

University of Sydney

Postgraduate Research Experience Questionnaire Report

Part Two: Trends and key issues : 2007 – 2010

February 2011

This report updates the previous report issued in November 2010, which covered the period 2006 - 2009

Contents

| | |
|---|-----------|
| EXECUTIVE SUMMARY | 2 |
| INTRODUCTION..... | 6 |
| GLOSSARY | 7 |
| 1 QUALITY OF SUPERVISION | 8 |
| 2 QUALITY OF INFRASTRUCTURE..... | 10 |
| 3 RESEARCH CLIMATE | 12 |
| 4 GRADUATE ATTRIBUTES..... | 14 |
| 5 THESIS EXAMINATION PROCESS..... | 16 |
| 6 OVERALL SATISFACTION..... | 18 |
| ATTACHMENT ONE: STATISTICAL DATA PREQ 2006 - 2009..... | 20 |
| ATTACHMENT TWO: NOTES ON ANALYSIS AND COUNTING OF COMMENTS..... | 21 |
| ATTACHMENT THREE: PREQ SCALES: COVERAGE OF QUANTITATIVE AND QUALITATIVE DATA ... | 22 |

Report compiled by

*Rachel Symons
Executive Officer
Graduate Studies Office*

rachel.symons@sydney.edu.au

EXECUTIVE SUMMARY

INTRODUCTION

The PREQ is a national survey administered by the independent body, the Graduate Careers Council of Australia (GCA). It is a survey of research higher degree *graduates* of all Australian universities. PREQ results are reported at least a year after the research higher degree graduates actually finish their courses i.e. students who completed their research higher degree in 2009 would have completed the PREQ in 2010, with results reported in 2011. The purpose of the PREQ is to provide the University community with a basis for strategic, faculty level academic development and curriculum review to further enhance the quality of research higher degrees. The PREQ also provides data for benchmarking between similar programmes in different universities.

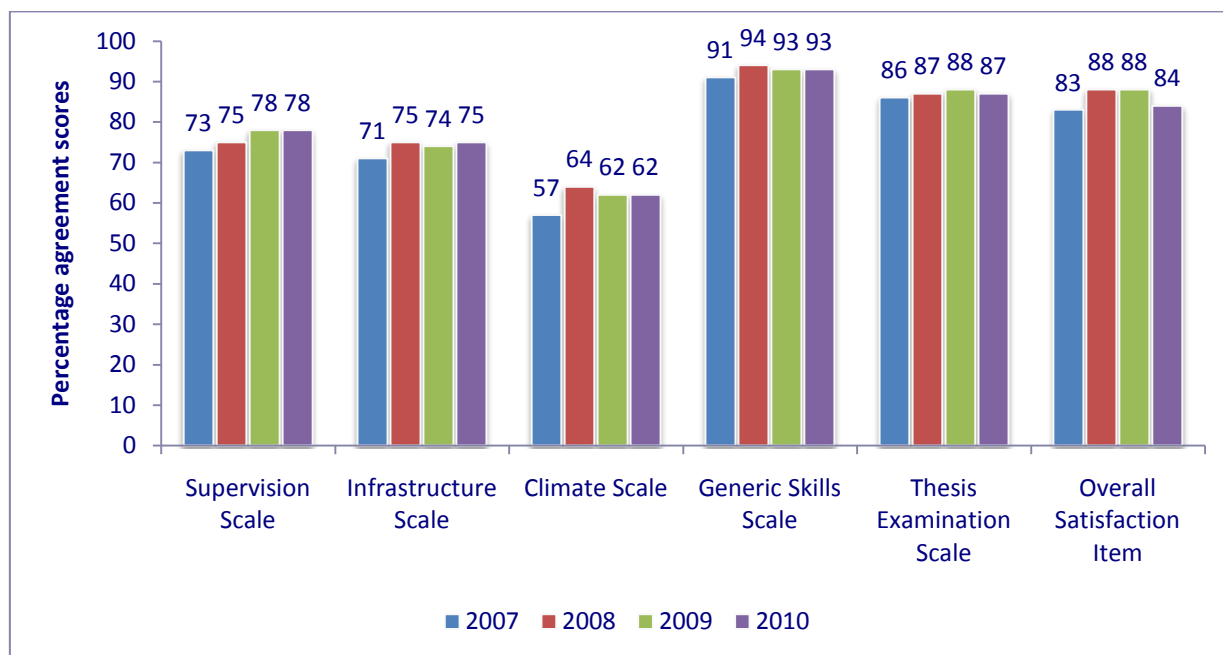
Written observations, from respondents to the survey, about their experiences provide evidence to support the University PREQ quantitative data results (percentage agreement scores), and provide detailed information about key issues in the Areas of best practice and Areas needing improvement, during their research training experience. The results are directly aligned with the scales and survey items used in the PREQ, with the addition of items that occur frequently in student comments.

COMPARATIVE DATA: 2007 – 2010¹

Quantitative data

The following chart provides a comparison of the results of the PREQ percentage agreement results (i.e. respondents who either agreed or strongly agreed with the survey items relating to each scale) for the University since 2007.

Figure 1: University of Sydney: Percentage agreement results: PREQ 2007 - 2010



QUALITATIVE DATA

Comparative data: 2007 – 2010

The charts on the following page provide an indication of those areas of the research higher degree student experience that respondents considered to be either of best practice or in need of improvement in their responses to the open questions in the PREQ 2007 – 2010. An average of 65-75% of respondents provide written observations, with more commenting on areas of best practice than suggesting improvements.

¹ More detailed data, i.e. comparing the results from domestic and international students is available in the individual sections of the report. Statistical data regarding the number of graduates who respond to the PREQ, together with data on those who answer the open questions, can be found at Attachment One.

