

*Predicting International Higher Education Students' Satisfaction
with their Study in Ireland*

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Abstract: The internationalisation of higher education - a facet of broader processes of globalisation - has resulted in increased study-related travel, and the development of policies to attract international students. Nevertheless, in the context of a strong drive to recruit international students, little is known about how they are faring during their study abroad. This paper addresses the gap in research, analysing the experiences of international students studying in Irish Higher Education Institutions, drawing on nationally representative data from the Eurostudent IV study. The findings show that students' satisfaction with study while abroad is shaped by a number of different factors including, first and foremost, students' satisfaction with their education institution and subjective rating of their health.

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Introduction

Across Europe, the internationalisation of higher education is firmly on the policy agenda. As a process, internationalisation has been in train since the 1950s (Knight & de Wit, 1995). It drew attention in policy terms from the mid-1990s onwards, at which time the Bologna Process was introduced, a process which cemented the policy of internationalisation within the European Union. Between 2000 and 2011, the global number of international students more than doubled and, currently, more than 4.5 million tertiary students are enrolled outside their country of citizenship (OECD, 2013). This has been attributed to a global expansion of the middle class, with greater numbers able to meet the financial costs of education (Garrett, 2014). National governments have announced plans to dramatically increase the numbers of international students, in some cases doubling existing numbers.¹ In the Irish context, the process of internationalisation is guided by the Government's Strategy for International Education Investing in Global Relationships, which runs to 2015. The number of international students in Ireland increased from just over 5,000 in 2000/2001 to more than 13,000 in the 2012/2013 academic year.² International students make up a substantial minority of non-EEA nationals in Ireland but are often a neglected group in migration research compared to labour migrants.³ Relatively little is known about the factors shaping their experiences. Existing international research focusing on student experiences within education institutions has tended to be qualitative, focusing on international students' strategies for coping with study abroad (Bianchi, 2013; Soutter et al., 2013) or the way in which their experience of studying abroad affects employability or identity (King, Findlay & Ahrens, 2010). There are also a limited number of quantitative studies examining student experiences, drawing on data collected within particular institutions (Sam, 2001; Yeh & Inose, 2003). Overall, research on how satisfied international students are with their study abroad has remained sparse. Little is known about what factors play a role. Analysis of student satisfaction is all the more important in the context of the tension between the drive to recruit international students and the practicalities of meeting international students' needs within both the classroom and the wider educational institution. In the

¹ For example, in 2014 Canada announced plans to double international student recruitment within the next decade and Japan has set a target of 300,000 international students by 2020, up from fewer than 150,000 in 2014 (Garrett, 2014: 6).

² Furthermore, in February 2015, the Irish Government signed up to Generation Study Abroad, an initiative of the U.S. Institute of International Education, which aims to double the number of US students studying abroad by 2020. Ireland is a Lead Signature Partner, contributing funding towards incentive grants to colleges and universities across the U.S.

³ For details see the European Migration Network, Ireland: <http://emn.ie/index.jsp?p=128&n=181>

context of increasing numbers, diversity, and languages among international students, the challenge of serving their needs in the classroom is growing (Garrett, 2014).⁴

This paper draws on the Eurostudent IV Survey data, which offers an ideal source for exploring student experiences across higher education institutions at the national level. The paper aims to answer the following questions:

1. To what extent is satisfaction with study associated with personal characteristics?
2. What institutional factors shape students' satisfaction with study?
3. To what extent does general well-being influence student satisfaction with study?

The paper begins by reviewing the theoretical literature on internationalisation and student mobility, tracing theoretical and conceptual discourses in social theory. This is followed by a review of existing literature on the experiences of international students within higher education institutions. It then considers the education landscape in Ireland, scrutinising the Irish education system and the situation for international students. Section five presents the methodological approach and data sources drawn on, which is followed by a presentation of the research findings and discussion of the results.

Theoretical Framework

In order to understand the experiences of international students and their satisfaction with study abroad, it is first necessary to understand broader concepts of the internationalisation of higher education and student mobility. Research on internationalisation has focused on defining its components (Knight & de Wit, 1995) and on developing its conceptualisation (Qiang, 2003; Chan, 2004). The term is also frequently conflated with 'globalisation' and 'Europeanisation' (Teichler, 1999). In the context of these debates and arguments, the term 'internationalisation' is best seen as a series of strategies and policies moving towards closer cooperation between academic institutions. Some authors have drawn on institutional theory (Enders, 2004) and on governance theory (Flach & Flach, 2010) to assist with theorising the phenomena. In the context of education, Teichler (1999) has conceptualised internationalisation as comprising the following processes:⁵

⁴ This is all the more important when unsatisfactory experiences can damage the reputation of a country or education institution, negatively impacting on its attractiveness as a destination for international students, as was the case in New Zealand in 2004 (Garrett, 2014: 6).

