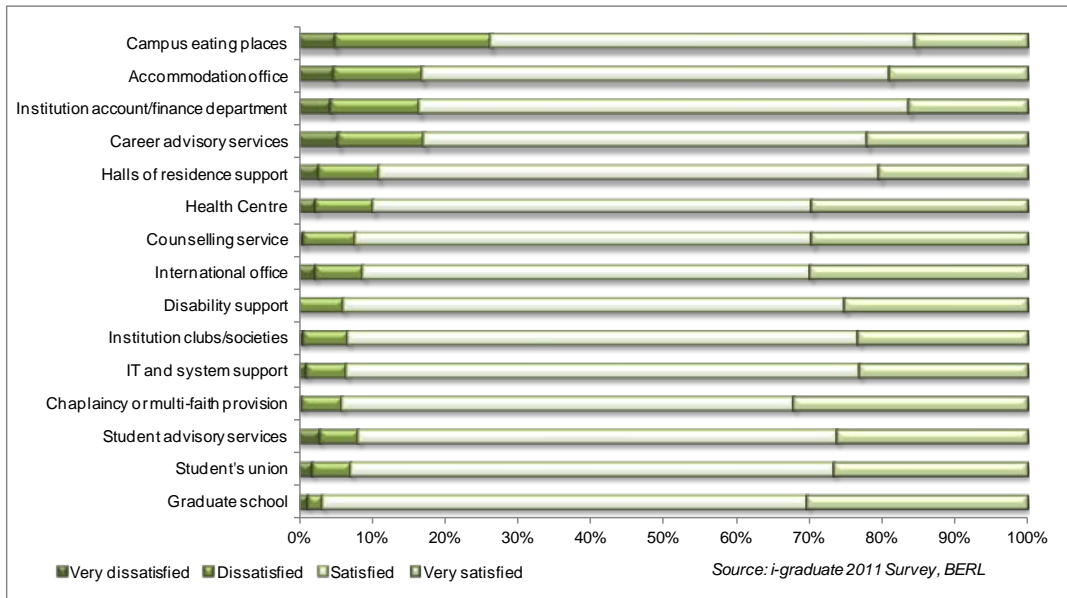
Universities

In our previous discussion on learning experiences, international students at New Zealand universities were dissatisfied with the opportunities for work experience and the advice and guidance they received on long-term job opportunities and careers related to their learning. Low satisfaction with the careers service could have been expected. However, the survey revealed that the careers advisory service was not the most unsatisfactory aspect of the student support services on New Zealand university campus– it was food.

International university students rated campus eating places poorly. The accounts and finance departments of the institutions, the accommodation offices and halls of residence support were also rated poorly.

Figure 7.40 and Figure 7.41 show the satisfaction of international students at New Zealand universities and ITPs with support services.

Figure 7.40 Support service satisfaction ratings, i-graduate university respondents

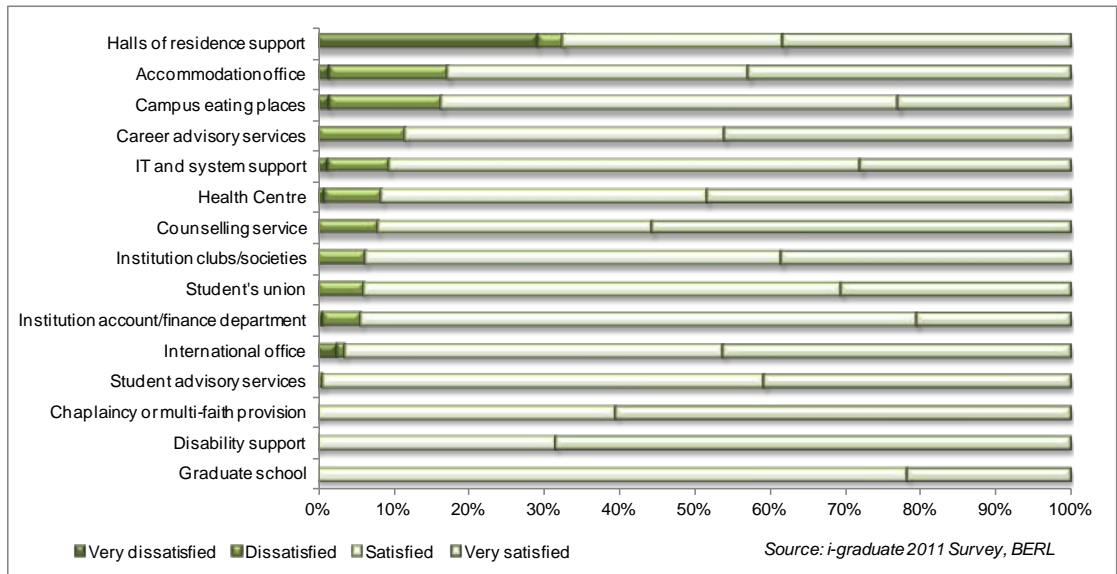


- Among support service areas, university respondents were most satisfied with services from the graduate schools, student unions, student advisory and chaplaincy or multi-faith services.
- The respondents were most dissatisfied with campus eating places, accommodation office and services from finance/accounting department and health centres.

