



Report 2006:29 R

International Postgraduate Students Mirror

Catalonia, Finland, Ireland and Sweden



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International Postgraduate Students Mirror Catalonia, Finland, Ireland and Sweden

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Preface

This International Postgraduate Students Mirror highlights Postgraduate Education in four countries from the student point of view. The investigation raises important questions about how the results can be used for improvement of postgraduate education in different countries. In many cases the answers can only be reached by profound discussions within and among the universities. But it is essential that this discussion be followed by measures for improvement.

Other questions that should be raised are whether a comparative investigation of this kind is possible and desirable in a wider European context. In my opinion the answer is in the affirmative in both cases.

It is important to know something about the conditions that apply for postgraduate study in a wider European perspective. Knowledge of this kind can help to facilitate the increasingly important movement of researchers in Europe and in the long-term mobility on the labour market. It is important for those who plan and take responsibility for postgraduate programmes in the various European countries to have access to comparative information so that they can themselves change and improve the research programmes that are of such strategic significance.



Sigbrit Franke

Summary

Research studies from the student perspective

The International Postgraduate Students Mirror is a survey conducted in Catalonia, Finland, Ireland and Sweden. It attempts to shed light on research studies from the perspective of the postgraduate students. The survey has been conducted using questionnaires that were answered during 2005 by 1,001 postgraduate students in Catalonia, 3,826 in Finland and 1,390 in Ireland. In Sweden 7,074 postgraduate students responded to the questionnaire in 2002.

Conditions for surveys

The conditions for surveys are very different in the four countries¹, being most favourable in Sweden and Finland with reliable frame information about the population and most challenging in Ireland and Catalonia, as central registers of their postgraduate student are not available, and also because of other important conditions for surveys relating to secrecy and integrity for both individuals and universities. This means that the qualities of data and analysis vary across countries also after we have applied the available statistical tools for improving comparability and adjusted for bias.

A pilot study

The Swedish Survey has been used as the Master Survey. As this is the first time a survey of this kind is conducted in the participating countries, the International Postgraduate Students Mirror could be seen as a pilot study in the sense that procedures and instruments have been developed together to reach out to postgraduate students in different educational systems, adjusting them to each country's context and constraints.

Seven scales

The main common core in capturing the post-graduate students' views and experiences was seven scales, based on 34 items in the Master Questionnaire, developed and tested for the Swedish Mirror. Through confirmatory factor analysis, testing the Swedish indices on the other three countries' data, it was found that they very well reflected the situation in all the participating countries, being both relevant and reliable. The seven indices represent the following different aspects of the life of post-graduate students: *Introduction*

1. For the sake of simplicity we name Catalonia a country although it is an autonomous part of Spain.

to postgraduate education, Professional development, Dialogue with supervisors, Supervision in action, Relevance of taught courses, (not available in the Irish dataset), Reflection and values, Study environments.

Different educational systems

There are both similarities and differences between the educational systems of the different countries. There are binary higher education systems in Catalonia, Finland and Ireland while in Sweden there is a unitary higher education sector including academic, professional and vocational programmes. However, both the length and structure of the various educational approaches are comparable. Where postgraduate education is concerned the similarities are greater than the differences.

The postgraduate students

In all four countries there is, on the whole, a balance between the proportion of female and male postgraduate students. In some subject fields the balance is uneven, however, as women and men tend, to a certain extent, to study different subjects – in all four countries, for instance, it is more frequent for men to study Engineering, Manufacturing and Computing.

Postgraduate students in Catalonia and Ireland are somewhat younger than in Finland and Sweden. In Finland and Sweden there is a relatively large group of postgraduate students aged 35 and above.

The Irish postgraduate students are those who assert that they devote most time to their doctoral studies – 68 per cent claim to spend at least 30 hours a week. On average the Irish and Swedish postgraduate students devote 30-39 hours a week to their studies, in Catalonia and Finland the figure is 20-29 hours.

In Catalonia and Ireland dissertations most often take the form of a monograph, while in Finland and Sweden collections of articles are more frequent. In Finland and Sweden the large majority of dissertations are written in English, while in Catalonia they are most frequently written in Spanish or Catalan.

Positive postgraduate students

The students were asked what overall grade they would give their postgraduate programme up to now. The overall grade of “good” or “excellent” is awarded by a total of 84 % of the students in Ireland to their programmes. The proportion of students in Sweden awarding the same grades is 78 %, in Finland 74 % and in Catalonia 71 %.

Most postgraduate students say that they would opt to begin postgraduate studies if they had to choose today, but 14 % in Finland and Catalonia, 15 % in Ireland and 19 % in Sweden respond “definitely not” or “probably not”.

Introductions attract criticism

Introduction programmes to postgraduate study do not function satisfactorily in any of the countries. The results reveal that the Swedish postgraduate students are most critical of their introductions while students in Catalonia are least critical. Above all the criteria for enrolment are clearer for postgraduate students in Catalonia. If the results for all the subject fields are taken into account, postgraduate students in the social science in Catalonia are those who consider their introduction programmes most satisfactory.

Professional development

Knowledge about scientific methodology and scientific theories constitutes the core of postgraduate study. The questions included in this index deal with the extent to which postgraduate studies have led to the acquisition by the students of knowledge of scientific methodologies and theories, the capacity to undertake independent research and heightened awareness of research ethics.

The majority of postgraduate students in all four countries consider professional development to function satisfactorily. Heightened awareness of research ethics is however one aspect of professional development that is attained by less than half of the students. The differences between the countries are on the whole insignificant in this index

Supervision

The responses to the questionnaires indicate the complexity of the view taken by postgraduate students of their supervision. The majority claim that on the whole their supervision functions satisfactorily, although to a somewhat less extent in Finland. But the responses in the *Dialogue with supervisors* index reveal that a large proportion of postgraduate students consider that their supervisors have only shown little interest in their studies, provided little constructive criticism of their research activities and rarely discussed methodological or theoretical issues.

In Sweden, Finland and Ireland the students were asked if they had received as much supervision as they wanted. Not surprisingly, here there is a firm link, the more supervision the more satisfied the students. There is a great deal of variation between different subject areas where the extent of supervision is concerned. This also varies within the same subject areas between the different countries.

Taught courses

Postgraduate programmes in Catalonia, Finland and Sweden consist of both taught courses and thesis work. The responses of the postgraduate students in Finland and Sweden to the taught courses were overwhelmingly positive. The students in Catalonia expressed somewhat less satisfaction, mainly with the relevance of their courses to their thesis work.

Social commitment does not come automatically

Personal development also forms part of the aim of higher education and this applies to both undergraduate and postgraduate study. One element in personal development involves increasing the capacity for reflection over one's own values another is greater educational breadth. The overarching social goals for higher education also include the expectation that education will contribute to the development of democracy and greater understanding between people with different cultural or ethnic backgrounds.

According to the majority of postgraduate students, their studies contribute to only a limited extent to increasing their involvement in social development or understanding for other groups. On the other hand, there is a feeling that their general education has been broadened and the majority of postgraduate students, apart from those in Finland, say that their studies have helped them to reflect over their own values.

Low degree of influence

The result shows that the majority of postgraduate students in all the countries feel that their studies are positive and stimulating and feel that they are accepted as members of the research collective. The students in Catalonia and Ireland feel somewhat less accepted in this respect. In all the countries surveyed the postgraduate students report a low degree of influence.

Concern about unemployment

The concern about unemployment after graduation varies a great deal among postgraduate students in the different countries. Students in Catalonia, where a good 64 % express concern about unemployment, show the greatest concern. The corresponding figure for Ireland is 35 % and for Finland 32 %. Least concern is shown in Sweden, where one student in every four is worried about not finding a job.

Introduction

In 2003 The Swedish National Agency for Higher Education undertook a major investigation of the conditions of doctoral students in the country, based on the premise that the primary purpose of postgraduate programmes is educational. *The Mirror for Postgraduate Students*, as it came to be called, covered seven different dimensions of postgraduate studies: Introduction, Professional development, Dialogue with supervisors, Supervision in action, Taught courses, Reflection and values and Study environment. The results were published in autumn, 2003, and have since been debated widely at universities and colleges throughout the country.

Acting on an initiative from the Chancellor of the Swedish Universities, Sigbrit Franke, Catalonia, Finland and Ireland agreed to carry out an investigation along the same lines in order to get information for their own use, but also in order to enable comparative analyses.

Purpose

The circumstances in which postgraduate programmes are offered and the way in which they are organised have a major impact on their quality. Gathering information from those directly concerned is one way of casting light on this quality. For that reason, it is important to study the experiences of postgraduate students themselves. In its adoption of a student perspective and its specific focus, *An International Mirror for Postgraduate Students* broadens the scrutiny of higher education. The four countries² that participate are of similar size but represent different educational systems within European higher education, and the results would thus reflect the varying conditions under which postgraduate students work.

By creating a deeper understanding of similarities and differences in working conditions and professional perspectives among graduate students in a couple of European countries, it could be an important contribution to the implementation of the Bologna process and the European Higher Education Area.

Questionnaires

The English version of the Swedish Questionnaire was the master instrument for the data collection in Catalonia, Finland and Ireland in 2005. It contained some 50 questions, coded into about 100 variables.

2. For the sake of simplicity Catalonia is referred to as a country although it is an autonomous part of Spain.

The main common core in capturing the postgraduate students views and experiences was seven scales, based on 34 items in the Master Questionnaire, developed and tested for the Swedish Mirror. Through confirmatory factor analysis and tests of the Swedish dimensions on the other three countries' data, it was found that they reflected very well the situation in all the participating countries, being both relevant and reliable. The seven indexes represent the following different aspects of postgraduate study life: *Introduction to postgraduate education*, *Professional development*, *Dialogue with supervisors*, *Supervision in action*, *Relevance of taught courses*, (not available in the Irish dataset), *Reflection of values*, *Study environments*. The focus in this report lies on scales/indices. The questions within each index highlight common essential elements in the postgraduate programmes.

A satisfactory and sound introduction to postgraduate studies can provide many benefits in terms of study techniques and from a social perspective. A good introduction can also enable the students to become part of the organisation more rapidly and get on with their studies and their other duties. Questions on this matter are to be found in index *Introduction to postgraduate studies*

Knowledge about scientific methodology and scientific theories constitutes the core of postgraduate study and is a necessary requirement for independent research. Awareness of research ethics is regarded as a quality issue both by the research community and elsewhere and the application of ethical standards is central to research. Questions on this matter are to be found in index *Professional development*.

During their studies postgraduate students are often highly dependent on their supervisors. Supervisor commitment to the student's progress and future career plans and supervision in the form of a dialogue provide necessary support. Two indices are identified on supervision, *Dialogue with supervisors* and *Supervision in action*.

Postgraduate programmes in Catalonia, Finland and Sweden consist of both taught courses and thesis work. The aim of the taught courses in postgraduate programmes is both to provide the students with more advanced expertise in their subject and also to give them sufficient specialised knowledge to enable completion of their theses. The index *Relevance of taught courses* deals with this area.

Personal development also forms part of the aim of higher education and this applies to both undergraduate and postgraduate study. The questions included in index *Reflection of values* deal with the extent to which postgraduate studies have prompted students to reflect about their own values or enabled them to gain greater awareness of social and cultural gender differences, become involved in community development, acquire greater understanding of people with other cultural/ethnic backgrounds and broaden their own educational horizons.

The relationships between individuals sharing the same environment have a great deal of influence on how creative it will be considered as a workplace. A creative environment can in its turn provide a fertile and stimulating setting for postgraduate study. Influence can be a quality factor in many operational areas. Questions on this matter are to be found in index *Study environments*.

Design and sample³

The target population in Sweden was defined as follows: (1) PhD students in all fields of PhD education, (2) the sample was restricted to postgraduate students who pursued their studies for 10 % or more of a full time post during the spring semester of 2002, and (3) the sample was restricted to those students who had at least one year's experience of postgraduate education.

The scope was widened in defining the target population for the 2005 International Postgraduate Students Mirror to include newly enrolled postgraduate students, and included: (1) PhD students (and Research Masters students in Ireland), active for 10 % or more of a full time post and (2) registered as PhD students (and Research Masters students in Ireland) during autumn 2004. Note that this difference between the Swedish survey and the others on the criteria for participation in the data collection spring 2003 vs. spring 2005 has to be taken into account when interpreting the results with the Swedish survey targeted towards those students with at least one year of experience only.

Data Collection

The Swedish original survey, Doktorandspegeln, with data collection during spring 2003, took the form of a questionnaire sent to 9,816 randomly selected postgraduate students at all the higher education institutions offering postgraduate studies. They represented about 50 % of all postgraduate students in Sweden and the response rate was 72 %, which vouches for reliable results. The investigation was carried out by the Swedish National Agency for Higher Education in cooperation with Statistics Sweden.

The Finnish survey was carried out on assignment by the Finnish Ministry of Education and in cooperation with the Finnish Higher Education Evaluation Council (FINHEEC), which coordinated an international evaluation on doctoral education in Finland in 2005. The target population included all doctoral students in all subject fields who were registered for a doctoral degree during autumn term 2004 in the Finnish universities, in total 22,105 students. The data were collected spring 2005 with a web-adjusted questionnaire in English. In all, there were 3,826 respondents.

In Catalonia the target population for the Mirror Survey included all doctoral students who were enrolled for a Doctoral degree in the first semester

3. Read the full technical report at www.hsv.se/international_mirror

of 2004 (autumn term) in a Catalan University, that states 12,568 students in total. Agència per a la Qualitat del Sistema Universitari de Catalunya (AQU Catalunya) offered the existing universities in Catalonia the chance to take part in the International Mirror Postgraduate Survey. In order to make data processing easier AQU Catalunya decided to conduct the survey through an Internet on-line questionnaire. In all, there were 1,001 respondents.

In Ireland the target population of 7,723 students included all those who were registered for a PhD or a research Masters degree in the autumn semester of 2004. Students on the research Master register were included in the survey as many students in Ireland initially sign up to this register only to transfer, at a later point, to the PhD register. Nine major higher educational providers in Ireland participated in the survey: Dublin City University; Dublin Institute of Technology; National University of Ireland, Galway; National University of Ireland, Maynooth; Royal College of Surgeons of Ireland; University College Cork; University College Dublin; University of Dublin, Trinity College and the University of Limerick. Thus the study included all the major higher educational providers in the Republic of Ireland who have a significant number of students registered for a postgraduate research degree. The survey was conducted using a web based questionnaire which was completed on line. In all there were 1,454 respondents.

Universities in Catalonia, Finland and Ireland were responsible to contact their own students.

Project team

The work has been coordinated by the Swedish Coordinating Centre: project manager Gunilla Jacobsson, Per Gillstrom from Swedish National Agency for Higher Education and Ingrid Munck, Statistica Munck. Other participants has been Josep Grifoll Sauri and Anna Prades Nebot from Agència per a la Qualitat del Sistema Universitari de Catalunya, Kirsi Hiltunen from Academy of Finland, Teresa Lee from Irish Universities Quality Board, Adrian Thomas and Angelica Risquez, University of Limerick.

Postgraduate education in Catalonia

Pre-school (pre-primary) education for children up to the age of 6, which is not compulsory in Spain, is provided in both state-funded and private centres.

Full-time education is compulsory for children from the age of 6 to 16 and is divided into compulsory primary (6–12) and compulsory secondary education (12–16).

The upper level of secondary education (from 16–18) is either vocational (with two educational levels or tiers) or academic/general (baccalaureate) in nature. Vocational secondary education involves the teaching of practical, job-related subjects whereas the baccalaureate has a threefold purpose in that it serves as a preparation for both university education and specific advanced vocational training, and ultimately insertion in the labour market.

57 % of all pupils in compulsory secondary education attend state-run institutions. This percentage increases to 63 % for baccalaureate students, 70 % for vocational training students and 90 % for university students.

Higher education

The Spanish university system is regulated by the Organic Law on Universities (LOU, 2001). In particular, this regulates the organisation, administration and management of higher education institutions, academic organisation and research, and also determines the powers of the regional Autonomous Communities in the field of higher education.

The principle of university autonomy, as regards educational and training aspects, is laid down in the Spanish Constitution (1978). Universities are responsible for the organisation and establishment of the educational programmes that they intend to offer, as well as for drawing up and proposing the syllabuses that lead to the various degrees they award. Nevertheless, in order to ensure education under equal conditions for all students and to permit the validation of degrees, syllabuses are subject to certain general directives regarding organisation, material and course load.⁴

The Government of Catalonia has jurisdictional powers with regard to higher education, pursuant to the Catalan Universities Act (LUC 1/2003). There are seven public universities, three private universities and one distance learning university in Catalonia. Application to the university admissions process (pre-enrolment) is required in order to be admitted to any of these institutions. 80 % of all university students attend the 7 public universities. The university system includes the Polytechnics.

4. General directives determine a minimum of 30 % of the total number of credits for first-cycle studies, and 20 % for second-cycle studies; general directives will determine 50–75 % of the total number of credits of the new Bologna Bachelor.

Fees are determined by the Autonomous Communities within the limits set by the Spanish government, except for non-recognised university degrees, the fees of which are determined by the universities themselves.

Admission procedures to higher education are organised to ensure that all Spanish students have equal rights. No university can refuse to fill places in an establishment if there are applicants who meet the legally established requirements. Students who wish to undertake university studies must possess a baccalaureate certificate and also have to pass a university entrance exam (PAAU).

The number of students has declined slightly in recent years whereas the number and diversification of the degrees offered has increased. As a result, large classes are no longer a problem.⁵

Total number of undergraduates (2003–04)	Total number of new entry (undergraduate) students in higher education 2004	Total number of undergraduate degrees 2004
225,559	38,835	21,961

Table I. Total numbers of undergraduate students, enrolments to higher education and undergraduate degrees in 2004.

Degrees

There are two types of main undergraduate degrees according to the length of study: the Diploma (3 years or 180 ECTS), and the Honours degree (4–5 years, 240–300 ECTS). The Bologna Masters is being introduced from 2007 onwards, whereas the Bachelors will not be introduced until 2010.⁶

Postgraduate education

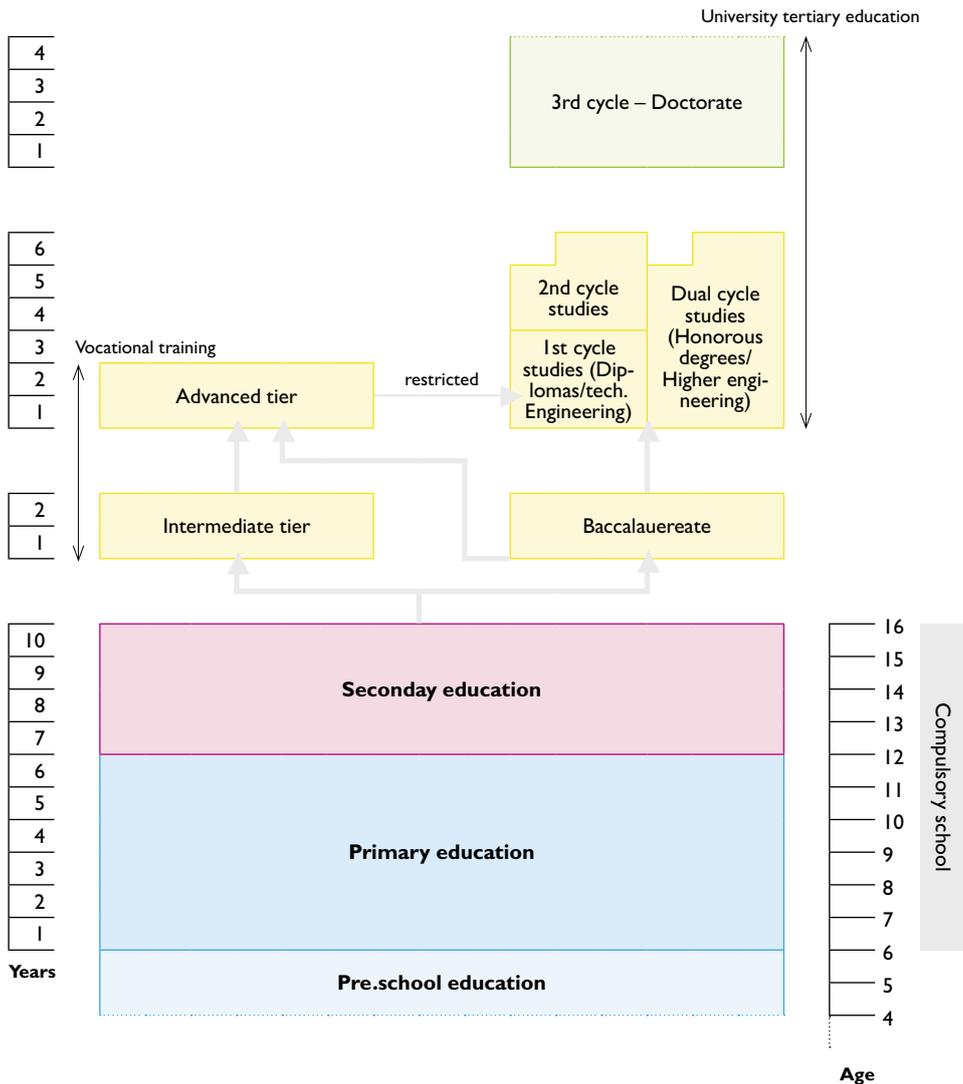
Doctoral programmes are offered to university graduates who wish to extend their knowledge and to conduct research into a specific area related to the disciplines they have studied previously. PhD programmes comprise taught courses (at least 32 credits) and sufficient exposure to research experience to be able to produce a thesis and subsequently submit it to a tribunal.

PhD studies are normally organised within university departments (which are organised on a disciplinary basis). In recent years however efforts have been made by the Government to encourage cooperation between different universities as a way of enhancing efficiency in the system.

5. 90 % of students passed the last university entrance exam (June 05) at the first sitting. In 2004, 86 % of students were enrolled to study their first-choice degree programme at their first-choice institution. This number is higher when only the first-choice programme is taken into account (90 %).

6. This difference is due to the fact that less regulation is required in the case of the Bologna Masters in comparison to Bachelors degrees. In the case of Bachelors degrees, general directives will cover 50–75 % of the total number of credits.

The educational system in Catalonia



Admission and registration

Admission requirements and periods for student registration are laid down by Spanish legislation.

Admission to a postgraduate programme requires a minimum of 300 ECTS (a Bachelors degree (*Licenciatura*), Architecture or Engineering). The number of places offered is determined by the department or centre responsible for the specific subject area at each university, which also administers selection and enrolment procedures. A candidate's first degree must be related in subject area in which doctoral studies will be pursued.

Registration is carried out at the department or centre with administrative responsibility for the doctoral programme and within the stipulated period for the two semesters (in September or February).

Course work and thesis requirements

Doctoral programmes consist of three periods:

Teaching period (first year): Training in research techniques and methods through specific courses and seminars in a specific field of knowledge is given during the first year. A minimum of 20 credits are required in order to pass this level, at which stage the student is awarded a certificate.

Research period (second year): One or more research projects must be undertaken, and a draft thesis produced. A minimum of 12 credits are required in order to pass this level, at which stage the student receives an **Advanced Studies Diploma (DEA)**. Although this certificate is not a recognised qualification, it is standard in all universities in Spain and allows the student to begin the final stage of writing the thesis.

Thesis (subsequent years): This is a research project conducted on an original and unpublished theme that deals with one specific aspect of a particular area of knowledge. This is the last stage of the doctorate and the thesis has to be produced under the supervision of a qualified teacher from the appropriate department. After revision, the student then has to gain permission to submit the thesis for the final reading and defence. If it is evaluated positively, the student may then request the award of the title of Doctor.

Supervision

As laid down in Royal Decree 778/1998, a thesis must be supervised by a PhD who has either permanent or temporary links with the department or institution coordinating the doctoral programme (in the case of inter-departmental or inter-university doctoral programmes, the supervisor may be linked to any of the participating departments or institutes). Other PhD's may act as supplementary supervisors (subject to the approval of the university's doctoral committee).

There are no regulations or even guidelines about how supervision is to be organised. Appropriate supervision basically depends on the supervisor's knowledge, although universities are increasingly drawing up their own internal regulations for supervisors.

As far as we know, there are no introductory training courses for supervisors.

Study conditions

Fees are approximately 55 euros per teaching credit and 77 euros per research credit (with some variation for some credits involving work of an experimental nature). The total cost for the two doctoral courses is around 2,000 euros.

A wide range of grants are available, including FPI grants issued by the Spanish Government (1,100 euros per month), FI grants issued by the Catalan Government, Spanish government university teaching training grants, and grants awarded by the universities themselves. Grant awards are made in two stages: one is for the first two taught courses and for taking the advanced

studies diploma, while the second is for thesis development. Students with grants are incorporated into the corresponding departments, under the supervision of a full professor and with certain teaching commission. A maximum of 45 teaching hours per year is permitted in the first stage, and 90 hours in the second stage. Students in the second stage receive a formal contract, with social security benefits.

The labour market

No statistical data are available on the insertion of PhD holders in the labour market. The general impression is that the labour market in Spain is not particularly favourable for those with PhD's. This may be explained by the industrial structure of the Spanish economy, which relies more on services than research and development (R&D). As a result, Catalan PhD's may on occasion go to other countries to obtain posts as researchers. Nevertheless, there are exceptions to this; for example, a doctorate can be useful in the compulsory education system (in terms of a professional career), in higher education (for lecturers, assistant professors or full professor), and in commercial areas which involve a large amount of research (for example, the biomedical and biotechnological fields, which are both highly developed in Catalonia).

Total number of post-graduate students 2004	Total number of post-graduate degrees 2004	Total number of doctoral degrees 2004
12,568	2,682	1,252

Table 2. Total numbers of postgraduate students and postgraduate degrees in 2004.

Postgraduate education in Finland

The Finnish educational system consists of compulsory nine-year schooling, beginning at the age of seven, three-year upper secondary schooling with pre-academic as well as vocational schools, and a binary higher education system. Local authorities, with the exception of a few private schools, primarily run comprehensive schools. The government contributes to the financing of all the schools. In Finland, 99.7 % of the age group complete compulsory schooling, which means that Finland has one of the lowest dropout rates in the world. Education from primary school up to and including higher education is free of charge. The school leaving age is around 19. There is a separate school system for the Swedish-speakers (6 % of the population).

Post-comprehensive school education is given by general upper secondary schools and vocational schools. Over half of the age group opt for the upper secondary school. The curriculum has been designed to extend over three years, but since there are no specific year-classes pupils may graduate in a longer or shorter time than this. The upper secondary school ends in a national matriculation examination, which is the general eligibility criterion for higher education. Upper secondary school has traditionally constituted the main channel to university education.

Higher education

The Finnish higher education system comprises two parallel sectors: universities and polytechnics. All universities engage in both education and research and have the right to award doctorates. They are state-run institutions, primarily financed from the state budget and governed by the Universities Act. Nevertheless, they have extensive autonomy. There are 20 universities in Finland: ten multi-faculty institutions, three universities of technology, three schools of economics and business administration, and four art academies. University-level education is also provided in a military academy under the Ministry of Defence. Geographically, the network of universities covers the whole country. Legislation concerning the university degree structure was revised in 2004 to enable the new two-cycle degree structure to be adopted in August 2005. Eligible for university studies are persons who have the matriculation examination or a vocational qualification requiring at least three years of studies.

Polytechnics are professionally oriented higher education institutions, either municipally or privately run and co-financed by the government and local authorities. At present, there are 29 polytechnics operating under the Ministry of Education. Polytechnic degrees are bachelor-level higher education degrees with a professional emphasis and take 3.5 to 4.5 years to complete. Universities and polytechnics offer a place to over 60 % of the age group.

A special characteristic of the Finnish higher education system is that no tuition fees are charged for degree studies. The student financial aid system consists of a study grant, a housing supplement and a market-based, government-guaranteed study loan. The study grant and the housing supplement are government-financed benefits paid monthly to the student's bank.

The Universities Act provides for the mission, overall administration and structure of universities. The underlying principle in university education is the freedom of research and university autonomy, which gives them extensive latitude for independent decisions. The universities themselves determine the student selection procedure and the intakes. In the performance agreement, the Ministry of Education and each university agree on the target number of degrees, which forms the basis for the budgetary funds allotted to the university. Being autonomous, universities may also determine the content of their educational programmes and courses they offer as well as the course profiles. Furthermore, they themselves decide on their research priorities.

The annual intake in the universities is about 21,000, which represents one third of the corresponding age group (19-year-olds). All fields apply *numerus clausus*, in which entrance examinations are a key element. Other selection criteria include matriculation examination grades and the school-leaving certificate. Competition for admission is tough: in 2004, Finnish universities received close on 114,000 applications and only 29,300 applicants were admitted. Over the period 2004–2006, the universities are aiming at an average of 14,000 masters degrees and 1,450 doctorates.

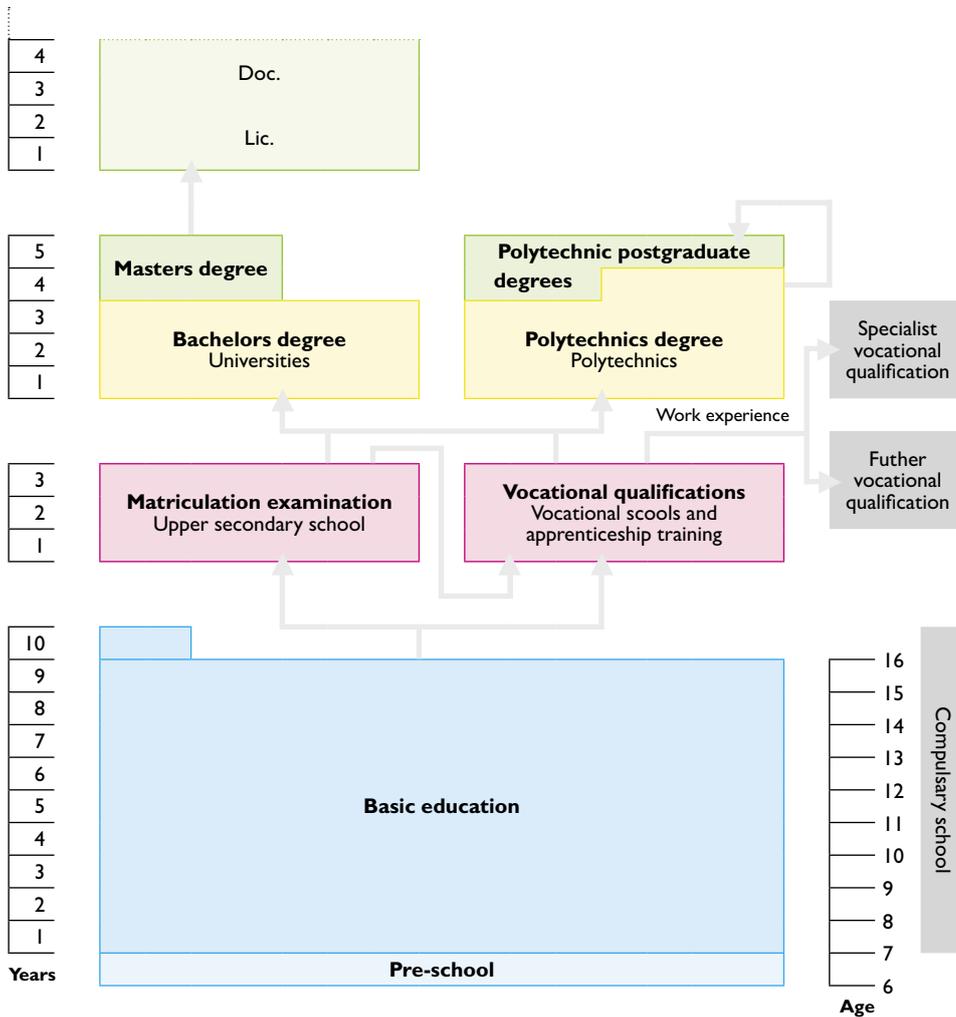
In 2004, there were around 174,000 students in Finnish universities: 150,000 undergraduate and 22,000 postgraduate students. Some 53 % of all university students were female. A total of 18,000 degrees were awarded during 2004. Of this number, nearly 12,600 were masters degrees. 2,700 students completed a bachelors degree.

Total number of undergraduates 2004	Total number of higher education beginners 2004	Total number of undergraduate degrees 2004
150,000	20,000	15,000

Table 3. Total numbers of undergraduate students, higher education entrants and undergraduate degrees in 2004.

The first university degree, bachelors, can generally be attained in three years of full-time study (180–210 ECTS credits) and the higher, masters degree (120–150 ECTS credits), in five years (3+2 years). In 2004, the mean completion time for masters degree was 6.0 years.

The educational system in Finland



Postgraduate education

Degrees and length of studies

There are two postgraduate degrees in Finland: a licentiate and a doctorate. The optional pre-doctoral postgraduate degree of licentiate can be completed in two years of full-time study after the masters degree. Full-time studies for the doctorate can generally be attained in approximately four years following the masters degree. However, the mean completion time for the doctorate is longer than this. Both postgraduate degrees require a thesis and course work. Most students choose to go straight for the doctorate. The annual number of doctoral degrees more than doubled in Finland during the 1990's. In 2004, a total of 1,400 doctorates were completed (women 45 %); licentiates numbered 560.

Entry requirements, content of doctoral education, supervision and thesis requirements

Masters (2nd cycle) degree grants formal eligibility for doctoral studies. Universities themselves are responsible also for the admission into third cycle studies. Since universities design and implement their own doctoral education rules and policies, there are no detailed regulations on the content of doctoral education (including course work) or supervision in national legislation either. However, when applying for a right to start doctoral studies, the applicant typically has to submit a detailed research plan and a study plan. Some faculties stipulate high grades for the applicant's masters thesis. In some faculties and graduate schools, the incoming student signs an agreement in which the research and study plan is described. This agreement will then have an annual follow-up. There is considerable variability between universities and between faculties within a single university concerning admission and supervision as well as resources available. In recent years, universities and faculties have introduced detailed regulations to guarantee the quality and efficiency of doctoral education; the aim has been to further systematise doctoral education in Finland. Some students, especially within graduate schools, have a supervisory team and/or an evaluation board, which may include, in addition to the main supervisor, internal and/or external advisors.

In all, about 22,000 doctoral students are enrolled in Finnish universities. Approximately 4,000 of these are active in graduate schools funded by the Ministry of Education, with another 18,000 students outside these schools. An unknown but likely large number of these latter students are part-time students who may not actively participate in doctoral education. As a consequence, there appears to be significant differences between the experiences of full-time doctoral students and part-time students. It should also be mentioned that under current regulations "inactive" or "passive" students may in some universities continue as enrolled students even for life, even if they are making little or no progress in their studies.

The general process for review and defence of the thesis is set up by law and further defined by official university and faculty policies. The completed thesis manuscript is reviewed prior to publication by a faculty-appointed team that includes outside reviewers (usually from another university or abroad), copies of the published thesis are made available to members of the relevant faculty and to others prior to the defence, and the published thesis is then defended in a public meeting involving faculty-appointed "opponent(s)" from other universities (often from abroad), who are also expected to submit a written evaluation of the thesis. Anyone who has concerns about the quality of the thesis can also express his critical comments during the public defence.

Study conditions

There are a number of mechanisms for funding doctoral studies in Finland. Doctoral students get funding usually from a number of sources; these include

e.g. a university post, funding from a research institute, project funding from the Academy of Finland or university, other paid work of their own, and a doctoral student post in a graduate school. Private foundations have also represented a significant source of funding. Appointment to a 4-year doctoral student post at a graduate school is the most secure way to fund doctoral studies. Such students are formally employed by a university and are thus covered by the same social insurance benefits as other employees in higher education institutions. The monthly salary is usually between 1,700-1,900 euros. Competition for these funded doctoral student posts in graduate schools is tough.

Organisation

Doctoral education is basically provided and organised by universities, faculties and departments. A specific feature in Finnish doctoral education is the graduate school system established by the Ministry of Education in 1995 with the following aims: to improve the quality and efficiency of doctoral education, shorten the time-to-degree, lower the mean age of new doctors, improve supervision, and increase cooperation between research groups as well as international cooperation. Most graduate schools are national, network-type joint programmes among several universities, and possibly research institutes, university hospitals and private enterprises. They are fixed-term programmes, selected on a competitive peer-review basis. Considerable flexibility of structure and focus has been permitted in the development of graduate schools. Consequently, there is a great variation among graduate schools in their organisation and practices.