⁵ Nevertheless, tensions and ambiguities in defining internationalisation are evident. For example, components around which there is a greater level of debate on their relevance include the convergence of national systems of education through crediting systems and efforts to achieve world class quality in a globally competitive environment. Knight (2004) argues that a more detailed analysis is required, looking at funding, programmes, policy, regulatory frameworks, and the classroom itself. Likewise, Enders (2004) critiques the focus on macro-level policy making and meso-level organisational adaptation, with a consequent neglect of

- Physical mobility of students and staff (both academic and administrative)
- Recognition of study achievements across administrative borders
- Other modes of cross border transfer such as publications, patents, virtual communication and transnational education.
- International orientations and attitudes.

Teichler (1999) typologised internationalisation into two ‘qualitative leaps’ since the 1990s – the first from vertical to horizontal⁶ and the second from casuistic to systematic.⁷ These two qualitative components bring internationalisation in terms of both mobility and cooperation on equal terms and move towards strategic and systematic internationalisation. The latter point highlights the focus on governance, relating back to the incorporation of governance theory and institutional theory identified earlier. Overall, the term internationalisation suggests a process, a trend, or a policy direction, away from more closed national systems of higher education towards a growing role for the long distance transfer of higher education knowledge and a more complex setting of multi-level actors.

There are several components to internationalisation and “student mobility is viewed as the most visible component in this framework in Europe, with Erasmus as the largest scheme of temporary mobility” (Teichler, 1999:5). Student mobility focuses both on the flow of students across countries and on the experiences of international students within host countries. The phenomenon of student mobility is theorised to a greater extent than internationalisation. In relation to the flow of immigrant students, economic theories and social demand theory are prominent (Findlay et al, 2011). By contrast, theories of social and cultural capital frame studies into the experiences of international students within host countries. A focus on social and cultural capital assists in conceptualising the differential power inherent in the varying characteristics of international students that play a role during their study abroad experiences. These encompass socio-cultural theories of learning, power relations, and theories of social identity construction (Gorgoshidze, 2010). Both concepts in this paper help to understand the rationale behind study-related mobility. The next section explores the existing international research on the experiences of international students in higher education institutions.

the micro-dynamics in the actual practices and performances of academic work. Efforts have also been made to move towards a conceptualisation of changes in phenomena and changes in context.

⁶ Cooperation and mobility was initially between developed and developing countries, with the majority of mobility from developing countries to developed and thus was comprised of a more vertical substance. International relationships and partnerships later became more ‘equal’ in their terms, with mobility within developing countries increasing.

⁷ Processes of internationalisation were casuistic in that they were diverse activities dispersed throughout the education institution, linked to particular research and teaching activities and often of a short-term nature. Cooperation agreements were often set within particular departments and were not linked by any special policy. Once these activities had been ongoing for some time, questions arose on how to make them standard, routine, and supported, and not dependent on the strengths or weaknesses of their pioneering individuals (Teichler, 2009).

Research on the Experiences of International Students in Higher Education Institutions

The empirical literature examining the experiences of international students has primarily focused on their experiences within the classroom; on their strategies for well-being; on the way in which their identity is shaped by their study abroad experiences; and on the way in which study abroad impacts on their employment prospects (Bianchi, 2013; Marginson, 2014; Sigalas, 2010; Tseng & Newton, 2002). There is little research to date that focuses on international students at the national level across different institutions.⁸ Furthermore, few studies examine the different personal and institutional characteristics of international students and whether, and if so in what way, these play a role in students' satisfaction with their study. The extent to which different institutions matter also remains under-explored.

Situated within an economic perspective, Findlay et al. (2011) examined the causal factors in students' choices to participate in mobility. A focus on the search for a 'world class' education was found to be at the forefront of students' motivations to study abroad (Findlay et al., 2011). Elsewhere, King et al. (2010) argue that mobility for education should not be separated from the wider life-course aspirations of international students. In other words, broader orientations towards migration should be incorporated into the analysis. Yet the majority of studies focus on experiences within the classroom. Much of this body of work focuses on the well-being of international students. The experiences of international students studying within host countries are impacted by quality of housing, work, safety, health and discrimination (Ramia et al., 2013). Some qualitative, small-scale studies explore the experiences of international students in a specific institution (MacLachlan & Justice, 2009). These studies foreground micro-level experiences and find that while most international students integrate successfully, some are challenged and distressed by difficulties brought about by cultural differences, social isolation, academic differences and difficulties in English language proficiency (MacLachlan & Justice, 2009). For the most part, international students do express overall satisfaction with the study abroad experience (Sam, 2001). In this latter study, based in Norway, Sam (2001) was one of the few to examine differences in students' experiences within the international student body. His findings illustrated nationality differences, with students from Europe and North America on the whole more satisfied with their experiences than those from Africa and Asia, a finding echoed by Garrett (2014). Factors that impacted on international students' life satisfaction included the number of friends they had, their satisfaction with their finances, perceived discrimination and information received prior to the foreign sojourn (Sam, 2001). The relative importance of these factors differed for students from developed and developing countries. Yeh and Inose (2003) also examine differences between students according to region of origin. The more macro-level analysis of the International Student Barometer has