ITPs

International students at ITPs were satisfied (> 80 percent of the respondents) with many of the services provided, and were particularly satisfied with services offered by their graduate schools, disability services, chaplaincies, and student advisory services.

Figure 7.41 Support service satisfaction ratings, i-graduate ITP respondents



Those areas with which students were least satisfied were accommodation, and the support provided by the accommodation offices and halls of residence and the campus eating places. Respondents at ITPs also rated food and accommodation as their key areas of concern in terms of dissatisfaction with support services.

7.7 Students who are working while studying

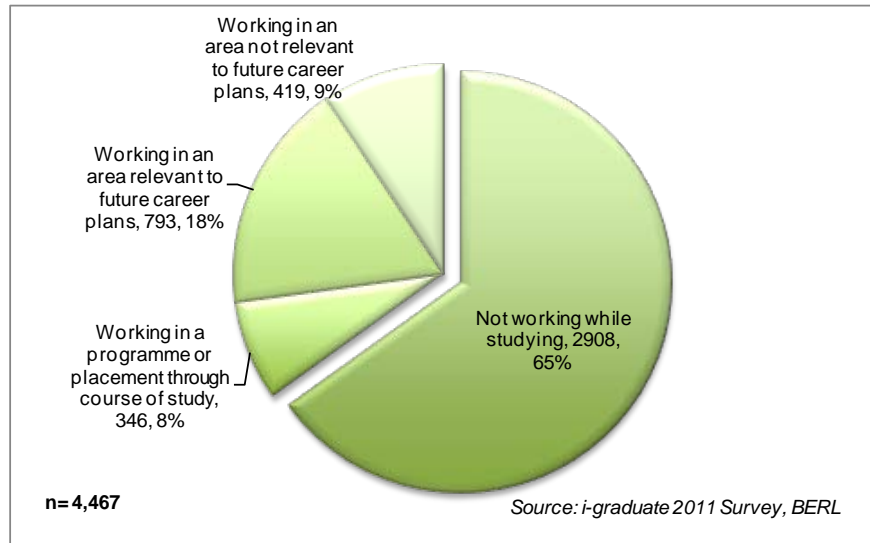
Over half of the students who participated in the survey were not working while studying:

- 35 percent of international students in universities were working, with 80 percent in paid work and 50 percent working outside their course of study in an area relevant to their future plans
- 48 percent of international students in ITPs were working, with 77 percent in paid work and 46 percent working outside their course of study in an area relevant to their future plans.

Universities

Figure 7.42 shows what percentage of international students in universities were in the workforce.

Figure 7.42 Students who are working while studying, i-graduate university respondents

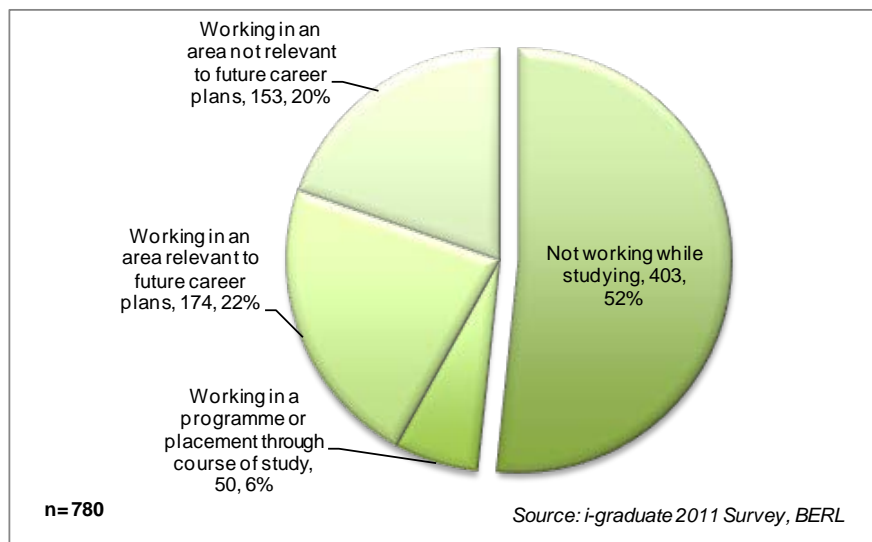


- 35 percent of the respondents (1,559 of 4,467) were working while studying and 84 percent were paid for their work.
- Most of those who were working had found employment outside their course of study, in an area relevant to their future plans.

ITPs

Figure 7.43 shows the participation of international students in ITPs in the workforce.