It is the task of the graduate schools to provide systematic teaching and supervision for participating doctoral students. The target is to complete the doctoral dissertation within four years. It can be said that the conditions for doctoral students in graduate schools are often more favourable than for other students. Doctoral education is in many ways far more systematised and structured in graduate schools. Many graduate schools have their own "Rule Books" which articulate general principles for the organisation of doctoral studies. In addition, they have to have an open, national call for applications for doctoral student posts. It seems that PhD graduates from graduate schools complete their studies in a shorter time as well as at a younger age than do graduates from outside the graduate school system. Individual universities themselves sometimes also establish graduate schools and other types of doctoral programmes in order to create a more efficient organisation for the programme.

The graduate school system is a tri-partite system between the Ministry of Education, the Academy of Finland and universities. Universities provide doctoral education and graduate school administration and send applications to the Academy of Finland. The Academy, in turn, evaluates the applications for the Ministry of Education and the Ministry makes the decision. The Academy gives specific subsidy to graduate schools for organising courses and for students to travel to international conferences etc.

In 2004, there were 114 graduate schools at Finnish universities funded by the Ministry of Education. The Ministry as well as 23 coordinators funded some 1,426 doctoral student places. There are another 2,500 doctoral students at graduate schools with some other form of funding. The 114 Finnish graduate schools consisted of 45 graduate schools in natural sciences and technology (43 % of all doctoral student posts at graduate schools), 13 in biosciences and environmental sciences (15 %), 40 in humanities and social sciences (24 %), and 16 in health sciences (17 %). In 2005, the Ministry of Education decided to launch 12 new graduate schools. Thus, the total number of graduate schools in Finland is 124 as from 2006.

It seems evident that graduate schools provide substantial added value to other forms of doctoral education. Many doctoral students outside graduate schools benefit from them, i.e. the best practices employed by graduate schools have a wider impact on doctoral education. Evaluations of the system have concluded that the system has made doctoral education more systematic and effective and increased research cooperation both nationally and internationally. A particular challenge in Finnish doctoral education is to continue developing good practices and increase internationalisation in graduate schools as well as to disseminate these practices to other doctoral education.

The labour market

The Finnish labour market is generally favourable to holders of postgraduate degrees, compared with other groups and other university degree holders. According to data compiled by Statistics Finland, the unemployment rate among holders of a Masters degree aged 20-64 was 4 %, compared with the unemployment rate of 3 % among Licentiates and Doctors in 2004.

Long-term follow-up data indicate that PhD placement tends to concentrate in the public rather than the private sector. However, since the 1990's more and more doctors are recruited to the private sector as well.

Total number of post-graduate students 2004	Total number of post-graduate degrees 2004	Total number of doctoral degrees 2004
22,000	2,000	1,400

Table 4. Total numbers of postgraduate students and postgraduate degrees in 2004.

Postgraduate education in Ireland

Responsibility for undergraduate education lies within the *Department of Education and Science*. It administers all aspects of education policy including curricula, syllabi and national examinations. Attendance at full time education is compulsory in Ireland from six to sixteen years of age and is free in the majority of schools, and at undergraduate third-level. There are a growing number of private fee paying schools providing education at second level. These schools also receive funding from the state. In Ireland, education is considered a fundamental right under the Irish constitution.

The Irish Education System is traditionally divided into three basic levels: *Primary* (8 years with an average age of entry of 4 years of age), *Secondary* (5 or 6 years) and *Third* level (also called higher education with an average age of entry of 18 years of age) which offers a wide range of opportunities from post-secondary courses, to vocational and technical training, to full degree and the highest post-graduate levels. In recent years the focus has expanded to include pre-school education and adult and further education as the concept of lifelong learning becomes reflected in the education opportunities available within the Irish education system.

Higher education

Funding

Most higher educational providers are in receipt of State aid, either via the Higher Education Authority (in the case of Universities and Colleges of Education) or directly by the Department of Education and Science in the case of all others.

State-Private: Traditionally the system of third level education in Ireland has comprised the university sector, the Institutes of Technology, the Colleges of Education and other State aided Institutions. Whilst the universities are state aided they enjoy full autonomy and independence under national legislation. The Institutes of Technology do not have the same independence in their decision-making processes. In recent years, a number of independent private colleges and other institutions have been established. These colleges offer a range of courses complementing the existing provision in the higher education and training sector.

Binary-unitary

Ireland has a binary system of higher education, designed to ensure maximum flexibility and responsiveness to the needs of students and to the wide variety of social and economic requirements. However, within each sector, a diversity of institutions offers differing types and levels of programmes. The seven Uni-

versities are essentially concerned with undergraduate and postgraduate programmes, together with basic and applied research. The Universities validate and award their own qualifications as well as institutions such as the Colleges of Education, which have management agreement with the universities. The main work of the thirteen Institutes of Technology is in undergraduate programmes, with a smaller number of postgraduate programmes and a growing involvement in regionally orientated applied research. Other higher education colleges and institutions include National institutions, private colleges and other higher education and training institutions. Finally, the Dublin Institute of Technology has made its own awards for many years, was awarded degree-awarding powers in 1997.

Free-fee paying

The children of all Irish and EU citizens who are resident for tax purposes in Ireland for three of the five years prior to entry to third level education are entitled to free fees for the duration of their undergraduate degree. A small registration fee is payable by all students. However, most students coming from low-income families are in receipt of state grants, which also covers this fee and provides some support for maintenance.

Participation Rate

Ireland has a long and honourable tradition in education. As a result of a sustained investment in this area Ireland now has one of the highest educational participation rates in the world – 81 % of Irish students complete second-level and approx 55 % go on to higher education.

Eligibility and entry requirements for undergraduate studies

Entry to third level education for Irish students is competitive and based upon performance in the final secondary school examination, the Leaving Certificate. Entry requirements for overseas students are determined individually by each institution and are generally based on national examination performance and English language aptitude.

Institutional structure: a Governing Body or an equivalent to it normally governs higher educational providers. Most providers are structured into traditional Faculty or School systems with central senior management comprising a President who is the Chief Officer, a Registrar who is responsible for academic administration of the Institute. Other senior management personnel would consist of vice-presidents, directors or deans.

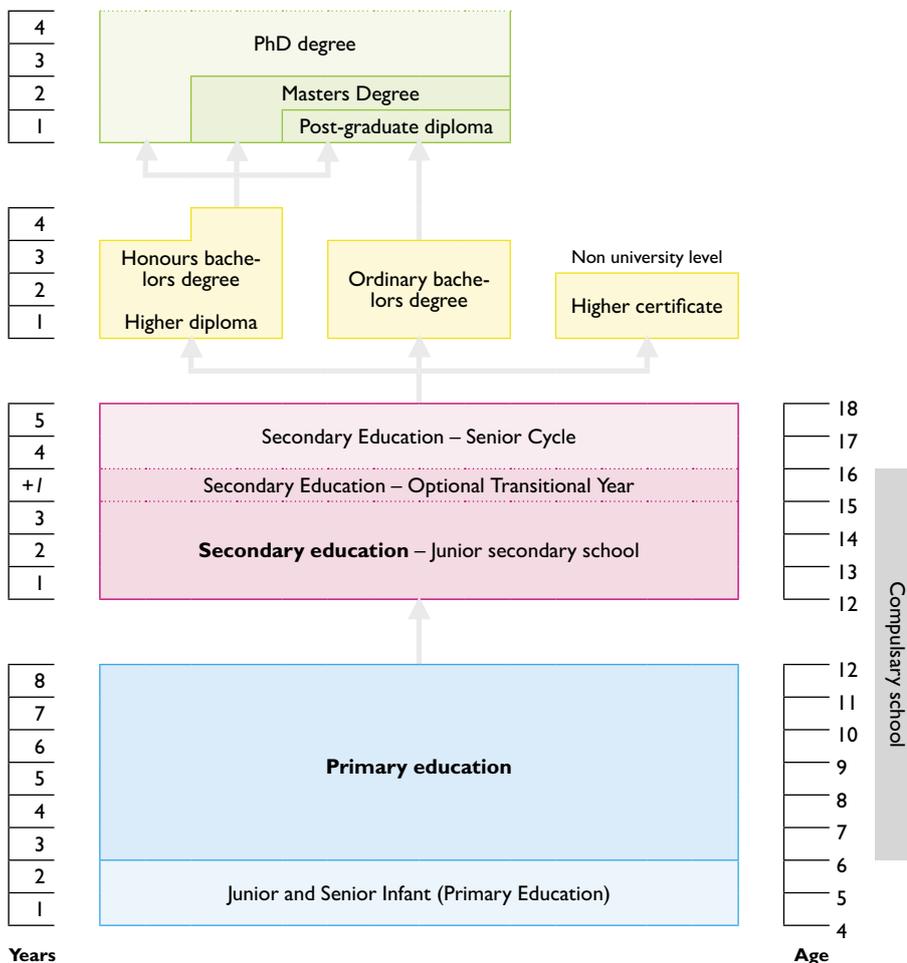
Total number of undergraduates 2003/04	Total number of higher education beginners 2003/04	Total number of undergraduate degrees 2004/05
109,000	20,400	19,700

Table 5. Total numbers of undergraduate students, higher education entrants and undergraduate degrees in 2004/05.

* The figures shown are for the institutes that participated in the survey only. For comparative purposes note that the total number of full-time undergraduate and postgraduate students in all third level institutions in Ireland in 2003/2004 was 145,700. The number of those that were from the participant institutes was in the order of 88,000.

Degree System: Undergraduate degrees are of 3 or 4-year duration. Postgraduate diplomas are 1 year in duration. Taught masters degrees are normally of 1-year duration with research masters completed in 2 years. PhD programmes are normally completed in 3,5–4 years.

The educational system in Ireland



Postgraduate education

Entry requirements

Entry to postgraduate degree programmes is co-ordinated at the level of the awarding institute or university. In general students have a 2.2 honours degree on entry. However, for research programmes most students would have a 2.1 or higher. Eligibility for research scholarships and funding is also dependent on the undergraduate degree grade received. This is ordinarily a 2.1 honours degree.

Course work and thesis requirements

On completion of their research work postgraduate research students submit a thesis for examination. In a small but growing number of cases a series of articles is submitted. Taught course work or training courses are now given to research students in many higher educational institutes but they do not have a formal place within the structure of the degree programme. The topics for these courses relate to the discipline area of the student and also to more generic skills required by a young researcher.

Supervision

Students normally work under the direction of one supervisor. In the sciences they may work as part of a research team but they would still tend to be under the supervision of one person but would be advised by postdoctoral researchers working as part of the team. In the humanities it is normal for the one student-one supervisor model to be in place. Research teams would be uncommon in the humanities.

Study conditions

The majority of full-time research students are funded in some manner for a period of three years. The amount of funding received can vary depending on the source of funding. It ranges from 8,000 to 23,000 euros per annum. The funding received is not normally liable for tax and social insurance as the researcher is still classified as a student by the tax/revenue offices. Most students are expected to carry out departmental tasks such as administration or teaching. The majority of research students commence their studies on a full-time basis as funding is given only to those who are registered in a full-time capacity. This is a disincentive to students who wish to undertake research on a part-time basis. However, many students transfer to the part-time register after 3/4 years of full-time study.

Organisation

The majority of research students undertake their research as part of a department or school structure. Graduate schools are uncommon. Some students do undertake research in private or public organisations but in all cases are registered and have a supervisor who is registered with the awarding institute.

Total number of post-graduate students 2004/05	Total number of post-graduate degrees 2004	Total number of doctoral degrees 2004
23,500	7,500	700

Table 6. Total numbers of postgraduate students and postgraduate degrees in 2004/05*.

* The figures shown are for the institutes that participated in the survey only.

The labour market

No particular data is available on the employment rate of PhD graduates in Ireland. However, in general the employment rate for graduates of postgraduate research degrees is high. A survey on students who received a third level award in 2002 showed that 50 % went on to employment. 42 % went on for further study or training.

Postgraduate education in Sweden

The Swedish educational system consists of a compulsory nine-year school, beginning at the age of seven, a three-year upper secondary school with pre-academic as well as vocational programmes, and a unitary higher education sector including academic, professional and vocational programmes. The school leaving age is 19.

Equal access to education has long been one of the pillars of the Swedish welfare state. Education from primary school up to and including higher education is mainly tax financed and free of charge. The local authorities run most schools, but there is a small and increasing number of independent schools.

Higher education

The vast majority of higher education institutions are state run. Sweden has 14 public universities, 7 colleges of visual and performing arts and 15 university colleges, including the Stockholm Institute of Education and the Stockholm University College of Physical Education and Sports. There is one independent university, one independent university college, one private school of business studies and a number of small independent providers.

The main difference between universities and university colleges is that the former have the right to award doctoral degrees, whereas the highest degree awarded by the latter is the masters degree (magister).⁷

There is a unitary system of higher education in the sense that all institutions offer both general degrees and professional degrees. Thus, there is one Higher Education Act regulating the whole of the higher education sector.

All higher education is free of charge and students have access to a study support system based on maintenance loans and grants. Students in Sweden are formally regarded as independent of their parents and consequently, study support systems are based on the student's own income and do not take into account that of her/his parents.

Increased participation in higher education is an important political aspiration for the government. The goal is that 50 % of 25-year-olds should have entered higher education. Currently the rate is about 45 %.

Anyone who has successfully completed upper secondary school is eligible for studies in higher education institutions. This applies also to anyone over the age of 25 who has had gainful employment during at least four years. However, there is a *numerus clausus*, and admission to some programmes is very competitive. Selection is based on school leaving certificates or the result of a scholastic aptitude test or a combination of both.

7. Some university colleges have been granted the right to confer doctorates in certain areas.

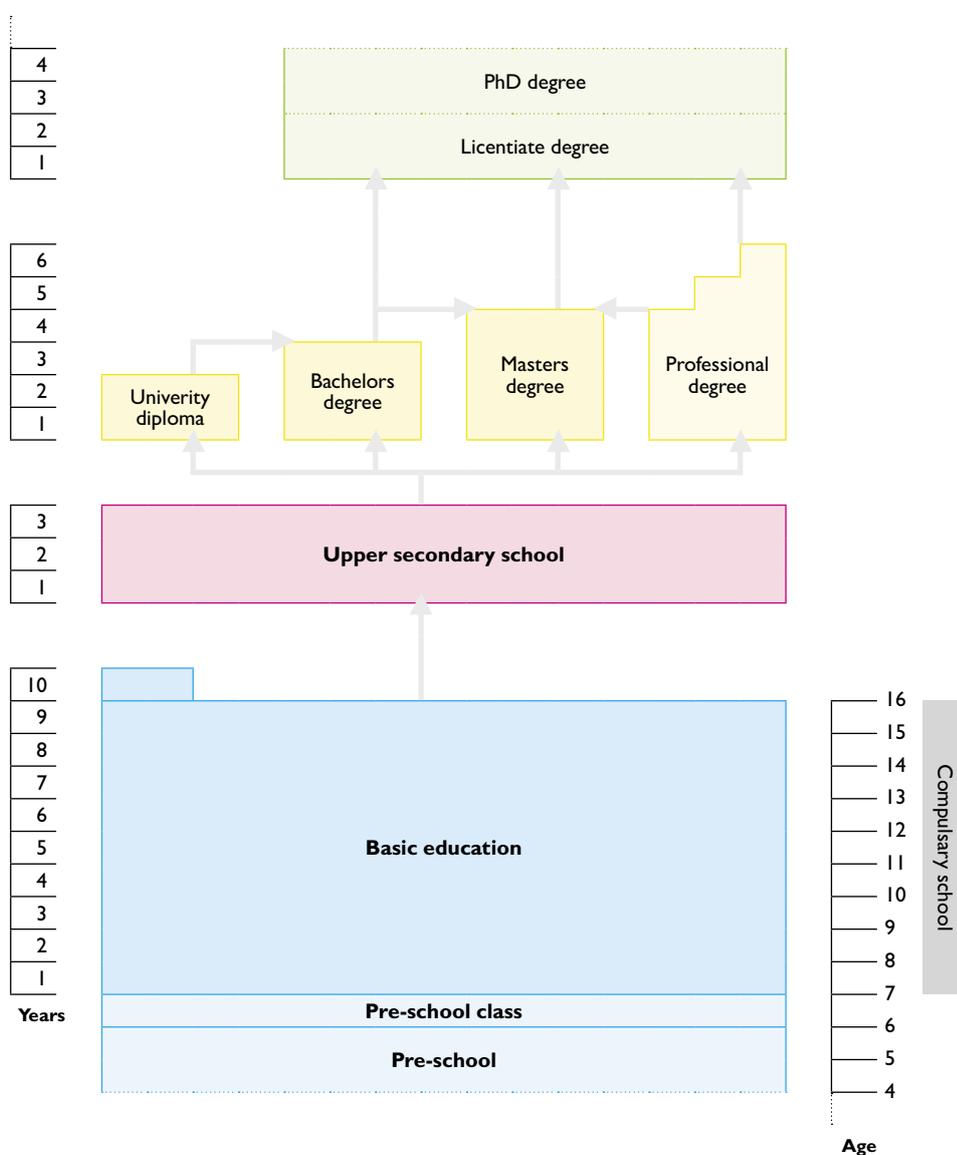
Total number of undergraduates 2004	Total number of higher education beginners 2004	Total number of undergraduate degrees 2004
360,000	60,000	53,000

Table 7. Total numbers of undergraduate students, higher education entrants and undergraduate degrees in 2004.

Degrees

There are two types of main undergraduate degrees: General degrees (Bachelors – three years, and Masters – four years) and professional degrees (e.g. medicine, law, engineering, teacher education). The Bologna Bachelors and Masters will be introduced from the year 2007.

The educational system in Sweden



Postgraduate education

Degrees and length of studies

Postgraduate studies lead to either a Licentiate of Philosophy (two years' full-time studies) or to a PhD (four years' full-time studies). Both require a thesis and course work. Some students use the Licentiate degree as a step towards the doctorate, but most choose to go straight for the PhD.

Admission requirements

Admission regulations are laid down in national legislation (The Higher Education Ordinance).

The main principle is that only as many students are to be admitted to postgraduate studies as can be offered supervision and acceptable conditions of study. Also, only applicants with guaranteed funding (through studentships or private income) throughout the duration of studies may be admitted.

Admission requirements are divided into two sections. The first covers general eligibility (a minimum of three years' undergraduate studies) together with any special eligibility requirements prescribed locally. The second is a judgment of the applicant's ability to benefit from the programme. If there is competition for places (which is usually the case), selection is based on the quality of Masters thesis, a research plan and often an interview.

Since January 2001, institutions providing postgraduate education have been required to establish official admission procedures, including rules to be applied locally for applications, eligibility, and selection among applicants, as well as on how decisions on admission are to be made. Institutions are also obliged to ensure the access of applicants to the necessary information about available programmes, in particular regarding admission regulations. The purpose of the new procedures is to increase the transparency of the process as well as to strengthen the legal rights of students.

Course work and thesis requirements

According to national regulations, general syllabi must be established for all subjects in which postgraduate education is provided. In addition, individual study plans/syllabi must be established for each student. Each individual plan must include a time schedule for courses and the production of a dissertation. It must list the obligations of the student and the supervisor and specify the ultimate goal/s of the study programme. The Faculty Board or the person/s responsible for postgraduate education in the specific subject must approve the plan. It should also be reviewed every year.

Doctorates or Licentiate Degrees, require course work as well as a dissertation. The minimum time required for a doctoral dissertation is two years, which leaves two years for courses. Most often, however, the ratio is two and a half years vs. one and a half or three and one.

The normative length of the study period for a Doctorate is four years; that for a Licentiate is two years, but not everyone manages to finish either degree within the prescribed period. An overly long period of study is a frequently cited problem of Doctoral studies in many countries. Sweden is no exception, and one of the aims of the 1998 postgraduate education reform was to reduce the amount of time these programmes would require. In recent years, the net study period for a Doctorate has decreased and today amounts to less than four-and-a-half years. For a Licentiate, the average period is less than three years.

Supervision

Academic supervision is a vital part of postgraduate education, and several studies show that well functioning co-operation with the supervisor is the most important factor for study success. All postgraduate students are entitled to one or more supervisor(s) during the “time deemed necessary” for completion of a postgraduate programme. Students are permitted to change supervisors, but it is also possible for the faculty board to withdraw the right to supervision in the case of a student who “materially neglects” his or her obligations. This sanction is rarely invoked. However, there are significant variations in how academic supervision is offered and the resources available. In many cases, the individual study plans established for each student and prescribing the time schedule for his or her work and the obligations of both supervisor and student do not fulfil their intended functions and are not followed consistently and effectively.

Another difficulty is related to the supervisory capacity of the institution. In the Humanities and Social Sciences, adequate human resources to allow the enrolment of additional postgraduate students frequently exist, both with regard to education offered and supervision. Often, however, there is a lack of financial resources. In the engineering sciences, on the other hand, it is frequently relatively easy to arrange funding, however, here, instead, a lack of supervisory capacity and/or students may impede the admission of new postgraduate students.

To professionalize academic supervision and to provide support for supervisors, many higher education institutions arrange introductory training courses for supervisors and set up “supervisor’s associations” in which those new to the role may also participate. Many departments also appoint one or more assistant supervisors to supplement the competencies of the main supervisor and to give the student access to additional support.

Study conditions

Appointment to a postgraduate studentship (“employment as a Doctoral student”) is the most secure way to fund postgraduate studies. Students who have been granted such studentship are formally employed and are thus covered by the same social insurance benefits as other employees in a higher educa-

tion institution. This type of employment is financially more advantageous for the student than many other forms of funding, *e.g.*, student grants, and the guaranteed income probably has a significant impact on the likelihood of success in studies. Studentships may only be offered to students enrolled in postgraduate study programmes. They are tenable for four years in the case of full-time studies, and for no more than one year following completion of the degree programme.

Postgraduate students are expected to devote most of their time to their own studies, but departmental tasks, such as administration, teaching, or research, are often included in the duties associated with these positions. These duties may not exceed 20 % of the normal workload, and the period of study may be prolonged proportionally.

As of May 2002, postgraduate students can apply for part-time studies. This opportunity was created primarily to facilitate participation in postgraduate programmes for those already in the labour market.

The working hours of students holding postgraduate studentships are regulated insofar as there are a set number of hours per year and that they are entitled to holidays, normally used in summer.

The monthly salary is usually between 16,000 and 21,000 SEK (approximately 1,700–2,300 euros). The level is set locally in negotiations between trade union representatives and representatives of the higher education institutions. Most institutions have fixed salary scales for postgraduate students, which may also be used for students who are not members of a union. Once a student can prove that he or she has accumulated 80 and 120 credits, respectively, salaries are normally raised.

Organisation

Studies are normally organised within university departments, but there are also a number of national graduate schools established by the government to strengthen certain areas or disciplines (*e.g.* modern languages, mathematics, history, space technology) and to encourage cooperation between universities and university colleges. Evaluations carried out by the Swedish National Agency for Higher Education show that conditions for postgraduate students in these schools are often more favourable than for other students.

Individual universities sometimes also establish graduate schools in order to create a more efficient organisation for the programme.

Total number of post-graduate students 2004	Total number of post-graduate degrees 2004	Total number of doctoral degrees 2004
19,200	3,800	2,700

Table 8. Total numbers of postgraduate students and postgraduate degrees in 2004.

The labour market

Many new PhDs choose to embark on a postdoctoral period, in order to further enhance their research experience and qualifications, either abroad or in a Swedish institution.

Sweden has no comprehensive framework for the postdoctoral period. New Doctorate-holders can be employed as research assistants and postdoctoral fellows, as researchers on temporary contracts within a specific project, and in other positions with teaching and/or research duties, for example, as a substitute teacher at a higher education institution.

There are no formal employment privileges automatically associated with a Doctorate. Although most appointees to the higher-ranking academic positions at higher education institutions hold postgraduate degrees, a Doctorate is not an absolute formal requirement for most positions. Neither are Doctorates required for employment outside the higher education sector, even if some employers may choose to fund an existing employee's Doctoral studies in order to offer him or her a higher-ranking position after graduation.

Nevertheless, the Swedish labour market is generally favourable to holders of postgraduate degrees, compared to other groups according to reports from Statistics Sweden.

The postgraduate students

The International Postgraduate Students Mirror contains a number of questions about the students' backgrounds, how they spend their time and support themselves and the motives that prompted their studies. This section contains an account of the responses to these questions. In this context it should be noted that the data from the four countries vary to some extent. The Swedish study does not include first-year postgraduate students, while these are included in the other three countries.

Gender

In Catalonia, Finland and Ireland the ratio of male and female postgraduate students was more or less equal. In Sweden in the spring of 2003 (which is when the Swedish study was undertaken) there were somewhat more male postgraduate students (54 %).⁸ However the proportions of women and men vary in the different subject fields.

Subject field and gender

In terms of the total distribution of postgraduate students over the different subject fields there are also certain differences between the countries (figure 1). The clearest differences are that in Ireland there is a relatively large proportion of postgraduate students taking Science, Mathematics and Computing, and also that in Sweden it is relatively common to take postgraduate programmes in Health and Welfare.⁹

8. In each country there was a slightly higher response rate for women than for men, which resulted in a somewhat larger proportion of women in the data – Catalonia 54 %, Finland 56 %, Ireland 52 % and Sweden 51 %.

9. The data from each country have been weighted on the basis of the actual distribution of postgraduate students in each subject field (register information). See technical report at www.hsv.se/international_mirror.

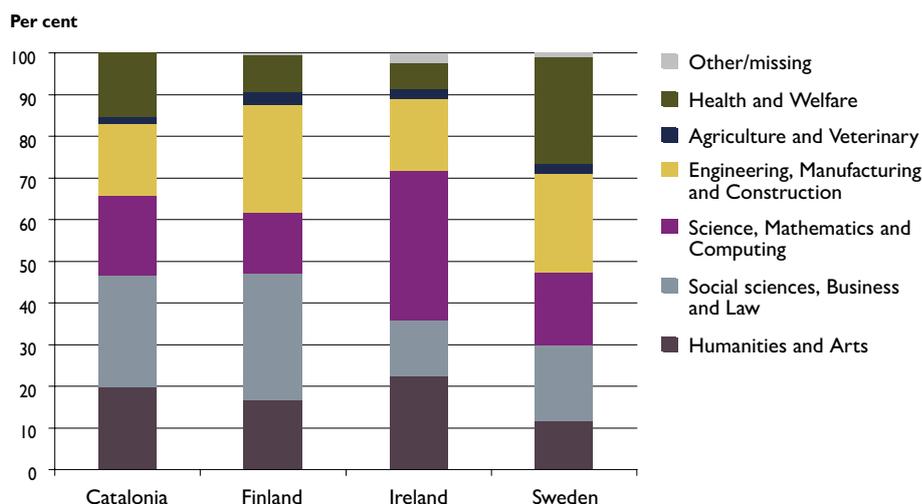


Figure 1. Percentage respondents within different subject fields by country.

Among the postgraduate students responding to the questionnaire the distribution of women and men in the various subject fields reveals a certain pattern (figure 2).

In all four countries it is clearly more frequent for men to study at postgraduate level in Engineering, Manufacturing and Computing, whereas women are more likely to take programmes in Health and Welfare. This means that men are evidently in the majority in Engineering, Manufacturing and Computing, whereas a clear majority of women are studying Health and Welfare.

There are also certain differences between the countries. Two examples are that in Sweden there is a more even balance between women and men in the Humanities and Arts than in the other three countries. In Finland women seem to form the majority in Social sciences, Business and Law.

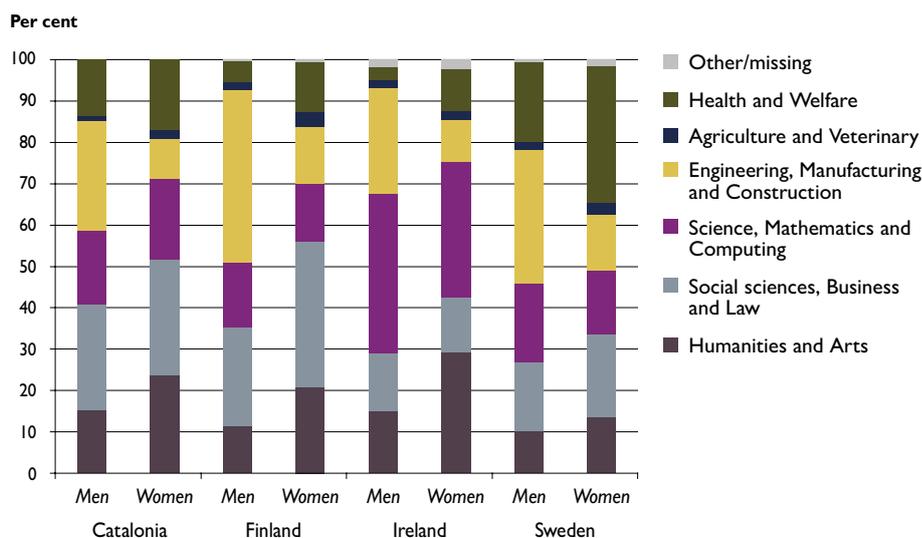


Figure 2. Percentage respondents within different subject fields by country and gender.

Age

The age distribution of those responding to the questionnaires suggests that postgraduate students are somewhat younger in Catalonia and Ireland compared to Finland and Sweden (figure 3). In Ireland 72 % of the postgraduate students are not yet 30 – in Sweden this proportion is 23 %. In both Finland and Sweden PhD students in the age group 20-24 are uncommon.

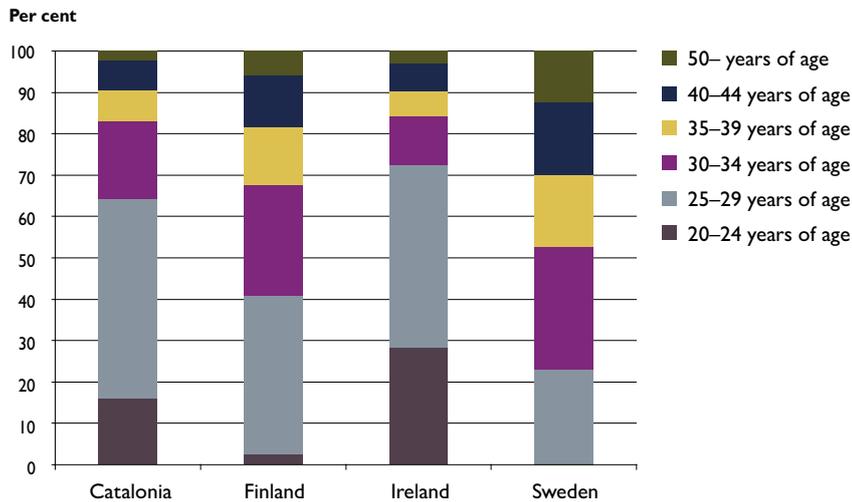


Figure 3. Percentage respondents within different age groups by country.

Activity – hours devoted to postgraduate studies

The number of hours devoted to their postgraduate studies reported by the students varies from country to country (figure 4). In Ireland 70 % of the students devote at least 30 hours a week to their studies, whereas 44 % do so in Catalonia, 48 % in Finland and 63 % in Sweden.

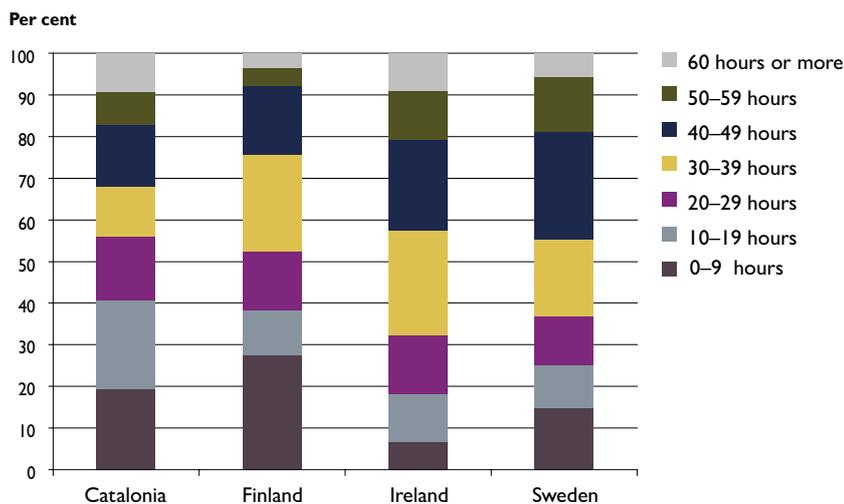


Figure 4. Distribution of hours devoted to postgraduate studies by country.

In Finland relatively many students have a low intensity of postgraduate study (expressed as a percentage of a full-time occupation), which is reflected in the proportion of students who devote less than 10 hours a week to their studies.

There are clear differences between different subject fields (table 8). The greatest number of hours per week can be found in Science, Mathematics and Computing – in Ireland 84 % of the students in these areas devote at least 30 hours per week to their studies. Many of the postgraduate students in Ireland are taking programmes in these areas, which to some extent explains the relatively high overall figures reported from Ireland in this respect.

The corresponding figure for Catalonia is 52 %, Finland 69 % and 78 % for Sweden, so there are obvious differences between the countries in this area.

It is not as common for students in the Humanities and Art to devote at least 30 hours a week to their postgraduate studies – 37 % do so in Catalonia, 48 % in Finland and Ireland and 57 % in Sweden.

In the Social sciences, Business and Law the number of hours spent studying each week is relatively low. In Catalonia 42 % of the students devote at least 30 hours a week to study, in Finland 40 %, 46 % in Ireland and 59 % in Sweden.

Subject field	Catalonia	Finland	Ireland	Sweden
Humanities and Art	37	48	48	57
Social sciences, Business and Law	42	40	46	59
Science, Mathematics and Computing	52	69	84	78
Engineering, Manufacturing and Construction	55	42	76	64
Health and Welfare	31	51	65	57
Total (all subject fields)	44	48	68	63

Table 8. Percentage respondents who devote 30 hours or more per week to postgraduate studies by country and subject field.

There is a link between the number of hours spent on study and the age of the postgraduate students. The older they are, the fewer hours they devote to their studies, which means that postgraduate students with “low” activity are older than those whose activity is “high”(table 9). This is particularly apparent in Finland, Ireland and Sweden, where the proportion of postgraduate students who are at least 40 is considerably higher among those who pursue their studies less actively.

Hours per week devoted to PhD studies	Catalonia			Finland		
	–39 years	40 years–	Total	–39 years	40 years–	Total
Less than 30 hours	89	11	100	72	28	100
30 hours or more	93	7	100	92	8	100
Hours per week devoted to PhD studies	Ireland			Sweden		
	–39 years	40 years–	Total	–39 years	40 years–	Total
Less than 30 hours	83	17	100	53	47	100
30 hours or more	93	7	100	80	20	100

Table 9. Respondents by age and number of hours devoted to postgraduate studies per week.

Reasons for postgraduate studies

In Finland, Ireland and Sweden the majority of the respondents state that their own interest in their subject has been the main reason for beginning postgraduate studies (figure 5). In Catalonia, on the other hand, most students say that the main reason was “to prepare for a career in teaching/research in higher education”.

In Catalonia considerably more students envisaged a continued career in higher education than in the other countries (see “Postgraduate students in Catalonia want to stay put”, p. 85).

The reason why somewhat more students in Finland have opted for “other” as their response is probably that the Finnish question was followed by a number of alternative responses that were not provided in the other countries and which have been grouped under this heading.

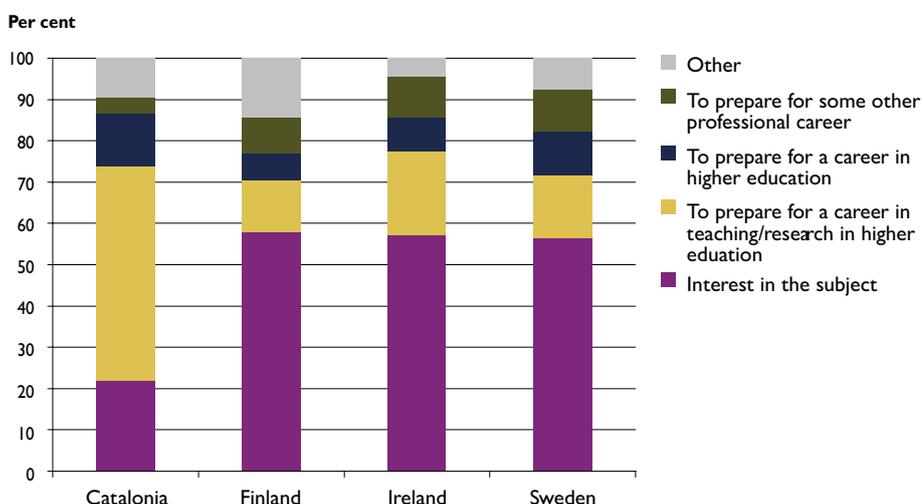


Figure 5. Distribution of reasons for postgraduate studies by country.