⁸ One exception to this is the International Student Barometer, which offers nationally and institutionally comparative data. The first wave was analysed in 2014, and subsequent panels are planned annually in the coming years.

reported that the majority of international students are satisfied with their study abroad experience. Yet, only a small minority are 'very' satisfied (Garrett, 2014).⁹

The report of the Eurostudent IV survey (Harmon & Foubert, 2010) in Ireland compares the experiences of international students to those of the overall student body in Ireland. The findings of this report illustrated that international students are more likely than Irish students to be studying part-time, are older than the general student body, and exhibit greater well-being than domestic students. Furthermore, they were more satisfied with their studies but less satisfied with their friendships and accommodation in comparison to domestic students (*ibid.*). In the analysis presented by Harmon and Foubert (2010), all international students were grouped together. However, it can be argued that the experiences of full-time and part-time as well as undergraduate and postgraduate students could differ. This paper intends to expand the original analysis by focusing specifically on international full-time undergraduate students. It does this so that the full experience within this group can be explored in-depth.¹⁰ The following section gives a short overview of Irish higher education system.

The Internationalisation of Higher Education: The Irish Context

The Irish higher education system comprises universities; institutes of technology (IOTs); colleges of education; some other State-aided third level institutions; and private colleges that provide higher education qualifications. All higher education institutions, except private colleges, receive State funding. In 2010 the Government of Ireland launched an internationalisation strategy for the education sector entitled Investing in Global Relationships. This strategy, the first of its kind, aimed to develop internationalisation as a long-term and sustainable process in Ireland and to "maintain Ireland's international profile and attractiveness by educating the next generation of leaders, entrepreneurs and decision-makers in partner countries" (2010: 11). With targets to increase the international student body in Irish Higher Education Institutions by 12,000 to 38,000, the strategy was the first of its kind in Europe (EMN, 2013). This impetus to recruit international students mirrors a global trend in the drive to attract international students to higher education institutions.

⁹ An important point here is that satisfaction is an inherently subjective concept. One must be aware that international student satisfaction is far from uniform across universities and across the world and that satisfaction is not always reflective of objective indicators of quality deployed to evaluate courses (Garrett, 2014).

¹⁰ This paper takes as its focus an exploration of experiences within the full-time undergraduate international student body only. It excludes a comparison between this group and postgraduate students, part-time students, and Irish students, in order to allow for a focused analysis on the dimensions of satisfaction itself. The analysis is seen as a starting point from which to explore satisfaction, and comparison at this stage was seen as removing the focus from some of the deeper investigations. We view comparison with other student groups as a task for later research.