Figure 7.43 Students who are working while studying, i-graduate ITP respondents



The figure shows that half of respondents from ITPs had found employment.

- 77 percent of students in ITPs were being paid for the work they were doing and 46 percent were working outside their course of study in an area relevant to their job.

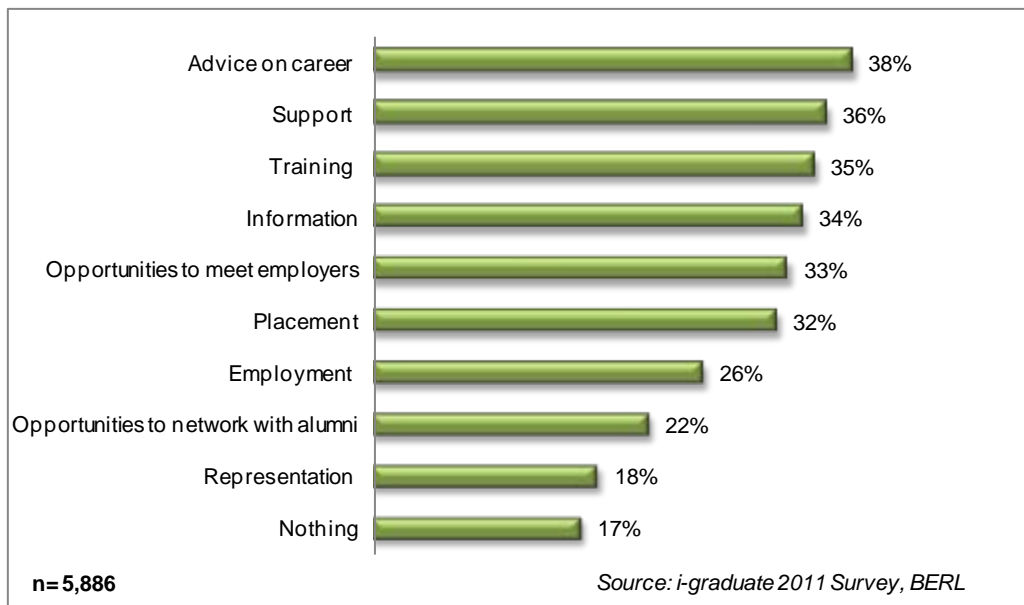
7.8 Students’ expectations of employment and careers support

Students were asked what employment and careers support they expected from their institution. The results of the descriptive analysis are in this section.

Universities

Figure 7.44 summarises the employment and career support that international students expected from their institution.

Figure 7.44 Expected employment/career support, i-graduate university respondents



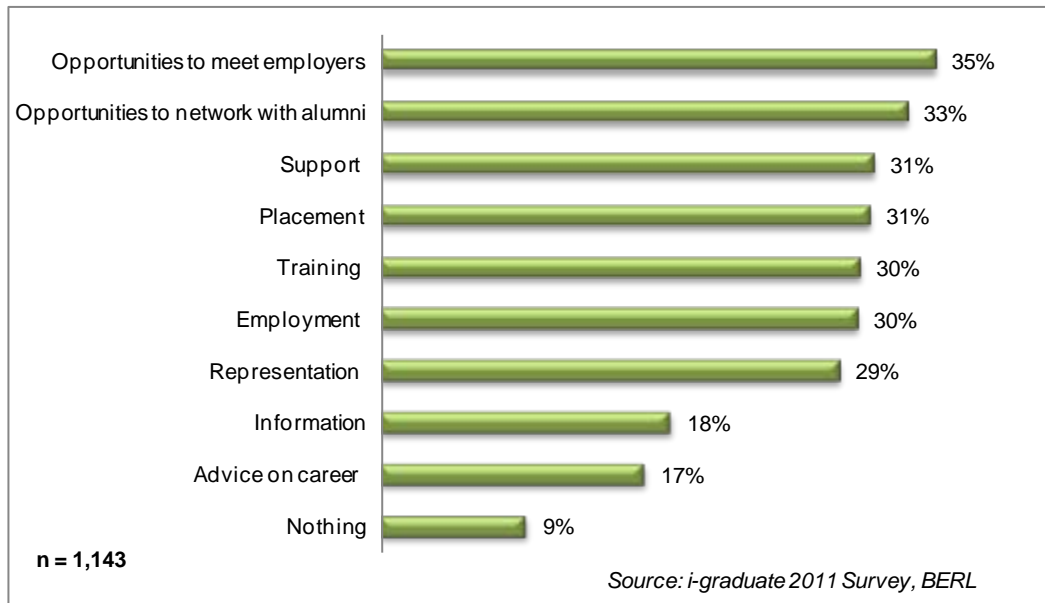
The findings suggest that the most common support the students expected was:

- advice and guidance around career paths and career options
- support such as preparing a CV or deciding which employers to approach
- training such as interview training or workshop skills.