The proportion stating that their own interest in their subject has been the main reason for beginning postgraduate studies is considerably smaller in Catalonia in all subject fields (table 10). In all four countries it is students in the Humanities and Art that respond that their own interest in their subject was the main reason – about two out every three in Finland, Ireland and Sweden and one in three in Catalonia.

Subject field	Catalonia	Finland	Ireland	Sweden
Humanities and Art	31	63	64	69
Social sciences, Business and Law	18	56	53	56
Science, Mathematics and Computing	23	60	59	62
Engineering, Manufacturing and Construction	23	57	52	51
Health and Welfare	16	57	44	52
Total (all subject fields)	22	58	57	56

Table 10. Percentage respondents who state that their own interest in their subject has been the main reason for beginning postgraduate studies by country and subject field.

Type of thesis

In the two Nordic countries the most frequent thesis type consists of a collection of articles, whereas in Ireland and Catalonia it is more usual to write a monograph (figure 6).

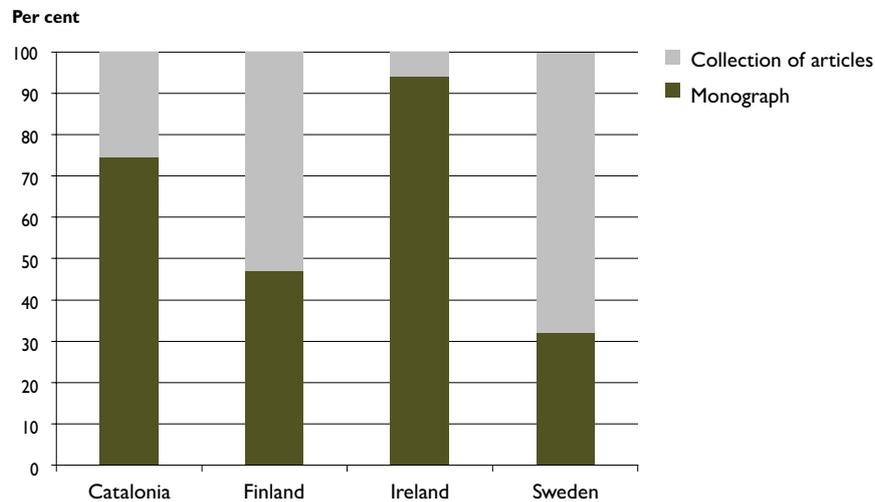


Figure 6. Distribution of types of thesis by country.

This pattern applies irrespective of the subject field studied (table II). A very clear difference can be seen in Science, Mathematics and Computing, and Health and Welfare, where almost all students in Ireland write monographs while this is uncommon in Finland and Sweden.

Subject field	Catalonia	Finland	Ireland	Sweden
Humanities and Art	97	86	98	90
Social sciences, Business and Law	85	64	93	62
Science, Mathematics and Computing	60	12	92	8
Engineering, Manufacturing and Construction	72	39	94	27
Health and Welfare	54	11	99	5
Total (all subject fields)	74	47	94	32

Table II. Percentage respondents who write monographs by country and subject field.

Selection of topic

About half of the respondents in Catalonia, Finland and Sweden state that they have themselves on the whole chosen the topic of their thesis, while somewhat fewer, 43 %, have done so in Ireland (figure 7). The lower share in Ireland is partly a result of the high numbers of students within Science, Mathematics and Computing, who, in all countries, to a lesser degree state that they have themselves chosen the topic of their thesis.

It is more frequent for students to choose their topic themselves in all four countries in Humanities and Arts and in Social Sciences, Business and Law,

72–82 %, whereas this is less common in the other subject fields, especially in Science, Mathematics and Computing, where most state instead that the topic has mainly been proposed by a supervisor or department (76–86 %).

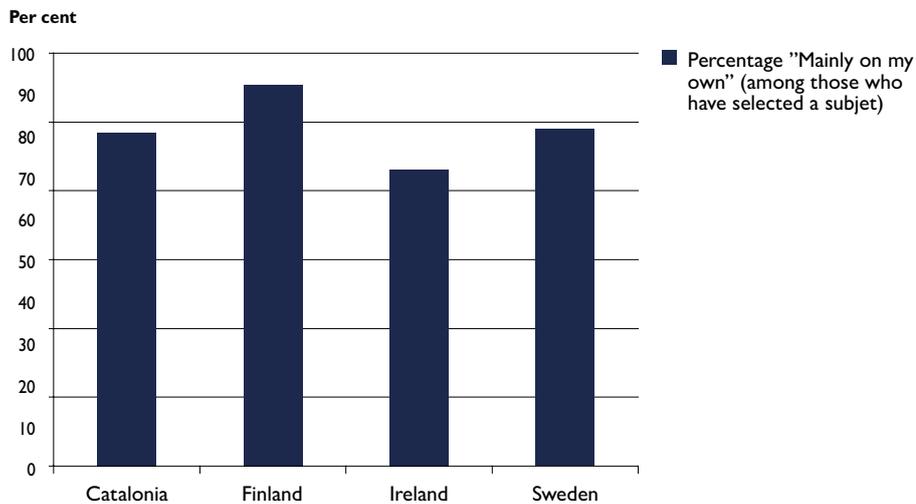


Figure 7. Percentage respondents who have themselves on the whole chosen the topic of their thesis by country.

Working methods

The majority of students who have chosen the subject of their thesis mainly work individually (figure 8). In Finland¹⁰, Sweden and Ireland about eight students out of ten claim that they mainly work on their own, while in Catalonia this applies to somewhat fewer, 56 %.

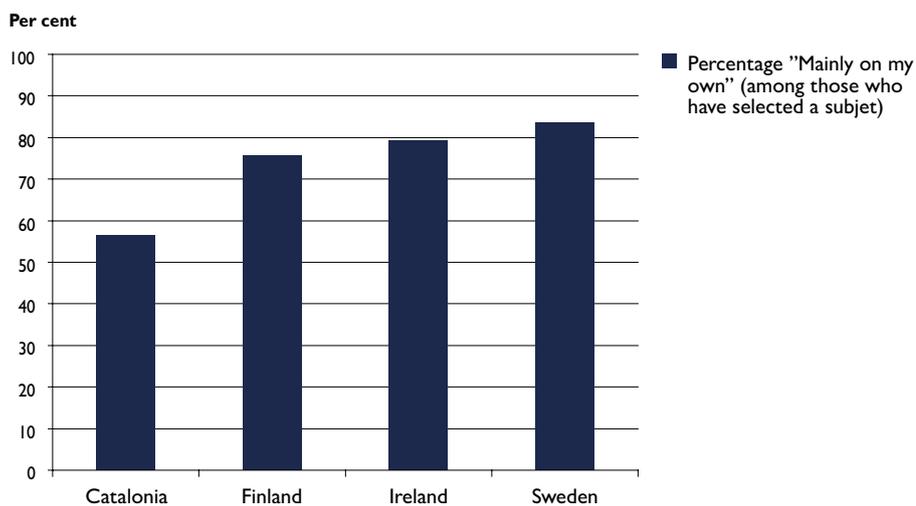


Figure 8. Percentage respondents who mainly work on their own by country.

10. The questionnaires in Finland offered the response alternative “as much on my own as in a research team” which was chosen by 20 %. In the other countries the responses consisted only of “mainly on my own”, “mainly in a research team” and “not chosen subject”.

The proportion working individually varies between the different subject fields, but even so it is smaller in Catalonia (table 12). Individual work is most frequent in the Humanities and Arts, where this applies to virtually all the students in Finland, Sweden and Ireland, while the proportion is somewhat lower in Catalonia, 80 %. Science, Mathematics and Computing is the field where individual work on the thesis is less common. This is how three students of every four work in Finland and Sweden, 58 % in Ireland and 33 % in Catalonia.

Subject field	Catalonia	Finland	Ireland	Sweden
Humanities and Art	80	93	99	99
Social sciences, Business and Law	79	84	94	93
Science, Mathematics and Computing	33	58	76	74
Engineering, Manufacturing and Construction	49	73	69	86
Health and Welfare	30	54	79	73
Total (all subject fields)	56	79	79	84

Table 12. Percentage respondents who mainly work on their own by county and subject field.

In Finland, Ireland and Sweden a relationship can be seen between how far students have progressed in their studies and how they are working with their theses – the further they have progressed the more they work on their own (figure 9).

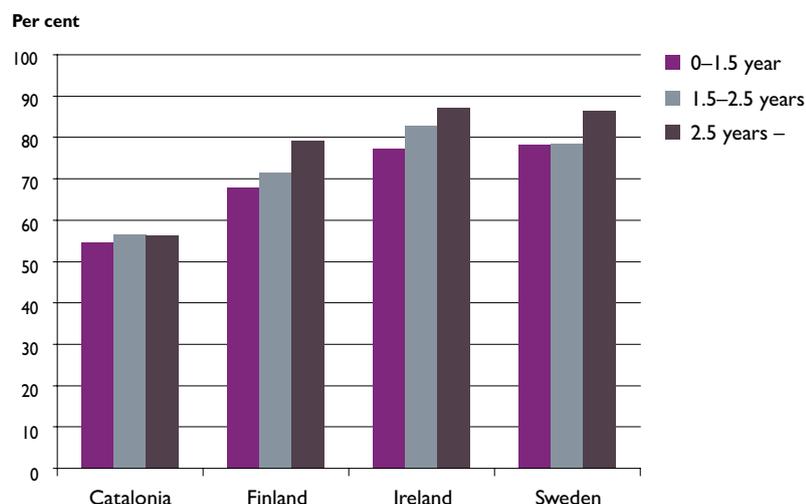


Figure 9. Percentage respondents who mainly work on their own by country and time in postgraduate education.

Language

Writing a thesis in English is obviously most common in Ireland, but in Finland and Sweden as well, a clear majority write their theses in English (figure

10). In Catalonia, students most frequently use their native Spanish (which is a world language) or Catalanian instead.

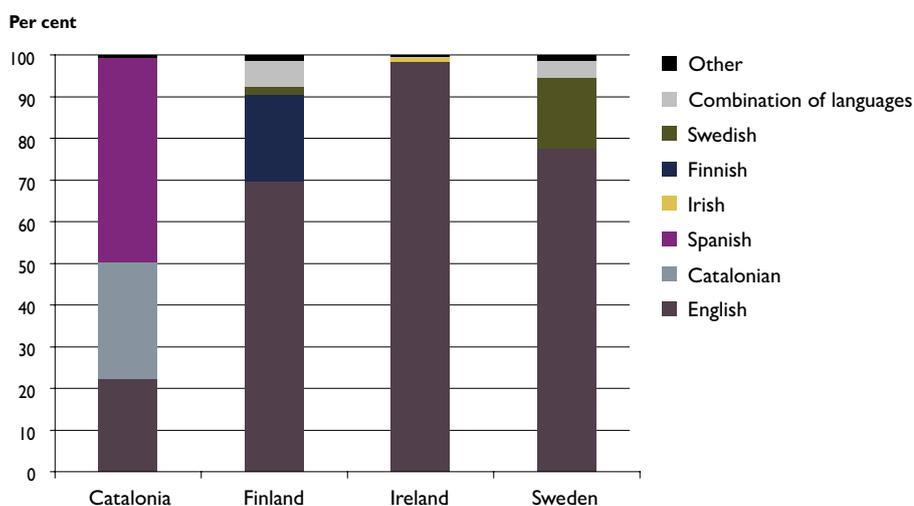


Figure 10. Distribution of thesis languages by country.

In Catalonia, Finland and Sweden the proportion of theses written in English varies from subject field to subject field (table 13). In Catalonia, English is most frequently used in Engineering, Manufacturing and Construction and Science, Mathematics and Computing. In Finland and Sweden, English is frequently used in these subject fields as well, but in contrast to Catalonia, English does dominate in all subject fields, except from Humanities and Art and in Social Sciences, Business and Law.

Subject field	Catalonia	Finland	Ireland	Sweden
Humanities and Art	12	42	95	32
Social sciences, Business and Law	10	48	100	47
Science, Mathematics and Computing	35	95	99	98
Engineering, Manufacturing and Construction	52	91	100	91
Health and Welfare	8	84	99	95
Total (all subject fields)	22	70	98	78

Table 13. Percentage respondents writing a thesis in English by country and subject field.

Forms of funding

The support provided for postgraduate students varies from country to country and therefore different questions were posed to their students. For this reason no comparisons are made between the countries but the forms of funding in each country are described and the extent to which students are satisfied with the way in which they function (for the most frequent funding forms).¹¹

11. See also the descriptions of postgraduate education in the respective countries.

Catalonia

Nearly a quarter of the respondents in Catalonia are studying on grants from the Catalan/Spanish government (figure 11).

Just over 10 % studies on a grant from the university where the programme is given, a further 12 % have a grant from abroad or another organisation.

Just over 29 % are employed outside the university (and slightly more than half of these students have the possibility of working on their research during their working hours).

On average 49 % of the Catalan postgraduate students say that they are content with their form of funding. The largest proportion of satisfied students can be found among those receiving a grant from abroad or another organisation (64 %) or a grant from the Catalan/Spanish government (61 %).

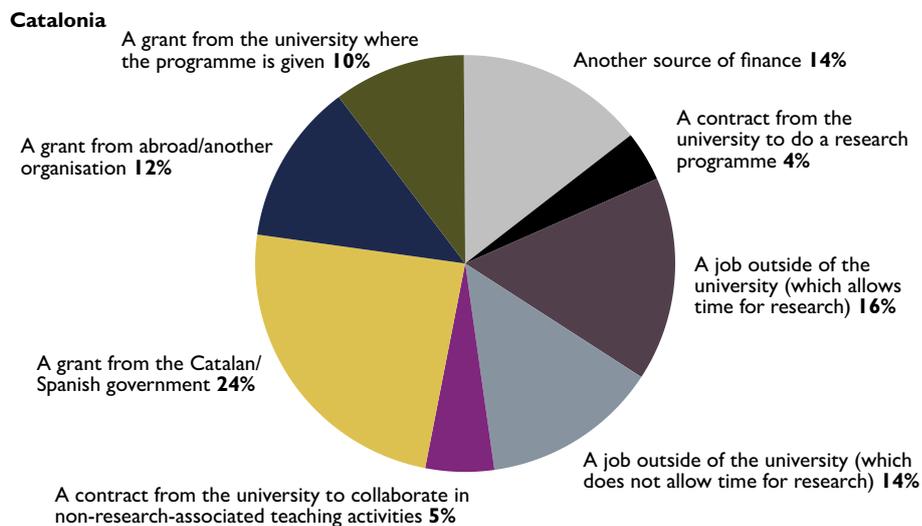


Figure 11. Funding forms in Catalonia.

Finland

In Finland 17 % of the respondents have a doctoral student position funded by the government (figure 12).

A further 17 % have a post at the university and 12 % have a scholarship offered by a foundation.

One in five of the postgraduate students state they finance their studies mainly through “some other paid work of your own”.

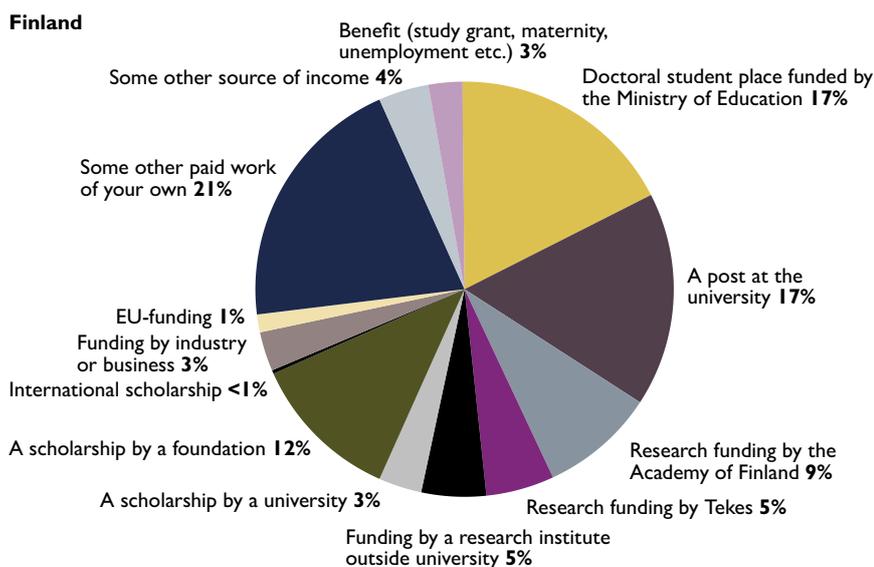


Figure 12. Funding forms in Finland

Overall seven out of every ten respondent in Finland are satisfied with their form of funding. In terms of the most frequent forms, the largest proportion of satisfied students can be found among those with a post at the university (80 %). On the other hand relatively few with a scholarship offered by a foundation are content with the way in which they are financed (58 %).

Ireland

In Ireland 25 % of the respondents have a postgraduate studentship and 16 % a scholarship (figure 13). Many, 32 %, indicate “some other form of funding” as their source of finance, and with some of them probably having posts outside higher education.

Ireland

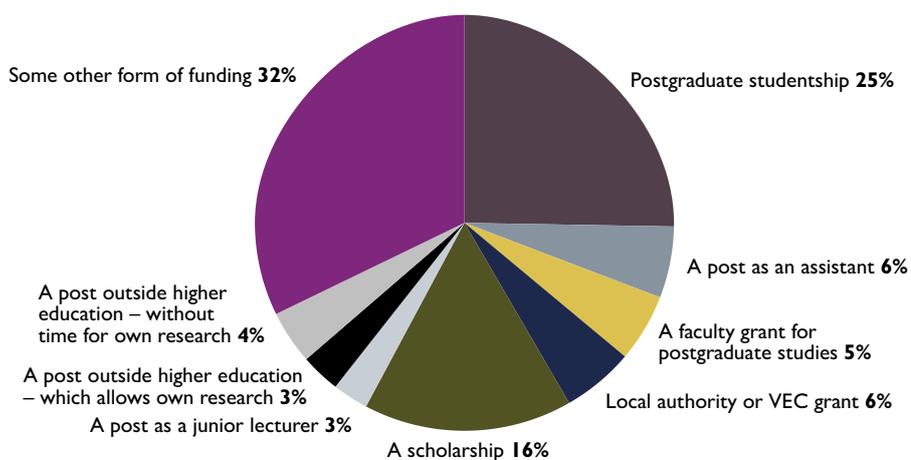


Figure 13. Funding forms in Ireland.

The proportion of Irish postgraduate students as a whole who say that they are content with their form of funding amounts to 55 %. Somewhat fewer of these with postgraduate studentships are satisfied (50 %), while a larger proportion are satisfied of those with scholarships (58 %) or some other form of funding (60 %).

Sweden

In Sweden just over half of the respondents have a postgraduate studentship funded by the university (figure 14).

Nearly 17 % have a post outside the university, of whom more than half can undertake their own research during working hours, and 8 % have a faculty grant for postgraduate studies.

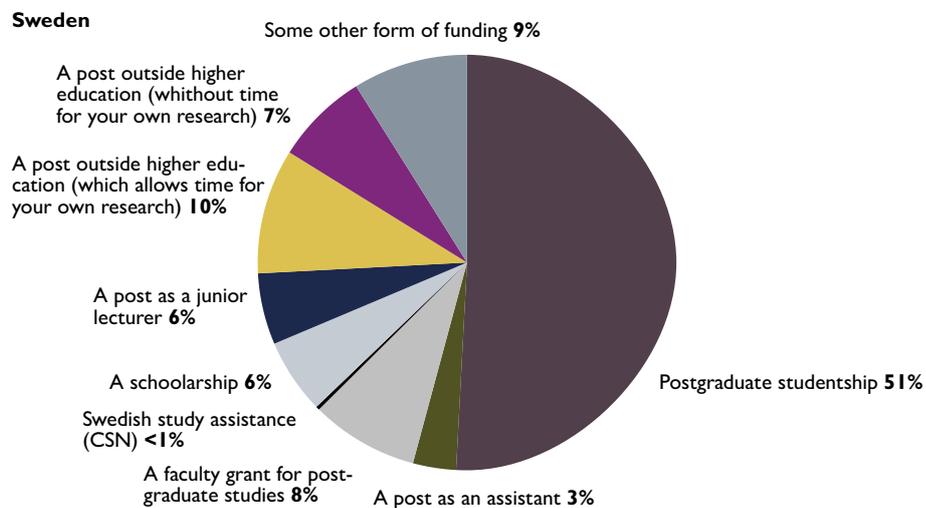


Figure 14. Funding forms in Sweden.

On average, 79 % of the Swedish postgraduate students say that they are satisfied with their form of funding. The largest proportion of satisfied students can be found among those with postgraduate studentships (92 %), but on the other hand the proportion is considerably smaller among those with faculty grants for postgraduate studies (42 %).

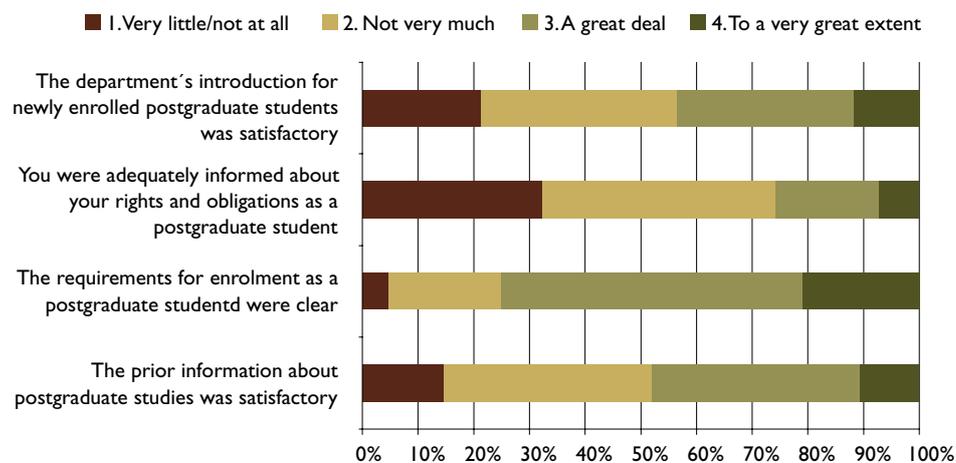
Introduction to postgraduate studies

A satisfactory and sound introduction to postgraduate studies can provide many benefits in terms of study techniques and from a social perspective. A good introduction can also enable the students to become part of the organisation more rapidly and get on with their studies and their other duties. Knowing that they are doing the right thing at the right time provides a more secure environment and makes it possible for them to avoid potential problems. Social introductions mean that postgraduate students feel welcome and find it easier to take their place in their environment.

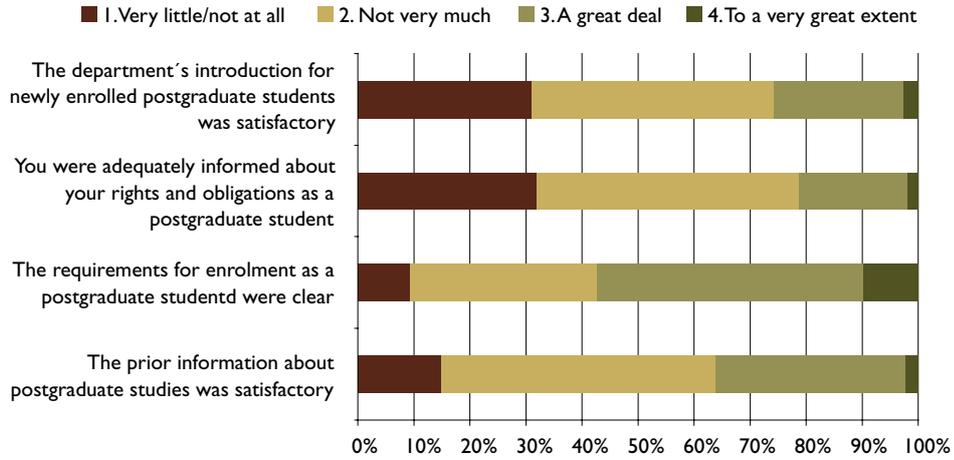
Introductions are also important for the departments. A postgraduate student who feels welcome and who knows what applies in the department is an asset and an affirmation that recruitment was successful.

The questions included in this index deal with the extent to which postgraduate students were given information about and an introduction to postgraduate study (figure 15).

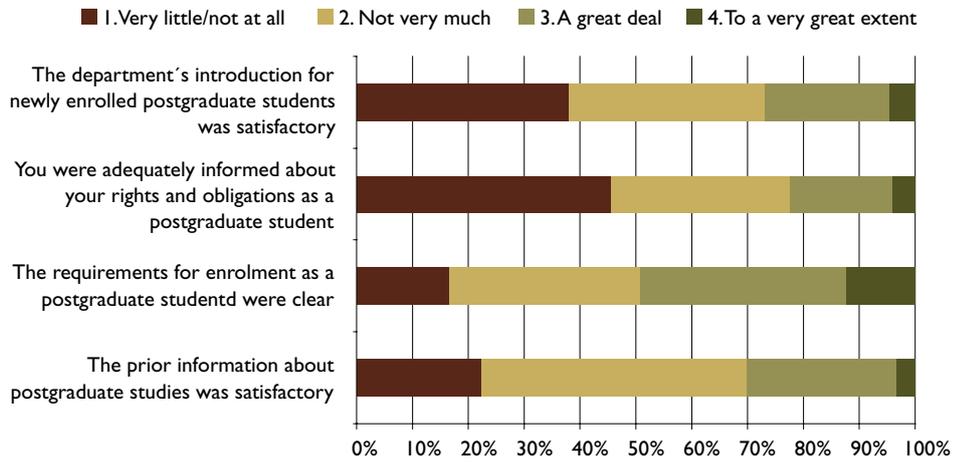
Catalonia



Finland



Ireland



Sweden

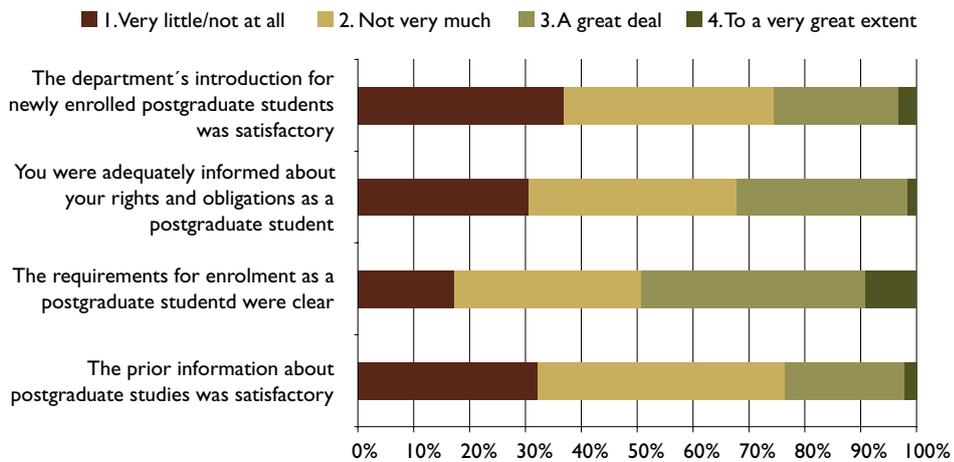


Figure 15. Introduction to postgraduate studies. Index items and distribution of responses by country.

Introductions to postgraduate study do not function satisfactorily in any of the countries (figure 16). The results reveal that the Swedish postgraduate students are most critical of their introductions while students in Catalonia are least critical. Above all the criteria for enrolment are clearer for postgraduate students in Catalonia. If the results for all the subject fields are taken into account, postgraduate students in social science in Catalonia are those who consider their introductions were most satisfactory.

Catalonia has a structured system of postgraduate study that is widely known and an introduction course prior to the programmes offers students greater certainty and awareness.

Among the students in Ireland those taking postgraduate programmes in the Humanities are less critical, which may be because they are more experienced when they begin.

The somewhat less positive figures for Health and Welfare may be linked to the large groups of postgraduate students in the hospitals.

With few exceptions, women are more critical of their introductory programmes than men in all four countries. The exceptions can be found in the Humanities and Science in Catalonia, where the men are more critical. The greatest differences between men and women can be seen in Sweden and Finland in the Humanities and in Ireland in the Social Sciences.

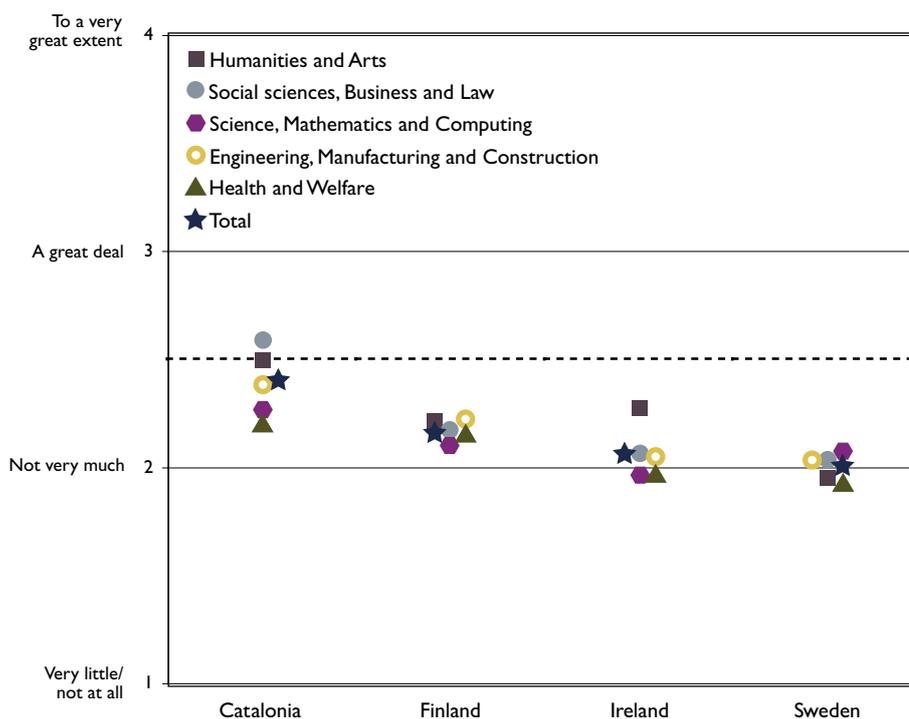


Figure 16. Introduction to postgraduate studies by country and subject field.

Ancillary questions

There is one question that is not included in the index but which is nevertheless interesting in this context. It concerns whether their teachers gave the postgraduate students any support or encouragement during their undergraduate programmes.

Support to continue studying

This question was included in the questionnaires in Sweden, Ireland and Finland. The pattern is the same in all three countries, between 40 and 50 % of the postgraduate students respond that their teachers at the undergraduate level supported them and encouraged them to go on with their studies to “a great” or “a very great” extent.

Comments

There is considerable scope for improvement in the postgraduate programmes in all the countries in the areas covered by the *Introduction to postgraduate study* index. This applies both to the information provided for potential postgraduate students and introductory programmes for the newly enrolled.

The explicit criticism of the introductions offered by the institutions should be noted and taken seriously. In view of the shortage of time that many students experience, for instance, it is particularly important to get them started on their studies without delay. This could be made easier by offering them a better introduction to their programmes. Attention had been drawn to this issue in the evaluation of postgraduate programmes in Finland published this year, *PhD Training and the Knowledge-Based Society*, and the report published in Sweden in 2004 *En Ny Doktorsutbildning (A New Doctoral Programme)*. This matter was also raised in Ireland by the Irish Universities Quality Board in their 2005 publication *Good Practice in the Organisation of PhD Programmes in Irish Universities*.

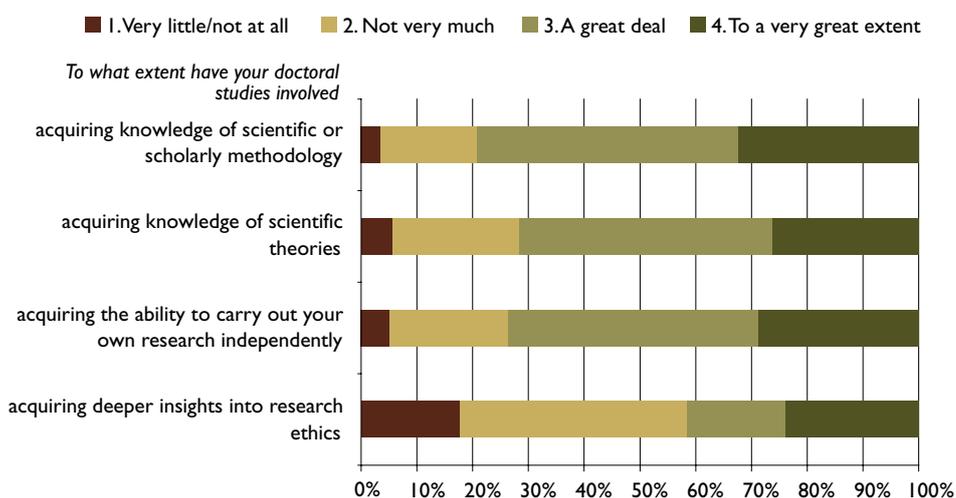
The responses of the students to the question about whether their introduction to postgraduate study was satisfactory indicate the necessity of insight into the everyday lives of postgraduate students. The challenge seems to be greatest for Sweden and Ireland, which are ranked lowest in this comparison.

Professional development

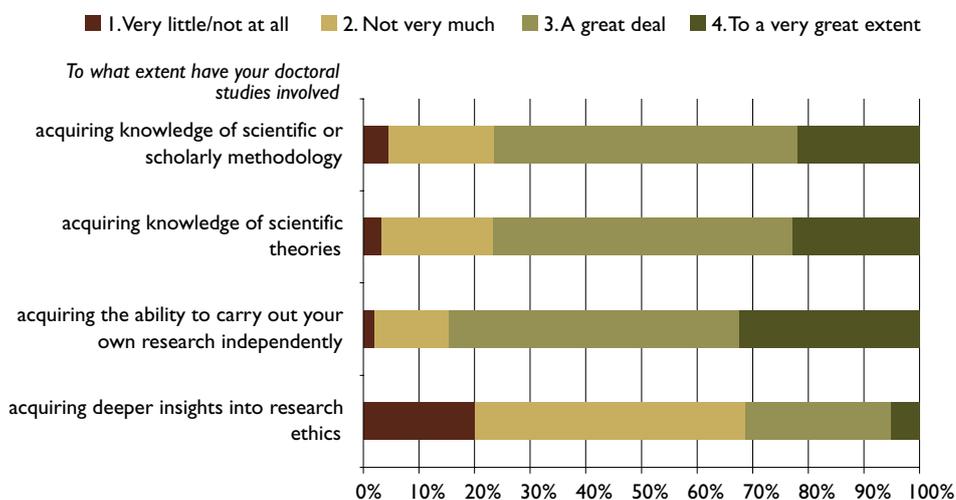
This index relates to the professional content of a career in research. Knowledge about scientific methodology and scientific theories constitutes the core of postgraduate study and is a necessary requirement for independent research. Awareness of research ethics is regarded as a quality issue both by the research community and elsewhere and the application of ethical standards is central to research.

The questions included in this index deal with the extent to which postgraduate studies have led to the acquisition by the students of knowledge of scientific methodologies and theories, the capacity to undertake independent research and heightened awareness of research ethics (figure 17).