Figure 1: Students in Irish Higher Education Institutions, 2000 - 2013

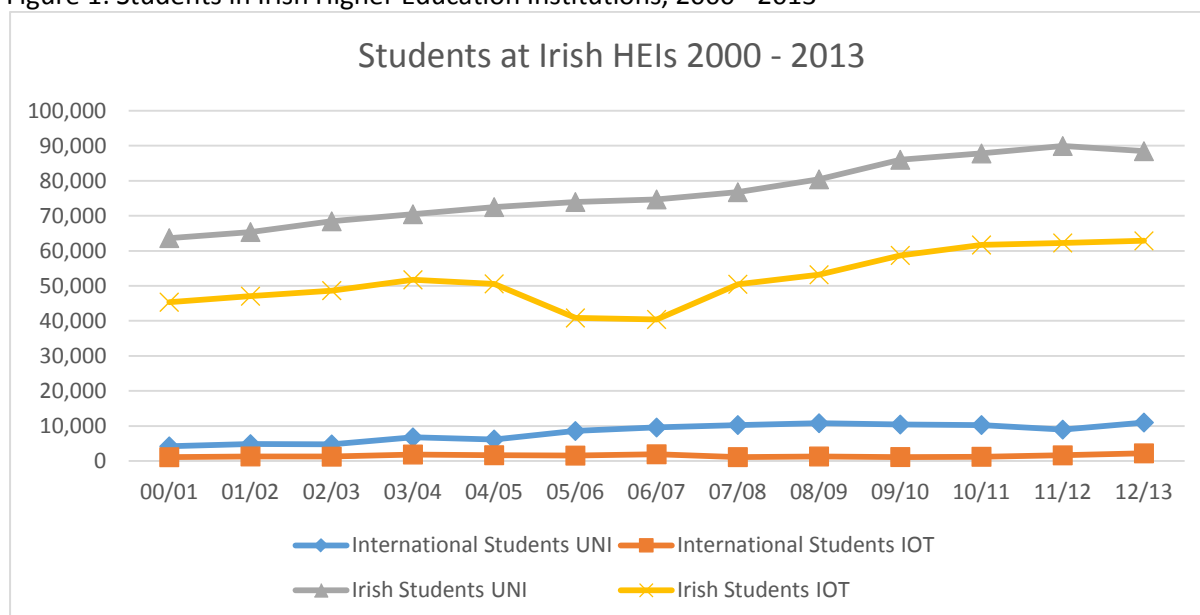


Figure One illustrates the number of Irish and international students in Higher Education Institutions¹¹ in Ireland, drawing on data collected by the Higher Education Authority (HEA). The HEA is the Government of Ireland’s planning and policy development body for higher education and research in Ireland. Here, ‘international student’ is measured by domicile of origin.¹² The figure illustrates the increases in Irish and international students over time. The number of international students attending Universities increased from 4,184 in 2000/2001 to 10,981 in the 2012/2013 academic year and the numbers in IOTs increased from 1,082 to 2,181 within this time period.¹³ This data does not include students who are registered with education providers outside the remit of the HEA, nor does it include those registered on English language courses. To complement these figures, data is available elsewhere on the nationality of international students. According to Education in Ireland, in 2012 (the most recent year available), the highest numbers of international students in Ireland (and thus excluding off-shore and distance learning students) were from the USA (4,415), China (2,715), France (2,092), Germany (1,727) and the United Kingdom (1,310).¹⁴ In that year there were 4,682 students participating in the Erasmus scheme in Ireland (Education in Ireland, 2012).

¹¹ Higher Education Institutions include all Universities and Institutes of Technology.

¹² This method captures where students were living before they came to Ireland. If any Irish nationals were living abroad for a number of years before returning to study they are also recorded within domiciliary of origin.

¹³ It is important to note that these figures are based on returns by higher education institutions to the HEA and that the number of institutions included in the data collection has increased over time. However, international students are predominantly concentrated in the main universities and institutes of technology, from which data has been collected from the outset.

¹⁴ These numbers include all students and not just those at undergraduate level.

Methodology

In order to assess the satisfaction levels of international higher education students with their study, the availability of relevant and reliable data on student life is essential. This was the premise of an international study, Eurostudent, commencing in 2000 and continuing to date. The main aim of the study is to collate comparable data on the social dimension of European higher education, exploring, in particular, the socio-economic background and the living conditions of students as well as other areas of their activities, such as temporary international mobility. The data collected enables cross-country comparisons among the participating countries. Since the creation of the Eurostudent Network in 1999, the project has been managed by combining a central coordination approach led by the Higher Education Information System (HIS), with the principle of shared responsibility of participating countries. The number of participating countries has grown over time from only 8 European countries included in the first study published in 2000, to 26 in Eurostudent IV in 2013. The project uses a survey-based approach. The surveys are repeated every three years and there are plans to continue the programme into the future (Clancy 2013). The implementation of the national student surveys based on the core questionnaire is the responsibility of participating countries. The data gathered is of particular interest to higher education policy-makers at national and European level, but also researchers in this field, and other stake-holders, including students. The Eurostudent project is an important contribution to comparative research on higher education across European countries.

The analysis presented in this article is based on secondary analysis of data collected for the Irish Eurostudent IV Study. The original study (see Harmon and Foubert, 2010) examined many of the key characteristics of the Irish student population, including their health and wellbeing, income and expenditure, socio-economic background, travel and accommodation. The data were drawn primarily from an Internet based survey of thirty higher education institutions from November 2009 to January 2010. To facilitate participation among part-time students who may not often access their academic email, a postal questionnaire was also used. The survey was promoted by a poster campaign in each college and students were invited to respond through an invitation email sent by participating institutions. There were 14,037 responses obtained; some cases were removed due to insufficient responses to key questions. In total the findings draw upon valid responses of 13,530 students from a population of approximately 180,000 full-time and part-time students. Although the profile of respondents was close to the known population profile, survey responses were weighted to reflect the known population parameters of gender and full/part-time status by institution.

Measures Used and Analytic Approach

International Students

Data on students' nationalities were not contained in the Eurostudent IV survey, and in its absence, in this paper 'international student' was defined by proxy using three criteria: respondent was not born in Ireland; respondent's parents were not born in Ireland; and respondent's family home was not in Ireland.¹⁵ In order to get a more concise picture, only full-time undergraduate students were included in the analysis. This excluded any part-time international students as well as any at post-graduate level.¹⁶ Using this definition of full-time undergraduate international student (hereafter FTUIS), a final sample of 607 individuals, or 5 per cent of the overall sample, was yielded. The total international student body (including postgraduate and part-time students) is 1,298 individuals or 10 per cent of the overall sample. While the study relies on a relatively small number of cases, small sample sizes have been analysed elsewhere (Thornton, et al., 2013; Yeh & Inose, 2003). The background variables used included gender, age, number of children,¹⁷ social standing, mother's education, father's profession, and family income.¹⁸ Institutional factors included type of higher education institution attended, field of study, term-time work, attitudes towards study, and accommodation. Factors related to student well-being included their perceived assessment of health, financial standing, relationship with peers, and workload. The outcome variable in this study is students' perceived satisfaction with their study ('very satisfied').