Cross-referencing this finding with satisfaction with support service experience, about 17 percent (over 800 students) were dissatisfied with their experience related to career advisory services. The areas where student expected least support from the institution were related to opportunities to network with alumni, employment and representation to contact employers.

ITPs

Figure 7.45 Expected employment/career support, i-graduate ITP respondents



International students at New Zealand ITPs, in contrast to those in New Zealand universities, expected more opportunities to meet employers and network with alumni. International students at ITPs would have liked support with their CV preparation and employment placement, along with training in interview techniques. The vocational focus of students at ITPs comes through in their expectation of career support and employment advice from their education provider.

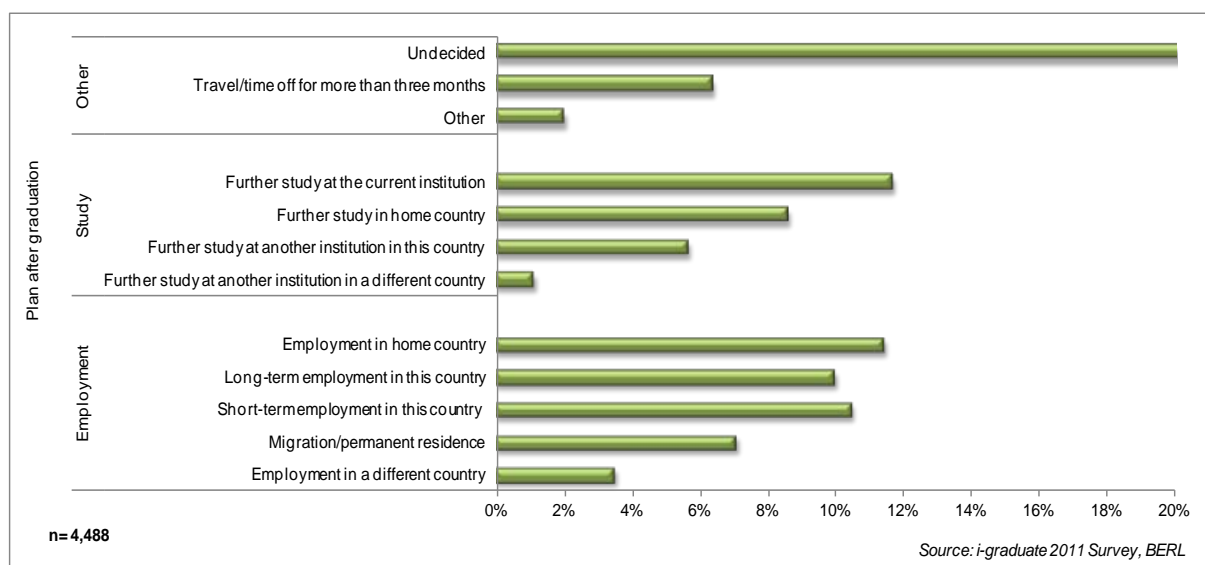
7.9 Students' future plans

In Section 7.6.2, it was noted that respondents from universities and ITPs were dissatisfied with the opportunities for work experience, and the advice and guidance they received about long-term job opportunities and careers.

Universities

Figure 7.46 shows the future plans of international students in New Zealand universities.

Figure 7.46 Future plans, i-graduate university respondents



The survey revealed that 22 percent of the 4,488 respondents were still undecided about their future plans. 282 (or 29 percent) of the 981 undecided students were from China, while others were mostly from India (94 respondents), Malaysia (73 respondents) and United States of America (72 respondents). Those students who were planning to travel or take time off after graduation (287 respondents or 6 percent) were from the China (78 respondents), along with some students from Malaysia (42 respondents), United States of America (18 respondents) and South Korea (13 respondents).

The most common future plan of those who have decided what to do was employment. Figure 7.47 shows the future employment plans of international students in New Zealand universities.

- Of the 1,911 students who planned to seek employment, 514 students were planning to seek employment in their own countries, while 920 students were planning to seek employment in New Zealand. The rest were planning to seek permanent residency in New Zealand.