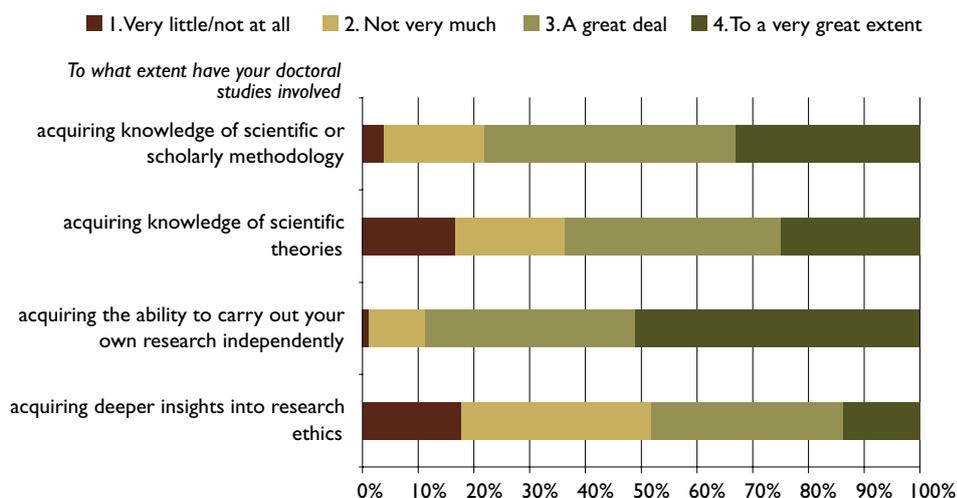
Catalonia



Finland



Ireland



Sweden

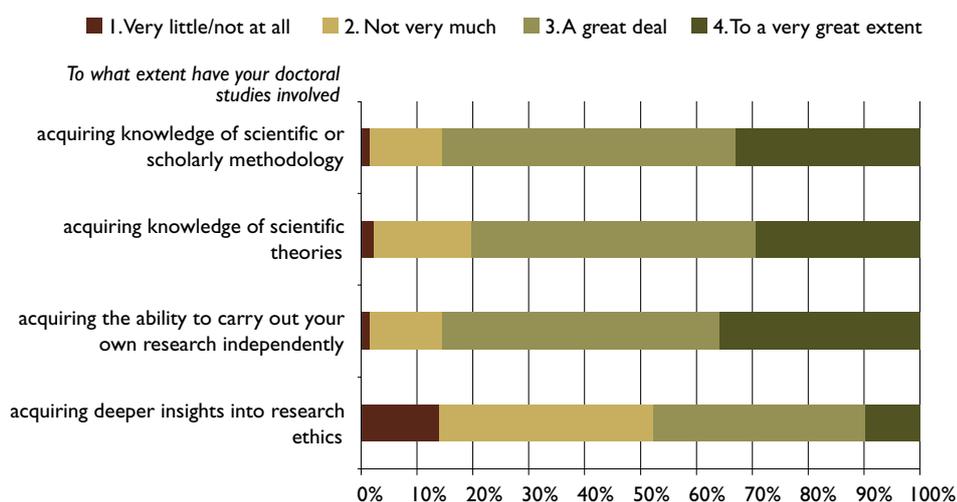


Figure 17. Professional development. Index items and distribution of responses by country.

The majority of postgraduate students in all four countries consider professional development to function satisfactorily (figure 18). Heightened awareness of research ethics is however one aspect of professional development that is attained by less than half of the students. The differences between the countries are on the whole insignificant in this dimension. But within Ireland you find a significant difference in the answers from postgraduate students in Humanities and Arts, who are less satisfied with the professional development compared with postgraduate students in other fields.

There are no major differences between the responses of women and men. In Catalonia there is some difference in the Social Sciences, where women are less positive, and in Science, where instead the men are less positive. Here,

however, there are only a small number of respondents so that the differences are uncertain.

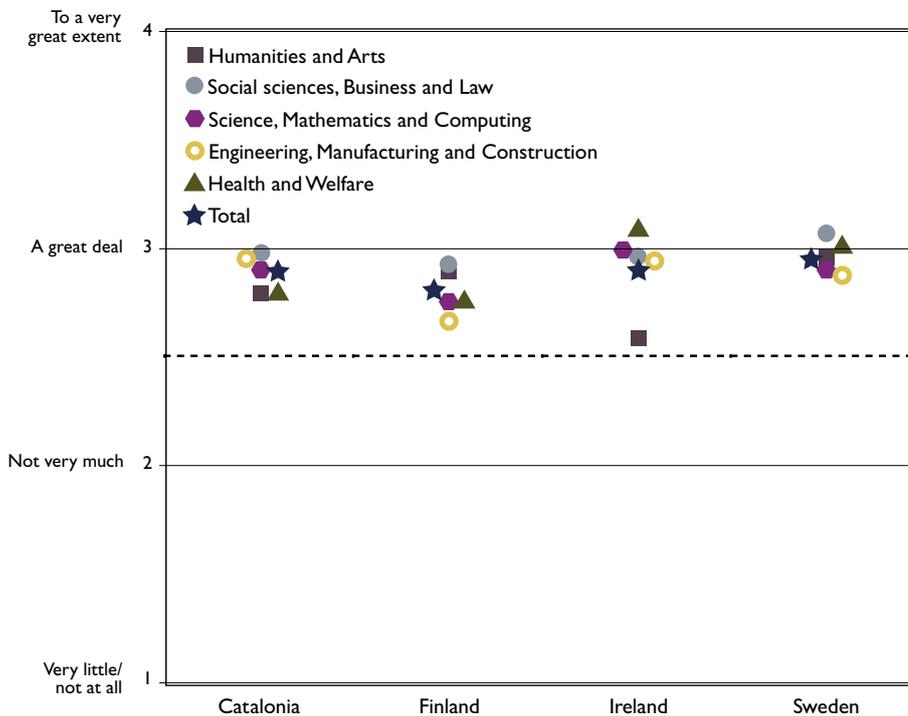


Figure 18. Professional development by country and subject field.

Ancillary questions

Oral and written expression

However, it is not only knowledge of the kind described above that is significant for postgraduate students in their subsequent careers. The ability to express themselves well in speech and writing is important. In the questionnaires in Sweden, Finland and Ireland the students were asked about the extent to which their postgraduate studies had helped to improve their ability to write clearly and comprehensibly and whether their ability to present their material clearly and comprehensibly orally had increased.

Between one-third and one-quarter of the postgraduate students state that their studies have only led to minor improvement of their abilities to express themselves in speech and in writing. The response pattern varies slightly from country to country. Among the students in Ireland, 33 % considered that their oral ability had increased to only a limited extent, and 31 % felt the same about their writing skills. In Finland 34 % reported only limited improvement of their oral skills and 24 % of their written skills, while, finally, 27 % of the Swedish students felt the same about their oral skills and 25 % about improvements in their writing.

Presenting and discussing their research

Presenting research and listening to reactions to it in various contexts is important. Affirmation and recognition contribute positively to personal development. Moreover, support in the form of critical feedback, for instance, and the possibility of discussing one's research is important for development as a researcher and for the quality of the thesis. The postgraduate students were asked whether they had taken part in various activities such as national and international conferences that were relevant to their research, whether they had presented their research to a more general audience in any context, if they had presented their research in publications or conferences, submitted sections of their theses in seminars or participated in any postgraduate student groups.

The participation of postgraduate students in national and international conferences relevant to their own doctoral studies varies from country to country (table 14). The students in Ireland were the most active participants in national conferences, 55 % compared to 54 % in Finland, 48 % in Sweden and 47 % in Catalonia. The difference is even greater where international conferences are concerned. Here 54 % of the postgraduate students in Sweden say that have participated in such events compared to Finland's 53 %, Ireland's 46 % and Catalonia's 33 %.

Responses to the questions on presentation of their own research in publications, conferences, and seminars or to more general audiences varied greatly between the different countries. Students in Sweden, 65 %, most frequently make presentations in publications and conferences while the Finnish students are those most frequently making presentations to more general audiences, 42 %.

Activity	Catalonia	Finland	Ireland	Sweden
Participation in one or more national conferences relevant to your post graduate studies	47	54	55	48
Participation in one or more international conferences relevant to your post graduate studies	33	53	46	54
Presentation of your research in a context which will make it more accessible for the general public	21	42	38	34
Presentation of your research through publication or at conferences	33	61	56	65
Submission of your research at some form of seminar at your department	26	57	53	65

Table 14. Percentage yes-answers whether the respondent had taken part in certain activities by country.

Comments

Research ethics deals with problems and issues about how research can be conducted. How far, for instance, may one jeopardise the integrity and safety of other people in order to attain the knowledge that is sought? Research ethics also involves the researcher's own rectitude and candour. There is justi-

fication for the inclusion of these quality aspects of research in postgraduate programmes.

It is important for doctoral students to understand the value of good research ethics, not least in their future careers. Lack of knowledge and the failure to apply ethical standards could in the long run impair the confidence of fellow-researchers, the general public and the commercial sector in the research undertaken. It is disturbing that as many as half of the postgraduate students do not consider that they have enhanced their awareness of research ethics.

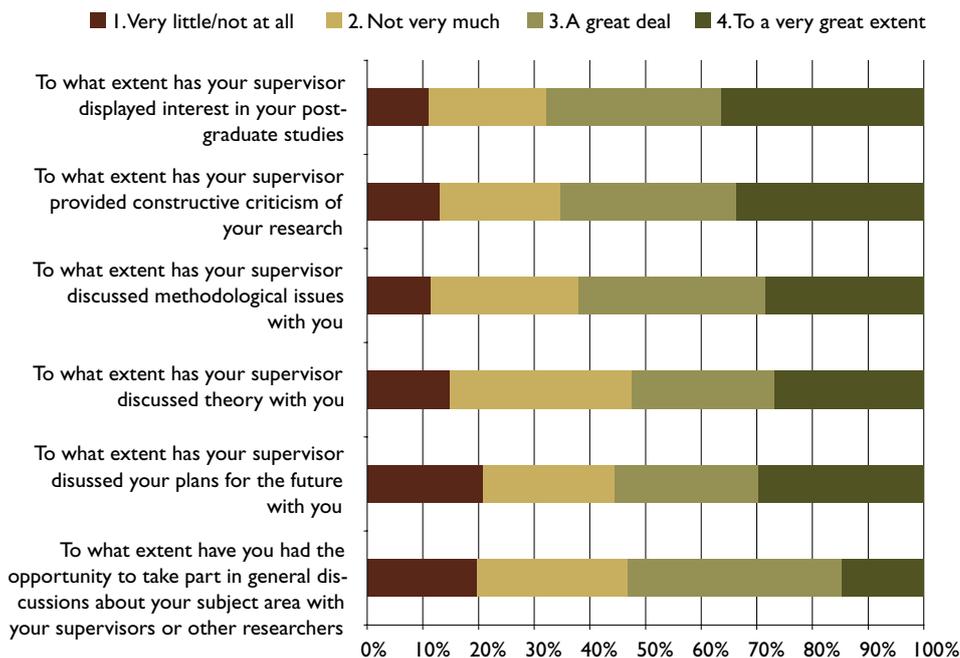
Another issue that is linked to the long-term public confidence in research is related to the capacity to present research in a context, which will make it more accessible for the general public. Postgraduate programmes do not seem to include training in this field to any great extent.

Dialogue with supervisors

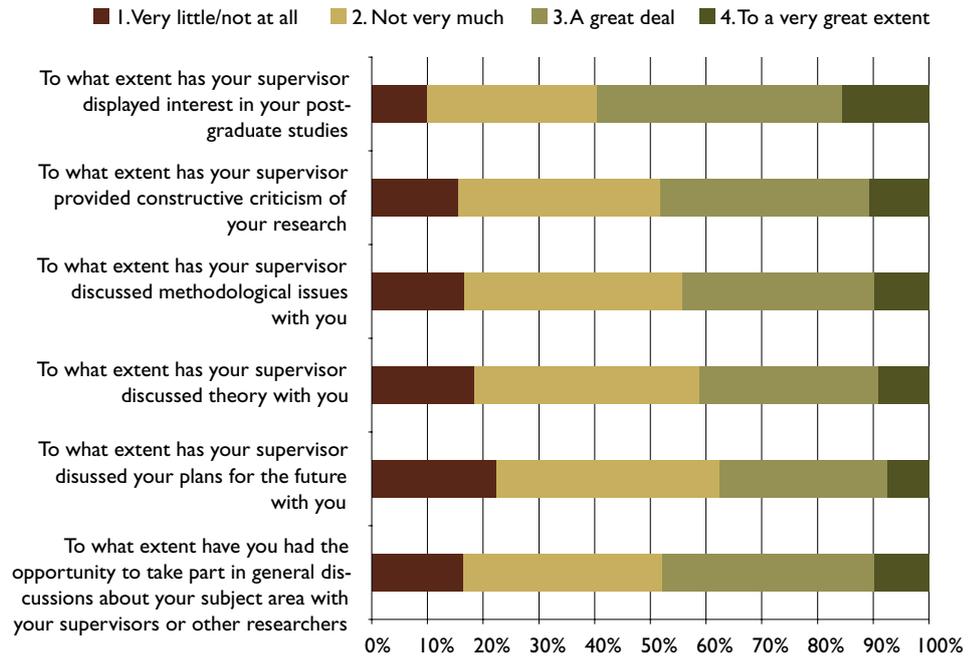
During their studies postgraduate students are often highly dependent on their supervisors. Supervisor commitment to the student's progress and future career plans and supervision that takes the form of a dialogue provide support. The role of the supervisor varies from subject to subject and according to the individual student's needs. But all postgraduate students need someone who can offer guidance and help to create a good environment for their work and research.

The questions included in this index deal with the extent to which students feel that their supervisors have displayed interest in their studies, provided constructive criticism of their research work, discussed methodological and theoretical issues, talked about their future plans and also the extent to which the students have been able to take part in general discussions in the subject field with their supervisors and other researchers (figure 19).

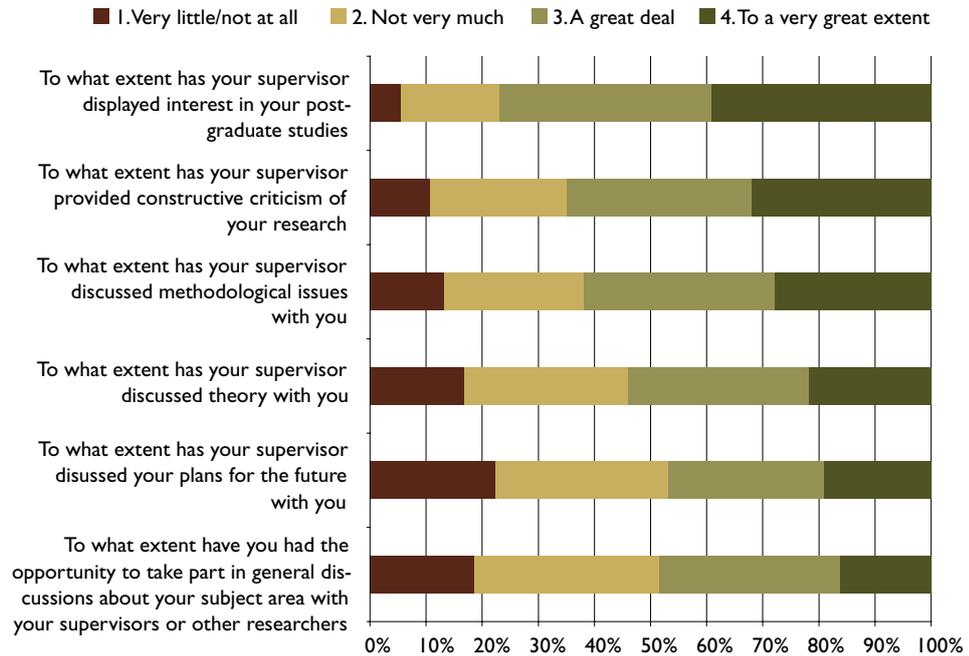
Catalonia



Finland



Ireland



Sweden

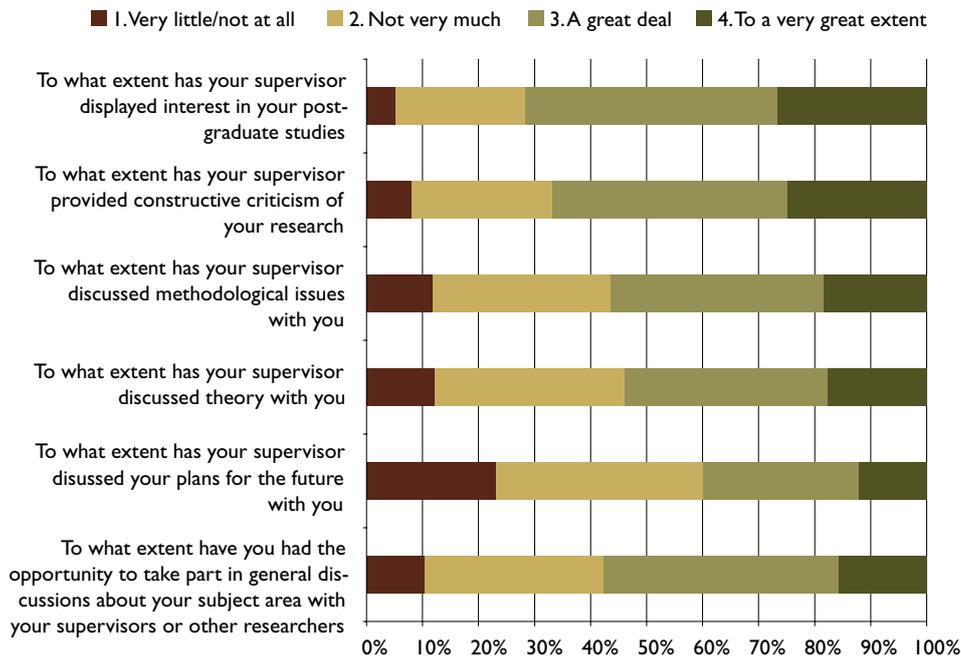


Figure 19. Dialogue with supervisors. Index items and distribution of responses by country.

The overall results are positive on the whole, apart from in Finland (figure 20). The students in Ireland provide the most positive responses. A large proportion of postgraduate students in all the countries feel that their supervisors show interest in their studies. The majority of students say that they have received constructive criticism of their research work except in Finland. The responses of the students in Finland are also more negative when it comes to whether their supervisors have discussed methodological and theoretical issues or talked about their future plans.

Generally in all the subject areas the women students in Sweden and Finland are somewhat more negative in their responses. The opposite applies in Ireland and Catalonia, where the women are more positive except in Science.

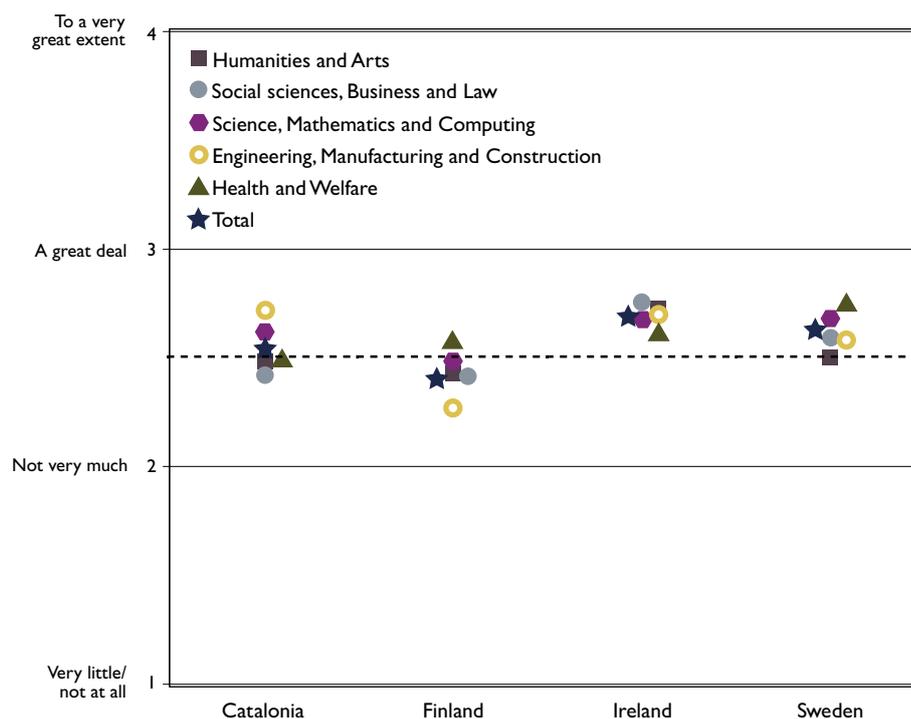


Figure 20. Dialogue with supervisors by country and subject field.

Ancillary questions

Inadequate review of study plans

An individual study plan may, for instance, contain a timetable for the student's studies and a description of the undertakings made by the student and by the faculty board for the period of study. One question in the questionnaire asked whether students had individual study plans and if they were reviewed adequately.

In Sweden, Finland and Ireland about 13–15 % of the postgraduate students say that they do not have an individual study plan. The largest proportion of students without an individual study plan can be found in Catalonia, where 30 % say that they do not have one. The students in Ireland are most satisfied with the review of their individual study plans, almost 60 % state that this review takes place and that they are satisfied with it. The corresponding figure for Sweden is 48 %, for Finland 43 % and Catalonia 38 %.

Supervisors are usually men

Of postgraduate students reporting that they have a principal supervisor, between 20 and 27 % state their principal supervisor is a woman. The lowest proportion of women principal supervisors can be found in Sweden, 19 %, and the highest in Catalonia, 27 %. Just under 80 % of the postgraduate students in Catalonia say that they have a principal supervisor. The corresponding fig-

ures in the other countries are 96 % in Finland, 97 % in Ireland and 99 % in Sweden (remember there are no first-year students in the Swedish data).

Assistant supervisors can be found most often in Sweden, two-thirds of the postgraduate students report one or more assistant supervisors. They are least common in Ireland where only half of the students say that they have an assistant supervisor.

Comments

The insights provided by *Dialogue with supervisors* are not solely positive when consideration is given to the large proportion of students who state that their supervisors have only shown limited interest in their studies, provided only little constructive criticism of their research activities or discussion of issues relating to methodology and theory.

One of the cornerstones of higher education, constructive criticism, should for instance help students to make progress in their work. Support of this kind seems to be lacking for about one-third of the postgraduate students in Sweden, Ireland and Catalonia and about half of the students in Finland. Almost half of the students (nearly 60 per cent in Finland) report that they do not get the support often provided by discussion of methodological and theoretical issues either. This situation can erode the quality of their theses and may possibly lead to a reduction of the efficiency of postgraduate programmes.

Academic staff interviewed by FINHEEC's international evaluation team on doctoral education reported about excessive supervision load. There are professors who have dozens of supervisees. According to the evaluation team, the tradition of restricting supervision to professors may contribute to this; therefore, the team proposes that more junior academic staff should be encouraged to act as supervisors.¹² This appears a viable solution. At least junior academic staff could function as assistant supervisors.

In Ireland, the Irish Universities Quality Board 2005 publication on Good Practice in the Organisation of PhD programmes in Irish Universities recommended that institutional procedures ensure that a supervisor is capable of taking on the proposed number of students with consideration given to various factors including the experience and reputation of the supervisor and the composition of their research team.

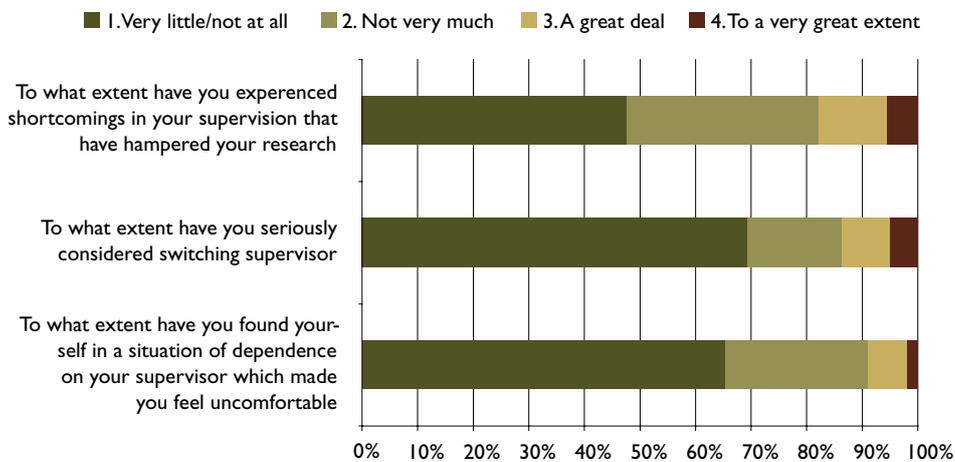
12. PhD Training and the Knowledge-Based Society: An Evaluation of Doctoral Education in Finland. Publications of the Finnish Higher Education Evaluation Council 1:2006.

Supervision in action

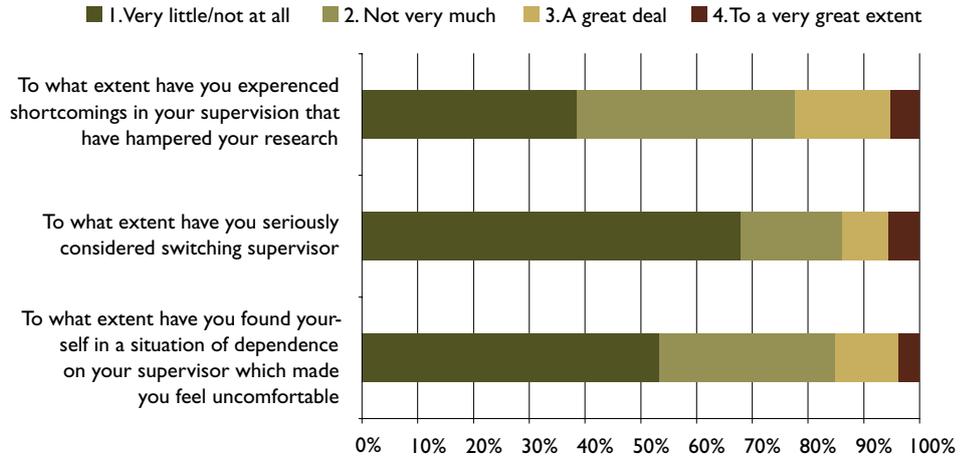
Shortcomings in their supervision may be the straw that breaks the backs for some postgraduate students. To be effective, for instance, an adequate amount of supervision must be provided. Opinions about where the limit should be drawn can, of course, differ between postgraduate students and their supervisors. Often contacts are at their most intensive early in the programme when the thesis subject has to be chosen, studies planned and the student initiated into research procedures. But towards the end of the programme as well, when the thesis has to be completed, contacts intensify again. There are no rules that lay down how much supervision a postgraduate student is entitled to.

The questions included in this index deal with the extent to which postgraduate students during the autumn semester 2004 (2002 in the Swedish data) experienced shortcomings in their supervision that hampered their research work, considered switching supervisor, were given as much supervision as they desired or found themselves in a distressful situation of dependence (figure 21).

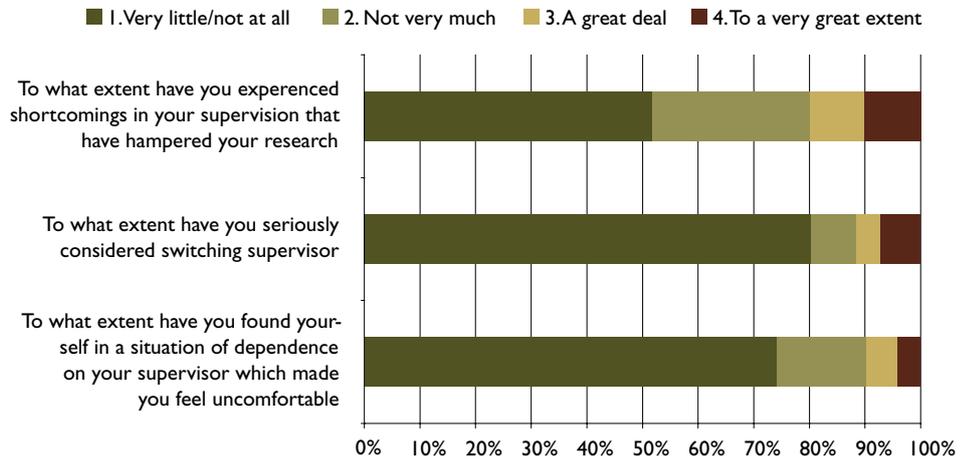
Catalonia



Finland



Ireland



Sweden

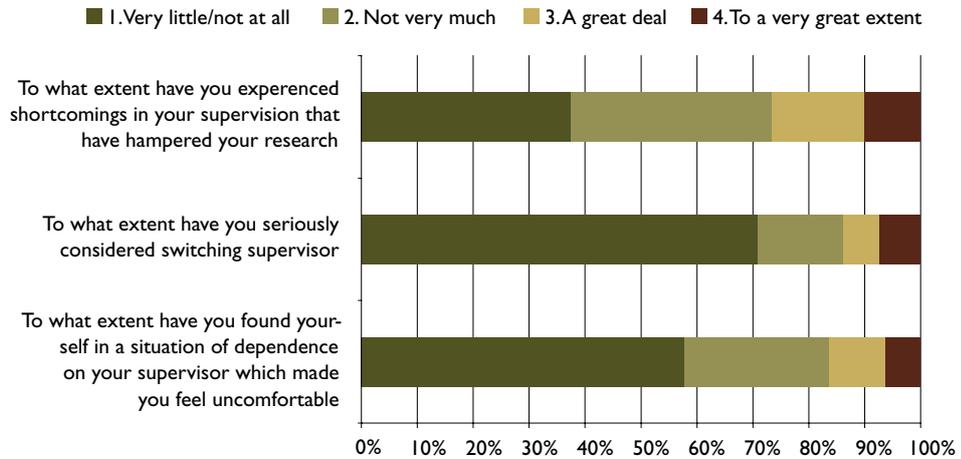


Figure 21. Supervision in action. Index items and distribution of responses by country.

The majority of postgraduate students in all the countries considered that Supervision in action functioned satisfactorily (figure 22). The most satisfied students were those in Ireland. However, between one-fifth and one-quarter in the different countries experienced shortcomings in their supervision that had obstructed their research work.

In their response to the question on whether they had received as much supervision as they desired¹³, 60 % of the postgraduate students in Sweden said they were satisfied, 55 % in Ireland and only 49 % of the postgraduate students in Finland.

Postgraduate students always find themselves in a situation of dependence on their supervisor in one way or another. The students in Sweden and Finland felt less comfortable about this dependence than their counterparts in Catalonia.

In all the subject fields there is a slight tendency for the men to respond more positively than the women.

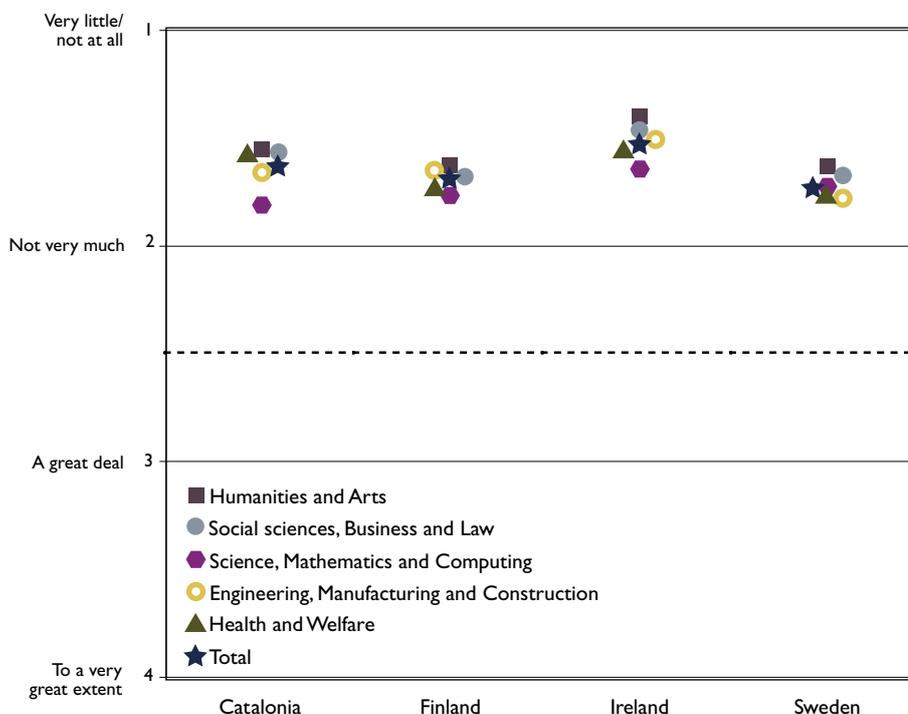


Figure 22. Supervision in action by country and subject field.

Ancillary questions

A lot or little supervision?

In one question the postgraduate students were asked to assess the average amount of time allocated to supervision during a semester. The smallest

13. This question has been removed from this index because the implication of the wording differed in Catalonia.

amount of supervision was reported by the students in Finland and the largest by those in Ireland (table 15). More than half of the postgraduate students in Ireland state that they received 11 hours of supervision or more each semester. The corresponding proportions for Sweden and Catalonia are 45 %, and for Finland 30 %.

There is a great deal of variation between the different subject areas with regard to the extent of supervision (table 15 and figures 23–27). Postgraduate students in Humanities and Arts in Catalonia, Finland and Sweden are those who report the fewest hours of supervision, on average 1–5 hours per semester. Students in Science, Mathematics and Computing as well as Engineering, Manufacturing and Construction report considerably more supervision hours compared to doctoral students in other areas, except in Finland.

In Sweden, Finland and Ireland the students were asked if they had been offered supervision to the desired extent. Not surprisingly there is a clear link, the more supervision, the more content the students.

Subject field	Catalonia	Finland	Ireland	Sweden
Humanities and Art	1–5 hours	1–5 hours	6–10 hours	1–5 hours
Social sciences, Business and Law	6–10 hours	1–5 hours	6–10 hours	6–10 hours
Science, Mathematics and Computing	11–15 hours	6–10 hours	16–20 hours	11–15 hours
Engineering, Manufacturing and Construction	11–15 hours	6–10 hours	16–20 hours	11–15 hours
Health and Welfare	6–10 hours	6–10 hours	6–10 hours	11–15 hours
Total (all subject fields)	6–10 hours	6–10 hours	11–15 hours	6–10 hours

Table 15. Average amount of time allocated to supervision by country and subject field.

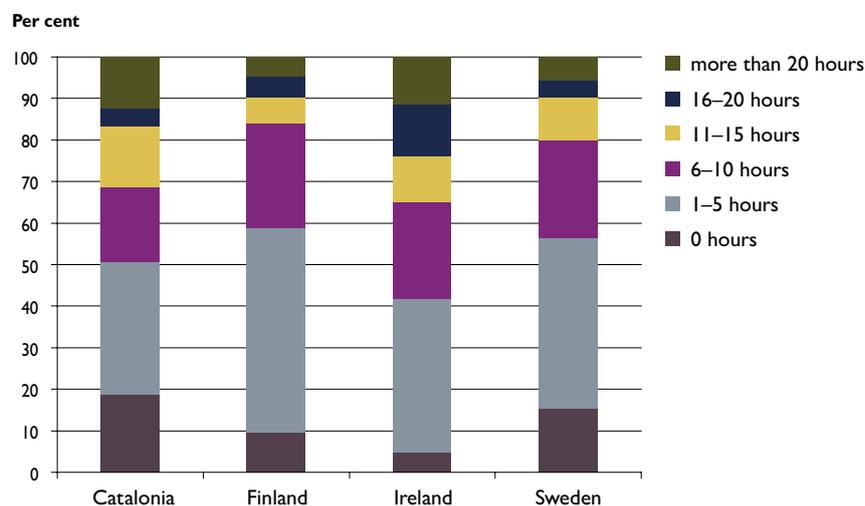


Figure 23. Humanities and Arts Amount of time allocated to supervision by country.

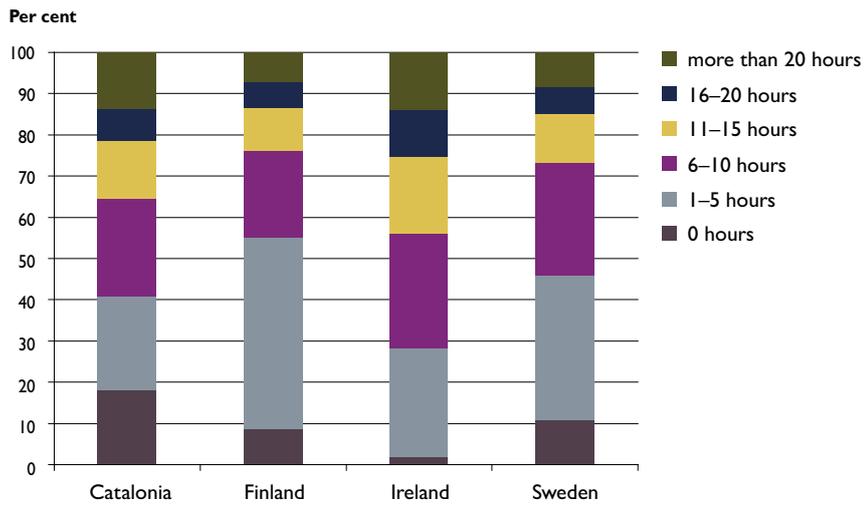


Figure 24. Social sciences, Business and Law Amount of time allocated to supervision by country.