Figure 2: University of Sydney: Areas of best practice: PREQ 2007 - 2010

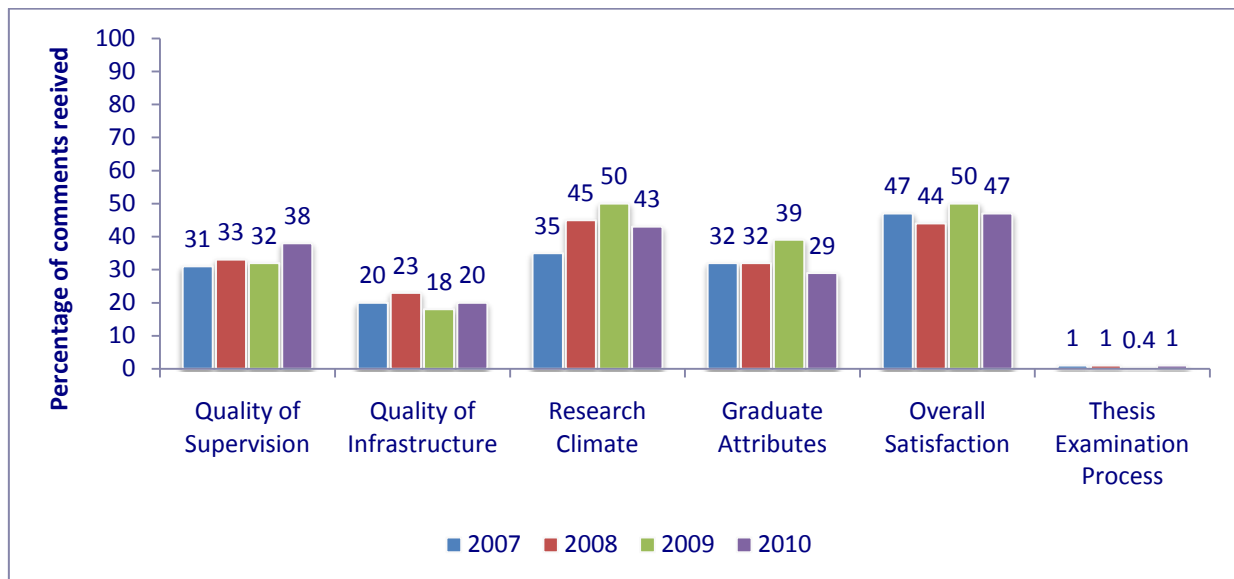
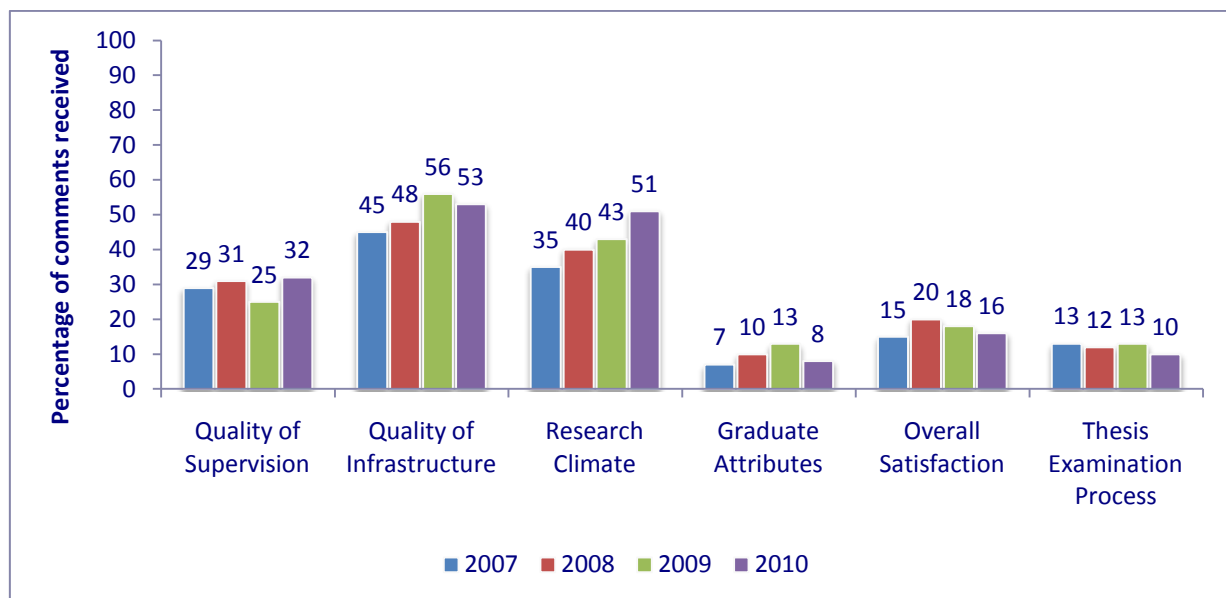