Figure 7.47 Future employment plans, i-graduate university respondents

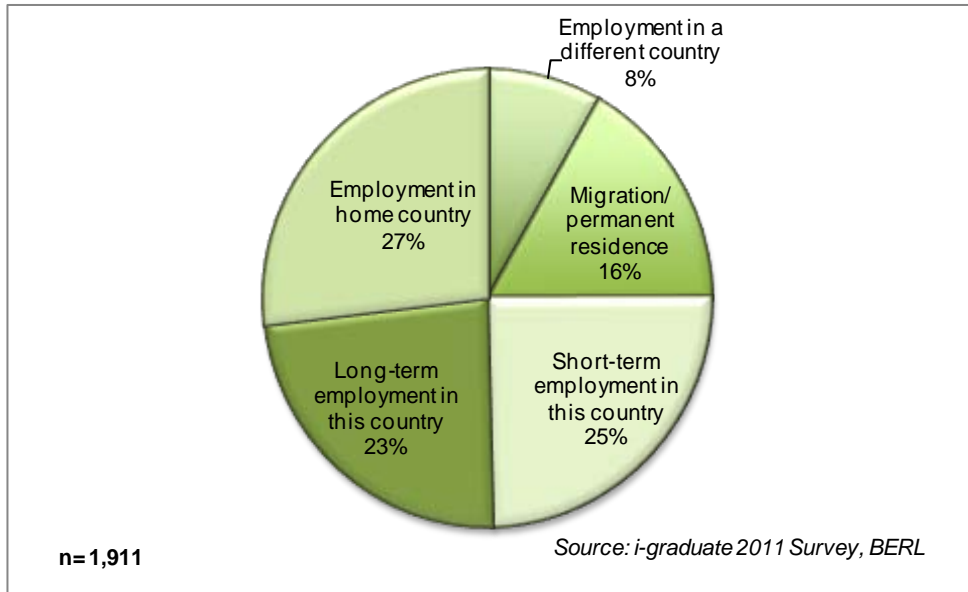
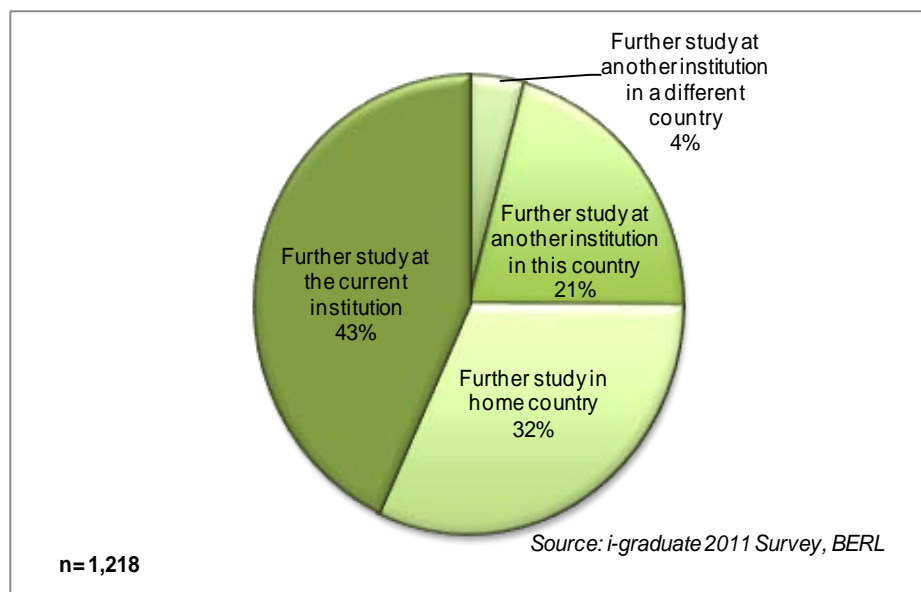


Figure 7.48 shows the study plans of the international students at New Zealand universities.

- Of the 1,218 students who were planning to study after graduation, 43 percent were planning to study at their current institution while 32 percent planned to undertake further study in their home country. The rest of the respondents who were planning on further study remained undecided as to whether they would study at a different institution or in another country.

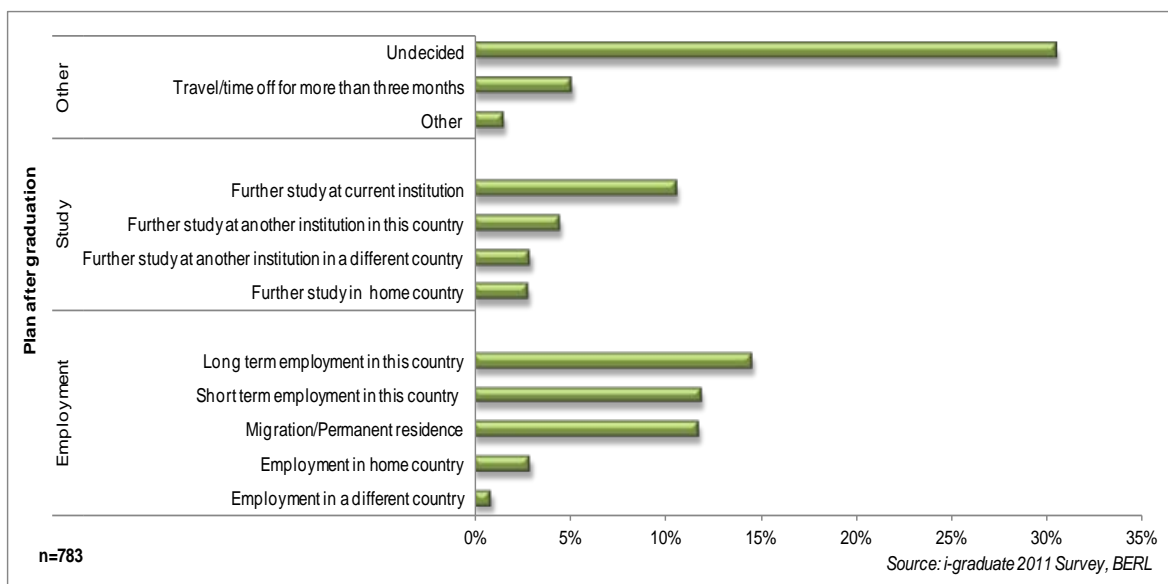
Figure 7.48 Further study plans, i-graduate university respondents