Analytic Approach

Exploratory analyses were first carried out to determine which factors played a role in examining students' satisfaction with study. With reference to many life factors explored in the literature, factors related to personal characteristics, institutional characteristics and health and well-being were explored using cross-tabulations. The analysis is based on weighted data so as not to skew the results. The process facilitated the identification of variables to include in the multivariate model. As the next step a binary logistic regression approach was adopted in order to facilitate an estimation of the relationships between several independent or predictor variables and a dependent variable, in this case 'student's satisfaction with study'. A multivariate approach allows for a more comprehensive analysis

¹⁵ This contrasts with the approach taken by the Higher Education Authority (who have published analysis of the Eurostudent Survey) who have measured international students based on their educational origin. This means Irish nationals who may have completed second-level education abroad are included in the definition. Thus international students are defined in Eurostudent by educational origin and as students who obtained their prior education outside of Ireland. Both definitions yielded a sample size of 10 per cent of the overall student population.

¹⁶ No data on duration of study or participation in international programmes is available for students in Ireland, though there is a question on Irish students' participation in study programmes abroad.

¹⁷ Information on marital status was not collected in the Eurostudent IV survey.

¹⁸ Family income for international students is the income of family abroad. Note that while it is recorded in Euro, the real value of income might vary depending on the country of origin.

than would have been possible using only descriptive analysis. The models in the analysis were run in three steps, background characteristics, institutional factors and factors associated with well-being.

Research Findings

Profile of international undergraduate students

According to our definition of FTUIS, based on 607 cases, the description of variables used is displayed in Table 1.

Table 1: Descriptive Analysis of Selected Factors Associated with the Satisfaction of International Students with their Study in Ireland (total n = 607)

	N	%
Background Characteristics		
Age >23yrs	373	61
Female	348	57
High Social Standing (Subjective) Levels 1-3 (Ref: Levels 4 – 10).	203	33
Mother's Education Level 7-10 (Ref: Levels 1 – 6)	279	46
Father's Profession (Two Highest Categories) (Ref: Eight Lower Categories)	283	47
Family Income less than €20,000 (Ref: income greater than €20,001)	202	42
Institutional Characteristics		
Working During Term Time (Ref: Not working during term time)	117	19
Study as Important as Other Activities (Ref: Study not as Important as Other Activities)	593	98
Attending University (Ref: Attending Institute of Technology)	349	58
Living in Rented Accommodation (Ref: Living in Other Accommodation)	424	70
Well-Being		
Felt Cheerful	299	49
Felt Calm	207	34
Been Active	209	35
Been Rested	143	24
Daily Life Filled With Interest (Ref: Not Reporting Various Elements of Well-Being)	275	45
Rating Health as Good	473	78

(Ref: Rating Health as Not Good)

Satisfied with Accommodation	443	73
Satisfied with Institution of Study (College)	492	81
Satisfied with Friendships	444	73
Satisfied with Workload	326	54
Satisfied with Finances	271	45

(Ref: Not Satisfied)

The sample included somewhat more females than males (57% versus 43 %). FTUIS tend to be older than other students – sixty one per cent are over 23 years of age. A greater number of these students attend universities than institutes of technology (58 per cent against 42 per cent respectively). A high proportion of these students (70 per cent) live in rented accommodation. FTUIS tend to have highly educated mothers: 16 per cent are educated to Masters’ level or higher; 16 per cent have an honours degree; and 19 per cent have a diploma or ordinary degree. FTUIS tend to have fathers in the higher professions: 19 per cent are legislators, senior officials and managers; and 36 per cent are professionals. However, family income tends to be modest. The highest proportion of FTUIS (42%) are members of families earning less than €20,000 per annum. FTUIS reported on their social standing on a scale of 1 -10, with 1 being the highest. Five per cent recorded themselves in the highest category, 8 per cent recorded themselves in the second category; and 21 per cent recorded themselves in the third category, with approximately 21 per cent each in the fourth and fifth categories. For the current study, the first three categories were incorporated into the analysis. In relation to well-being, 49 percent reported feeling cheerful within the last two weeks, with 34 percent having felt calm; 35 per cent active; 24 per cent rested; and 45 per cent that their daily life is filled with interest. Seventy-eight per cent of FTUIS report that their health is good. Finally, when it comes to satisfaction with various aspects of life, 73 per cent are satisfied with their accommodation; 81 per cent with their institution of study; 73 per cent with their friendships; 54 per cent with their workload and 45 per cent with their finances. The following section turns to the multivariate analysis and explores which of the factors best predict FTUIS being very satisfied with studies.