Figure 3: University of Sydney: Areas needing improvement: PREQ 2007 - 2010

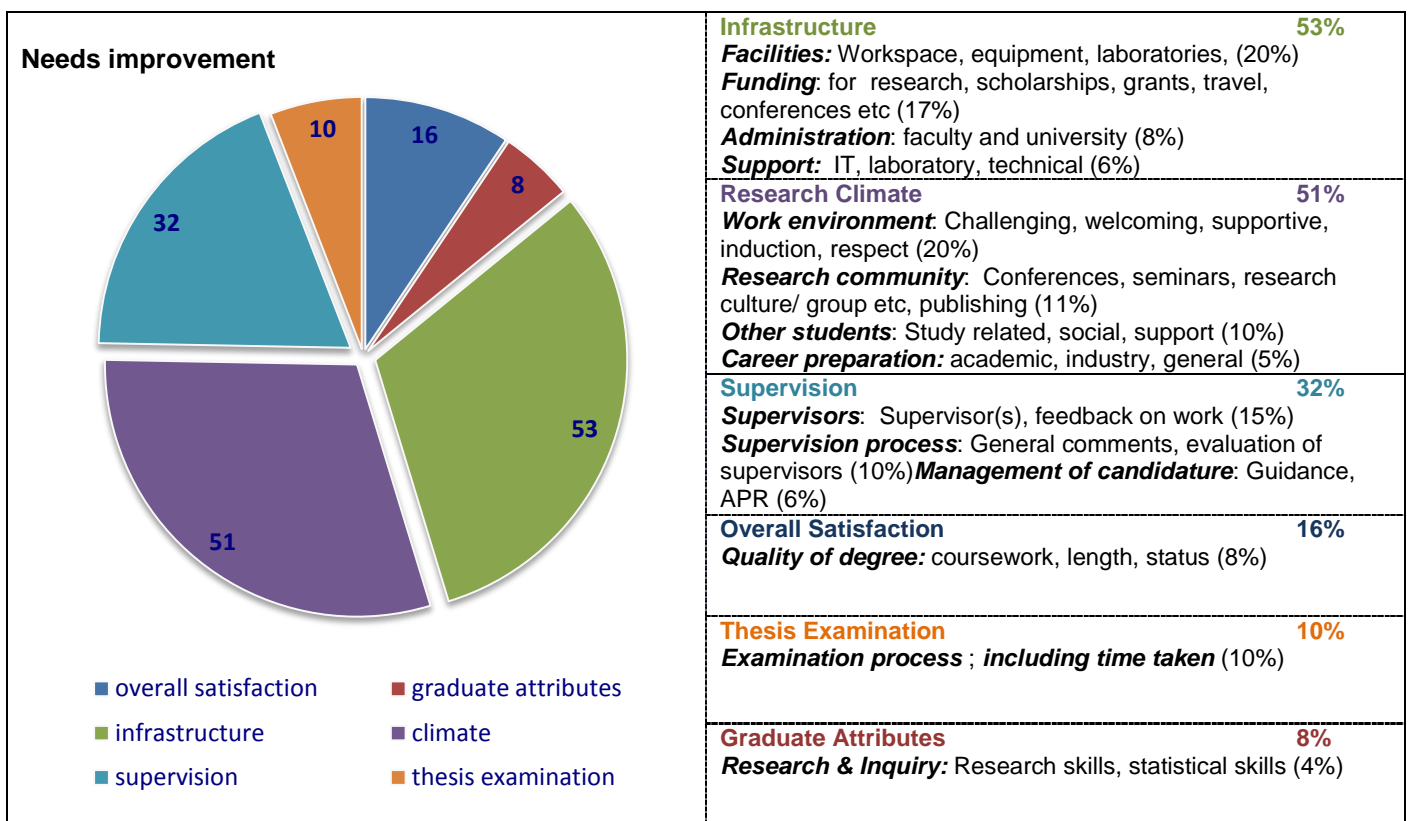
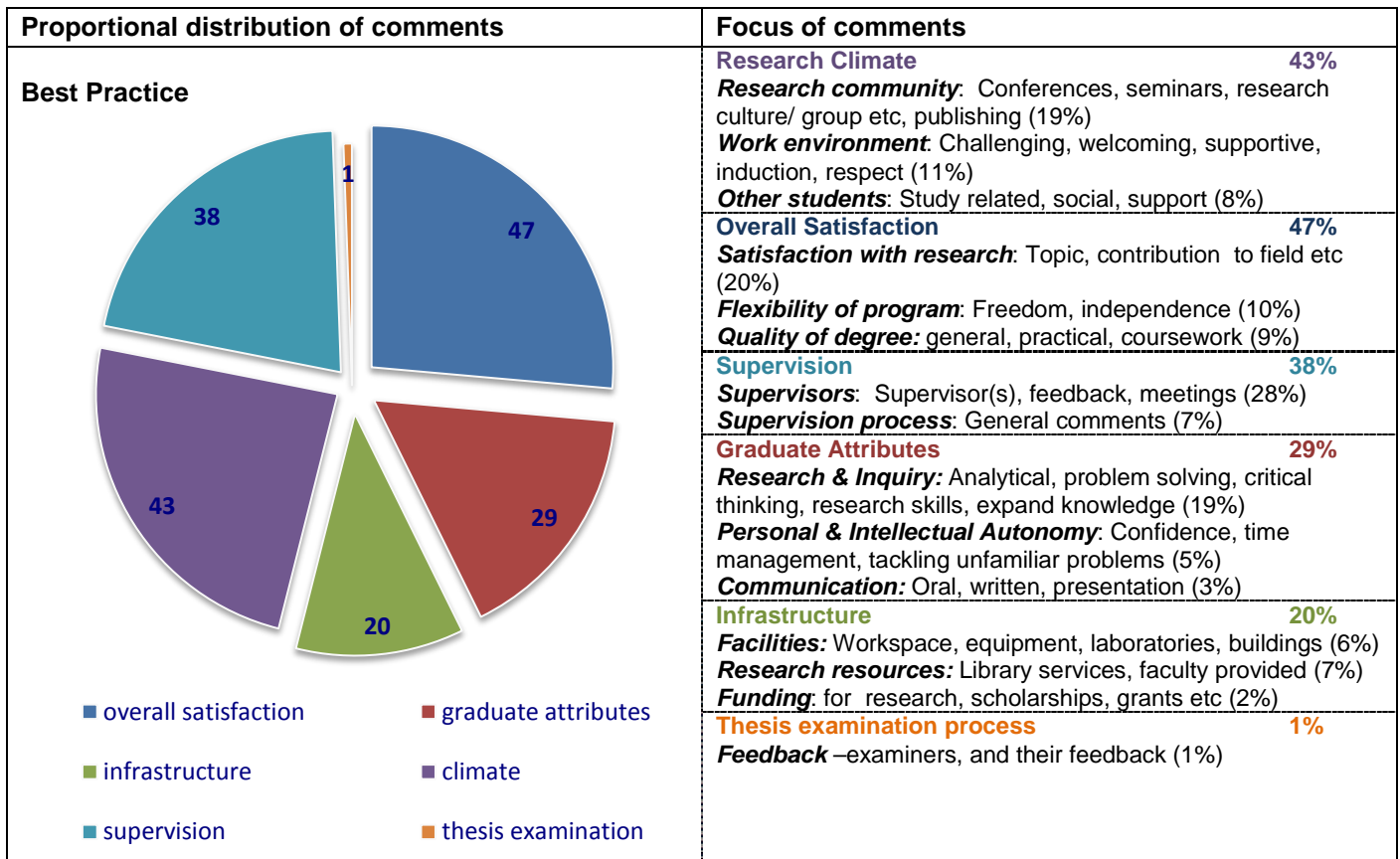


Key issues: PREQ 2010

The charts on the following page provide an overview of the issues that were of importance to research higher degree graduates who completed their degrees in 2009, and submitted responses to the PREQ in 2010.

Narrative and proportional chart data show the percentage of the total number of comments received from respondents for each of the main categories of the research higher degree student experience, together with an indication of those components that were mentioned most frequently. The statistical data indicates the distribution within each scale and category. Further detail is provided in Sections 1 – 6 of this report.

NB: the numbers in each of the pie slices add up to more than 100% because students often mention more than one aspect of their experience in their answers, each of which is counted once. (see Attachment Two for explanation on analysis and counting of comments)



FOR MORE INFORMATION

On the analysis and reporting of qualitative data

Ms Rachel Symons Executive Officer, Graduate Studies Office

Phone: + 61 2 9351 6560

Email: rachel.symons@sydney.edu.au

Reports on the research higher degree student experience (PREQ and SREQ) are available at

http://sydney.edu.au/learning/evaluating/research_higher_degree_reports.shtml

On PREQ and how to interpret results

Staff of the ITL are available to provide support to faculties in the interpretation of the PREQ data and the development of strategic responses to address any issues identified

Phone: + 61 2 9351 3725

Email: itl@sydney.edu.au

PREQ results and reports are at <http://www.itl.usyd.edu.au/preq/reports.cfm>

INTRODUCTION

POSTGRADUATE RESEARCH EXPERIENCE QUESTIONNAIRE (PREQ)

The PREQ is a national survey administered by the independent body, the Graduate Careers Council of Australia (GCA). It is a survey of research higher degree *graduates* of all Australian universities. PREQ results are reported at least a year after the research higher degree graduates actually finish their courses. The purpose of the PREQ is to provide the University community with a basis for strategic, faculty level academic development and curriculum review to further enhance the quality of research higher degrees. The PREQ also provides data for benchmarking between similar programmes in different universities.

The Institute for Teaching and Learning (ITL) PREQ reports use responses obtained from research higher degree graduates of the University of Sydney who completed their degrees in the previous year (i.e. the 2010 reports are for graduates who completed in 2009). The ITL reports use the GCA data and are therefore usually published shortly after the GCA reports. As an example, the 2010 reports are for graduates who completed their courses in 2009. The data is collected during 2010 and the reports are published in 2011². It is important to note that, because of the relatively small number of research higher degree graduates in any one year, the number of respondents for a given year and faculty are often low. For this reason the ITL also runs an annual survey of currently enrolled research higher degree graduates, the Student Research Experience Questionnaire (SREQ)³.

In the PREQ graduates are asked to respond to statements which, clustered together, form the factor scales: Supervision, Infrastructure, Climate, Generic Skills, Thesis Examination, and the Overall Satisfaction Item. The following open response questions are also included in the PREQ:

- *What were the best aspects of your course?*
- *What aspects of your course were most in need of improvement?*

Quantitative and qualitative data from the PREQ provide evidence of the success of University and Faculty initiatives to improve the overall student experience in general and the student experience of research training in particular.

FOCUS OF THE REPORT

Based on the answers to the PREQ, this report seeks to provide an analysis of observable trends in the experiences of research higher degree graduates of the University of Sydney between 2006 and 2009 (PREQ 2007 – 2010). The report also provides detailed information on the key issues highlighted in the analysis of the 2010 PREQ qualitative data.