ITPs

Figure 7.49 shows the future plans of international students in New Zealand ITPs.

Figure 7.49 Future plans after graduation, i-graduate ITP respondents

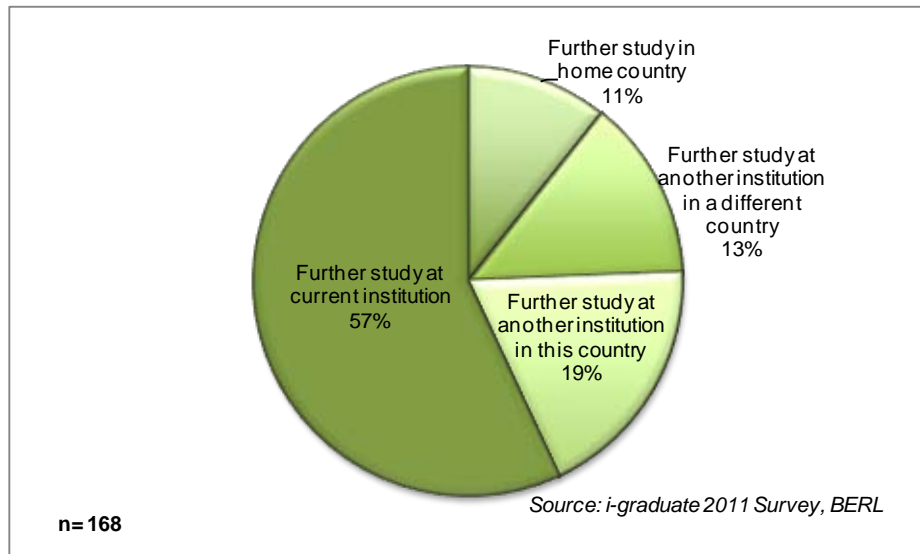


- 31 percent (239 students) of the ITP respondents were undecided about their future plans at this point in the year when the survey was completed.
- Most undecided students were from India (100 respondents) while others were from China (53 respondents).
- 3 percent (or 40 students) of the ITP respondents were planning to travel or take time off after graduation were also predominantly from China (15 respondents) and India (12 respondents).

Figure 7.50 shows the further study plans of international students at New Zealand ITPs.

- Over half the students were planning to continue their studies at their current institution.
- One in three students in the ITP sector was likely to move to another institution for further study in New Zealand. Unfortunately, the survey does not detect whether students were moving within the ITP sector or are moving into another area of tertiary education. This would be an interesting area to explore in the future.

Figure 7.50 Further study plans, i-graduate ITP respondents

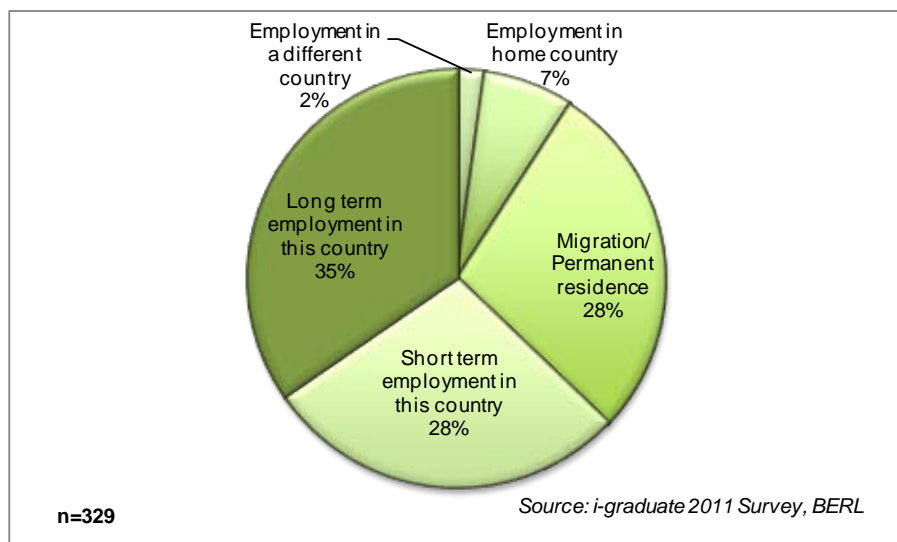


Most international students at New Zealand ITPs who knew what they planned to do after finishing their current course of study were planning to seek employment.