Multivariate Analysis

Multivariate modelling allows simultaneous examination of the different factors reviewed above as well as their association with the level of satisfaction among international students. The approach allows for a nuanced exploration of the underlying reasons for the effects of particular factors on a topic of interest, in this case international students’ satisfaction with their study.¹⁹

¹⁹ Students were asked to assess the extent to which they were satisfied with their study on a five point scale.

A binary logistic regression model (see Table 2) was employed to examine impacts on students' satisfaction with their study. This method was chosen because a binary outcome was under analysis – FTUIS being very satisfied with their studies compared to all others – and a binary logistic regression would best demonstrate the direction of the association. Odds ratios (ORs) provided a measure of effect size, to describe the strength of association between the binary data values. For this analysis, the focus is on those students who are very satisfied with their studies and n=115, or 19 per cent, of FTUIS are very satisfied with their studies. What makes this one-fifth of the research population so satisfied with their studies?

Table 2: Multivariate Analysis of Factors Predicting Satisfaction with Study among International Students in Ireland.

	Model 1	Model 2	Model 3
Background Characteristics			
Age >23yrs	0.60**	0.62*	0.58**
Female	1.75**	1.67*	1.70*
High Social Standing (Subjective) Levels 1 -3 (Ref: Levels 4 – 10).	1.26	1.26	1.12
Mother's Education Level 7-10 (Ref: Levels 1 – 6)	1.29	1.25	1.50<
Father's Profession (Two Highest Categories) (Ref: Eight Lower Categories)	0.93	0.95	0.87
Family Income less than €20,000 (Ref: income greater than €20,001)	1.33	1.26	1.23
Institutional Sphere			
Working During Term Time (Ref: Not working during term time)		1.43	1.80*
Study as Important as Other Activities (Ref: Study not as Important as Other Activities)		3.17	1.78
Attending University (Ref: Attending Institute of Technology)		1.02	1.03
Living in Rented Accommodation (Ref: Living in Other Accommodation)		1.13	1.24
Well-Being			
Felt Cheerful			1.12
Felt Calm			1.52
Been Active			1.60<
Been Rested			0.75
Daily Life Filled With Interest			1.31

(Ref: Not Reporting Various Elements of Well-Being)			
Rating Health as Good			2.13*
(Ref: Rating Health as Not Good)			
Satisfied with Accommodation			0.98
Satisfied with Institution of Study (College)			5.02***
Satisfied with Friendships			2.43**
Satisfied with Workload			1.07
Satisfied with Finances			0.73
(Ref: Not Satisfied)			
Nagelkerke R2	0.04	0.05	0.21
Number	607		

*signifies < 0.05; **signifies <0.01; ***signifies <0.001; < signifies < 0.10

Model 1 relates to background characteristics. It shows that overall, apart from gender and age, these variables are not strongly associated with why some are very satisfied. Women are more satisfied with their studies while older students are less satisfied. Model 2 adds institutional characteristics. At this point no factors display a strong association. Model 3 introduces variables on student well-being. It shows that being satisfied with the study institution attended, being satisfied with friends, and assessing that health is strong are all strongly related to being very satisfied with studies. Thus, factors of well-being such as good health, a good network of friends, and liking the college environment matter the most in terms of being very satisfied with studies. Age and gender continue to be important, and one institutional factor, working during term-time displays a stronger association once well-being factors are introduced. However, what plays the greatest role in student's satisfaction with their studies is their subjective satisfaction with the institution they are attending. Returning to the research questions, we can then see that well-being factors are associated with the satisfaction of students with their studies, with personal factors playing some part. Institutional factors do not display any relation, apart from term-time employment. The remainder of this paper turns to consider these issues in greater detail.

The factor associated most strongly with being very satisfied with studies was FTUIS satisfaction with the college they were attending. The type of college itself (university or institute of technology) did not matter, but students' subjective rating of their satisfaction with the place had the strongest impact on their satisfaction with study. Students who were satisfied with the college they were attending were 5 times more likely to be very satisfied with their studies (OR = 5.02, p < .001). Being satisfied with friendships was also strongly

related to FTUIS being very satisfied with their studies. FTUIS who were happy with their friendships were two and a half times more likely to be very happy with their studies (OR = 2.43, $p < 0.01$). The findings illustrate the importance of social context and of social networks while studying in Ireland. Earlier, it was reported that international students were less satisfied with their friendships than Irish students (Harmon and Foubert, 2010). This matters, given that satisfaction with friendships is important for international students in their satisfaction with study.