Information is arranged by the following areas of the research higher degree student experience: Quality of Supervision, Quality of Infrastructure, Research Climate, Graduate Attributes, Thesis Examination Process and Overall Satisfaction, which, taken together, comprise the student experience of research training within the Faculty.

FOCUS OF WRITTEN OBSERVATIONS FROM RESPONDENTS

By examining the foci of the graduates' comments in the 2010 PREQ, this report seeks to highlight areas that were of best practice in the graduates' experience during their research higher degree studies at the University of Sydney, together with those that have been suggested as areas of improvement.

The views of the research higher degree graduates, on their overall experience at the University, as received through the open response comments, are a valuable insight into what was important to them; what they considered to be areas of best practice; and what they considered to be in need of improvement.

It is important to remember, when looking at the results of the analysis of this data, that the absence of favourable comments on a particular aspect of research training does not reflect that this is not an area of best practice. Rather, it could be interpreted that the graduates were happy with their experiences, and prefer to focus on commenting about areas in need of improvement. It should also be noted that research higher degree respondents to the PREQ, have consistently provided more comments relating to areas of best practice than those requiring improvement.

Notes relating to the analysis and counting of comments are provided in Attachment Two.

² Further information about the PREQ can be found at <http://www.itl.usyd.edu.au/preq/>

³ See <http://www.itl.usyd.edu.au/sreq> for SREQ results and reports.

GLOSSARY

The following terms and phrases are used throughout the report

| | |
|--|---|
| PREQ | Postgraduate Research Experience Questionnaire Administered to postgraduate research graduates annually, during the year after they finish their studies. |
| SREQ | Student Research Experience Questionnaire. Administered annually to current research higher degree graduates |
| Supervision Scale Infrastructure Scale Climate Scale Generic Skills Scale Thesis Examination Scale Overall Satisfaction Item | Items in the PREQ have been shown to cluster together to form factor scales: <ul style="list-style-type: none">• Supervision• Infrastructure• Climate• Generic Skills• Thesis Examination• Overall Satisfaction Item Within the report, this naming convention is used to identify information relating to the analysis of the quantitative data (survey items) |
| Faculty Scores Percentage agreement | PREQ item responses are combined and reported in terms of the proportions of graduates who agreed or disagreed that their research higher degree experience was positive in the areas of: Supervision; Infrastructure; Climate; Generic Skills; Thesis Examination; and Overall Satisfaction. |
| Quality of Supervision Quality of Infrastructure Research Climate Graduate Attributes Thesis Examination Process Overall Satisfaction | The University of Sydney Postgraduate Research Experience Questionnaire (PREQ) report is based upon categories used in the SREQ/PREQ Taxonomy: <ul style="list-style-type: none">• Quality of Supervision• Quality of Infrastructure• Research Climate• Graduate Attributes• Thesis Examination Process• Overall Satisfaction Within the report, this naming convention is used as headings for each section of the report, and to identify information relating to the analysis of the qualitative data (written observations). |
| Qualitative data Focus of written observations | Graduates' written observations received in response to open ended questions in the PREQ: <ul style="list-style-type: none">• What were the best aspects of your course?• What aspects of your course are most in need of improvement? |
| Percentage of comments received | The number of times an aspect is mentioned within written observations of respondents received from respondents is presented as a percentage of the total number of comments received from respondents to the PREQ in any particular year. |
| Key issues | As a general rule, only those aspects which receive over 5% of comments from the <u>whole</u> cohort (i.e. domestic and international combined) are considered significant enough to be included as key issues in the report. |

1 QUALITY OF SUPERVISION

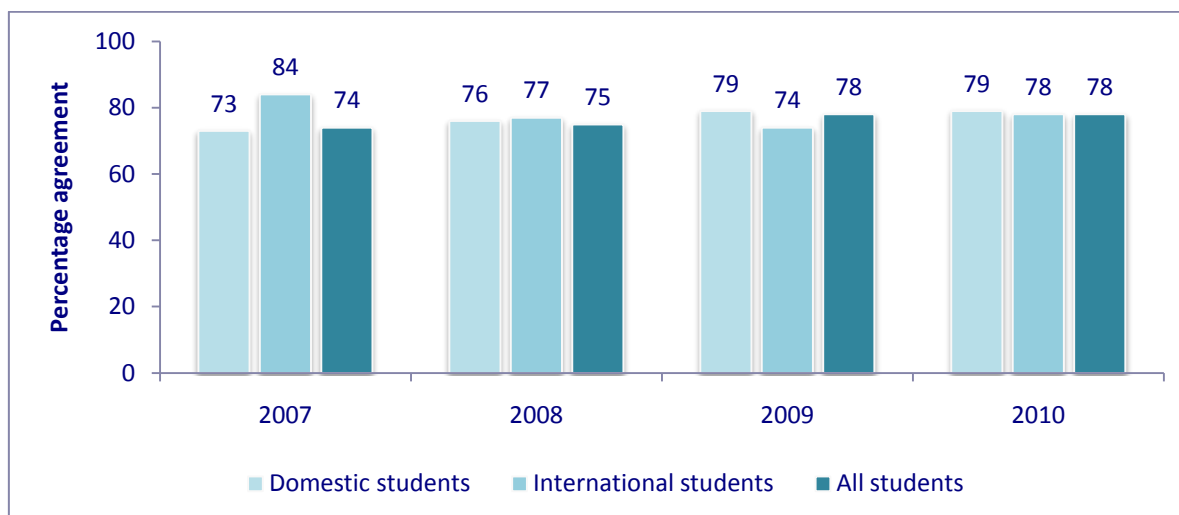
1.1 BACKGROUND INFORMATION

The *Supervision Scale* covers aspects of supervision including: supervision being available when needed; understanding by the supervisor(s) of difficulties; provision of additional information relevant to the thesis topic by the supervisor; provision of guidance in topic selection and refinement; provision of helpful feedback on progress; provision of good guidance in literature search; and overall satisfaction with quality of supervision.

1.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2007 – 2010

The following graph shows the proportion of graduates who either agreed or strongly agreed with relevant Supervision Scale survey items in the PREQ between 2007 and 2010.

Figure 4: Supervision Scale: Percentage agreement results: PREQ 2007 - 2010



1.3 FOCUS OF WRITTEN OBSERVATIONS: 2007 - 2010

The following chart provides an indication of trends in the research higher degree student experience of the Quality of Supervision, as indicated in their responses to the open questions in the 2007 - 2010 PREQ. It demonstrates the relationship between areas of best practice, and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 5: Quality of Supervision: Focus of written observations: PREQ 2007 - 2010



1.4 KEY ISSUES: PREQ 2010

This section provides information on the aspects of Supervision that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the graduates who provided written observations in their responses to the 2010 PREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all graduates.