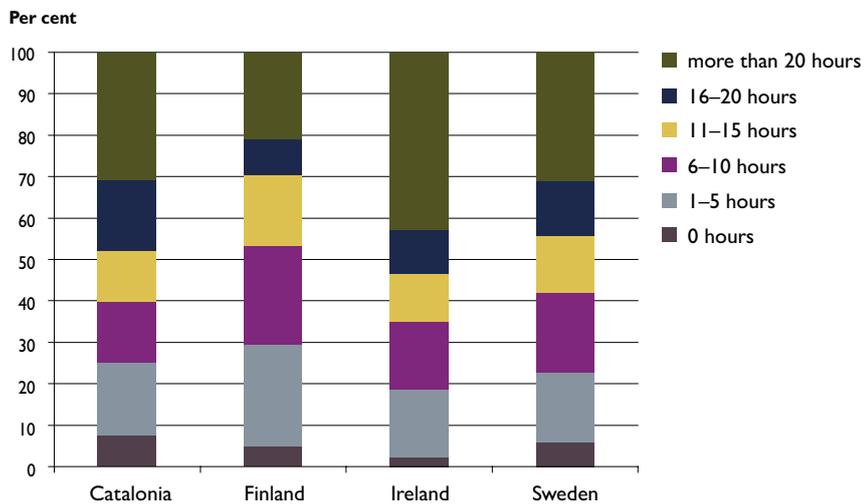


Figure 25. Science, Mathematics and Computing Amount of time allocated to supervision by country.

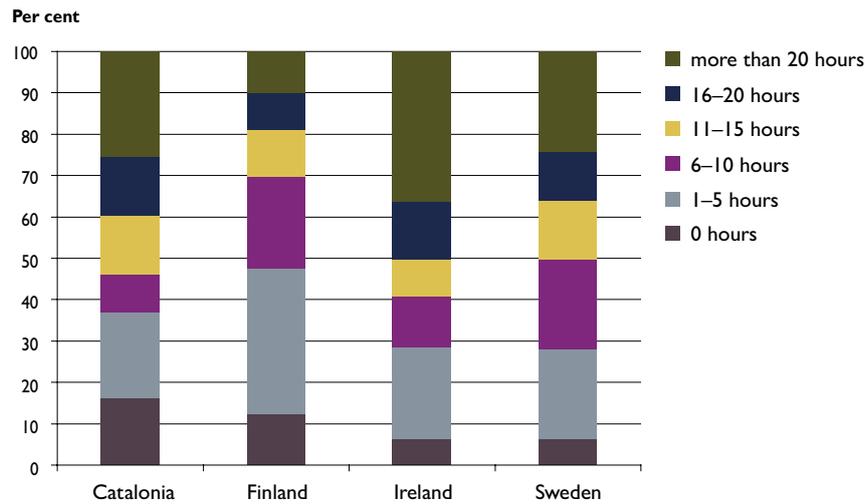


Figure 26. Engineering, Manufacturing and Construction Amount of time allocated to supervision by country.

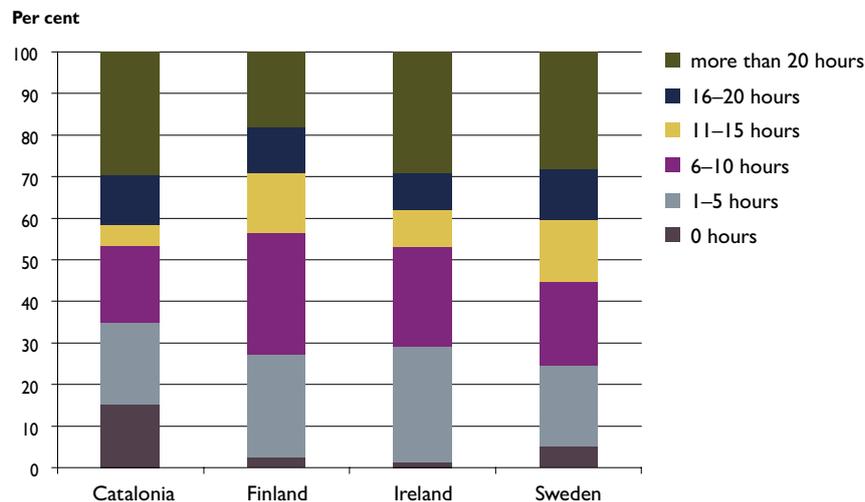


Figure 27. Health and Welfare Amount of time allocated to supervision by country.

Comments

The pattern revealed by the responses to the *Supervision in action* index is the most positive of the seven different indices.

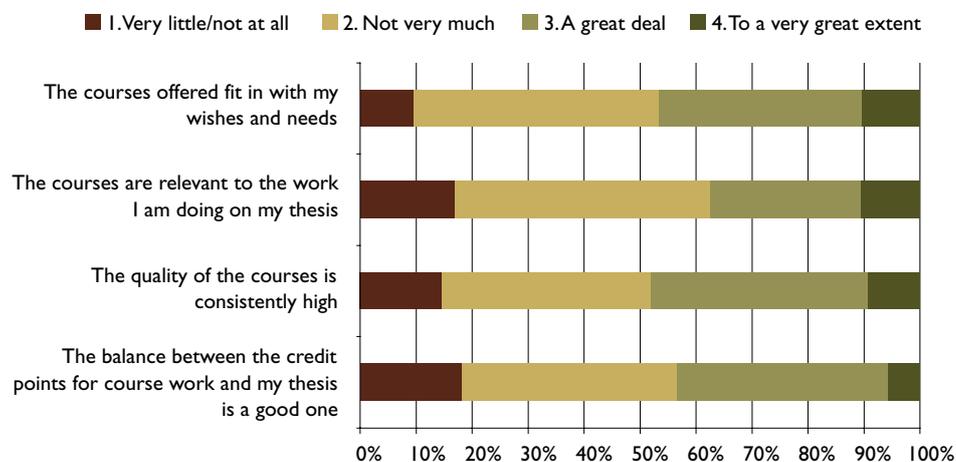
Even though they constitute a minority, it is worth bearing in mind that every fourth or fifth postgraduate student has experienced shortcomings in their supervision that have affected their research results. This is probably not merely a question of the volume of supervision. However, the volume of supervision is an interesting area in itself. Are the major differences between subject areas justifiable? What is the optimal amount of supervision? What are the consequences of more or less supervision? It is interesting to note that the amount of supervision provided in a subject area can vary between the different countries.

Relevance of taught courses

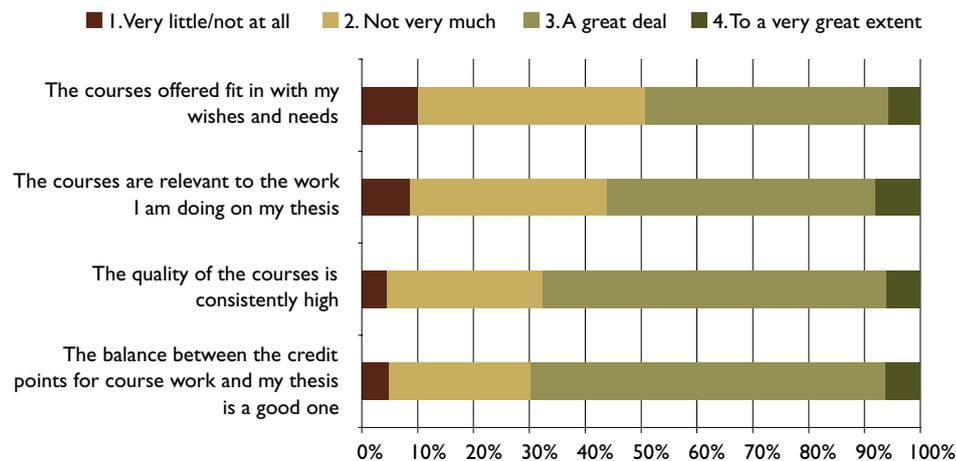
Postgraduate programmes in Catalonia, Finland and Sweden consist of both taught courses and thesis work. In Ireland postgraduate studies involve either a study programme leading to a taught Masters or a research project leading to a Research Masters or PhD. However, the introduction of a taught element for PhD degrees is being seriously considered. The proportion of time allocated to taught courses and to thesis work varies from subject field to subject field, and even within the same subject field in different higher education institutions and between countries. The aim of the taught courses in postgraduate programmes is both to provide the students with more advanced expertise in their subject and also to give them sufficient specialised knowledge to enable completion of their theses.

The questions included in this index deal with the extent to which the courses offered matched the desires and needs of the postgraduate students, whether the courses were relevant to their thesis work, whether they were of a good standard and also whether the distribution of credits for taught courses and the thesis was sound (figure 28).

Catalonia



Finland



Sweden

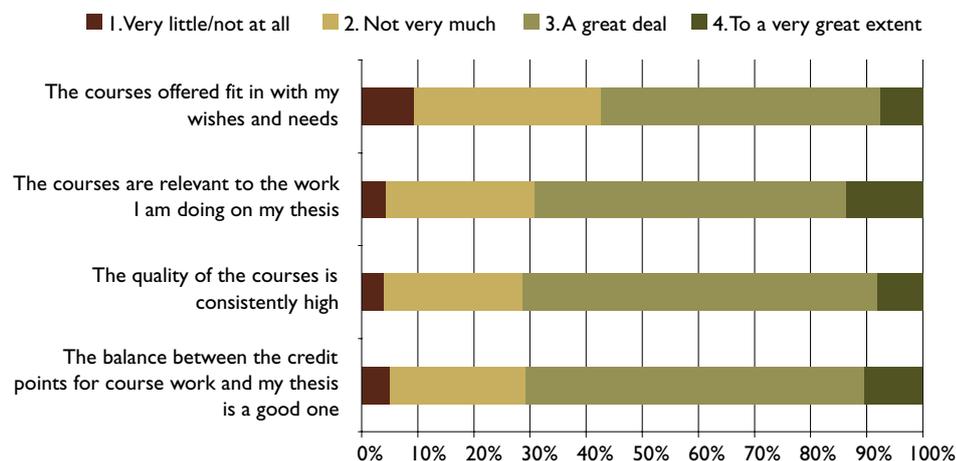


Figure 28. Relevance of taught courses. Index items and distribution of responses by country.

The responses of the postgraduate students in Finland and Sweden to the taught courses were overwhelmingly positive (figure 29). The students in Catalonia, especially from Health and Welfare and Science, Mathematics and Computing, expressed somewhat less satisfaction, mainly with the relevance of their courses to their thesis work.

The differences between the responses of the women and the men are insignificant.

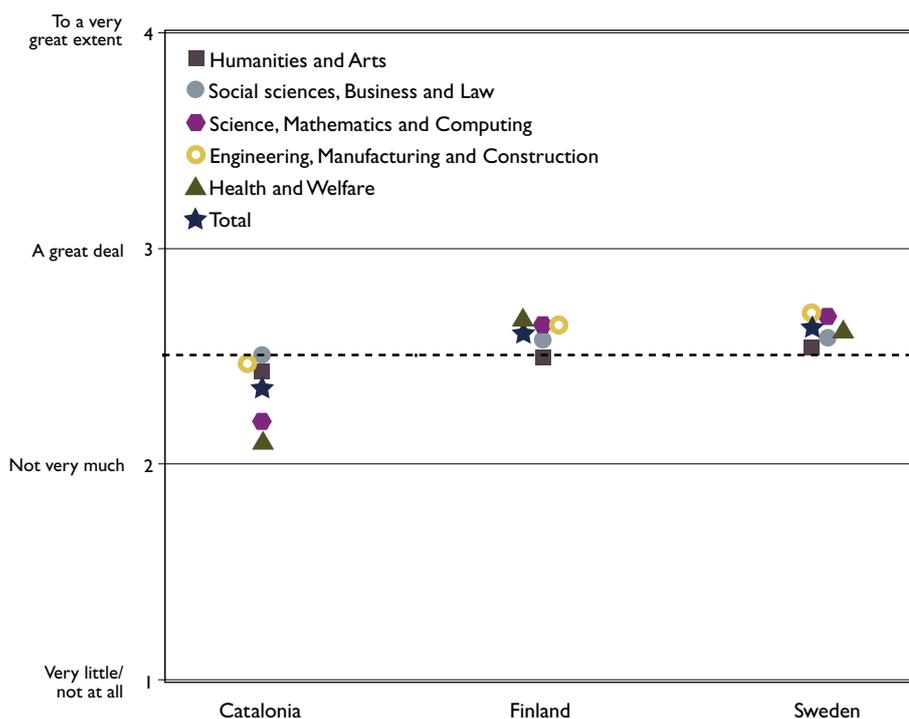


Figure 29. Relevance of taught courses. Index by country and subject field.

Comments

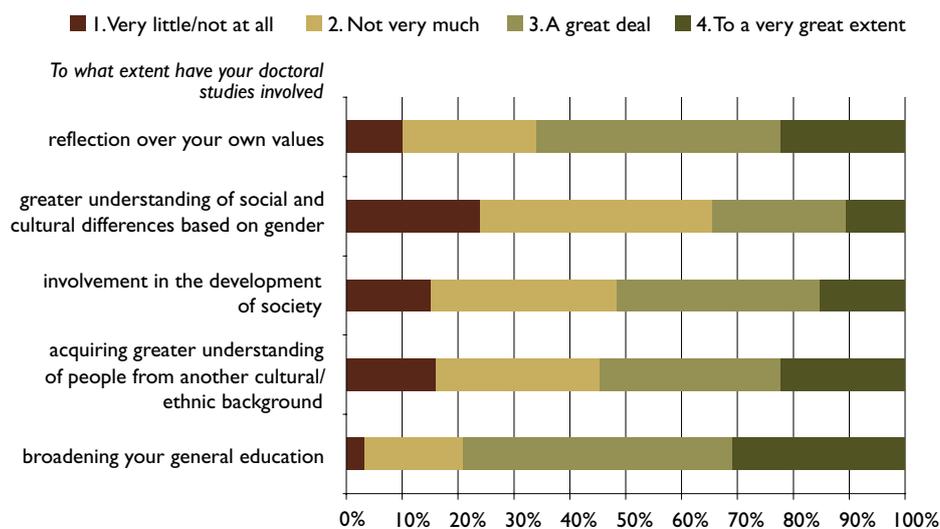
Even though many postgraduate students are satisfied, there are large proportions in all three countries who feel that the range of courses offered does not fit in with what they want and need. The solution to this problem may seem expensive as many research settings are small and it could appear unreasonable to provide a wide range of courses. More cooperation between different higher education institutions and different subjects, for instance on courses in methodology could be tested more extensively.

Reflection and values

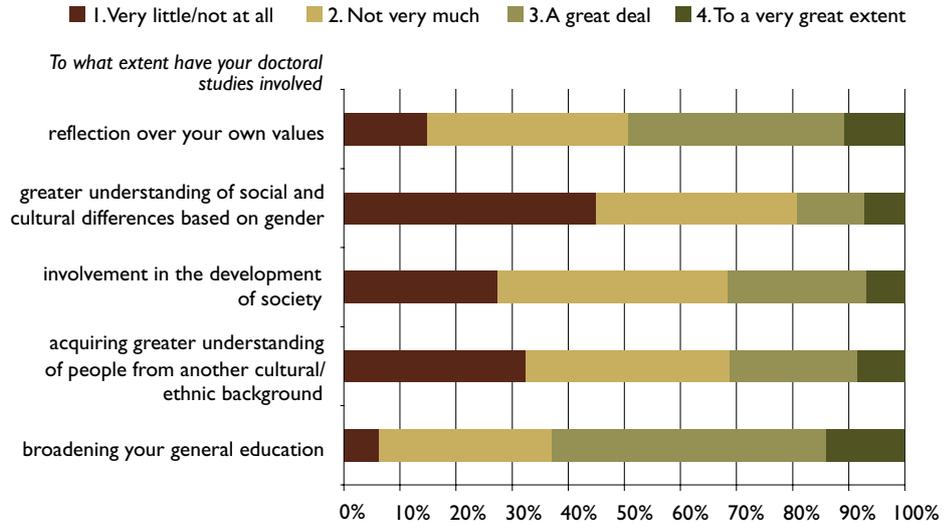
Personal development also forms part of the aim of higher education and this applies to both undergraduate and postgraduate study. One element in personal development, involves increasing the capacity for reflection over one's own values, another is greater educational breadth. The overarching social goals for higher education also include the expectation that education will contribute to the development of democracy and greater understanding between people with different cultural or ethnic background.

The questions included in this dimensional index deal with the extent to which postgraduate studies have prompted students to reflect about their own values or enabled them to gain greater awareness of social and cultural gender differences, become involved in community development, acquire greater understanding of people with other cultural/ethnic backgrounds and broaden their own educational horizons (figure 30).

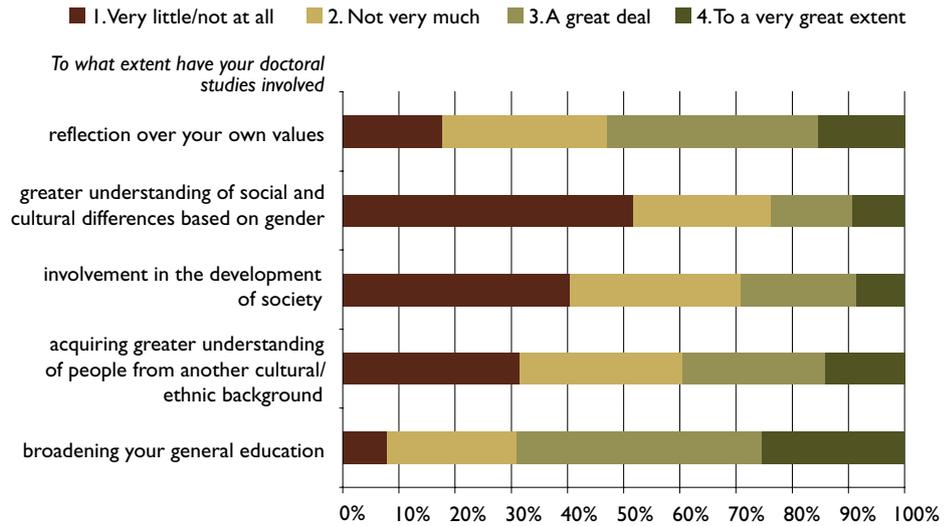
Catalonia



Finland



Ireland



Sweden

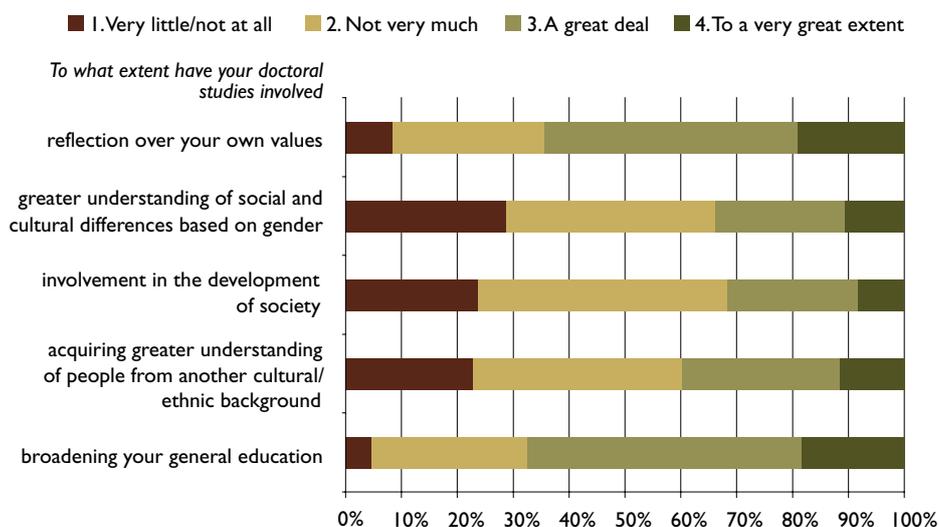


Figure 30. Reflection and values. Index items and distribution of responses by country.

On the whole the majority of postgraduate students state that their studies have not influenced their personal development to any major extent (figure 31). The students in Catalonia, however, indicated somewhat more influence on their personal development than the students in the other countries. Most students feel that postgraduate study has helped to broaden their educational horizons. More postgraduate students in Sweden and Catalonia claim that postgraduate study has led to greater reflection about their own values. A small proportion of postgraduate students in Finland, Sweden and Ireland say that their studies have led to greater awareness of social and cultural gender differences, more involvement in community development and increased understanding of individuals with other cultural backgrounds. The proportion is somewhat larger in Catalonia, which may reflect the fact that many postgraduate students come from Latin America.

This index shows great differences between different subject fields. The pattern is more or less the same in the different countries. The figures from the Humanities and Arts and from the Social sciences, Business and Law are higher than for Science, Mathematics and Computing, Engineering, Manufacturing and Construction or Health and Welfare.

This is the only index in which the women have responded more positively than the men in virtually every area.

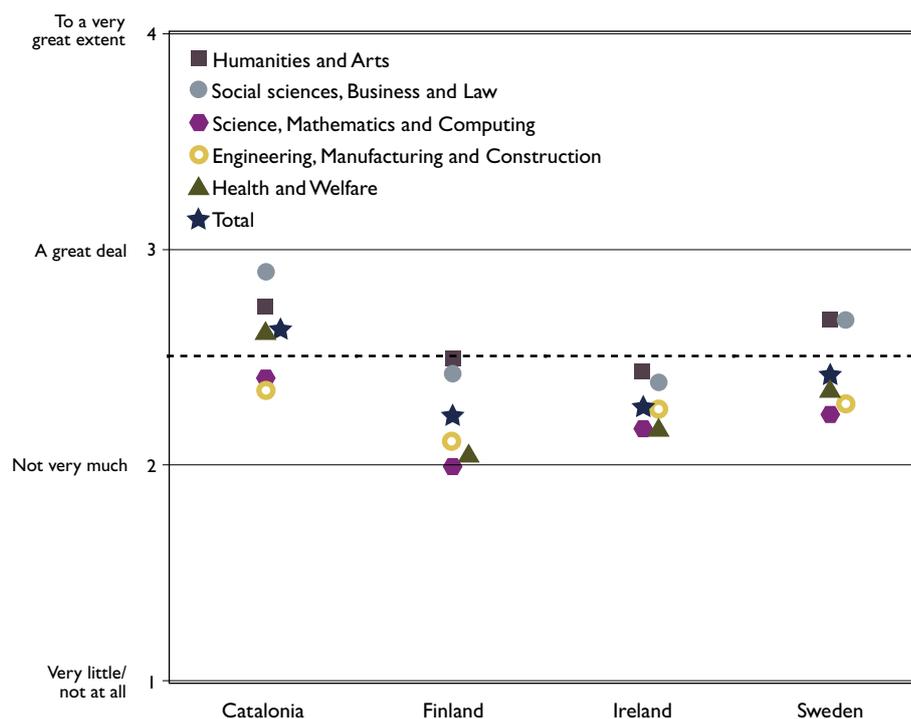


Figure 31. Reflection and values by country and subject field.

Comments

On the whole the *Reflections and values* index reveals great differences between the subject areas. This may be an expression of differences in the way the various programmes involve questions relating to values and human interaction. The most surprising figures are perhaps those from Health and Welfare.

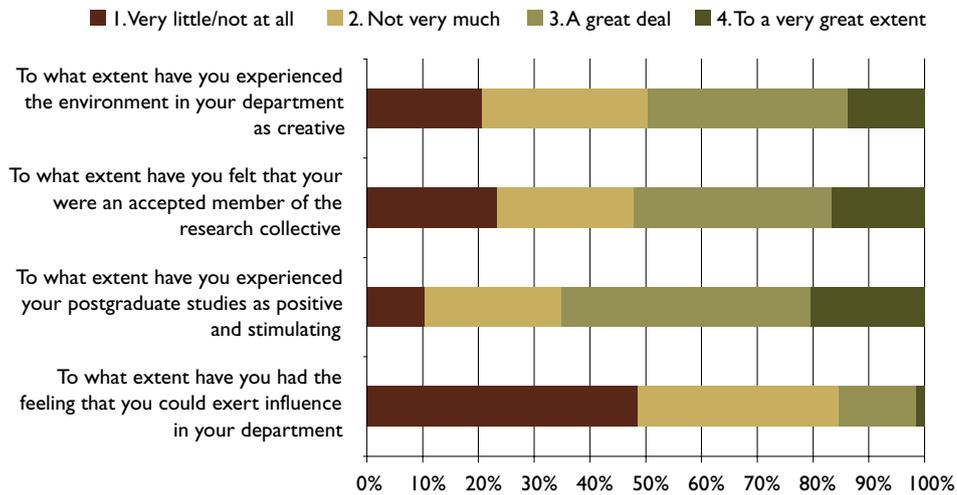
According to the majority of postgraduate students, their studies only increase their social involvement or understanding of other groups to a limited extent. On the other hand they do feel that their education has been broadened and the majority of students, except in Finland, state that their studies have helped them to reflect more about their own values.

Postgraduate study in mathematical, scientific, technological and medical subject areas are felt to contribute far less to the development of the students' own values when compared with programmes in other subjects. It may be that issues relating to values have traditionally played a less important role in these disciplines. In a career oriented world, however, it may be important for both undergraduate and postgraduate programmes to offer both personal and professional development – not least in view of the goals of the Bologna process.

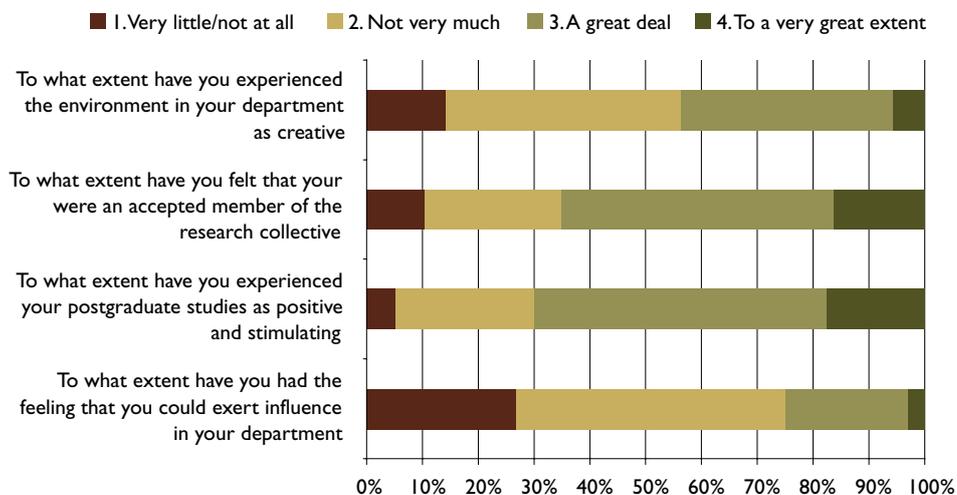
Study environments

The relationships between individuals sharing the same environment have a great deal of influence on how creative it will be considered as a workplace. A creative environment can in its turn provide a fertile and stimulating setting for postgraduate study. Influence can be a quality factor in many operational areas. The questions included in this dimensional index deal with the extent to which the postgraduate students experience their study environment as creative and feel accepted as members of the research community, whether their studies are positive and stimulating and how influence in their department functions (figure 32).

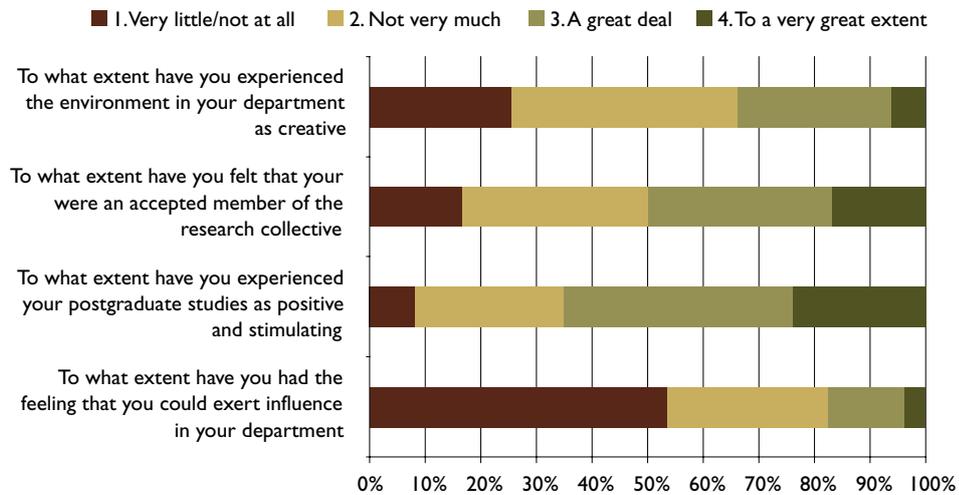
Catalonia



Finland



Ireland



Sweden

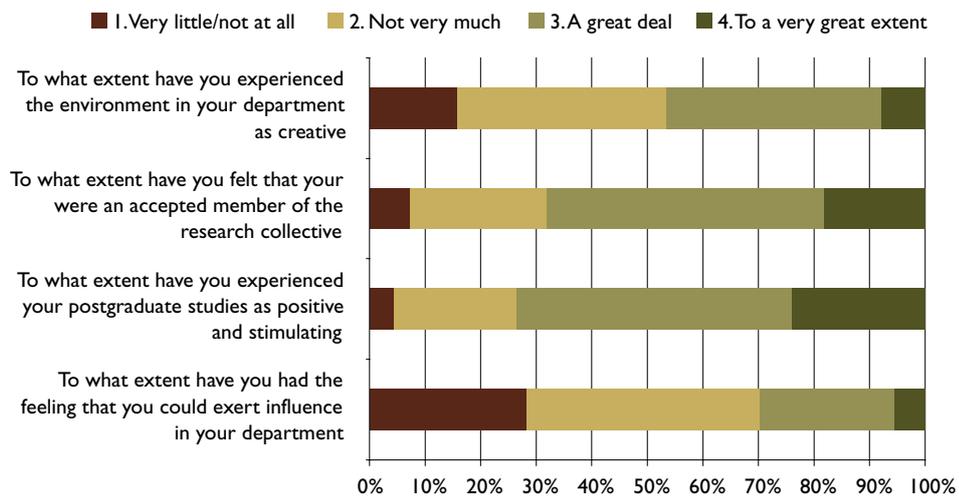


Figure 32. Study environments. Index items and distribution of responses by country.

The result shows that the majority of postgraduate students in all the countries feel that their studies are positive and stimulating and feel that they are accepted as members of the research collective (figure 33). The students in Catalonia and Ireland feel somewhat less accepted in this respect. Fewer than half of the postgraduate students experience the environment in their departments as creative, in Ireland the proportion is only one-third, even though doctoral students in Sweden and Finland report a markedly higher degree of influence.

In the Humanities and Art in Sweden and in Social sciences in Ireland the responses of the women tend to be somewhat less positive.

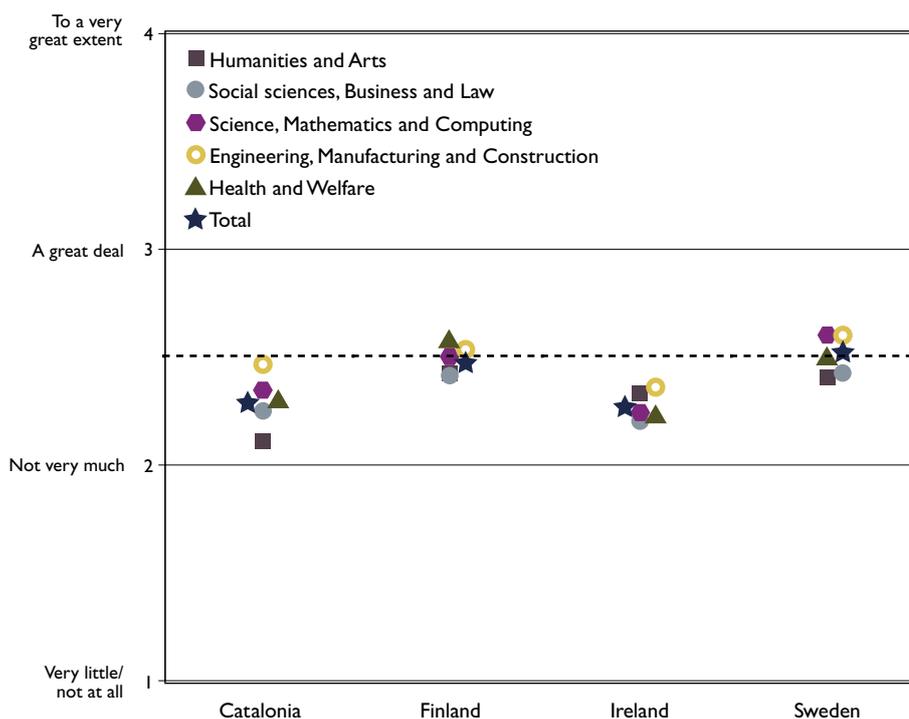


Figure 33. Study environments by country and subject field.

Ancillary questions

Stress, pressure and demands

Whether postgraduate students feel that the demands made of them are too high in relation to the length of the programme and whether they have negative experiences of stress and pressure were two questions that were posed in Sweden, Finland and Ireland. Three out of ten students in all three countries state that they have felt that postgraduate study has involved demands that were too high in relation to the length of their programmes. The proportion of affirmative responses to the question about negative experience of stress and pressure was particularly high in Sweden. Here nearly half of the students answered in the affirmative. In Finland the proportion is 33 % and in Ireland 38 %.

Comments

Even if the length of time students have been pursuing their postgraduate studies is taken into account, the same image emerges – the degree of influence they exert is felt to be low. Is this due to lack of opportunity, lack of interest from the students or is their position as students a real obstacle to genuine participation in the academic community?

Altogether the picture that develops of the conditions in which postgraduate students work gives rise to the feeling that their environment is demanding and that they are to some extent marginalised.

Postgraduate students on their studies and their relationships

The questionnaires included a number of questions in which the postgraduate students were asked to express their opinions about their programmes, university/higher education institution, other postgraduate students, teachers, supervisors and administrative staff. The questionnaires also included some questions about their careers after the award of their degrees. The responses to these questions are presented here. The questions are:

- What overall grade would you give your postgraduate programme up to now?
- If you had to make the choice today, would you opt to begin postgraduate studies?
- Do you want to work at your current university/higher education institution after the award of your PhD? (Not Finland)
- Would you like to work at another university/higher education institution after the award of your PhD? (Not Finland)
- Do you worry about being unemployed after you complete your postgraduate programme?
- Have you experienced different treatment because of your gender?

Positive postgraduate students

The overall grade of “good” or “excellent” is awarded by a total of 84 % of the students in Ireland to their programmes. The proportion of students in Sweden awarding the same grades is 78 %, in Finland 74 % and in Catalonia 71 %.

Most postgraduate students say that they would opt to begin postgraduate studies if they had to choose today, but 14 % in Finland and 19 % in Sweden respond “definitely not” or “probably not”. The proportion in Ireland responding in the same way is 15 % and in Catalonia 14 %.

Postgraduate students in Catalonia want to stay put

Fewer than half of the postgraduate students in Sweden and Ireland want to continue to work at their current higher education institution after the award of their PhD (table 16). On the other hand a good 76 % of the students in Catalonia say that they would like to work at their present institution. The question about wanting to work at another higher education institution evokes a positive response from less than half of the postgraduate students in Sweden. However in Ireland 65 % respond positively and in Catalonia a total of 86 %. (Students in Finland were not asked this question.)

If you put the two questions into a cross table you can see that relatively many students in Sweden want to leave the “academic world”, 34 %. Corresponding figures for Ireland are 27 % and for Catalonia 10 % (see light grey cells in table 16).