Both of these factors relate to well-being and it was the variables on well-being that displayed the strongest effect. FTUIS who subjectively rated their health as good were more than twice as likely to be satisfied with their studies (OR = 2.13, $p < .05$). All told, these three aspects of well-being – satisfaction with institution of study, satisfaction with friendships; and feeling in good health – displayed the strongest association with having a strong satisfaction with studies in Ireland. Overall, these associations may point to a generally more satisfied cohort of students, against a generally less satisfied cohort, yet they point to domains that can be targeted where circumstances for international students' study need to be improved. Furthermore, these factors appeared to mediate others. Working during term time (19% of FTUIS) was associated with satisfaction with studies. At first, these students were 1.4 times more likely to be satisfied with their studies (OR = 1.43) but this was increased to nearly two times once well-being factors were introduced into the analysis (OR = 1.80) and became statistically significant.

Finally, gender and age displayed associations with being very satisfied with studies, associations which were not particularly strong but which were statistically significant. Female international students displayed a positive relationship to satisfaction with study (OR = 1.75 / 1.67 / 1.7, $p < .05$), and being aged under 23 was negatively associated with satisfaction with studies (OR = 0.6 / 0.62 / 0.58, $p < 0.01$). The display of the three odds ratios achieved at each step of the analysis reveals that age and gender were not strongly affected by the addition of institutional or well-being factors, including the three factors with the strongest effect on satisfaction with study (satisfaction with place of study; satisfaction with friendships; feeling in good health). Overall, based on the odds ratios, female students consistently remained one and a half times more satisfied with their studies than male students. Those FTUIS aged under 23 years consistently remained 60 per cent as likely to be very satisfied with their studies as their older counterparts.

Overall, the findings highlight the importance of social context for students, in terms of how much they are satisfied with the place they study in and in terms of their friendships. Students' sense of their underlying health is also important. Across these elements, female students and older students remain consistently more satisfied than their male and younger counterparts.

Conclusion

Literature on the experiences of international students regarding their study abroad programmes is emerging, broadly situated within the phenomena of the internationalisation of higher education and of student mobility. Research by Sam (2001) illustrated that students from Europe and North America fare better than those from other countries when studying internationally. Other research (MacLacklan & Justice, 2009) has shown that greater distress is experienced by those international students who are the most culturally distinct from the overall student body. In the Irish case, existing analysis has compared the international student experience to that of Irish students, revealing that international students were marginally more satisfied with their studies and less satisfied with their accommodation, financial well-being and friendships than domestic students (Harmon & Foubert, 2010).

This paper took the analysis further by examining a broad spectrum of factors impacting on the experiences of international full-time undergraduate students. This included an analysis of key aspects of their living and working situations, as well as background characteristics such as their social class and their health and well-being. The analysis revealed that the strongest influence on the satisfaction of international students with their study in Ireland was their satisfaction with the institution at which they were studying. Satisfaction with friendships, and with health, also played a very important role. Thus the findings point to the vital role that broader social context and social capital, as well as the underlying health of FTUIS, play in their study abroad experience.

At the outset of this research, it was expected that certain aspects of the living and working situations of international students would play a role in their overall satisfaction. In fact, this was not proven. Neither living situation, institution attended nor course of study interacted in any way with the satisfaction levels of international students. Working situation displayed a small effect once well-being factors were introduced. In the absence of any data on nationality, given prior research pointing to the role of cultural distance in the international student experience (MacLacklan & Justice, 2009; Sam, 2001), it is also reasonable to postulate that those students with greater financial resources originate from Europe and North America.

Our findings extend the existing literature in that they draw on a national dataset, whereas the majority of prior empirical studies have been conducted within single institutions, with the exception of the Student Barometer. Analysing a cross-institutional dataset which included a variable on satisfaction with institution revealed that this was the strongest factor to influence student satisfaction with study, something that has not been explicitly identified in existing research. Furthermore, this study was the first to incorporate questions of health (subjectively measured) into the analysis. The finding that friendships matter reflects

patterns in the study by Sam (2001). While data on specific nationalities were not available in the present study, prior studies have shown that there are nationality variations in satisfaction with friendships (Garrett, 2014), an area that warrants further research in the European context. Relating back to the theoretical frame employed in this study, these findings point to the relevance of drawing on institutional theory and governance theory to assist with theorising the phenomenon of internationalisation and to the utility of theories of social and cultural capital in framing aspects of students' social context.

The findings have important policy implications in that they point to the importance of the institutional context for students as well as their social experience, and this is something that is within the competence of institutions to address. In order to increase the satisfaction levels of international students, higher education institutions can focus on approaches to enhance their on-campus experience, including their social experience. In the context of the Irish Government's drive to recruit students from the emerging markets of India, Brazil, and China, and a desire to present Ireland as an attractive study destination for nationals of these countries, the findings point towards a need to ensure that the challenges that nationals of these countries may face in adjusting to life in Ireland are addressed through policy, and this should be primarily within the education institutions themselves.