1.4.1 Areas of best practice

This is the first time since 2006 that the views of domestic and international respondents have been almost identical. In previous years domestic students provided a more positive view of supervision than their international counterparts.

| | Domestic (n=222) | International (n=47) | All (n=269) |
|-------------------------------|---------------------|-------------------------|----------------|
| Quality of Supervision | 37% | 38% | 38% |
| - Supervisor(s) | 27% | 32% | 28% |
| - Supervision process | 8% | 6% | 8% |

Sample comments

- *My supervisors were amazing, ready to help at any time and very accessible and easy to talk to. They were understanding of my situation but yet pushed me hard enough to complete the degree*
- *A good supervisor/student relationship that fostered a desire to learn*
- *My supervisor is diligent and provided me helpful and timely feedback*
- *The continuing encouragement and support from my principal supervisor*

1.4.2 Areas needing improvement

| | Domestic (n=192) | International (n=41) | All (n=233) |
|-------------------------------|---------------------|-------------------------|----------------|
| Quality of Supervision | 34% | 20% | 32% |
| - Supervisor(s) | 16% | 12% | 15% |
| - Supervision process | 11% | 2% | 10% |
| - Management of candidature | 7% | 2% | 6% |

Sample comments

- *Closer monitoring of the number of students/work that supervisors take on as my primary supervisor was too busy a lot of the time to help me and I was lucky to have two great associate supervisors to help me as needed*
- *Guidance and supervision with regard to my specific research topics. Supervision was much more about writing and presentation than about scientific aspects. My supervisor did not have enough time to be aware of the details of my research or read papers relevant to my research*
- *Perhaps some induction into supervisor/student expectations. As a mature age researcher, I had no expectations of how a supervisor-led program of study would be conducted. Consequently, early in my research my supervisor and I had some 'robust' discussions on what he wanted to see in the way of output and what I was prepared to produce*
- *Original supervisor's ability to effectively guide the thesis*

2 QUALITY OF INFRASTRUCTURE

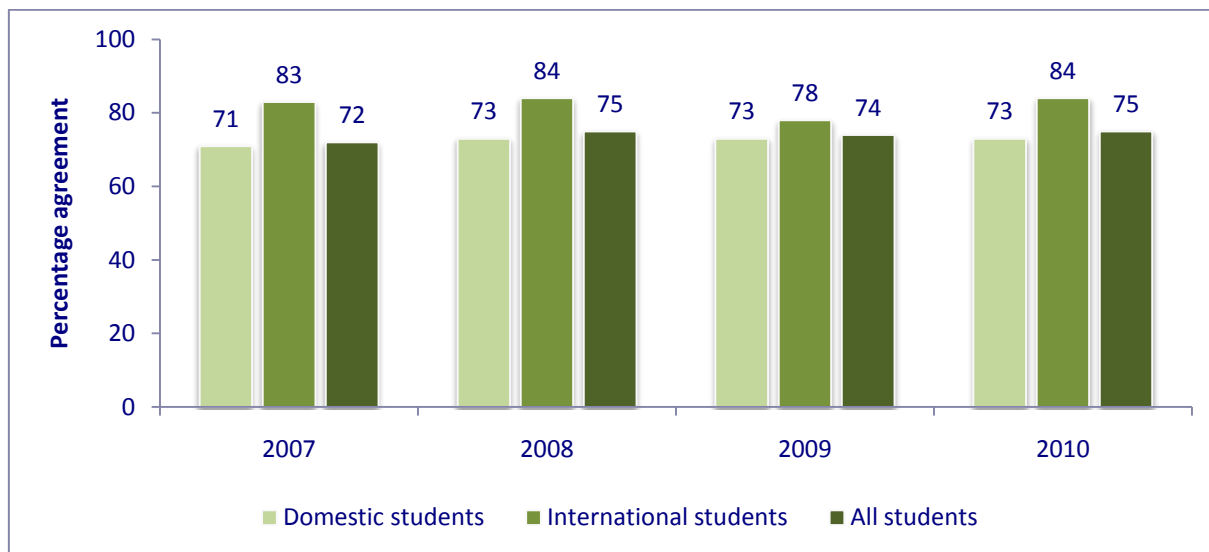
2.1 BACKGROUND INFORMATION

The *Infrastructure Scale* covers aspects of the infrastructure available to research graduates, including: access to a suitable working space; access to technical support; access to a common room; access to necessary equipment; access to computing facilities and resources; appropriate financial support; and overall satisfaction with the quality of services and facilities.

2.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2007 – 2010

The following graph shows the proportion of graduates who either agreed or strongly agreed with Infrastructure Scale survey items in the PREQ between 2007 and 2010.

Figure 6: Infrastructure Scale: Percentage agreement results: PREQ 2007 - 2010



2.3 FOCUS OF WRITTEN OBSERVATIONS: 2007 – 2010

The following chart provides an indication of trends in the research higher degree student experience of the Quality of Infrastructure, as indicated in their responses to the open questions in the 2007 – 2010 PREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 7: Quality of Infrastructure: Focus of written observations: PREQ 2007 - 2010



2.4 KEY ISSUES: PREQ 2010

This section provides information on the aspects of Infrastructure that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the graduates who provided written observations in their responses to the 2010 PREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all graduates.

2.4.1 Areas of best practice

| | Domestic (n=222) | International (n=49) | All (n=269) |
|---|---------------------|-------------------------|----------------|
| Quality of Infrastructure | 20% | 17% | 20% |
| - Facilities (computers, equipment, workspace etc) | 6% | 9% | 6% |
| - Research resources (libraries and faculty supplied) | 8% | 6% | 7% |

Sample comments

- Good access to facilities to carry out experiments
- The Fisher library's inter-library loan facility
- Computing facilities and network administration were good
- The best aspects of my study is library resource, especially Inter-library loan because I can access materials from all libraries in the world

2.4.2 Areas needing improvement

| | Domestic (n=192) | International (n=41) | All (n=233) |
|--|---------------------|-------------------------|----------------|
| Quality of Infrastructure | 53% | 54% | 53% |
| - Facilities (computers, equipment, workspace etc) | 19% | 24% | 20% |
| - Finance and funding (incl. scholarships) | 18% | 12% | 17% |
| - Administration | 8% | 7% | 8% |
| - Support (IT, laboratory, technical) | 6% | 5% | 6% |

Sample comments

- Dedicated areas with some privacy with little desk/computer and a door to close behind instead of 'sharing a place' in a 'communal mentality', it is sometimes destructive
- Some lab assistant staff members were not as approachable as would be expected for their role. When asked to assist they often provided little appropriate assistance and/or guidance
- USyd is behind the times in some administrative processes. Letters regarding thesis completion, examiners' reports, etc are all sent by surface mail - why not attach them to emails, a small thing, but you keep feeling like you are getting bumped back to the 20th century. (The admin people in my faculty were good, though)
- There was inadequate financial support - even in regard to activities that would attract more funding for the university such as presenting papers at conferences. I was invited to present papers at a number of conferences and as a result of no support I was only able to attend one (self-funded)