- Of the 329 students who were planning to seek employment, 35 percent were planning to seek long-term employment in New Zealand, while 26 percent were planning to seek short-term employment in New Zealand.

This is a positive aspect of international students studying in New Zealand.

Figure 7.51 Further employment plans, i-graduate ITP respondents



8 Conclusion

Information on how international students rate their university and ITP experience offers education providers, policy makers and researchers some insight into the areas that need further improvement to ensure that international students are satisfied with their experience in New Zealand.

As discussed earlier in this report, overall satisfaction with institutions is strongly associated with learning experience. International students in New Zealand were highly satisfied with their learning experience as well as with their living and support services.

Implications for further research

Among the areas that we recommend for further research are:

- international students' future plans – associated with the outcomes of other graduate destination surveys, and examined for any influence of both the positive and negative living and learning experiences students have had.
- social integration – and the extent to which it affects international students' living and learning experience by nationality.
- social integration – and the extent to which it differs among international students in the ITP and university sectors.

What the 2011 i-graduate survey reveals

- International students had very positive learning, living and support service experiences in New Zealand universities and ITPs.
- Learning experience had the strongest impact on overall university and ITP experience.
- International students will recommend their current university and ITP to other students.

Further research in these areas will enable a greater understanding of what could be done to support international students to have a positive experience in New Zealand.

9 Appendix: Comments on methodology

9.1 Analytical methods employed

Table 9.1 Tasks undertaken, analytical method employed

Tasks	Methodology	Tool
Task 1: Over-all student picture	Descriptive analysis of demographic variables, method of application, immigration visa and level and area of study.	Frequency count and percentages using MS Excel
Task 2: Pre-arrival information	Descriptive analysis of English language proficiency, choice for international study, previous education, visa application satisfaction and over-all arrival experience. The factors perceived as important in arriving at a decision to study overseas were also summarised.	Frequency count and percentages using MS Excel;
Task 3: Summary of student satisfaction experience	Summarise statistics for each of the indicators under the following: living, learning and social services support dimensions. Overall satisfaction, social integration, student perception and were also summarised by key variables.	Frequency count and percentages using MS Excel.
		Rank of mean scores of the indicators (Likert Items) under the learning, living and support services satisfaction
Task 4: Determine the influences on international student satisfaction	Estimate regression model (s) of overall institution satisfaction experience. Assess goodness-of-fit of the model (s).	Ordered logistic regression analysis using STATA (a statistical software)
Task 5: Identify future plans	Descriptive analysis of employment, study and other plans after completion of study in New Zealand. The career/employment support expected from the institution was also identified.	Frequency count and percentages using MS Excel
Task 6: Synthesis of findings	Highlighted major findings from the analysis and identified areas for further research.	

9.1.1 Task 1

Percentages and proportions were used to build a profile of the international students who responded to the i-graduate survey, and their levels of satisfaction with learning and living in New Zealand. The findings from task 1 are discussed further in the next section of this report, where we discuss the profile of the survey respondents.

Descriptive analysis was used to provide headline figures on key demographic variables such as the country of origin of the student, their age and sex. This analysis was also used to provide an education profile of the international student in terms of their field and level of study, and the point that they were at in their study at the time of the survey.

9.1.2 Task 2

Task 2 also used descriptive analysis, this time to focus on pre-arrival information about the survey respondents. This type of information included response patterns for the following variables:

- Decision-making¹⁷
- Application methods and visa process
- Previous education
- English language test
- Length of stay in New Zealand before current programme of study
- Choice (of country/institution/university) for international study.

Together, tasks 1 and 2 provided the context for undertaking further analysis on the satisfaction of international students with their learning and living experiences in New Zealand, and the support services provided by New Zealand education institutions.

9.1.3 Task 3

Task 3 summarised international students' experiences in five areas.¹⁸

- Arrival
- Learning
- Living
- Support services
- Overall institution experience.

Frequency counts and percentages were used to illustrate satisfaction in each of these areas as a proportion of the total response. These responses are displayed as figures. These figures show how students were very dissatisfied to very satisfied with their experiences

¹⁷ The survey identified 24 factors that may have influenced the decision of an international student to study in New Zealand. The survey respondents then rated each factor, with the scale being *very unimportant*, *very important* and *not applicable*.

¹⁸ The Likert Scale used is very dissatisfied, dissatisfied, satisfied and very satisfied.

across various variables related to one of the four areas. These findings by key variables are presented separately for international students at New Zealand universities and ITPs.

The mean score of the responses was then calculated for each variable to identify which variable had the highest and lowest satisfaction rating. We then identified the top five and bottom five variables under three of the four areas: living, learning and support services.