Catalonia

Do you want to work at your present university/higher education institute when you have your doctorate?	Do you want to work at another university/higher education institute when you have your doctorate?		
	Definitely not/Probably not	Probably/Definitely	Total
Definitely not/Probably not	10	15	24
Probably/Definitely	5	71	76
Total	14	86	100

Ireland

Do you want to work at your present university/higher education institute when you have your doctorate?	Do you want to work at another university/higher education institute when you have your doctorate?		
	Definitely not/Probably not	Probably/Definitely	Total
Definitely not/Probably not	27	33	60
Probably/Definitely	8	32	40
Total	35	65	100

Sweden

Do you want to work at your present university/higher education institute when you have your doctorate?	Do you want to work at another university/higher education institute when you have your doctorate?		
	Definitely not/Probably not	Probably/Definitely	Total
Definitely not/Probably not	34	18	52
Probably/Definitely	21	27	48
Total	55	45	100

Table 16. Cross tabulation of “Do you want to work at your present university/higher education institute...” and “Do you want to work at another university/higher education institute when you have your doctorate?” By country.

Two closely related questions in the Finnish study show that 19 % state that they definitely or probably not want to have a career in neither research nor in the field of teaching when they have their doctorate.

Great concern about unemployment in Catalonia

The concern about unemployment after graduation varies a great deal among postgraduate students in the different countries. Students in Catalonia, where a good 64 % express concern about unemployment, show the greatest concern (table 17). The corresponding figure for Ireland is 35 % and for Finland 32 %. Least concern is shown in Sweden, where one student in every four is worried about not finding a job.

There is great variation between the different subject fields in all the countries. The postgraduate students who worry most about unemployment are those studying Science, Mathematics and Computing, 75% in Catalonia and 45 % in Finland. In Sweden and Ireland the students on postgraduate programmes in the Humanities and Art worry most, 37 % in Sweden, 52 % in Ireland. The female students consistently report greater concern about unemployment than the men.

Subject field	Catalonia	Finland	Ireland	Sweden
Humanities and Art	64	42	52	37
Social sciences, Business and Law	55	29	28	19
Science, Mathematics and Computing	75	45	36	35
Engineering, Manufacturing and Construction	60	24	23	22
Health and Welfare	66	22	23	15
Total (all subject fields)	64	32	35	24

Table 17. Percentage respondents who express concern about unemployment by country and subject field.

Gender discrimination

One question deal with whether postgraduate students feel that they have been treated differently/discriminated because of their gender by 1) other postgraduate students, 2) teachers, 3) supervisors or 4) administrative staff.

This question was formulated differently in the different countries so that direct comparison is difficult. The students in Finland, Ireland and Sweden were able to respond on a scale of 1–7 (1= not at all, 7= to a very great extent). In Finland and Ireland the question was whether they have experienced discrimination because of their gender, while in Sweden the question was whether they have experienced different treatment because of their gender. In Catalonia the question was worded differently and the response could be either yes or no.

These responses reveal no major differences between the four different categories.

Even though the questions were worded differently, it can be seen that a consistently smaller proportion of women respond “not at all” to the question about discrimination/differentiation. Table 18 presents the responses to the question about discrimination/differentiation by supervisors.

	Catalonia		Finland		Ireland		Sweden	
	M	W	M	W	M	W	M	W
1 (Not at all)	No=99	No=97	94	79	95	88	88	70
2			3	10	1	3	5	11
3			1	4	1	3	2	5
4			2	2	2	2	3	5
5			1	3	0	1	1	4
6			0	1	0	2	1	3
7 (To a very great extent)	Yes= 1	Yes= 3	0	1	0	2	0	2
	100	100	100	100	100	100	100	100

Table 18. Discrimination from supervisors by country and gender.

Final remarks

The number of research students has risen considerably in the countries included in this survey. Today there are about 12,600 doctoral students in Catalonia and 1,252 PhD's were awarded in 2004 (19 per 100,000 in the population). Finland has about 22,000 postgraduate students and 1,400 PhD's were awarded in 2004 (27 per 100,000 in the population). In Ireland in the institutes who participated in the study there are about 23,500 postgraduate students and 700 PhD's were awarded in 2004, while in Sweden there are about 19,200 postgraduate students and 2,700 PhD's were awarded in 2004 (30 per 100,000 in the population). This is a major joint commitment, both by the community and by the students themselves. Not least from the point of view of the community, there are great hopes of enhanced innovation and growth.

Even though there are many differences in the organisation and implementation of postgraduate programmes, a similar pattern emerges.

On the whole, the postgraduate students grade their programmes well, and the most positive are those studying in Ireland. On the other hand there is scope for improvement.

Postgraduate students do not feel that their studies help to develop their values to any great extent, and least in the mathematical, scientific and medical subject areas. The students' involvement in social development and their understanding of other groups of people are not enhanced by their studies. In a Europe where all countries place great faith in education both as a way of improving European competitiveness and providing democratic stability, postgraduate programmes are faced with a challenge. The intellectual leaders of a society undergoing transformation will be largely found in the groups that have completed postgraduate studies.

One common factor in all four countries in the survey was that the introductory programmes for postgraduate study did not function effectively and that students were offered very little opportunity to participate in the governance of their departments. Genuine influence could possibly engender creativity. Not unexpectedly, the questions about supervision revealed problems. Supervision is the cornerstone of postgraduate study while at the same time the dependency of the students is a sensitive issue. The postgraduate students have praised the model that has been developed in some Finnish graduate schools with supervision teams or boards of supervisors.¹⁴

The labour market situation for PhD's has an obvious impact on the postgraduate students. Concern about unemployment is particularly noticeable in Science, Mathematics and Computing as well as in other groups, particularly

14. PhD Training and the Knowledge-Based Society: An Evaluation of Doctoral Education in Finland. Publications of the Finnish Higher Education Evaluation Council 1:2006

among the women. Firmer links between postgraduate programmes and the labour market outside higher education, together with support in planning careers would be valuable for many postgraduate students.

Appendix

A Mirror for Postgraduate Students 2004

1. Were you enrolled as a postgraduate student during the 1st semester of 2004 (autumn semester)?

Yes	96,4 %
No, I have been awarded a doctorate	1,9 %
No, I have given up postgraduate studies	,1 %
No, I have taken time off for some other reason	1,5 %

2. Gender:

men 46,3 % women 53,7

3. Age of respondent

20-24	14,3 %
25-29	42,8 %
30-34	19,2 %
35-39	10,0 %
40-44	10,6 %
50-	3,1 %

4. How actively (as a percentage) did you pursue postgraduate studies during the x semester of 20xx?

0-9 %	6,8	10-40 %	14,4	41-60 %	17,4	61-80 %	25,4	81-100 %	36,0
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5. Did you begin your postgraduate studies before you had been formally enrolled?

No	71,3 %
Yes, 1-6 months in advance	22,5 %
Yes, 7-12 months in advance	3,1 %
Yes, over a year in advance	3,0 %

6. What was your primary reason for undertaking postgraduate studies?

Interest in the subject	23,2 %
To prepare for a career in teach/research in hig. ed.	53,0 %
To prepare for a career in research outside high. ed.	11,4 %
To prepare for some other professional career	3,1 %
Other	9,3 %

7. How true are the following statements regarding support and preliminary information provided prior to your doctoral studies?

	Very little / not at all	Not very much	A great deal	To a very great extent
The prior information about postgraduate studies was satisfactory	12,9 %	33,1 %	41,8 %	12,3 %
The department's introduction for newly enrolled postgraduate students was satisfactory	18,0 %	33,9 %	36,2 %	11,9 %
You were adequately informed about your rights and obligations as a pg std	27,5 %	42,6 %	22,1 %	7,8 %
The requirements for enrolment as a pg std were clear	4,6 %	18,8 %	52,7 %	23,8 %

8. Where do most of your postgraduate studies take place?

At the high. edu. instit. at which you are enrolled	64,2 %
At some other higher education institution	33,6 %
Somewhere else	2,2 %

9. In the course of your pg studies have you spent some period of time studying at another institution?

Home country	Abroad	No
8,8 %	15,3 %	75,9 %

10. What was your principle source of income during the last semester of 20xx?

A grant from the Catalan/Spanish government	21,0 %
A grant from aboard/another organisation	10,1 %
A grant from the university where the prog. is given	11,5 %
A contract from the univ. to do a research progr.	4,7 %
A contract from the univ. to collaborate in non-res.	6,1 %
A job outs. of the univ. (which allows time for res.	17,5 %
A job outs. of the univ. (which does not allow time	15,3 %
Another source of finance	13,8 %

11. Were you satisfied with this source of income (in nq8)?

yes	51,5 %	no	48,5 %
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12. Have you taken sick leave for more than 14 days during 2004?

Yes	3,7 %	No	96,3 %
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13. Are you married or living with a partner?

Yes	50,2 %	No	49,8 %
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14. Do you have children under the age of 18 living with you?

Yes	16,6 %	No	83,4 %
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15. Have either of your parents a university degree or a higher ed qualification from a pgm 3 full years or more?

Yes, both	21,2 %
Yes, only father	15,5 %
Yes, only mother	5,8 %
No	57,5 %

16. Which academic qualifications did you have when you began your doctorate?

Diploma or equivalent / Engineering or Technical Architecture	7.4%
Degree or equivalent / Higher Engineering or Architecture	89.4%
Master or equivalent	25.2%

17. How many of the credit points in your postgraduate programme are for course work?

(open response)

18. How many credit points are for courses you can choose yourself?

(open response)

19. Assess the following statements that describe the courses in the doctorate:

	Very little / not at all	Not very much	A great deal	To a very great extent
a. The quality of the courses is consistently high	14,0 %	33,4 %	40,5 %	12,1 %
b. The balance between the credit points for course work and my thesis is a good one	14,0 %	33,4 %	40,5 %	12,1 %
c. The courses are relevant to the work I am doing on my thesis	14,3 %	43,4 %	29,6 %	12,7 %
d. The courses offered fit in with my wishes and needs	9,6 %	40,5 %	37,3 %	12,6 %

20. How much teaching did you do during the 1st semester of 2004 (as a percentage of a full-time post)?

0 %	29,5 %	1-20 %	21,7 %	21-40 %	18,1 %	41-60 %	13,7 %	61-80 %	10,9 %	81-100 %	6,2 %
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21. How much of your time was spent on other work for your department during the 1st semester of 2004 (as % of full-time post)?

0 %	33,3 %	1-20 %	25,0 %	21-40 %	12,1 %	41-60 %	10,9 %	61-80 %	11,1 %	81-100 %	7,6 %
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22. Have you taken part in any teacher training sessions for postgraduate students of teachers?

Yes 12,1 % No 87,9 %

23. What type of thesis do you intend to submit?

On one specific subject 74,6 % Article compilation 25,4 %

24. In what language are you writing your thesis?

Catalan 31,0 % English 21,0 % Spanish 47,3 % Other 0,6 %

25. How did you select the subject of your thesis?

Mainly on my own 40,6 %
A proposal from my department/subervisor 38,8 %
I have not yet selected a subject 20,6 %

26. How are you working on your thesis?

I am working independently 46,4 %
Mostly with a research group 33,7 %
I still haven't chosen a subject 19,9 %

27. Do you have a principal supervisor?

Yes, a man 53,1 %
Yes, a woman 21,4 %
No 25,5 %

28. Have you switched to another supervisor at your own request?

Shall not answer the question 22,9 % Yes 5,2 % No 71,9 %

29. Do you have one or more assistant supervisors?

Yes, a man/only men 16,4 %
Yes, a woman/only women 6,1 %
Yes, men and women 39,3 %
No 38,2 %

30. Do all your assistant supervisors come from your own department?

Shall not answer the question **38,4 %** Yes **40,0 %** No **21,6 %**

31. Who, in practice, provides most of your supervision?

Principal supervisor **74,9 %**
Assistant supervisor **9,9 %**
Someone else **15,2 %**

32. Give an estimate of the number of hours of supervision you have been given during the x semester of 20xx?

0 h **15,5 %** 1-5 h **21,1 %** 6-10 h **19,0 %** 11-15 h **12,7 %**
16-20 h **10,4 %** > 20 h **21,3 %**

33. How much has/have your director/s:

	Very little / not at all	Not very much	A great deal	To a very great extent
a. displayed interest in your pg studies	10,9 %	21,1 %	32,8 %	35,2 %
b. discussed methodological issues with you	11,7 %	24,8 %	34,4 %	29,1 %
c. discussed theory with you	14,1 %	29,5 %	29,0 %	27,3 %
d. provided constructive criticism of your research	12,9 %	20,3 %	31,9 %	34,9 %
e. discussed your plans for the future with you	19,2 %	24,3 %	26,5 %	30,0 %

34. Has your individual study programme been supervised during 2004?

Yes, I am satisfied with the follow up **39,2 %**
Yes, but I am not satisfied with the follow up **6,9 %**
No **22,6 %**
I do not have an individual study plan **31,2 %**

35. During 2004 have you been involved in any of the following activities?

	Yes	No
a. Participation in one or more national conferences relevant to your pg studies	49,4 %	50,6 %
b. Participation in one or more international conferences relevant to your pg studies	34,2 %	65,8 %
c. Presentation of your research in a context which will make it more accessible for the general public	22,6 %	77,4 %
d. Presentation of your research through publication or at conferences	34,2 %	65,8 %
e. Submission of your research at some form of seminar at your department	27,7 %	72,3 %
f. Membership of a group of postgraduate students	19,4 %	80,6 %

36. To what extent during 2004 in the course of your postgraduate studies have you

	Very little / not at all	Not very much	A great deal	To a very great extent
a. been provided with as much supervision as you wanted	43,8 %	43,5 %	11,5 %	1,2 %
b. found yourself in a situation of dependence on your supervisor which made you feel uncomfortable	65,7 %	25,7 %	6,7 %	1,9 %
c. experienced shortcomings in your supervision that have hampered your research	51,2 %	32,3 %	11,8 %	4,6 %
d. seriously considered switching supervisor	71,5 %	15,2 %	8,7 %	4,6 %
e. experienced your pg studies as positive and stimulating	10,1 %	23,8 %	43,2 %	22,9 %
f. had the opportunity to take part in general discussions about your subject area with your supervisors/other researchers	17,8 %	28,6 %	38,9 %	14,7 %
g. experienced the environment in your department as creative	19,7 %	29,7 %	36,6 %	14,0 %
h. felt that you were an accepted member of the research collective	22,2 %	23,2 %	37,1 %	17,5 %
i. had the feeling that you could exert influence in your department	44,7 %	36,8 %	15,8 %	2,7 %

37. To what extent have your postgraduate studies involved

	Very little / not at all	Not very much	A great deal	To a very great extent
a. broadening your general education	3,1 %	16,5 %	46,9 %	33,4 %
b. a greater understanding of people from another cultural/ethnic background	16,4 %	28,4 %	31,9 %	23,3 %
c. reflection over your own values	9,3 %	23,1 %	43,7 %	23,9 %
d. involvement in the development of society	13,2 %	30,8 %	37,5 %	18,6 %
e. a greater understanding of social and cultural differences based on gender	22,8 %	41,0 %	25,3 %	10,9 %
f. a greater understanding of scientific or scholarly methodology	3,1 %	16,2 %	47,0 %	33,6 %
g. a greater understanding of scientific theories	4,5 %	22,3 %	46,3 %	26,9 %
h. you acquiring the ability to carry out your own research independently	5,1 %	21,3 %	44,9 %	28,7 %
i. you acquiring deeper insights into research ethics	11,9 %	26,5 %	41,6 %	20,0 %

38. Have you had access to a workplace of your own at your department, including computer, printing and copying facilities?

yes **62,5%** no **37,5 %**

39. During the 1st semester of 2004 how many hours have you worked each week on average?

0-9 hours	27,7 %
10-19 hours	6,5 %
20-29 hours	13,2 %
30-39 hours	19,1 %
40-49 hours	22,9 %
50-59 hours	5,0 %
60 hours or more	5,5 %

40. During the 1st semester of 2004 how many hours each week did you devote to your postgraduate studies on average?

0-9 hours	20,8 %
10-19 hours	22,0 %
20-29 hours	16,9 %
30-39 hours	11,2 %
40-49 hours	13,4 %
50-59 hours	7,6 %
60 hours or more	7,9 %

41. By the end of the 1st semester of 2004 how large a proportion (as a percentage) of your postgraduate studies had you completed?

20 percent or less	36,1 %
21-40 percent	26,7 %
41-60 percent	18,5 %
61-80 percent	10,7 %
80 percent or more	8,1 %

42. Are you going to take a licentiate degree?

Yes	13,3 %	No	38,6 %	I already have	30,1 %	Don't know	17,9 %
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43. When do you expect to present your thesis?

This semester	6,3 %	Next course	24,9 %	I don't know	68,8 %
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44. What feelings do you have about the other postgraduate students, teachers, supervisors and administrative staff?

a) other postgraduate students

unfriendly	2,1	4,6	7,6	14,7	22,3	28,4	20,3	Friendly
unhelpful	3,7	5,7	9,7	18,3	22,1	24,9	15,5	Helpful
not supportive	-	-	-	-	-	-	-	supportive

b) teachers on the courses you have attended

unapproachable	3,0	5,3	9,8	16,4	23,2	28,8	13,5	approachable
not supportive	2,2	6,3	10,8	16,1	23,5	27,0	14,2	supportive
uninformed	3,7	7,5	10,3	14,5	23,5	24,6	15,9	knowledgeable

c) supervisors

unapproachable	4,0	6,9	9,1	11,7	17,0	27,7	23,5	approachable
not supportive	4,7	6,1	9,4	10,9	15,9	27,1	26,0	supportive
Uninformed	5,1	6,6	9,0	11,4	17,9	26,1	23,9	knowledgeable

d) administrative staff

unapproachable	5,3	5,1	10,1	12,6	21,9	26,4	18,7	approachable
Disobliging	7,0	6,9	9,4	14,6	18,9	24,0	19,0	accommodating
not supportive								supportive

45. Have you been sexually discriminated against by:

	Yes	No
Other students	2,7	97,3
Academics	3,8	96,2
Supervisors	1,9	98,1
Administrative staff	,8	99,2

48. Do you want to work at your present university/higher ed inst when you have your doctorate?

Definitely not	10,3 %
Probably not	12,2 %
Probably	25,8 %
Definitely	51,7 %

46. If you had to choose today would you still choose to begin pg studies? (CAT slight diff quest)

Definitely not	4,7 %
Probably not	10,4 %
Probably	26,2 %
Definitely	58,7 %

49. Do you want to work at another university/higher ed inst when you have your doctorate?

Definitely not	5,6 %
Probably not	8,6 %
Probably	34,8 %
Definitely	51,0 %

47. If you could start pg studies in the same subject again would you still choose the same university/higher ed inst? (CAT slight diff quest)

Definitely not	11,2 %
Probably not	12,0 %
Probably	24,4 %
Definitely	52,4 %

50. Are you concerned about being unemployed when your postgraduate studies are completed?

Not at all	20,2 %
Not very much	21,6 %
Quite a lot	27,3 %
A great deal	30,9 %

51. Does your department provide support for a continued career in research?

Yes	24,4 %
No	20,1 %
The question has not arisen	55,6 %

52. When you finish your doctorate, would you like your career to be in university research?

No	5,6	Probably not	12,3	Probably yes	32,9	Yes	49,2
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53. When you finish your doctorate, would you like to undertake a research career outside of the university?

No	6,1	Probably not	16,1	Probably yes	45,7	Yes	32,1
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54. When you finish your doctorate, would you like a professional career unrelated to research?

No	20,3	Probably not	30,3	Probably yes	34,9	Yes	14,6
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55.. What overall grade would you give your pg pgm so far?

Very bad	4,4 %	Bad	21,8 %	Good	59,1 %	Excellent	14,7 %
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56. Give the reasons that led you to choose the university where you are taking the doctorate. Also comment on any other issue that you consider to be relevant.

(open response)



The Finnish Higher Education Evaluation Council

Dear doctoral student!

What do you feel about your doctoral studies and how much time do you devote to them and to other forms of work? How do the courses and supervision function, what is your working environment like, and what is the impact of your studies on your own values? It is questions like these that the Finnish Higher Education Evaluation Council and the Ministry of Education want to study with the help of this questionnaire. The survey is intended to reflect the views of students themselves. It aims to provide the basis for a general discussion of how well doctoral education in Finland functions today. The data collected with the questionnaire will be used in the thematic discussions of the external evaluation team and in an international project called International Mirror for Postgraduate Students.

Your responses will remain completely confidential. The respondents cannot be recognised. All IP information will only be in Tietotalo's server. There are almost 20 000 potential respondents. So there might be some difficulties with Internet connections, which are not due either to the programme or the server.

If you have technical problems in answering, please, inform jari.huuskonen@tietotalo.fi.

We hope that you will take the time to fill in the questionnaire. Please, be patient and fill in each question and subquestion carefully before proceeding to the next one; otherwise the programme hinders your progression. Lastly, never use Enter-key while answering. Press Continue-icon at the end of each page to proceed.

Answering will take at least 30 minutes.

Thank you for participating!

At first, a few general questions about your background and doctoral studies

1. When did you begin your doctoral studies? Please write down the year in four digits.

less than a year ago **13 %** year _____

2. Were you enrolled as a doctoral student during the autumn term of 2004?

yes **92 %**
 no, I have been awarded a doctorate **1 %**
 no, I have been awarded a licentiate degree **1 %**
 no, I have given up doctoral studies **0 %**
 no, I have taken time off for some other reason **6 %**

3. Your gender

female **56 %**
 male **44 %**

4. Your age _____

5. Your nationality

Finnish **92 %**
 other **8 %**

what (nationality) _____

6. What category best describes your doctoral studies? (regardless of your funding)

a doctoral student at a graduate school funded by the Ministry of Education **23 %**
 a doctoral student at a graduate school or doctoral programme provided by your own university or some other institution **27 %**
 a doctoral student outside structured programmes **50 %**

7. How actively did you pursue doctoral studies during the autumn term of 2004 (as a percentage of a full-time post)?

0-9 **20 %** 10-40 **19 %** 41-60 **10 %** 61-80 **10 %** 81-100 **41 %**

8. During the autumn term of 2004 how many hours each week did you devote to your doctoral studies on average?

Include here hours spent on research and study related to doctor's degree

< 5 **17 %** 5-9 **10 %** 10-19 **10 %** 20-29 **13 %** 30-39 **23 %**
 40-49 **18 %** 50-59 **5 %** ≥ 60 **4 %**

9. During the autumn term of 2004 how many hours did you work each week on average? Include here all hours related to BOTH your doctoral studies, administration, project work etc. within the university AND other work such as part- or full-time work elsewhere

< 5 **7 %** 5-9 **2 %** 10-19 **2 %** 20-29 **2 %** 30-39 **21 %** 40-49 **43 %**
 50-59 **16 %** ≥ 60 **7 %**

10. By the end of the autumn term of 2004 how large a proportion of your doctoral studies would you estimate that you had completed?

20% ≤ **29 %** 21-40% **23 %** 41-60% **19 %** 61-80% **16 %**
 > 80% **13 %**

Are you a full-time doctoral student?

yes **59 %** no **41 %**

11. During the autumn term 2004, to which of the following activities did you devote most of your daily working hours?

for thesis work **37 %**
 for doctoral studies other than thesis work **10 %**
 for something else at your department (e.g. teaching) or administrative duties **4 %**
 divided evenly **6 %**
 don't know **2 %**

12. What was your primary reason for undertaking doctoral studies? Please choose only one option.

interest in the subject **28 %**
 to prepare for a career in teaching or research at university **10 %**
 to prepare for a career in teaching or research at polytechnic **2 %**
 to prepare for a career in research outside higher education **6 %**
 to prepare for some other professional career **9 %**
 encouragement by your professor/supervisor **6 %**
 natural continuation of your studies/career **30 %**
 bad employment situation **8 %**
 other **1 %**

what (reason) _____

13. What degree did you have when you began doctoral studies? Please write down also the year of graduation in four digits.

bachelor's degree **3 %**
 master's degree **87 %**
 licentiate **5 %**
 licentiate in medicine, veterinary medicine or dentistry **4 %**
 undergraduate student **1 %**
 other **0 %**

what degree _____

year of graduation _____

14. What did you do prior to the enrolment as a doctoral student? Please choose only one option.

I was a student	32 %
I had a post or worked in a research project at the university	17 %
I worked in a research project funded by the Academy of Finland	3 %
I worked in a research project funded by Tekes	4 %
I worked at a research institute outside university	7 %
I did some other work than research in teaching	9 %
I did some other work than research in industry or business	11 %
I did some other work than research in public administration	9 %
I did some other work than research by employing myself (e.g. in my own company)	2 %
I was a trainee (e.g. in EU)	1 %
I took care of my child/children at home	2 %
I was unemployed	3 %
I did something else	2 %

what did you do? _____

Are you a doctoral student in medicine, veterinary medicine or dentistry?

yes 9 % no 88 %

15. Are you going to take a licentiate degree?

yes 12 % no 54 % I already have it 10 % don't know 15 %

16. In which year do you expect to submit your doctoral thesis? Please write down the year in four digits.

don't know 18 % year _____

17. To what extent is the following true about the support, prior information and introduction you were given before your doctoral studies?

	very little / not at all	not very much	a great deal	to a very great extent
a) teachers in your undergraduate studies gave you support and encouraged you to go on with doctoral studies	25 %	33 %	33 %	9 %
b) the prior information about doctoral studies was satisfactory	13 %	49 %	35 %	3 %
c) the department's introduction for newly enrolled doctoral students was satisfactory	31 %	43 %	23 %	3 %
d) you were adequately informed about your rights and obligations as a doctoral student	33 %	46 %	19 %	2 %
e) the requirements for enrolment as a doctoral student were clear	10 %	35 %	47 %	9 %

Financing

18. Who has the main responsibility for finding funding for your doctoral studies?

mainly myself	42 %
mainly my supervisor	28 %
my supervisor and myself together	30 %

19. What was your principal source of income during the autumn term of 2004? Please choose only one option.

doctoral student place funded by the Ministry of Education (so called <i>tutkijaopiskelijapaikka</i>)	17 %
a post at the university	15 %
research funding by the Academy of Finland	10 %
research funding by Tekes	6 %
funding by a research institute outside university	6 %
a scholarship by a university	3 %
a scholarship by a foundation	12 %
international scholarship (e.g. Fulbright)	0 %
funding by industry or business	3 %
EU-funding	2 %
some other paid work of your own	20 %
some other source of income	4 %

what (source of income) _____

20. Were you satisfied with this source of income during the autumn term of 2004?

yes 71 % no 29 %

21. Have you been satisfied with your source(s) of income?

yes 61 % no 39 %

22. If you haven't been satisfied with your source(s) of income in the course of your doctoral studies, is this due to You may choose more than one option

low wage level	21 %
fragmentary funding (rahoituksen pätkittäisyys)	19 %
some other reason	5 %
I haven't had funding	9 %

23. In all, how many months of your doctoral studies have been and/or will be funded? With respect to the future, please count only those months you know for sure.

Courses and thesis work

24. How many study weeks/credits are included in your doctoral degree for studies other than thesis work?

20 ≤ 11 % 21–40 43 % 41–60 32 % > 60 5 % don't know 9 %

25. To what extent have you participated in the courses, seminars or other activities organised by graduate school(s) in the course of your doctoral studies?

very little / not at all	not very much	a great deal	to a very great extent
16 %	39 %	37 %	8 %

26. How well do the following statements describe the courses in your doctoral programme?

	very little / not at all	not very much	a great deal	to a very great extent
a) the quality of the courses is consistently high	4 %	26 %	63 %	7 %
b) the balance between the study weeks/credits for course work and my thesis is a good one	4 %	25 %	65 %	6 %
c) the courses are relevant to the work I am doing on my thesis	8 %	34 %	50 %	9 %
d) the courses offered fit in with my wishes and needs	9 %	39 %	46 %	6 %
e) research ethics have been dealt with in courses and seminars	28 %	43 %	25 %	3 %

27. How did you select the subject of your thesis?

mainly on my own	47 %
a proposal from my department or supervisor	46 %
a proposal from outside university, e.g. from a company	4 %
I have not yet selected a subject	3 %

28. How are you working on your thesis?

mainly on my own	71 %
as much on my own as in a research team	23 %
mainly in a research team	6 %

29. In what language are you writing your thesis? You may choose more than one option.

Finnish 22 % Swedish 2 % English 81 % other 1 %

30. What type of thesis do you intend to submit?

monograph 38 % collection of articles 62 %

Supervision

31. Do you have a principal supervisor?

yes, female 25 % yes, male 71 % no 4 %

32. Do you have one or more assistant supervisors or members in your supervising group (in addition to your principal supervisor)?

yes, only female 13 % yes, only male 34 %
yes, female and male 13 % no 40 %

In all, how many (principal and assistant)? _____

33. Do your assistant supervisor(s) or members in your supervising group (other than your principal supervisor) come from You may choose more than one option.

your own department	52 %
another department at your university	14 %
another university or institution in Finland	19 %
abroad	9 %
I have no assistant supervisors	25 %

34. Have you switched your supervisor(s)?

yes, at my own request 6 % yes, for some other reason 9 %
no 85 %

35. Who, in practice, provides most of your supervision?

principal supervisor	65 %
assistant supervisor(s) or members in my supervising group	22 %
someone else	13 %

who _____

36. Give an estimate of the number of hours of supervision you have been given during the autumn term of 2004.

0 8 % 1-5 35 % 6-10 23 % 11-15 13 % 16-20 8 % > 20 13 %

37. To what extent has your supervisor(s):

	very little / not at all	not very much	a great deal	to a very great extent
a) displayed interest in your postgraduate studies	10 %	31 %	43 %	16 %
b) discussed methodological issues with you	15 %	38 %	36 %	10 %
c) discussed theory with you	17 %	39 %	34 %	9 %
d) provided constructive criticism of your research	14 %	36 %	39 %	11 %
e) discussed your plans for the future with you	22 %	40 %	31 %	8 %
f) discussed research ethics with you	42 %	42 %	14 %	2 %

38. Has there been any follow up of your individual study plan/research plan during 2004?

yes, I am satisfied with the follow up	41 %
yes, but I am not satisfied with the follow up	12 %
no	31 %
I do not have an individual study/research plan	10 %
don't know	7 %

39. To what extent during 2004 in the course of your doctoral studies have you

	very little / not at all	not very much	a great deal	to a very great extent
a) worked as independently as you wanted to	3 %	6 %	47 %	44 %
b) been provided with as much supervision as you wanted	16 %	33 %	38 %	12 %
c) found yourself in a situation of dependence on your supervisor which made you feel uncomfortable	50 %	34 %	12 %	4 %
d) experienced shortcomings in your supervision that have hampered your research	38 %	40 %	17 %	5 %
e) seriously considered switching supervisors	68 %	19 %	8 %	5 %
f) had the opportunity to take part in general discussions about your subject area with your supervisor and other researchers	16 %	36 %	38 %	10 %

Research/study environment

40. Have you had access to a workplace of your own at your department, including computer, printing and copying facilities?

yes 76 % some of the time 8 % no 16 %

41. To what extent during 2004 in the course of your doctoral studies have you

	very little / not at all	not very much	a great deal	to a very great extent
a) experienced your doctoral studies as positive and stimulating	6 %	25 %	53 %	16 %
b) experienced unacceptable pressure and stress	20 %	47 %	25 %	7 %
c) experienced the environment in your department as creative	14 %	41 %	39 %	6 %
d) felt that you were an accepted member of the research collective	10 %	23 %	50 %	17 %
e) had the feeling that you could exert influence in your department	25 %	50 %	22 %	3 %
f) felt that doctoral studies involve demands that are not proportionate to the length of the programme	20 %	53 %	22 %	5 %

42. In the context of your doctoral studies, have you identified yourself as

a (doctoral) student	35 %
an early stage researcher	45 %
a professional researcher	11 %
don't know	8 %

43. Have you experienced discrimination because of your gender?

	not at all	1	2	3	4	5	6	7	to a very great extent
a) by other doctoral students	89 %	6 %	2 %	1 %	1 %	0 %	0 %	0 %	
b) by teachers in the courses you have attended	88 %	7 %	2 %	1 %	1 %	1 %	0 %	0 %	
c) by supervisors	85 %	7 %	3 %	2 %	2 %	1 %	1 %	1 %	
d) by administrative staff	87 %	6 %	3 %	1 %	1 %	1 %	1 %	1 %	

44. In the course of your doctoral studies have you spent some period of time studying at another institution?

in Finland	7 %	months in Finland _____
abroad	18 %	months abroad _____
no	77 %	

45. In the course of your doctoral studies have you done research in cooperation with other researchers or research groups?

	very little / not at all	not very much	a great deal	to a very great extent
a) in Finland	34 %	36 %	25 %	5 %
b) abroad	57 %	26 %	15 %	3 %
c) with companies or funding organisations	62 %	22 %	13 %	3 %

Professional development

46. During 2004 have you been involved in any of the following activities?

	yes	no
a) participation in one or more national conferences relevant to your postgraduate studies	53 %	47 %
b) participation in one or more international conferences relevant to your postgraduate studies	54 %	46 %
c) presentation of your research in a context which will make it more accessible for the general public	40 %	60 %
d) presentation of your research through publication or at conferences	60 %	40 %
e) submission of your research at some form of seminar at your department	56 %	44 %

47. To what extent have your doctoral studies involved

	very little / not at all	not very much	a great deal	to a very great extent
a) broadening your general education	7 %	32 %	48 %	13 %
b) acquiring greater understanding	34 %	37 %	22 %	7 %
c) reflection over your own values	16 %	37 %	38 %	9 %
d) involvement in the development of society	29 %	42 %	23 %	6 %
e) greater understanding of social and cultural differences based on gender	48 %	36 %	11 %	5 %
f) acquiring knowledge of scientific or scholarly methodology	4 %	18 %	56 %	21 %
g) acquiring knowledge of scientific theories	3 %	20 %	55 %	22 %
h) acquiring the ability to carry out your own research independently	2 %	13 %	53 %	31 %
i) acquiring knowledge about methods and theories used in other fields	7 %	42 %	41 %	10 %
j) acquiring deeper insights into research ethics	21 %	48 %	26 %	5 %

48. To what extent have you acquired skills/competencies in the following fields in the course of your doctoral studies?

	very little / not at all	not very much	a great deal	to a very great extent
a) an increased ability to write in a clear and comprehensible way	3 %	20 %	58 %	18 %
b) greater ability to present your material orally in a clear and comprehensible way	6 %	28 %	52 %	14 %
c) ability to approach scientific questions systematically	3 %	23 %	60 %	14 %
d) ability to develop strategies by combining various perspectives	4 %	33 %	51 %	12 %
e) international cooperation	18 %	41 %	30 %	10 %
f) networking	14 %	44 %	34 %	8 %
g) language skills	7 %	29 %	48 %	15 %
h) teamwork	17 %	44 %	32 %	7 %
i) project work	16 %	34 %	40 %	9 %
j) leadership and managerial skills	34 %	45 %	18 %	3 %
k) public administration	42 %	43 %	13 %	2 %
l) elaborating innovative solutions	19 %	41 %	33 %	6 %
m) entrepreneurship (valmiuksia yrittäjyyteen)	66 %	27 %	5 %	2 %

Finally, some questions about employability

49. Do you want to have a career in research when you have your doctorate?

definitely not	probably not	probably	definitely
5 %	26 %	48 %	20 %

50. Do you want to have a professional career other than research when you have your doctorate?

	definitely not	probably not	probably	definitely
a) in the field of teaching	13 %	40 %	40 %	7 %
b) in managerial or consulting positions in industry or business	19 %	32 %	41 %	8 %
c) in public administration or service	16 %	42 %	38 %	4 %
d) as an entrepreneur (employing yourself e.g. by establishing a company of your own)	35 %	43 %	19 %	3 %

51. Does your department provide support for a continued career in research?

yes 26 % no 22 % the question has not arisen 52 %

52. Do you worry about being unemployed when your doctoral studies are completed?

very little / not at all	not very much	a great deal	to a very great extent
31 %	36 %	19 %	13 %

53. Does your doctoral programme, in your opinion, prepare you sufficiently

	very little / not at all	not very much	a great deal	to a very great extent
a) for an academic career in the scientific community	3 %	21 %	61 %	15 %
b) for a professional career in industry, business, administration etc.	23 %	47 %	27 %	3 %
c) for entrepreneurship	61 %	34 %	5 %	1 %

54. If you had to choose again would you still choose to begin doctoral studies?

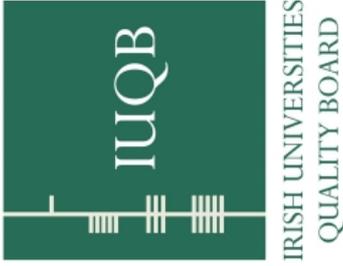
definitely not	probably not	probably	definitely
2 %	12 %	43 %	43 %

55. What overall grade would you give your doctoral programme or doctoral education provided by your university/institution so far?

very bad	bad	good	excellent
4 %	21 %	67 %	9 %

If there are other aspects of doctoral education or if you have specific positive or negative experiences that you would like to tell us about please use the space below ((You have 6 000 characters space to write down your answer. If your answer exceeds this, it will automatically be sent to the operator by e-mail. It is good to know that your answer will not disappear.))