3 RESEARCH CLIMATE

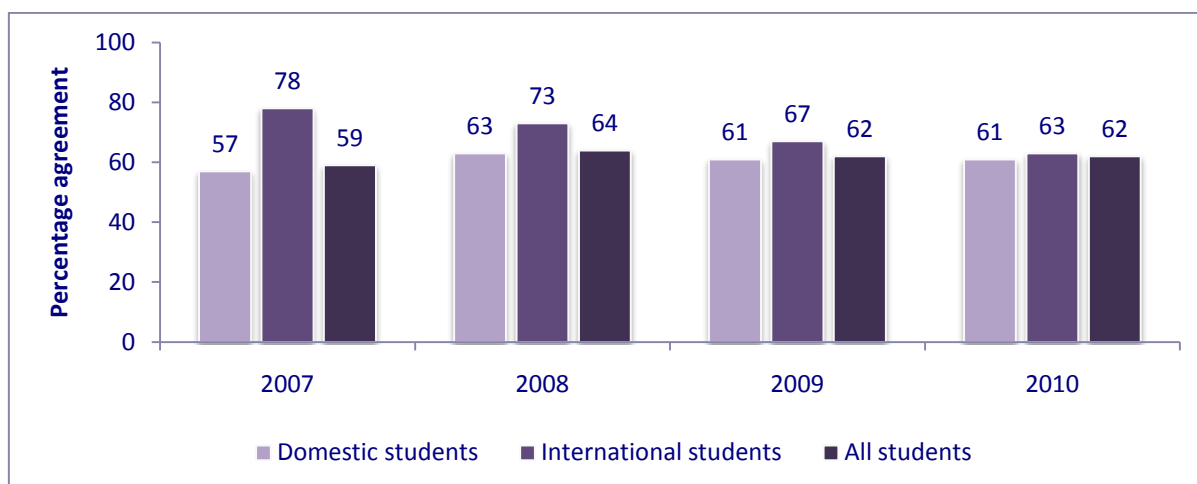
3.1 BACKGROUND INFORMATION

The *Climate Scale* covers aspects of the prevailing research climate in a graduates' school/ department, including: opportunities for social contact with other postgraduate graduates; integration into the school/ department community; opportunities to become involved in the broader research culture; perception of other research graduates as supportive; feelings of isolation within the school/ department; encouragement of interaction with other research graduates; provision of a good seminar programme; stimulation of personal work by the prevailing research ambience; provision of a supportive work environment; and feeling respected as a fellow researcher.

3.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2007 – 2010

The following graph shows the proportion of graduates who either agreed or strongly agreed with Climate Scale survey items in the PREQ between 2007 and 2010.

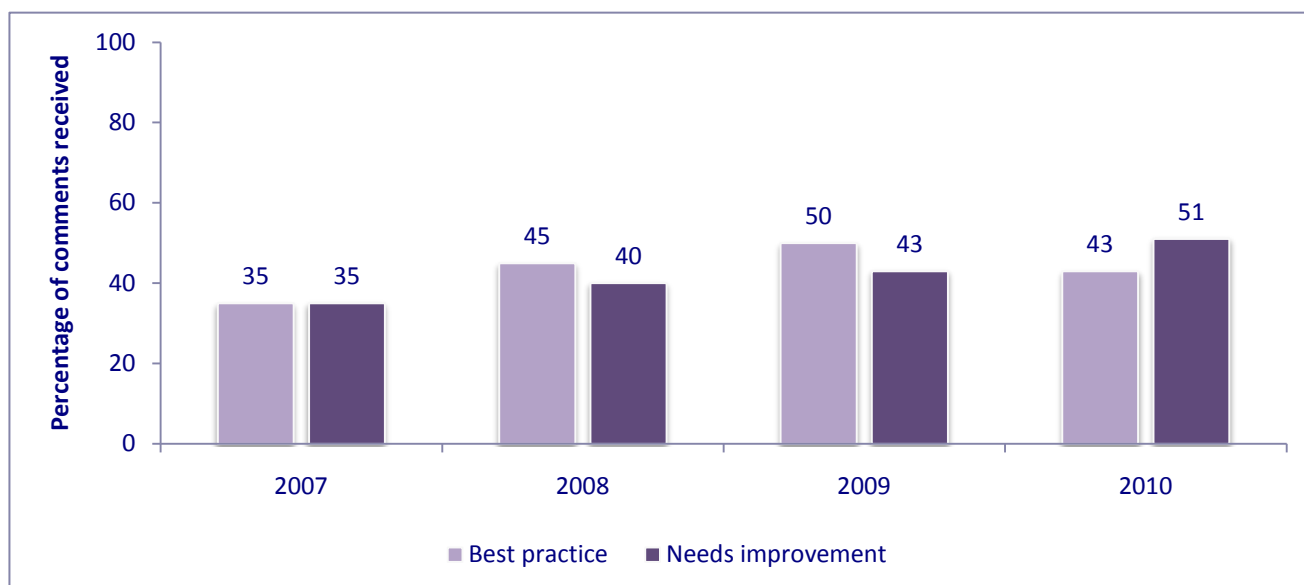
Figure 8: Climate Scale: Percentage agreement results: PREQ 2007 - 2010



3.3 FOCUS OF WRITTEN OBSERVATIONS: 2007 – 2010

The following chart provides an indication of trends in the research higher degree student experience of Research Climate, as indicated in their responses to the open questions in the 2007 – 2010 PREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 9: Research Climate: Focus of written observations: PREQ 2007 - 2010



3.4 KEY ISSUES : PREQ 2010

This section provides information on the aspects of the Research Climate that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the graduates who provided written observations in their responses to the 2010 PREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all graduates.

3.4.1 Areas of best practice

| | Domestic (n=222) | International (n=49) | All (n=269) |
|--|---------------------|-------------------------|----------------|
| Research Climate | 46% | 26% | 43% |
| - Research culture/ community | 22% | 4% | 19% |
| - Work environment | 11% | 11% | 11% |
| - Interaction with other research higher degree students | 8% | 9% | 8% |

Sample comments

- *It was my supervisor that created a research culture with postgraduate seminars for his students and postdocs and an inspiring community of young scholars (plus me), which eventuated in an edited volume of our work being published this year, an ongoing international conference series, and many other publications from his students*
- *I also enjoyed attending numerous conferences and meetings, and socialising with other scientists*
- *It has also given me an opportunity to be part of a fast growing international research interest group in related area*
- *The supportive and generous attitude of academic staff and students*

3.4.2 Areas needing improvement

This is the first year since 2007 that more students have suggested improvements in the research climate than have mentioned areas of best practice.

| | Domestic (n=192) | International (n=41) | All (n=233) |
|--|---------------------|-------------------------|----------------|
| Research Climate | 52% | 46% | 51% |
| - Work environment | 22% | 10% | 20% |
| - Research culture/ community | 11% | 10% | 11% |
| - Interaction with other research higher degree students | 8% | 20% | 10% |

Sample comments

- *Visiting conferences or workshops was not greatly encouraged, leading to a sense of isolation with respect to the international research community. This is somewhat understandable, of course, considering the geographic isolation of Australia*
- *Postgraduates need to be considered as part of the team, academics cannot research without postgraduates and postgraduates cannot research without supervision, it is a win-win situation and academics often forget this fact*
- *Departmental seminar programmes were generally uninteresting and without benefit*
- *The sense of scholastic community among postgrads in the department was nonexistent*