9.1.4 Task 4

In task 4 we explored the factors influencing the level of satisfaction of international students in New Zealand using ordered logistic regression analysis. Here, we estimated the relationship and likelihood of a response (Y) to the satisfaction experience (i) of an international student using the following expression:

Where:

i = is the Likert scale used: very dissatisfied, dissatisfied, satisfied and very satisfied.

X_i is a set of independent variables such as nationality and English language test scores to explain the changes in Y.

β_{im} is a coefficient that determines the direction of the relationship between the independent variables and logit Y the dependent variable.¹⁹

Using this method of analysis we considered the following:

- Overall satisfaction with the institution experience (OS) = f(overall living experience(S_1), overall learning experience(S_2), overall support services experience(S_3), X)
- $S_1 = f(X)$, $S_2 = f(X)$, $S_3 = f(X)$, $S_3 = f(X)$

Ordered logistic regression analysis allowed us to:

- determine the likelihood that international students to report being very dissatisfied, dissatisfied, satisfied, or very satisfied
- describe and identify significant influences on the level of student satisfaction.

¹⁹ The natural logarithm of odds of Y and odds are ratios of probability of Y happening to the probability of Y not happening.

THE SATISFACTION OF INTERNATIONAL STUDENTS IN NEW ZEALAND

Findings from task 4 allowed us to describe whether overall satisfaction with the institution relates to overall satisfaction in the key areas of living, learning and support services, while controlling for key variables such as nationality and English language test scores. It also allowed us describe the relationship between a response, such as being very dissatisfied with the overall learning experience, and one or more variables such as nationality or English language test score.

9.1.5 Task 5

In task 5, we went back to descriptive analysis to answer the research question, what do international students plan to do after their current programme of study. This task also identified what career support services were used by international students.

9.2 Fee-paying international students population in 2011

Table 9.2 Fee-paying international students

Country of Citizenship	% distribution	
	2011	2011
China (incl Hong Kong)	19,773	24%
South Korea	10,973	13%
India	10,429	13%
Japan	7,762	9%
Saudi Arabia	4,796	6%
Germany	3,109	4%
Thailand	2,694	3%
Brazil	2,451	3%
USA	2,159	3%
Malaysia	2,092	3%
Vietnam	1,888	2%
Taiwan	1,585	2%
France (incl Tahiti, New Caledonia, French Polynesia)	1,531	2%
Philippines	999	1%
Fiji	984	1%
Russia	950	1%
Switzerland	755	1%
Chile	500	1%
United Kingdom	498	1%
Indonesia	484	1%
Columbia	446	1%
Sri Lanka	437	1%
Canada	310	0%
Italy	310	0%
Spain	304	0%
Tonga	216	0%
Norway	209	0%
Singapore	208	0%
Oman	199	0%
Nepal	193	0%
Cambodia	185	0%
Mexico	180	0%
Samoa	175	0%
Argentina	172	0%
Iran	168	0%
Kuwait	167	0%
South Africa	157	0%
Turkey	141	0%
United Arab Emirates	140	0%
Papua New Guinea	136	0%
Czech Republic	122	0%
Austria	121	0%
Pakistan	120	0%
Bangladesh	116	0%
Sweden	115	0%
Denmark	101	0%
Kazakhstan	100	0%
All other countries	1,631	2%
Total	83,291	100%

Source: Education Counts

9.3 Diagnostic tests undertaken

9.3.1 *Misspecification error*

The *linktest* command was used to detect misspecification error. The idea behind *linktest* is that if the model is properly specified, we should not be able to find any additional predictors that are statistically significant except by chance.

The *linktest* uses the linear predicted value and linear predicted value squared as the predictors to rebuild the model. The predicted value should be a statistically significant predictor. This will be the case unless the model is completely badly specified. On the other hand, if our model is properly specified, the linear predicted value squared should not have much predictive power except by chance. Therefore, if it is significant, then the *linktest* is significant. This usually means that either we have omitted relevant variable(s) or our link function is not correctly specified.

9.3.2 *Goodness-of-fit*

The output of logistic regression analysis in the statistical software used in this analysis contains the log likelihood chi-square and pseudo R-square for the model. These measures give us a general gauge of how the model fits the data.

The log likelihood chi-square is an omnibus test to see if the model as a whole is statistically significant. It is 2 times the difference between the log likelihood of the current model and the log likelihood of the intercept-only model. The degrees of freedom come from the number of predictors in the model.

The pseudo R-square is also a measure how well the model fits the data. It is the proportion of change in terms of the log likelihood. Unlike the usual R squared, the pseudo-R-squared is not measured in terms of variance since in the logistic regression-the variance is fixed.

9.3.3 *Multicollinearity*

The standard errors of the coefficients /odd ratios were examined. When severe multicollinearity occurs, the standard errors for the coefficients tend to be very large (inflated), and sometimes the estimated logistic regression coefficients can be highly unreliable.

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