THANK YOU FOR PARTICIPATING!



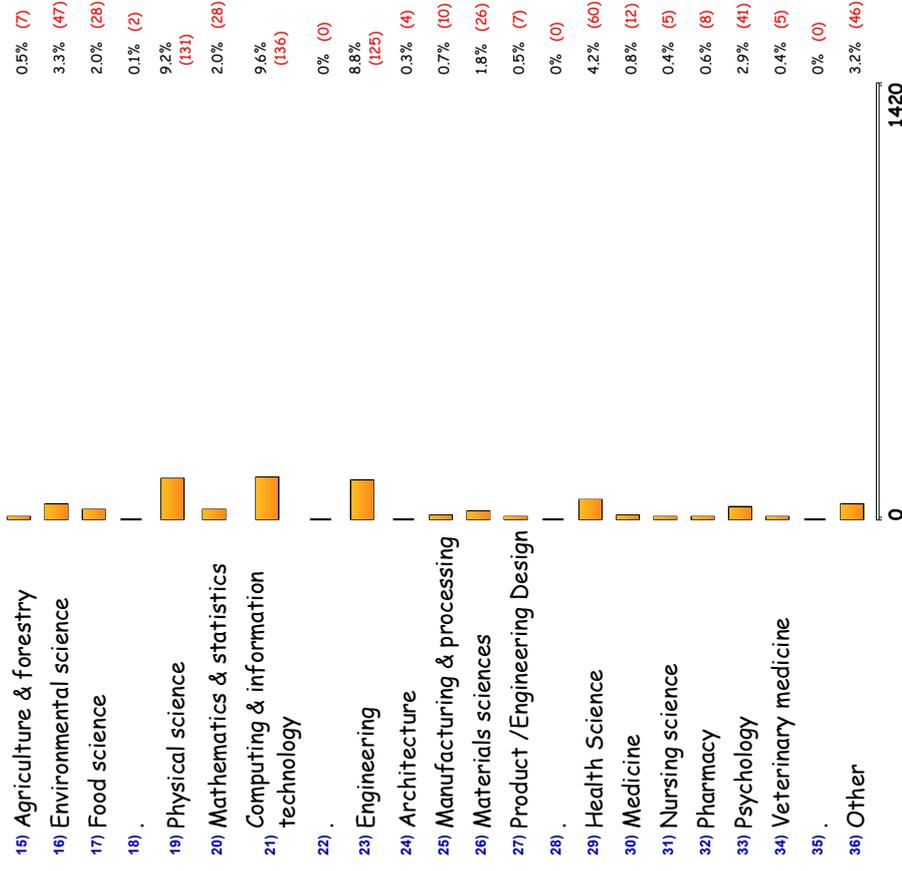
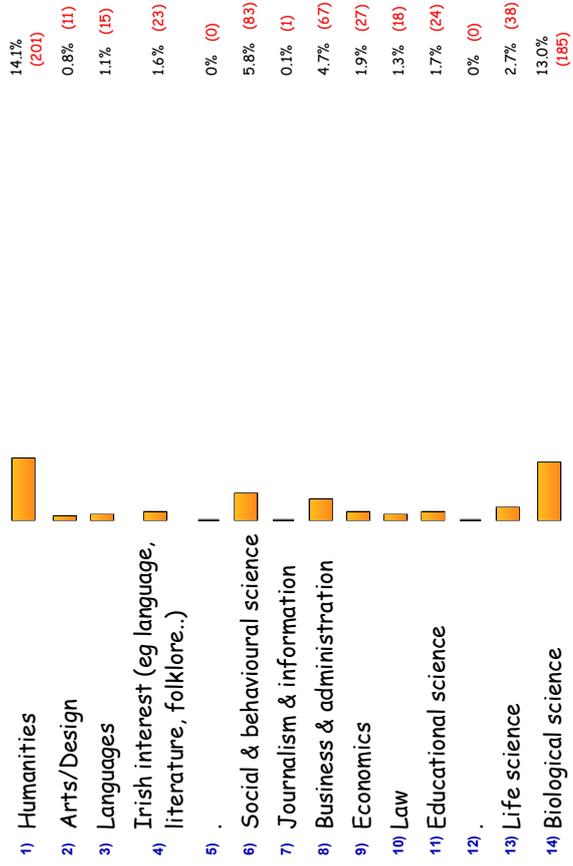
The Mirror for Irish Postgraduate Students 2005.

Survey finished 8/26/2005

Total Respondents: 1454

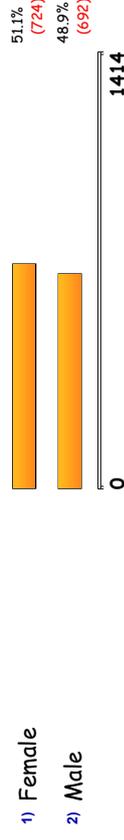
SECTION A - General Information & Background

1. To what broad subject field does your thesis belong?



1420 people answered this question (97.7%)

2. Your gender?



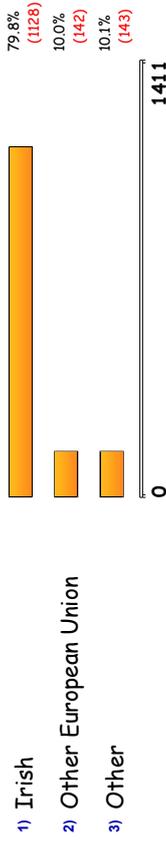
1414 people answered this question (97.2%)

3. Your age in years? (e.g. - 28)

Max: 70
 Min: -8987
 Mean (average): 22.43
 Median: 26.00
 Mode: 25
 Range: 9057
 Std. Deviation: 239.22

1422 people answered this question (97.8%)

4. Your nationality?



1411 people answered this question (97.0%)

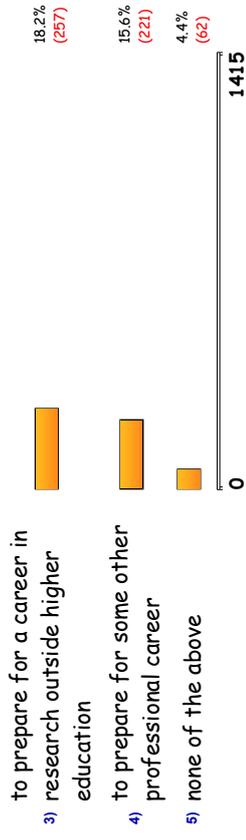
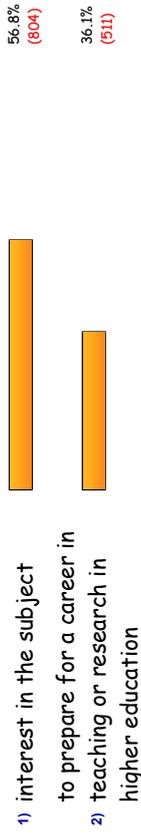
5. What degree(s) did you have when you started your current postgraduate studies?

(for those from which you have already graduated, please indicate the year of graduation - eg 1998)

	Min	Max	Avg
1) Bachelors degree	0	2005	1857.90
2) Graduate Diploma	0	2004	1824.69
3) Postgraduate Diploma	0	2005	1869.46
4) Masters degree (research)	0	2005	1843.96
5) Masters degree (taught)	0	2005	1810.87
6) PhD degree	0	2005	1835.83
7) None of the above	0	2003	1109.67

1282 people answered this question (88.2%)

6. What was your primary reason for undertaking postgraduate studies?



1415 people answered this question (97.3%)

7. To what extent is the following true about the support, prior information and introduction you were given before your postgraduate studies?

	very little / not at all	somewhat	a good deal	to a very great extent
- Teachers in your undergraduate programme gave you support and encouraged you to go on with postgraduate studies	327 (23.4%)	434 (31.0%)	379 (27.1%)	261 (18.7%)
- Other students in your undergraduate programme gave you support and encouraged you to go on with postgraduate studies	514 (37.1%)	487 (35.2%)	303 (21.9%)	82 (5.9%)
- The prior information about postgraduate studies was satisfactory	333 (23.8%)	657 (47.0%)	367 (26.3%)	43 (3.1%)
- The department's introduction for newly enrolled postgraduate students was satisfactory	541 (38.6%)	498 (35.6%)	298 (21.3%)	66 (4.7%)
- You were adequately informed about your rights and obligations as a postgraduate student	621 (44.3%)	464 (33.1%)	257 (18.3%)	64 (4.6%)
- The requirements for enrolment as a postgraduate student were clear	228 (16.2%)	482 (34.3%)	523 (37.3%)	173 (12.3%)

1404 people answered at least one part of this question (96.6%)

8. In what year did you begin your current postgraduate studies? (eg 1997 and not 97)

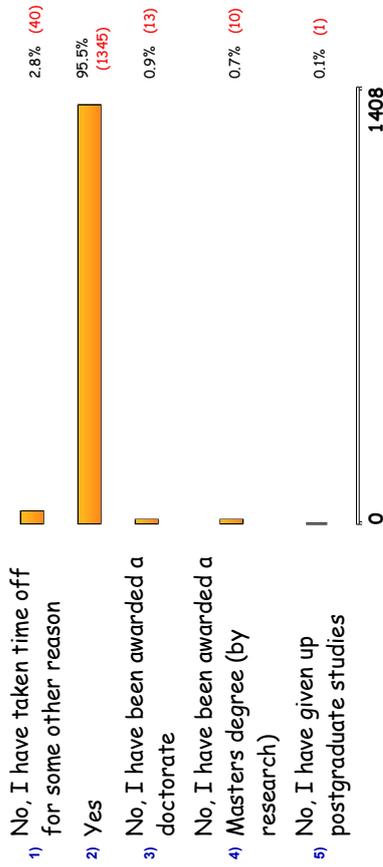
If you started with a Masters and transferred to a PhD without being awarded the Masters, then give the year you started the Masters.

Max: 20002
 Min: 4
 Mean (average): 2,009.83
 Median: 2,003.00
 Mode: 2004
 Range: 19998
 Std. Deviation: 491.83

1403 people answered this question (96.5%)

9. Were you enrolled as a postgraduate student during the autumn semester of 2004/05?

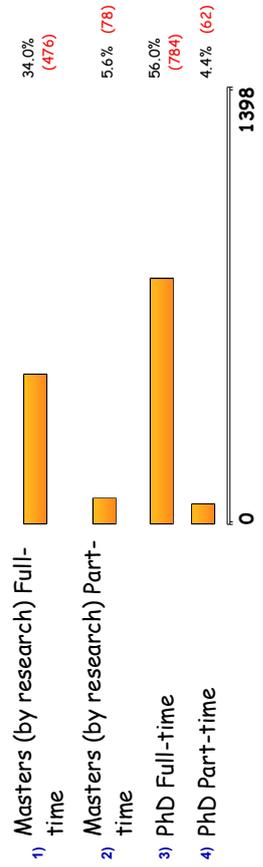
autumn semester is typically August to mid January



1408 people answered this question (96.8%)

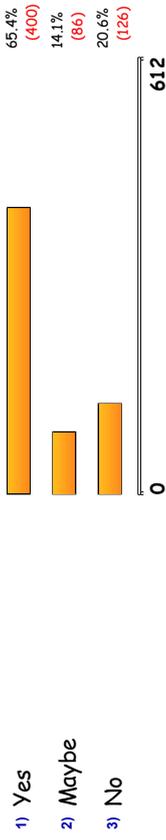
10. What was your registration status during the autumn semester of 2004/05?

autumn semester is typically August to mid January



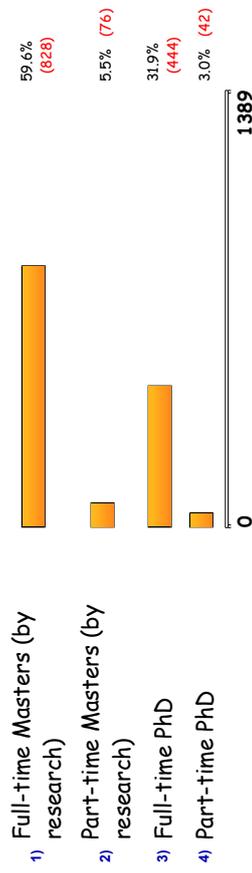
1398 people answered this question (96.1%)

11. If registered on the Masters (by research) register do you intend to apply to transfer to the PhD register at a later date?



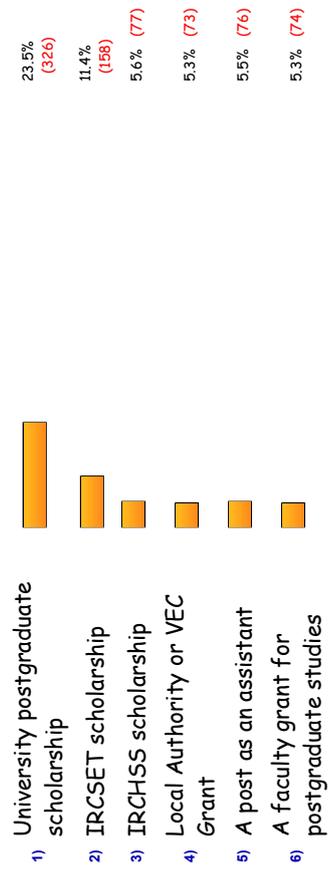
612 people answered this question (42.1%)

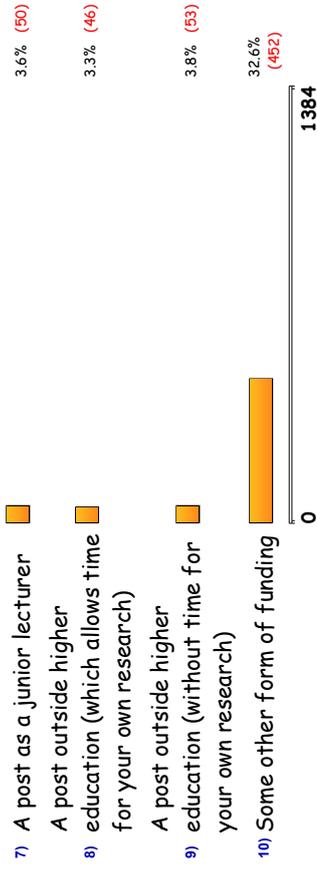
12. What was your registration status when you commenced your postgraduate study programme?



1389 people answered this question (95.5%)

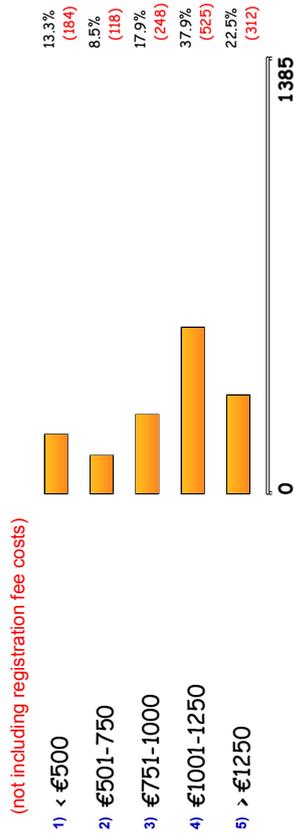
13. What was your principle source of income during the autumn semester of 2004/05?





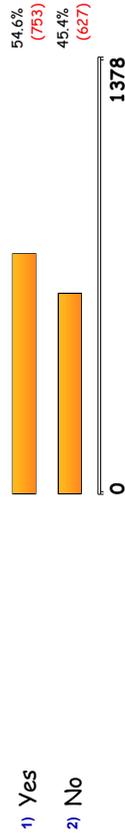
1384 people answered this question (95.2%)

14. What level of Monthly "take home" income did you receive during the autumn semester of 2004/05?



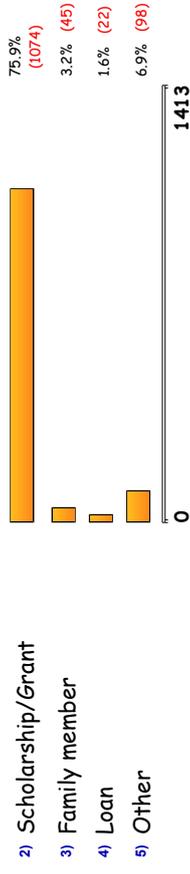
1385 people answered this question (95.3%)

15. Were you satisfied with this source of income during the autumn semester of 2004/05?



1378 people answered this question (94.8%)

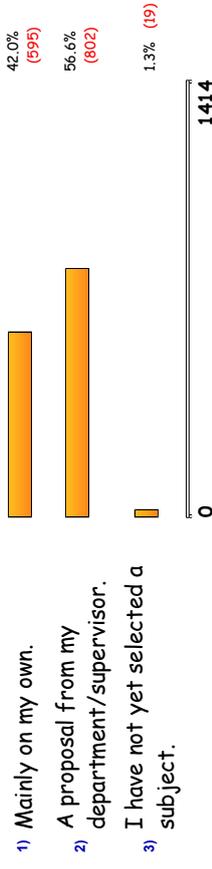
16. Who pays your fees?



1413 people answered this question (97.2%)

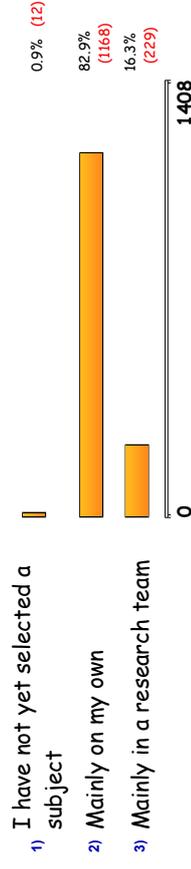
SECTION B - Supervision and Professional Development

17. How did you select the subject of your thesis?



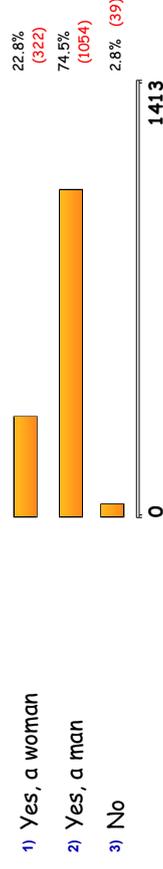
1414 people answered this question (97.2%)

18. How are you working on your thesis?



1408 people answered this question (96.8%)

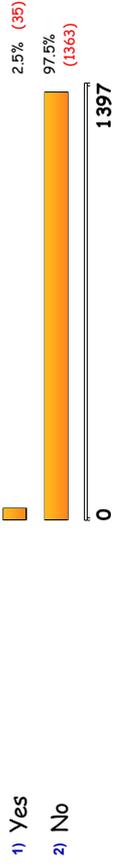
19. Do you have one principal supervisor?



1413 people answered this question (97.2%)

1413 people answered this question (97.2%)

20. Have you switched to another supervisor at your own request?



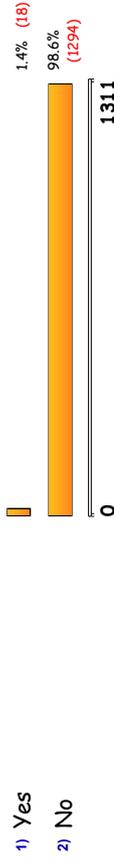
1397 people answered this question (96.1%)

21. How many assistant supervisors, of each gender, do you have?

	Min	Max	Avg
1) Number of Male assistant supervisors	0	8	0.56
2) Number of Female assistant supervisors	0	3	0.23

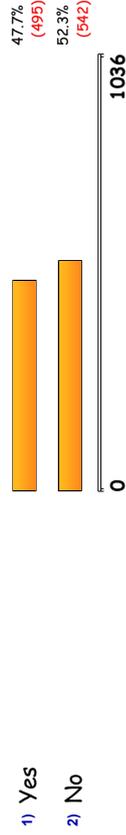
1204 people answered this question (82.8%)

22. Have you changed assistant supervisors at your own request?



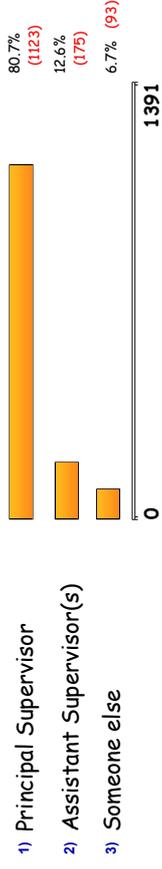
1311 people answered this question (90.2%)

23. Do all your assistant supervisors come from your own department?



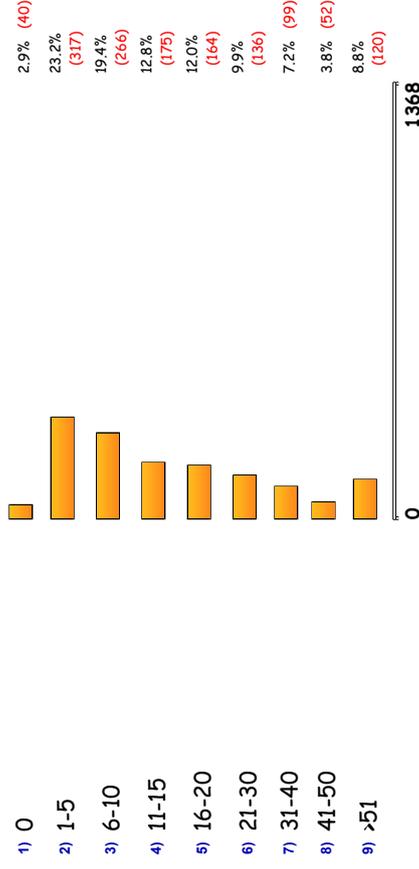
1036 people answered this question (71.3%)

24. Who, in practice, provides most of your supervision?



1391 people answered this question (95.7%)

25. Please estimate of the number of hours of supervision you were given during the autumn semester, 2004/05:



1368 people answered this question (94.1%)

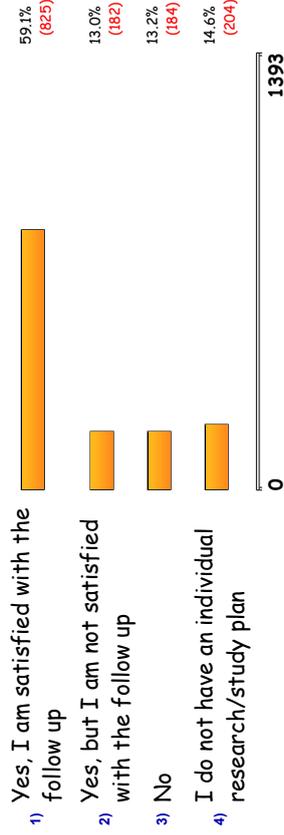
26. To what extent has your supervisor/assistant supervisors:

	very little / not at all	some what	a good deal	to a very great extent
1) - Directed your choice of optional courses/training modules	630 (46.1%)	391 (28.6%)	257 (18.8%)	1366 responses (6.6%)
2) - Displayed interest in your postgraduate studies	80 (5.7%)	270 (19.3%)	522 (37.2%)	1402 responses (37.9%)
3) - Discussed methodological issues with you	183 (13.0%)	362 (25.8%)	488 (34.6%)	1405 responses (26.8%)
4) - Discussed theory with you	234 (16.7%)	425 (30.2%)	449 (32.0%)	1405 responses (21.4%)
5) - Provided constructive criticism of your research	151 (10.8%)	362 (25.9%)	456 (32.6%)	1400 responses (31.0%)

- 6) - Discussed your plans for the future with you
- | | | | | |
|---------|---------|---------|---------|-----------|
| 333 | 433 | 374 | 266 | 1403 |
| (23.7%) | (30.9%) | (26.7%) | (19.0%) | responses |

1405 people answered at least one part of this question (96.6%)

27. Has there been any follow up from your supervisor(s) of your individual research/study plan during 2004/5?



1393 people answered this question (95.8%)

28. During the calendar year of 2004 have you been involved in any of the following activities?

	Yes	No
1) - Participation in one or more national conferences relevant to your postgraduate studies	773 (55.6%)	620 (44.6%)
2) - Participation in one or more international conferences relevant to your postgraduate studies	656 (47.4%)	730 (52.8%)
3) - Presentation of your research in a context which will make it more accessible for the general public	515 (37.6%)	858 (62.6%)
4) - Presentation of your research through publication or at conferences	772 (56.0%)	610 (44.2%)
5) - Submission of your research at some form of seminar at your department	736 (53.4%)	644 (46.8%)
6) - Membership of a group of postgraduate students (i.e. research group)	575 (42.0%)	796 (58.1%)

1390 people answered at least one part of this question (95.6%)

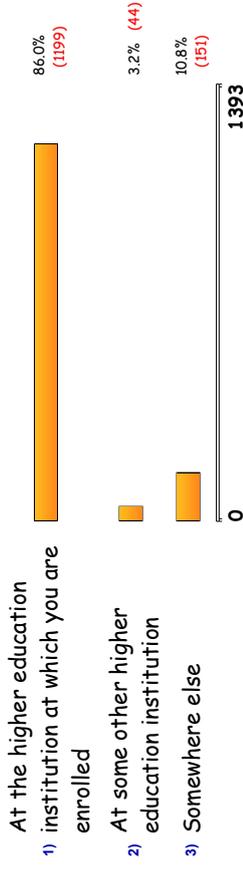
29. To what extent during the calendar year of 2004 in the course of your postgraduate studies have you:

	very little / not at all	somewhat	a good deal	to a very great extent
1) - Participated in advanced seminars/research seminars outside your courses	627 (45.4%)	442 (32.0%)	229 (16.6%)	83 (6.0%)
2) - Worked as independently as you wanted to	29 (2.1%)	155 (11.2%)	531 (38.3%)	671 (48.4%)
3) - Been provided with as much supervision as you wanted	238 (17.3%)	383 (27.9%)	441 (32.1%)	313 (22.8%)
4) - Met your supervisor in a situation not connected with supervision	460 (33.3%)	484 (35.1%)	320 (23.2%)	118 (8.6%)
5) - Found yourself in a situation of dependence on your supervisor which made you feel uncomfortable	1009 (73.1%)	237 (17.2%)	81 (5.9%)	56 (4.1%)
6) - Experienced shortcomings in your supervision that have hampered your research	680 (49.4%)	423 (30.7%)	140 (10.2%)	136 (9.9%)
7) - Seriously considered switching supervisor	1083 (78.8%)	126 (9.2%)	72 (5.2%)	95 (6.9%)
8) - Experienced your postgraduate studies as positive and stimulating	114 (8.3%)	381 (27.6%)	564 (40.9%)	322 (23.4%)
9) - Had the opportunity to take part in general discussions about your subject area with your supervisor and other researchers	253 (18.4%)	467 (33.9%)	442 (32.1%)	219 (15.9%)
10) - Experienced pressure and stress giving you negative experiences	361 (26.3%)	488 (35.5%)	304 (22.1%)	224 (16.3%)
11) - Experienced the environment in your department as creative	364 (26.5%)	558 (40.6%)	376 (27.4%)	77 (5.6%)
12) - Felt that you were an accepted member of the research collective	232 (16.9%)	445 (32.4%)	483 (35.2%)	214 (15.6%)
13) - Had the feeling that you could exert influence in your	738 (53.7%)	402 (29.3%)	187 (13.6%)	49 (3.6%)

1387 people answered at least one part of this question (95.4%)

SECTION C - Information on your Postgraduate Studies

31. Where do most of your postgraduate studies take place?



1393 people answered this question (95.8%)

32. In the course of your postgraduate studies how much time have you spent studying at another institution.

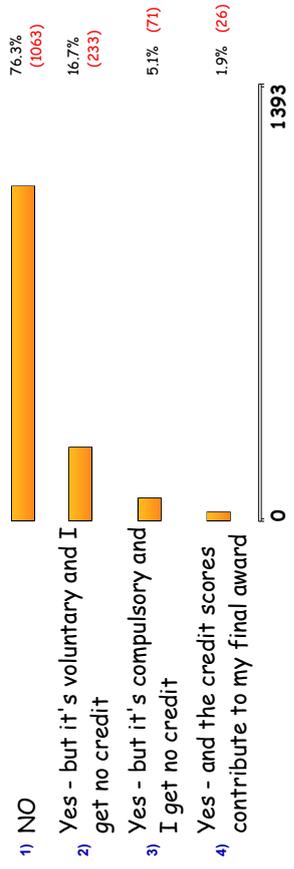
(e.g. - educational, commercial or industrial)

Category	Min	Max	Avg
1) Ireland, but outside your registered institution	0	200	1.90
2) outside Ireland	0	120	1.39

1042 people answered this question (71.7%)

33. Do you take Courses (Modules) as part of your postgraduate studies?

WARNING - according to your response you will be jumped to the next appropriate question.



department

- Felt that postgraduate studies involve demands that are not proportionate to the length of the programme

14) 455 (33.2%) 507 (37.0%) 237 (17.3%) 174 (12.7%) 1371 responses

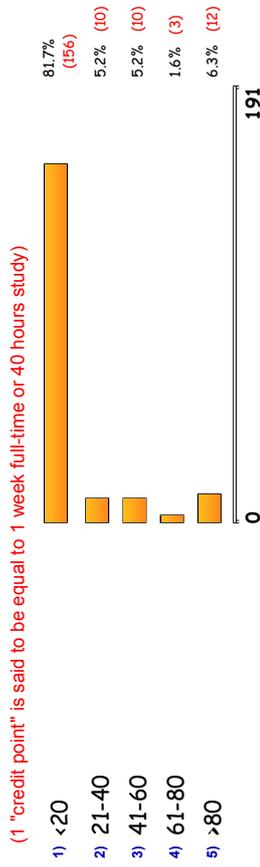
1385 people answered at least one part of this question (95.3%)

30. To what extent have your postgraduate studies involved:

	very little/not at all	somewhat	a good deal	to a very great extent
1) - Broadening your general education	122 (8.8%)	344 (24.9%)	592 (42.8%)	329 (23.8%)
2) - Acquiring greater understanding of people from another cultural or ethnic background	435 (31.5%)	401 (29.0%)	350 (25.3%)	199 (14.4%)
3) - Reflection over your own values	244 (17.6%)	418 (30.1%)	511 (36.8%)	216 (15.6%)
4) - Involvement in the development of society	555 (40.1%)	426 (30.8%)	283 (20.5%)	121 (8.7%)
5) - Greater understanding of social and cultural differences based on gender	710 (51.6%)	347 (25.2%)	206 (15.0%)	116 (8.4%)
6) - Acquiring knowledge of scientific or scholarly methodology	54 (3.9%)	237 (17.1%)	624 (45.1%)	470 (34.0%)
7) - Acquiring knowledge of scientific theories	210 (15.2%)	262 (19.0%)	565 (40.2%)	366 (26.6%)
8) - Acquiring the ability to carry out your own research independently	14 (1.0%)	144 (10.4%)	520 (37.7%)	703 (50.9%)
9) - Acquiring knowledge about methods and theories used in other fields	144 (10.5%)	460 (33.4%)	536 (38.9%)	239 (17.4%)
10) - Acquiring deeper insights into research ethics	243 (17.7%)	475 (34.5%)	461 (33.5%)	197 (14.3%)
11) - Acquiring an increased ability to write clearly and comprehensibly	98 (7.1%)	347 (25.2%)	576 (41.8%)	360 (26.1%)
12) - Acquiring greater ability to present your material orally in a clear and comprehensible way	133 (9.7%)	320 (23.3%)	551 (40.1%)	373 (27.1%)

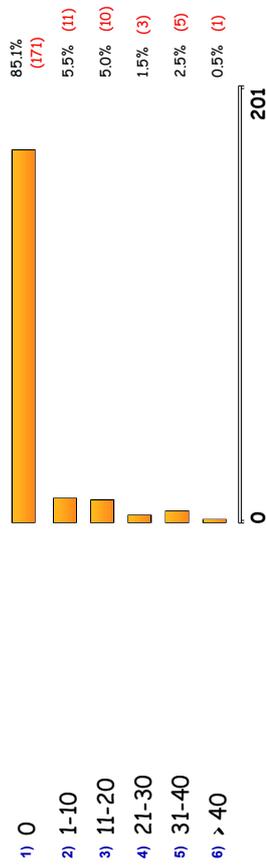
1393 people answered this question (95.8%)

34. How many "credit points" in your postgraduate programme are for course work?



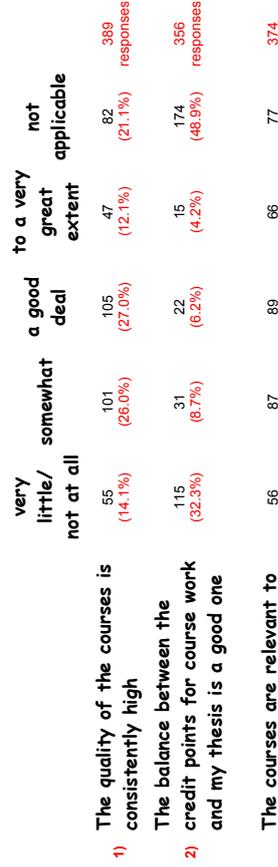
191 people answered this question (13.1%)

35. How many "credit points" are for courses you can choose yourself?



201 people answered this question (13.8%)

36. How well do the following statements describe the course work in your postgraduate programme?

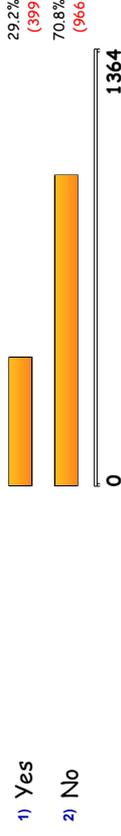


3) the work I am doing on my thesis (15.0%) (23.3%) (23.8%) (17.6%) (20.6%) responses

4) The courses offered fit in with my wishes and needs (19.0%) (27.9%) (22.5%) (9.9%) (20.9%) responses

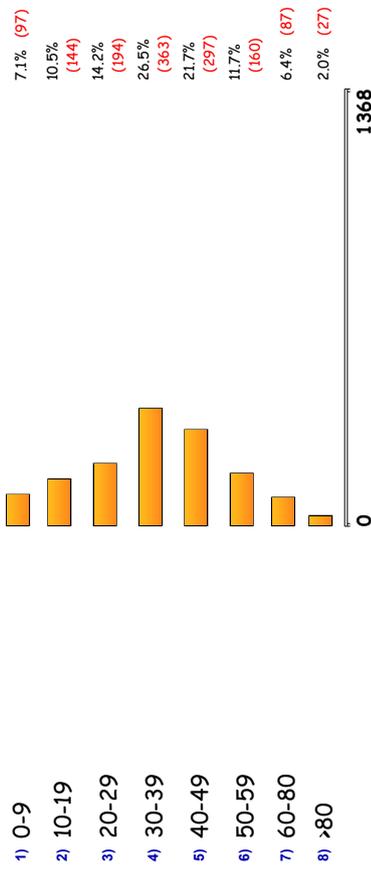
389 people answered at least one part of this question (26.8%)

37. Have you taken part in any teacher/tutor training sessions for postgraduate students or teachers?



1364 people answered this question (93.8%)

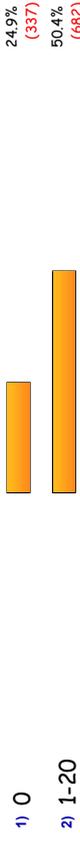
38. During the autumn semester of 2004/05 how many hours each WEEK did you devote to your postgraduate studies on average?