4 GRADUATE ATTRIBUTES

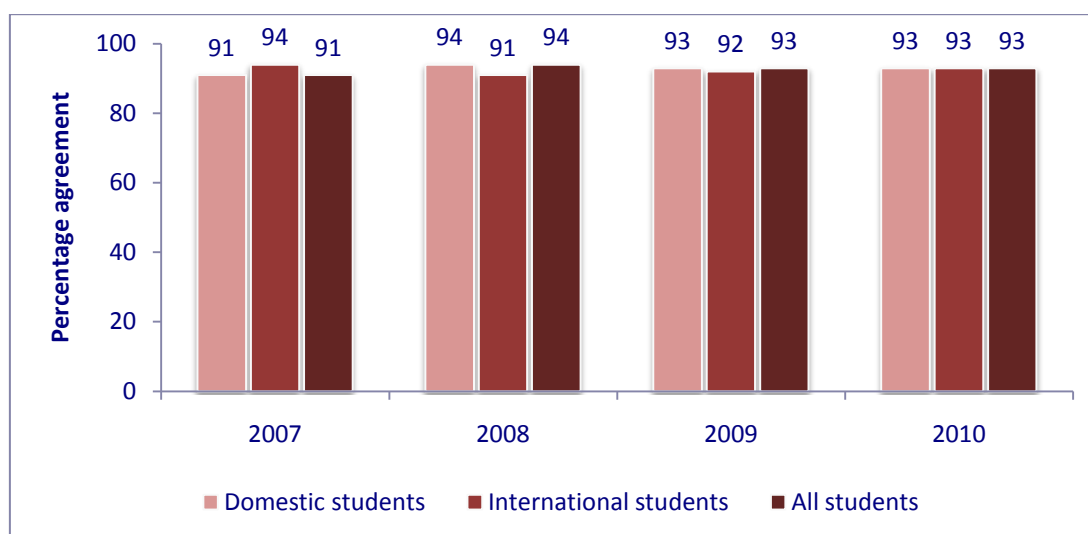
4.1 BACKGROUND INFORMATION

The *Generic Skills* scale reflects the extent to which graduates perceive their studies to have fostered the development of the generic skills recognised by the university as being a valuable outcome of university education, in addition to discipline specific skills and knowledge. Skills include problem solving; oral and written communication; development of ideas and their written presentation; collaboration with other researchers; analytical skills; planning; confidence in tackling unfamiliar problems; and ability to learn independently

4.2 COMPARATIVE RESULTS: QUANTITATIVE DATA 2007 – 2010

The following graph shows the proportion of graduates who either strongly agreed or agreed with Generic Skills Scale survey items in the PREQ between 2007 and 2010.

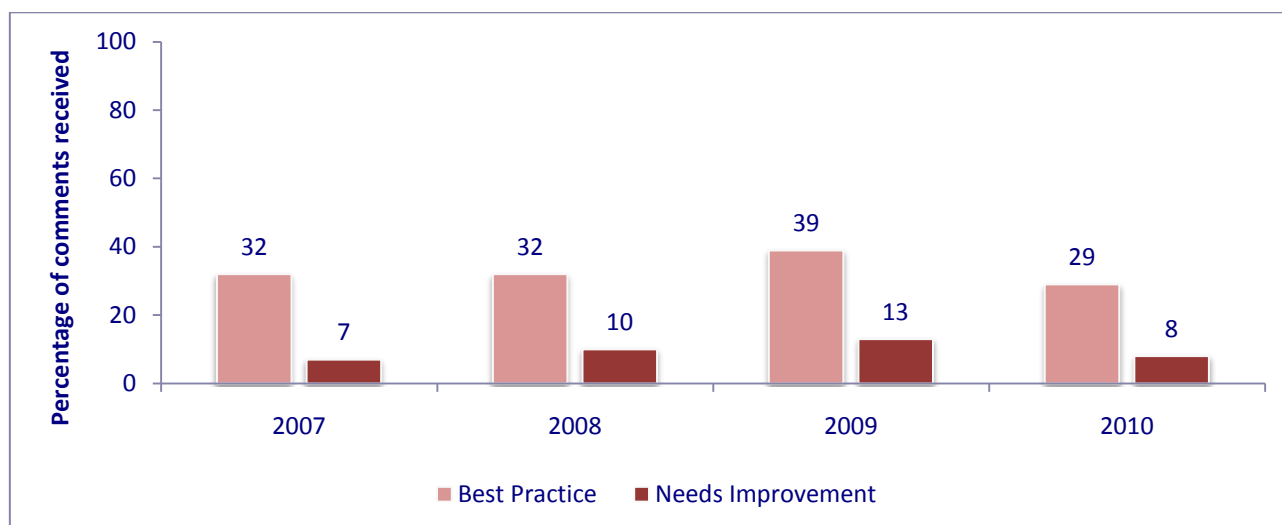
Figure 10: Generic Skills: Percentage agreement results: PREQ 2007 - 2010



4.3 FOCUS OF WRITTEN OBSERVATIONS: 2007–2010

The following chart provides an indication of trends in the research higher degree student experience relating to the enhancement of University Graduate Attributes, as indicated in their responses to the open questions in the 2007 – 2010 PREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 11: Graduate Attributes: Focus of written observations: PREQ 2007 - 2010



4.4 KEY ISSUES : PREQ 2010

This section provides information on graduates' perceptions of the development or enhancement of tasks and abilities within each of the University Graduate Attribute clusters that were considered significant enough to merit mention by over 5% of the graduates who provided written observations in their responses to the 2010 PREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all graduates.

4.4.1 Areas of best practice

| | Domestic (n=222) | International (n=47) | All (n=269) |
|----------------------------|---------------------|-------------------------|----------------|
| Graduate Attributes | 27% | 38% | 29% |
| - Research and inquiry | 18% | 23% | 19% |

Sample comments

- *Learning to write critically, learning how to research, developing the knowledge of the quality of work that is expected of an academic*
- *I found that towards the end of the PhD, I could read and understand scientific papers that I found incomprehensible at the beginning*
- *I got the chance to develop my research skills in a high standard*
- *Stimulating my problem-solving ability*

4.4.2 Areas needing improvement

| | Domestic (n=192) | International (n=41) | All (n=233) |
|----------------------------|---------------------|-------------------------|----------------|
| Graduate Attributes | 7% | 15% | 8% |

Sample comments

- *Access to NVIVO training*
- *availability/support for statistical problems*
- *Formal/credited sessions on advanced research methodology and biostatistics for students*
- *An internship program for work experience would be good*