References

- Bianchi, C. (2013). Satisfiers and Dissatisfiers for International Students of Higher Education: An Exploratory Study in Australia, *Journal of Higher Education Policy and Management* 35: 4: 396 – 409.
- Chan, W. (2004). International Cooperation in Higher Education: Theory and Practice, *Journal of Studies in International Education* 8: 1: 32 – 55.
- Clancy, P. (2013) Differentials in Inequality of Access to Higher Education in European Countries: Triangulation of Findings from Eurostudent and Other Comparative Studies. 26th Consortium of Higher Education Researchers Annual Conference 9 – 11 September 2013.
- Education in Ireland. (2012). *International Students in Irish Higher Education 2011 – 2012*. Dublin: Education in Ireland.
- Enders, J. (2004). Higher education, internationalisation, and the nation-state: Recent developments and challenges to governance theory. *Higher Education* 47: 3, 361-382.
- European Migration Network (EMN). (2013). *Immigration of International Students to the EU: Synthesis Report*. Brussels: European Migration Network.
- Findlay, A.M. (2011). An Assessment of Supply and Demand-Side Theorizations of International Student Mobility, *International Migration* 49: 2: 162 – 190.

- Findlay, A.M. King, R. Smith, F.M. Geddes, A. Skeldon, R. (2011). World Class? An Investigation of Globalisation, Difference and International Student Mobility, *Transactions of the Institute of British Geographers*, 37: 118 – 131.
- Flach, L. and Flach, L. (2010). Institutional Theory and the Internationalisation of Higher Education in South America: The Brazilian Case, *Journal of International Business and Economy* 11: 1: 25 – 50.
- Garrett, R. (2014). Explaining International Student Satisfaction: Insights from the International Student Barometer. Available online:
<http://iggraduate.dev.ingelby.com/assets/Explaining-Satisfaction-ISB-2014.pdf>
- Gorgoshidze, K. (2010). Understanding Motivations for Student Mobility: The Case of Georgia. LUP Student Papers. <http://lup.lub.lu.se/student-papers/record/1612561>
- Harmon, D. and Foubert, O. (2010). Eurostudent Survey IV. Report on the Social and Living Conditions of Higher Education Students in Ireland 2009/2010. Dublin: Higher Education Authority.
- King, R. Findlay, A. and Ahrens, J. (2010). International Student Mobility Literature Review: Report to HEFCE and co-funded by the British Council, UK National Agency for Erasmus.
- Knight, J. (2004). Internationalisation Remodelled: Definition, Approaches and Rationales, *Journal of Studies in International Education* 8: 1: 5 – 31.
- Knight, J. and de Wit, H. (1995). Strategies for Internationalization of Higher Education: Historical and Conceptual Perspectives, in De Wit, H. (ed.) *Strategies for Internationalisation of Higher Education: A Comparative Study of Australia, Canada, Europe and the United States of America*. Amsterdam: European Association for International Education.
- Marginson, S. (2014). Student Self-Formation in International Education, *Journal of Studies in International Education* 18: 1: 6 – 22.
- Organisation for Economic Co-operation and Development (OECD). (2013). How is International Student Mobility Shaping Up? *OECD Education Indicators in Focus* 2013/05 No. 14. Paris: OECD.
- Qiang, Z. (2003). Internationalization of Higher Education: Towards a Conceptual Framework, *Policy Futures in Education*, 1: 2: 248 – 270.
- Ramia, G. Marginson, S. and Sawir, E. (2013). *Regulating International Students' Well-Being*. Bristol: University of Bristol Policy Press.
- Sam, D.L. (2001) Satisfaction with Life among International Students: An Exploratory Study, *Social Indicators Research* 53: 3: 315 - 337.
- Sigalas, E. (2010). Cross-Border Mobility and European Identity: The Effectiveness of Intergroup Contact During the ERASMUS Year Abroad, *European Union Politics* 11: 2: 241 – 265.

Soutter, A.K. O'Steen, B. Gilmore, A. (2013). The Student Well-Being Model: A Conceptual Framework for the Development of Student Well-Being Indicators, *International Journal of Adolescence and Youth*. doi: 10.1080/02673843.2012.754362

Teichler, U. (1999). Internationalisation as a Challenge for Higher Education in Europe, *Tertiary Education and Management* 5: 1: 5 – 22.

Teichler, U. (2009). Internationalisation of Higher Education: European Experiences. Paper presented at the University of Twente European Summer School, 2009. Available at: http://www.utwente.nl/bms/cheps/summer_school/literature/internationalisation.pdf

Thornton, M. Darmody, M. and McCoy, S. (2013). Persistent Absenteeism among Irish Primary School Pupils, *Educational Review* 65: 4: 488-501.

Tseng, W.C. and Newton, F.B. (2002). International Students' Strategies for Well-Being, *College Student Journal* 36: 4: 591 – 597.

Yeh, C. J.; Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress, *Counselling Psychology Quarterly*, 16, 1, 15-28.

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