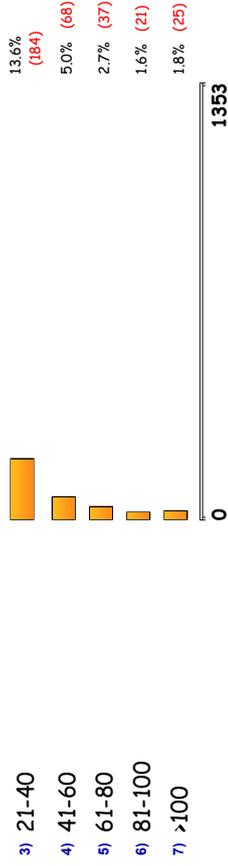


1368 people answered this question (94.1%)

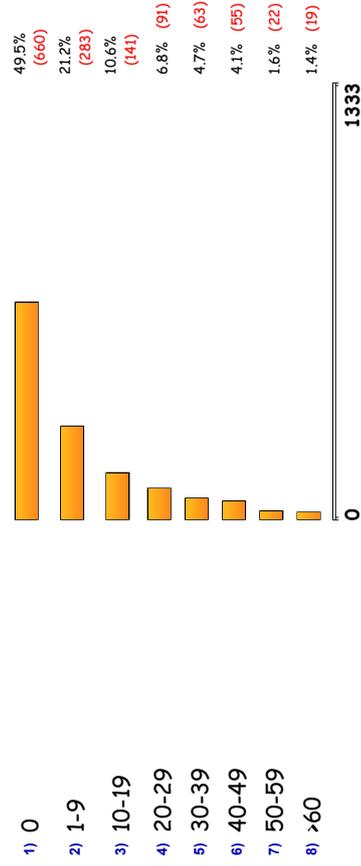
39. How much of your time was spent on other work for your department during the autumn semester of 2004/05?

Include time spent on teaching, tutorials, preparation time, supervision of laboratory sessions, marking, assessments and admin work.

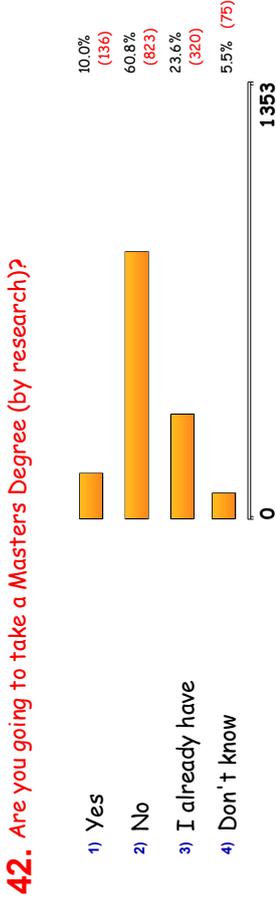
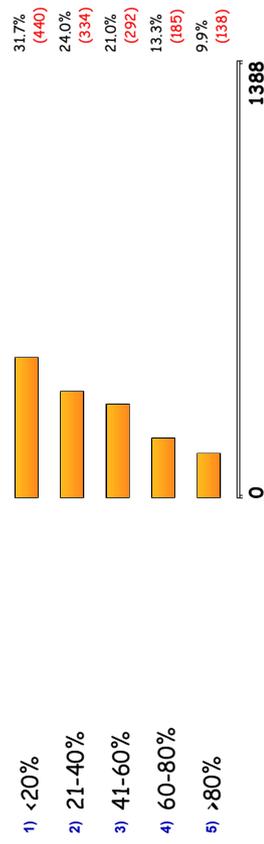




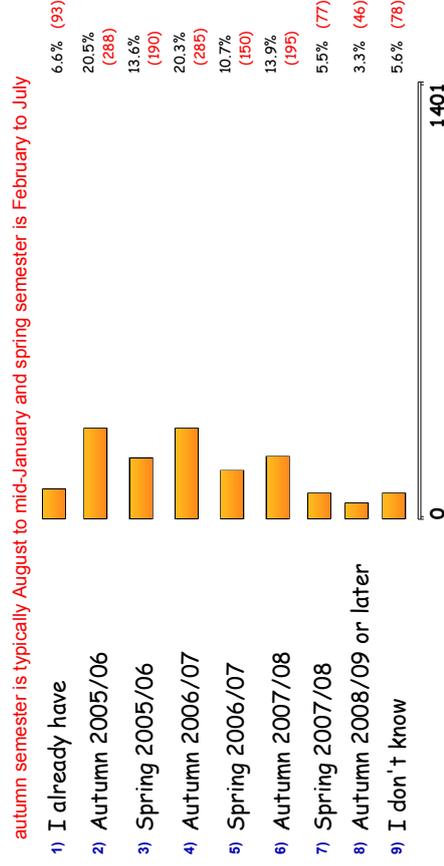
40. During autumn 2004/05 semester how many hours did you work each week, on average, on part-time or full-time work elsewhere?



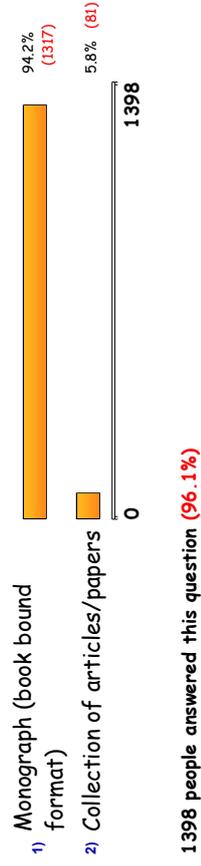
41. By the end of the autumn semester of 2004/05 - how large a proportion (as a percentage of your postgraduate studies) had you completed?



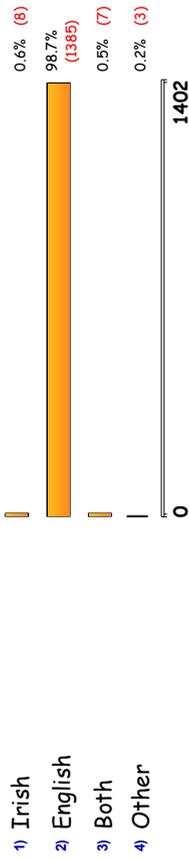
43. In which semester do you expect to submit your thesis?



44. What type of thesis do you intend to submit?



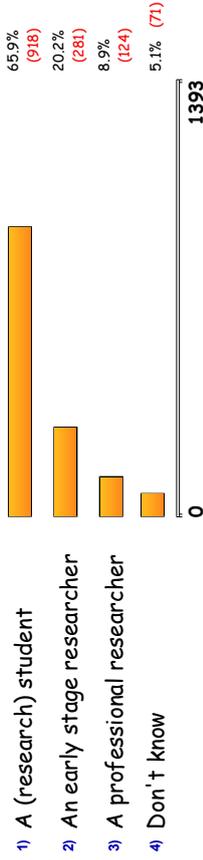
45. In what language are you writing your thesis?



1402 people answered this question (96.4%)

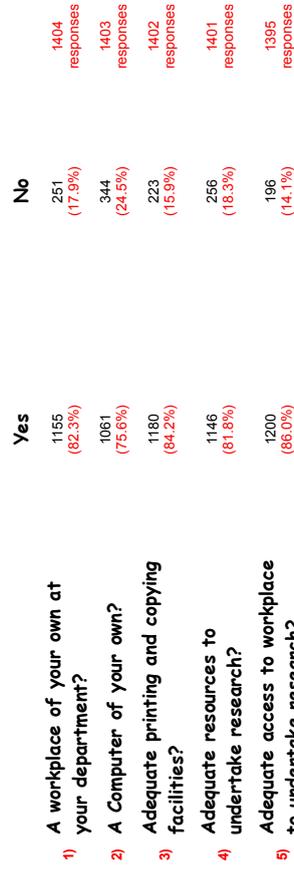
SECTION D - Research Environment

46. In the context of your research studies, have you identified yourself as



1393 people answered this question (95.8%)

47. Have you had access to:



1404 people answered at least one part of this question (96.6%)

48. How would you rate the other people in your work environment under the following headings:-

1 = not at all / very negative, ----- 4 = neutral, ----- 7 = very much so / very positive

	1	2	3	4	5	6	7
1) postgraduates... - friendliness	20 (1.5%)	28 (2.0%)	42 (3.0%)	168 (12.2%)	227 (16.5%)	422 (30.6%)	1379 (99.7%)
2) postgraduates... - helpfulness	23 (1.7%)	51 (3.7%)	65 (4.7%)	196 (14.2%)	281 (20.4%)	372 (27.0%)	1377 (99.6%)
3) postgraduates... - supportive	35 (2.6%)	40 (2.9%)	63 (4.6%)	217 (15.8%)	259 (18.9%)	368 (26.8%)	1372 (99.5%)
4) lecturers..... - approachability	29 (2.1%)	40 (2.9%)	87 (6.4%)	290 (21.4%)	318 (23.5%)	340 (25.1%)	1356 (99.4%)
5) lecturers..... - supportive	50 (3.7%)	58 (4.3%)	113 (8.4%)	299 (22.1%)	316 (23.4%)	310 (22.9%)	1353 (99.3%)
6) knowledgeable	22 (1.6%)	32 (2.4%)	89 (6.6%)	228 (16.9%)	294 (21.8%)	399 (29.2%)	1349 (99.2%)
7) supervisor(s)..... - approachability	31 (2.2%)	43 (3.1%)	57 (4.1%)	105 (7.6%)	192 (13.9%)	344 (25.0%)	613 (44.3%)
8) supervisor(s)..... - supportive	48 (3.5%)	53 (3.8%)	89 (6.4%)	115 (8.3%)	218 (15.7%)	329 (23.7%)	535 (38.6%)
9) knowledgeable	30 (2.2%)	44 (3.2%)	62 (4.5%)	103 (7.4%)	211 (15.2%)	355 (25.6%)	583 (42.0%)
10) admin staff..... - approachability	42 (3.1%)	47 (3.4%)	96 (6.9%)	183 (13.3%)	247 (18.0%)	343 (25.0%)	427 (30.7%)
11) admin staff..... - accommodating	54 (3.9%)	62 (4.5%)	88 (6.4%)	208 (15.1%)	237 (17.2%)	354 (25.7%)	373 (27.1%)
12) admin staff..... - helpfulness	56 (4.1%)	57 (4.1%)	100 (7.3%)	185 (13.5%)	245 (17.8%)	341 (24.8%)	391 (28.5%)

1387 people answered at least one part of this question (95.4%)

49. Have you experienced discrimination because of your gender?

1 = not at all --- 4 = a moderate amount --- 7 = to a very great extent

	1	2	3	4	5	6	7
By other postgraduate students	1262 (90.7%)	31 (2.2%)	18 (1.3%)	35 (2.5%)	20 (1.4%)	13 (0.9%)	1391 (99.9%)
By teachers in the courses you have attended	1281 (92.7%)	22 (1.6%)	24 (1.7%)	23 (1.7%)	17 (1.2%)	9 (0.7%)	1382 (99.8%)
By supervisors	1266 (91.1%)	35 (2.5%)	25 (1.8%)	25 (1.8%)	13 (0.9%)	14 (1.0%)	1390 (99.8%)
By administrative staff	1299 (93.8%)	19 (1.4%)	18 (1.3%)	31 (2.2%)	3 (0.2%)	7 (0.5%)	1385 (99.7%)

1391 people answered at least one part of this question (95.7%)

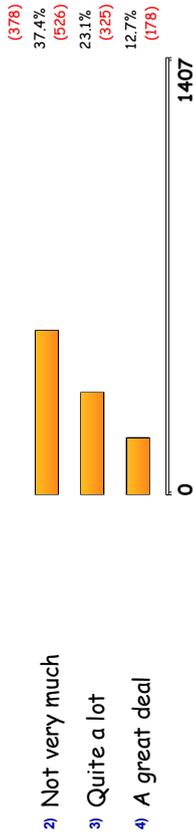
SECTION E - Your Future

50. Do you worry about being unemployed when your postgraduate studies are completed?

1) Not at all

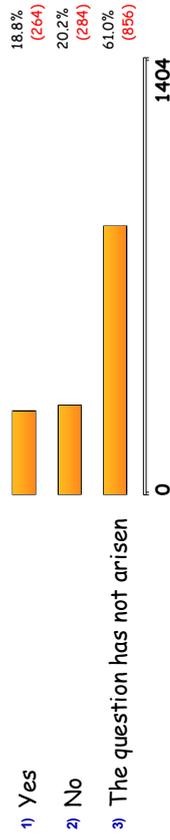


26.9%



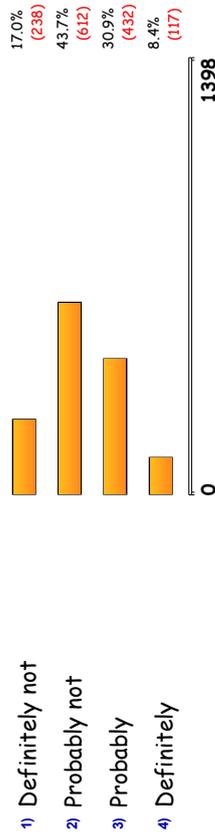
1407 people answered this question (96.8%)

51. Does your department provide support for a continued career in research?



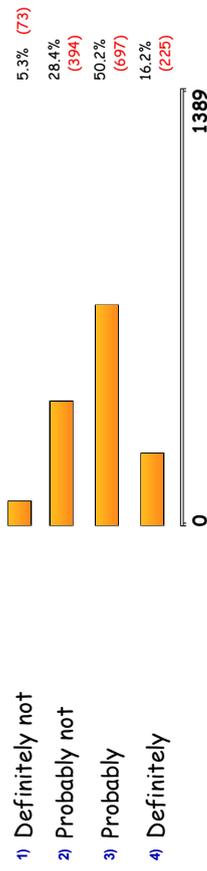
1404 people answered this question (96.6%)

52. Do you want to work at your present university when you have your research degree?



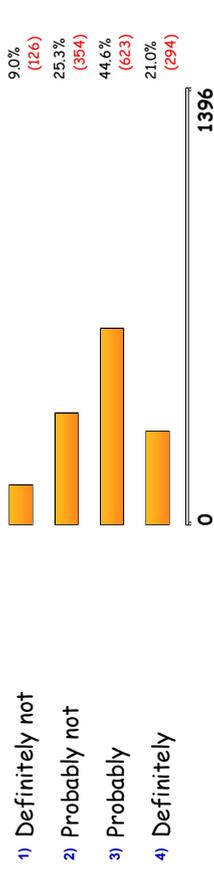
1398 people answered this question (96.1%)

53. Do you want to work at another university/higher education institution when you have your research degree?



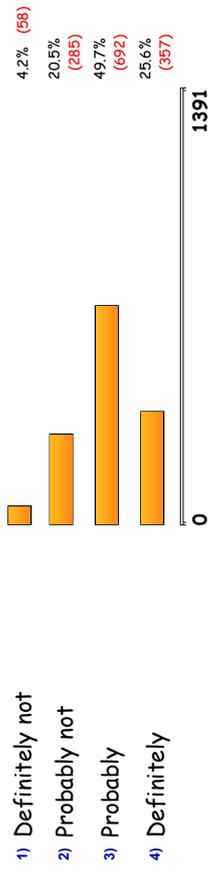
1389 people answered this question (95.5%)

54. Do you want to work abroad when you have your research degree?



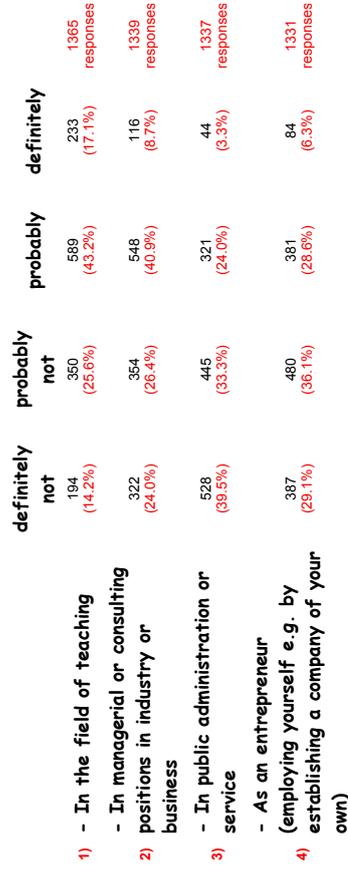
1396 people answered this question (96.0%)

55. Do you want to have a career in research when you have your research degree?



1391 people answered this question (95.7%)

56. Do you want to have a professional career other than research when you have your doctorate?



1365 people answered at least one part of this question (93.9%)

57. Does your doctoral programme, in your opinion, prepare you sufficiently:

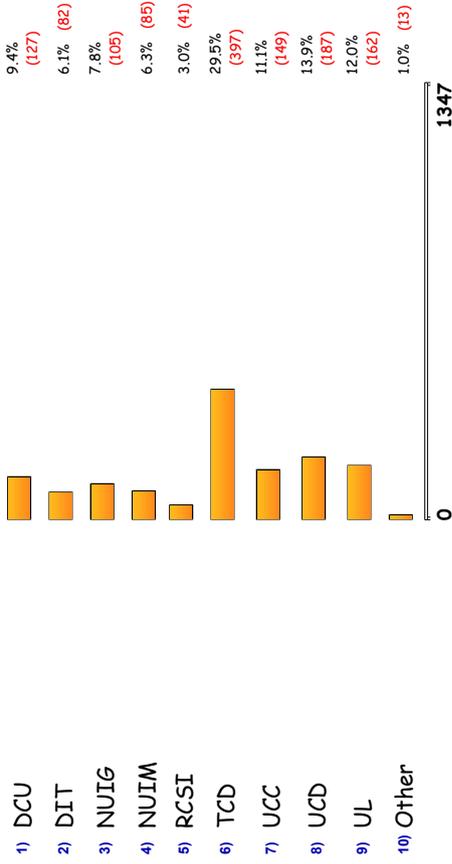
	not very/not at all	somewhat	a good deal	to a very great extent
1) - For an academic career in the scientific community	139 (10.3%)	341 (25.3%)	658 (48.8%)	212 (15.7%)
2) - For a professional career in industry, business, administration etc.	359 (26.7%)	591 (44.0%)	340 (25.3%)	54 (4.0%)
3) - For entrepreneurship	734 (54.8%)	452 (33.7%)	123 (9.2%)	32 (2.4%)

1349 people answered at least one part of this question (92.8%)

SECTION F - To Conclude:

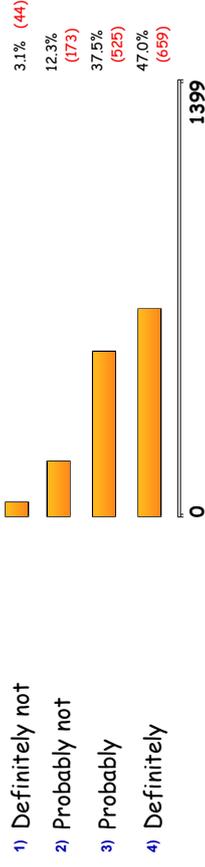
58. Please select the acronym for your third level institution.

This is optional but will be very helpful if answered.



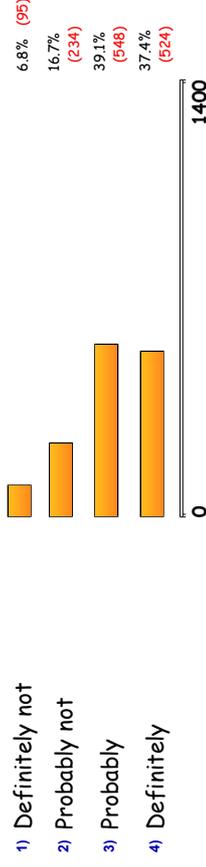
1347 people answered this question (92.6%)

59. If you had to choose today would you still choose to begin postgraduate studies?



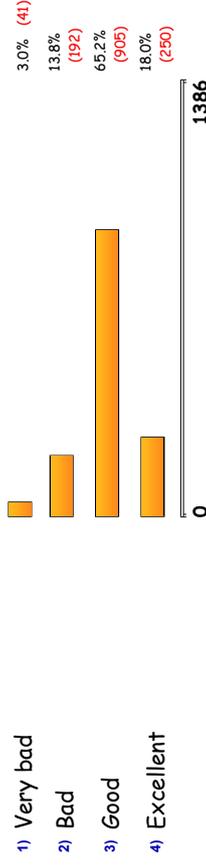
1399 people answered this question (96.2%)

60. If you could start postgraduate studies in the same subject again would you still choose the same university?



1400 people answered this question (96.3%)

61. What overall grade would you give your postgraduate programme so far?



1386 people answered this question (95.3%)

A Mirror for Postgraduate Students 2003

What do you feel about your postgraduate studies and how much time do you devote to them and to other forms of work? How do the courses and the supervision function, what is your working environment like, and what is the impact of your studies on your own values? It is questions like these and many others that the National Agency for Higher Education wants to study with the help of this questionnaire – the first national survey of postgraduate students of its kind in Sweden. You are one of about 9,800 postgraduate students who will receive this questionnaire. Students have been chosen from all the universities and higher education institutions in Sweden that offer postgraduate programmes and the questionnaire is addressed to those with at least one year's experience of postgraduate study.

The Mirror for Postgraduate Students reflects the views of students themselves. The study is intended to show whether and to what extent postgraduate programmes live up to their fundamental objectives. It aims to provide the basis for a general discussion of how well postgraduate studies in Sweden function today. The commitment of postgraduate students and the way in which their environments are organised have a significant impact on the quality of programmes. For this reason it is important to focus on what students themselves feel about their studies.

The information provided by the study can help universities and higher education institutions to determine where improvements are needed. This will make it easier for them to work with quality. The results of the Mirror for Postgraduate Students will be presented institution by institution and also research subject by research subject for the whole of Sweden.

Your responses will remain completely confidential

The questionnaire is being distributed by Statistics Sweden on behalf of the National Agency for Higher Education. Statistics Sweden will also be responsible for collecting the data, and registration and analysis of the responses. Your responses are subject to the Swedish Secrecy Act (SFS 1980:100). This means that the few individuals working for Statistics Sweden who will see the responses are not allowed to divulge any information,. Data such as your social registration number, sex, age, undergraduate degree, higher education institution and research subject, enrolment semester, country of birth, year of

immigration and the date of the award of a licentiate degree have been taken from the Higher Education Register. Your address comes from the Population Register. On completion of the survey the anonymity of all the respondents will be guaranteed by removal of their social registration numbers, names and addresses. The remaining records will then be forwarded to the National Agency for Higher Education. Participation in the study is voluntary, but we hope you will take the time to fill in the questionnaire. Return it as soon as possible, preferably within a week, to Statistics Sweden in the enclosed envelope. You can also use the envelope to request a version of the questionnaire in English.

Would you like to know more?

You will find more information about the Mirror for Postgraduate Students at www.hsv.se/doktorandspegeln. Questions can also be answered by the project administrator, Gunilla Jacobsson 08-563 086 16 (gunilla.jacobsson@hsv.se), or Per Gillström 08-563 085 16 (per.gillstrom@hsv.se) and Anette Gröjer 08-56308818 (anette.grojer@hsv.se), who are both involved in the project. The contact person at Statistics Sweden is Harald Theorin, 019-17 69 37 (harald.theorin@scb.se).

Thank you for your help,



Sigbrit Franke
University Chancellor

A Mirror for Postgraduate Students 2003

1. Were you enrolled as a postgraduate student during the autumn semester of 2002?

yes	95 %
no, I have been awarded a doctorate	3 %
no, I have been awarded a licentiate degree	1 %
no, I have given up postgraduate studies	0 %
no, I have taken time off for some other reason	2 %

2. How actively (as a percentage) did you pursue postgraduate studies during the autumn semester of 2002?

0–9 10 % 10–40 13 % 41–60 10 % 61–80 15 % 81–100 51 %

3. Did you begin your postgraduate studies before you had been formally enrolled?

no	55 %
yes, 1–6 months in advance	23 %
yes, 7–12 months in advance	9 %
yes, over a year in advance	13 %

4. What was your primary reason for undertaking postgraduate studies?

interest in the subject	56 %
to prepare for a career in teaching or research in higher education	15 %
to prepare for a career in research outside higher education	11 %
to prepare for some other professional career,	10 %
other	7 %

5. To what extent is the following true about the support, prior information and introduction you were given before your postgraduate studies?

	very little/ not at all	not very much	a great deal	to a very great extent
a) teachers in your undergraduate programme gave you support and encouraged you to go on with postgraduate studies	29 %	29 %	27 %	13 %
b) other students in your undergraduate programme gave you support and encouraged you to go on with postgraduate studies	42 %	35 %	17 %	4 %
c) the prior information about postgraduate studies was satisfactory	32 %	43 %	21 %	2 %
d) the department's introduction for newly enrolled postgraduate students was satisfactory	36 %	37 %	22 %	3 %

very little/
not at all not very
much a great
deal to a very
great extent

e) you were adequately informed about your rights and obligations as a postgraduate student

36 %	44 %	17 %	2 %
------	------	------	-----

f) the requirements for enrolment as a postgraduate student were clear

17 %	33 %	40 %	9 %
------	------	------	-----

6. Where do most of your undergraduate studies take place?

at the higher education institution at which you are enrolled	77 %
at some other higher education institution	8 %
somewhere else	14 %

7. In the course of your postgraduate studies have you spent some period of time studying at another institution? in Sweden 12 % abroad 16 % no 69 %

8. What was your principle source of income during the autumn semester of 2002?

postgraduate studentship (doktorandanställning)	52 %
a post as an assistant (assistenttjänst)	3 %
a faculty grant for postgraduate studies (utbildningsbidrag)	9 %
swedish study assistance from CSN	1 %
a scholarship	6 %
a post as a junior lecturer (adjunktjänst)	5 %
a post outside higher education (which allows time for your own research)	10 %
a post outside higher education (without time for your own research)	7 %
some other form of funding	8 %

9. Were you satisfied with this source of income during the autumn semester of 2002?

yes 78 % no 21 %

10. Have you taken sick leave for more than 14 days during 2002?

yes 9 % no 91 %

11. Are you married or living with a partner?

yes 69 % no 31 %

12. Do you have children under the age of 18 living with you?

yes 38 % no 62 %

13. Have either of your parents a university degree or a higher education qualification from a programme that lasted for the equivalent of three full years or more?

yes, both	26 %
yes, only father	13 %
yes, only mother	7 %
no	52 %
don't know	1 %

14. How many of the credit points in your postgraduate programme are for course work?

0 41% 1-20 44% 21-40 8% 41-60 2% 61-80 1% 81-100 1%

15. How many credit points are for courses you can choose yourself?

10 ≤ 19 % 11-20 25% 21-30 18 % 31-40 19 % > 40 14 %

16. How well do the following statements describe the course work in your postgraduate programme?

	very little/ not at all	not very much	a great deal	to a very great extent
a) the quality of the courses is consistently high	4 %	24 %	61 %	8 %
b) the balance between the credit points for course work and my thesis is a good one	5 %	23 %	58 %	10 %
c) the courses are relevant to the work I am doing on my thesis	4 %	26 %	54 %	13 %
d) the courses have usually not involved teaching	30 %	37 %	16 %	7 %
e) the courses offered fit in with my wishes and needs	9 %	33 %	48 %	7 %

17. How much teaching did you do during the autumn semester of 2002 (as a percentage of a full-time post)?

0 41% 1-20 44% 21-40 8% 41-60 2% 61-80 1% 81-100 1%

18. How much of your time was spent on other work for your department during the autumn semester of 2002 (as a percentage of a full-time post)?

0 58% 1-20 35% 21-40 3% 41-60 2% 61-80 1% 81-100 1%

19. Have you taken part in any teacher training sessions for postgraduate students or teachers?

yes 30 % no 70 %

20. What type of thesis do you intend to submit?

monograph 31 % collection of articles 65 %

21. In what language are you writing your thesis?

Swedish 17 % English 77 % both 4 % other 1 %

22. How did you select the subject of your thesis?

mainly on my own	47 %
a proposal from my department/supervisor	50 %
I have not yet selected a subject	3 %

23. How are you working on your thesis?

mainly on my own	82 %
mainly in a research team	16 %
I have not yet selected a subject	1 %

24. Do you have a principal supervisor?

yes, a man 80 %
yes, a woman 19 %
no (go directly to question 26) 1 %

25. Have you switched to another supervisor at your own request?

yes 9 % no 89 %

26. Do you have one or more assistant supervisors?

yes, a man/only men	48 %
yes, a woman/only women	11 %
yes, men and women	7 %
no (go directly to question 29)	33 %

27. Have you switched assistant supervisors at your own request?

yes 9 % no 90 %

28. Do all your assistant supervisors come from your own department?

yes 53 % no 46 %

29. Who, in practice, provides most of your supervision?

principal supervisor	68 %
assistant supervisor	20 %
someone else	9 %

30. Give an estimate of the number of hours of supervision you have been given during the autumn semester of 2002.

0 6% 1-5 25% 6-10 23% 11-15 14% 16-20 10% > 20 21%

31. To what extent has your supervisor/supervisors:

	very little/ not at all	not very much	a great deal	to a very great extent
a) directed your choice of optional courses	43 %	40 %	13 %	2 %
b) displayed interest in your postgraduate studies	5 %	23 %	45 %	26 %
c) discussed methodological issues with you	12 %	31 %	38 %	18 %
d) discussed theory with you	12 %	34 %	36 %	17 %
e) provided constructive criticism of your research	8 %	25 %	41 %	25 %
f) discussed your plans for the future with you	23 %	37 %	28 %	12 %

32. Has there been any follow up of your individual study plan during 2002?

yes, I am satisfied with the follow up	48 %
yes, but I am not satisfied with the follow up	12 %
no	26 %
I do not have an individual study plan	13 %

33. During 2002 have you been involved in any of the following activities?

	yes	no
a) participation in one or more national conferences relevant to your postgraduate studies	47 %	52 %
b) participation in one or more international conference relevant to your postgraduate studies	53 %	45 %
c) presentation of your research in a context which will make it more accessible for the general public	33 %	65 %
d) presentation of your research through publication or at conferences	64 %	34 %
e) submission of your research at some form of seminar at your department	64 %	34 %
f) membership of a group of postgraduate students	42 %	55 %

34. To what extent during 2002 in the course of your postgraduate studies have you

	very little/ not at all	not very much	a great deal	to a very great extent
a) participated in advanced seminars/research seminars outside your courses	25 %	41 %	26 %	7 %
b) worked as independently as you wanted to	2 %	8 %	49 %	39 %
c) been provided with as much supervision as you wanted	12 %	28 %	40 %	19 %
d) met your supervisor in a situation not connected with supervision	22 %	35 %	30 %	12 %
e) found yourself in a situation of dependence on your supervisor which made you feel uncomfortable	57 %	26 %	10 %	6 %
f) experienced shortcomings in your supervision that have hampered your research	37 %	35 %	16 %	10 %
g) seriously considered switching supervisor	70 %	15 %	6 %	7 %
h) experienced your post-graduate studies as positive and stimulating	4 %	22 %	49 %	24 %

	very little/ not at all	not very much	a great deal	to a very great extent
i) had the opportunity to take part in general discussions about your subject area with your supervisor and other researchers	10 %	32 %	41 %	16 %
j) experienced pressure and stress giving you negative experiences	15 %	37 %	38 %	8 %
k) experienced the environment in your department as creative	15 %	37 %	28 %	18 %
l) felt that you were an accepted member of the research collective	7 %	24 %	49 %	18 %
m) had the feeling that you could exert influence in your department	28 %	41 %	24 %	5 %
n) felt that postgraduate studies involve demands that are not proportionate to the length of the programme	22 %	47 %	21 %	7 %

35. To what extent have your postgraduate studies involved

	very little/ not at all	not very much	a great deal	to a very great extent
a) broadening your general education	5 %	27 %	49 %	18 %
b) acquiring greater understanding of people from another cultural or ethnic background	23 %	37 %	28 %	11 %
c) reflection over your own values	8 %	27 %	45 %	19 %
d) involvement in the development of society	24 %	44 %	23 %	8 %
e) greater understanding of social and cultural differences based on gender	28 %	37 %	23 %	10 %
f) acquiring knowledge of scientific or scholarly methodology	2 %	13 %	52 %	33 %
g) acquiring knowledge of scientific theories	2 %	17 %	50 %	29 %
h) acquiring the ability to carry out your own research independently	2 %	13 %	49 %	36 %
i) acquiring knowledge about methods and theories used in other fields	9 %	44 %	38 %	9 %
j) acquiring deeper insights into research ethics	14 %	38 %	37 %	10 %
k) acquiring an increased ability to write clearly and comprehensibly	3 %	22 %	53 %	21 %

very little/
not at all not very
much a great
deal to a very
great extent

l) acquiring greater ability
to present your material
orally in a clear and com-
prehensible way

4 % 23 % 50 % 22 %

36. Have you had access to a workplace of your own at
your department, including computer, printing and copying
facilities?

yes 87 % no 12 %

37. During the autumn semester of 2002 how many
hours have you worked each week on average?

0-9 13 % 10-19 10 % 20-29 12 % 30-39 18 %
40-49 27 % 50-59 14 % 60 > 6 %

38. During the autumn semester of 2002 how many
hours each week did you devote to your postgraduate
studies on average?

0-9 3 % 10-19 2 % 20-29 3 % 30-39 13 %
40-49 43 % 50-59 23 % 60 > 11 %

39. By the end of the autumn semester of 2002 how
large a proportion (as a percentage) of your postgraduate
studies had you completed?

20 < 13 % 21-40 21 % 41-60 23 % 61-80 20 % 80 > 22 %

40. Are you going to take a licentiate degree?

yes 19 % no 51 % I already have 18 % don't know 11 %

41. In which semester do you expect to submit your
thesis?

42. What feelings do you have about the other
postgraduate students, teachers, supervisors and
administrative staff?

a) other postgraduate students

unfriendly	0 %	1 %	2 %	7 %	12 %	31 %	45 %	friendly
unhelpful	1 %	2 %	3 %	12 %	18 %	28 %	34 %	helpful
not supportive	1 %	2 %	5 %	15 %	19 %	24 %	31 %	supportive

b) teachers on the courses you have attended

unapproachable	1 %	2 %	5 %	14 %	24 %	30 %	21 %	approachable
not supportive	1 %	2 %	6 %	19 %	26 %	26 %	17 %	supportive
uninformed	1 %	1 %	2 %	9 %	17 %	38 %	30 %	knowledgeable

c) supervisors

unapproachable	3 %	7 %	7 %	11 %	15 %	24 %	31 %	approachable
not supportive	3 %	5 %	6 %	11 %	15 %	24 %	34 %	supportive
uninformed	1 %	2 %	4 %	8 %	12 %	27 %	44 %	knowledgeable

d) administrative staff

unapproachable	1 %	3 %	4 %	12 %	16 %	27 %	35 %	approachable
disobliging	1 %	2 %	3 %	12 %	15 %	28 %	36 %	accommodating
unhelpful	1 %	2 %	3 %	11 %	14 %	27 %	37 %	helpful

43. Have you experienced discrimination because of your
gender?

a) by other postgraduate students

not at all 79 % 8 % 3 % 4 % 3 % 2 % 1 % to a very great extent

b) by teachers in the courses you have attended

not at all 78 % 8 % 4 % 4 % 3 % 1 % 0 % to a very great extent

c) by supervisors

not at all 78 % 7 % 3 % 4 % 3 % 2 % 1 % to a very great extent

d) by administrative staff

not at all 81 % 7 % 3 % 4 % 2 % 2 % 1 % to a very great extent

44. If you had to choose today would you still choose to
begin postgraduate studies?

definitely not 3 % probably not 15 %
probably 39 % definitely 41 %

45. If you could start postgraduate studies in the same
subject again would you still choose the same university/
higher education institution?

definitely not 5 % probably not 15 %
probably 45 % definitely 34 %

46. Do you want to work at your present university/
higher education institution when you have your doctorate?

definitely not 14 % probably not 37 %
probably 35 % definitely 12 %

47. Do you want to work at another university/higher
education institution when you have your doctorate?

definitely not 8 % probably not 46 %
probably 37 % definitely 7 %

48. Do you worry about being unemployed when your
postgraduate studies are completed?

not at all 40 % not very much 35 %
quite a lot 15 % a great deal 9 %

49. Does your department provide support for a
continued career in research?

yes 31 % no 22 % the question has not arisen 45 %

50. What overall grade would you give your postgraduate
programme so far?

very bad 3 % bad 18 % good 61 % excellent 16 %

If you have any specific positive or negative experiences that
you would like to tell us about you can either send an e-mail
to doktorandspegeln@hsv.se or use the space below:

THANK YOU FOR PARTICIPATING!