5 THESIS EXAMINATION PROCESS

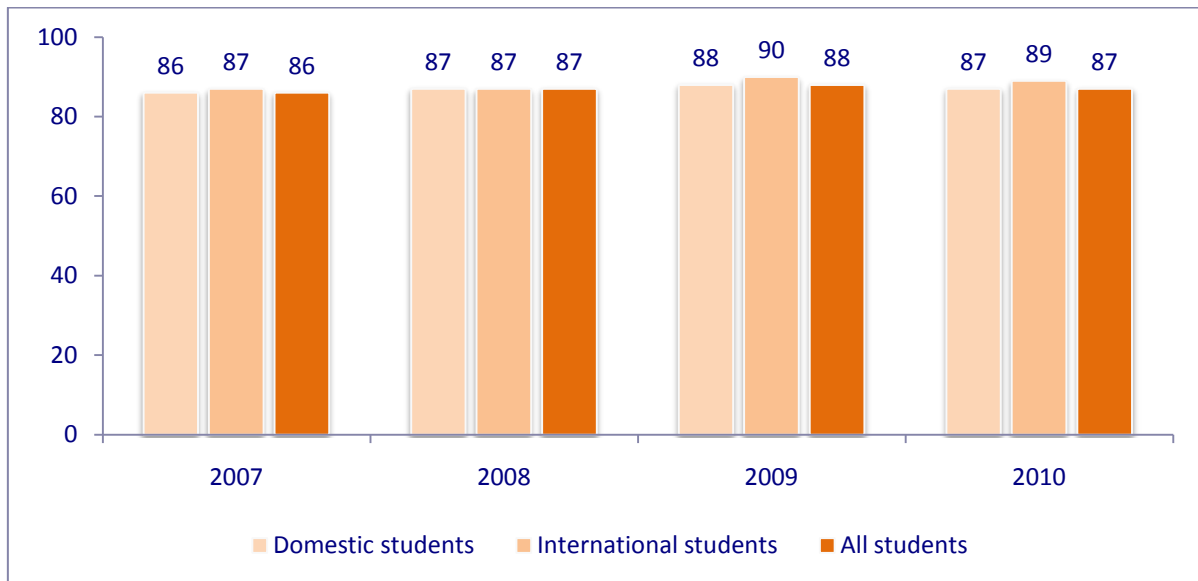
5.1 BACKGROUND INFORMATION

The *Thesis Examination Scale* reflects the extent to which graduates are satisfied with the process of examination of their dissertation, and understood the standard of work required.

5.3 COMPARATIVE RESULTS: QUANTITATIVE DATA 2007 – 2010

The following graph shows the proportion of graduates who either strongly agreed or agreed with the Thesis Examination Scale survey items in the PREQ between 2007 and 2010.

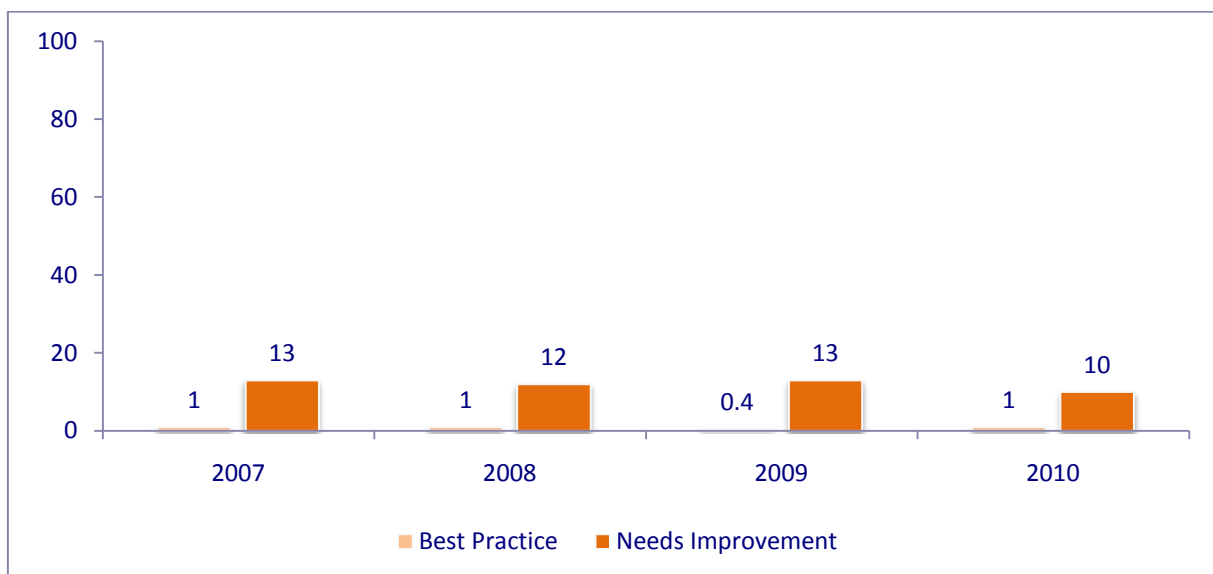
Figure 12: Thesis Examination Scale: Percentage agreement results: PREQ 2007 - 2010



5.3 FOCUS OF WRITTEN OBSERVATIONS: 2007–2010

The following chart provides an indication of trends in the research higher degree student experience of Thesis Examination Process, as indicated in their responses to the open questions in the 2007 – 2010 PREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 13: Thesis Examination Process: Focus of written observations: PREQ 2007 - 2010



5.4 KEY ISSUES: PREQ 2010

This section provides information on the aspects of Thesis Examination that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the graduates who provided written observations in their responses to the 2010 PREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all graduates.

From the evidence received, it appears that respondents to the PREQ focus their written observations on Thesis Examination as an area in need of improvement, and prefer to write about other areas of their experience as being of best practice. It should be noted, however, that the quantitative data results have exceeded 87% agreement for the past four years.

4.4.1 Areas of best practice

Respondents to the 2010 PREQ provided the following positive comments relating to the thesis examination process:

- *My exam. The comments on my thesis were helpful and encouraging. We discussed my work and future directions and career. If only the previous two years had been as positive and helpful*
- *examiners were wonderful*
- *One of my examiners was great and prompt with the response for the thesis*

4.4.2 Areas needing improvement

| | Domestic (n=192) | International (n=41) | All (n=233) |
|-----------------------------------|---------------------|-------------------------|----------------|
| Thesis Examination Process | 11% | 7% | 10% |
| - Examination process | 11% | 5% | 10% |

Sample comments

- *My examiners took 8 months to all complete their report on my thesis*
- *The examination process lasted over a year because of Sydney University committee disagreements. I was not able to know or ask anything about it, it was degrading and humiliating, left me with extremely low confidence in myself and my work, and in the end, the thesis was accepted with few recommendations - there was no reason for the prolonged delay that went on interminably. There are precious few experts in this field at Sydney Uni, and they were not consulted for the most part, during the unnecessarily prolonged committee process, and when they were, they were ignored in favour of those who knew nothing about it. I remain very bitter about my entire experience at Sydney Uni because of this. It is very difficult to see any of the good aspects after the humiliation through which I was put in the end*
- *The way of examining students' thesis should be modified or changed to save students' time and resources, especially for international students. Maybe it is ok for doctoral students to search, apply or take academic jobs when their theses are under examination in Australia, but this is not acceptable in some countries. When I searched and applied for academic jobs in Taiwan and China, I was told that I could only apply when I really receive my PhD degree, or I can certainly show them that I will definitely get my degree before a certain date. However, that process of thesis examination is too uncertain, and it took me five months to get my examiners' marks and responses. If the process of doctoral thesis examination in Australia will be kept, this process should be finished as soon as possible*
- *The person in charge of my thesis marking committee did not explain the requirements and did not follow an appropriate procedure resulting in a delay for me to get the results by 9 months, my missing of a graduation ceremony, me having to do extra work on the thesis which was not actually required, and handing in the thesis only days before my student visa expired*

6 OVERALL SATISFACTION

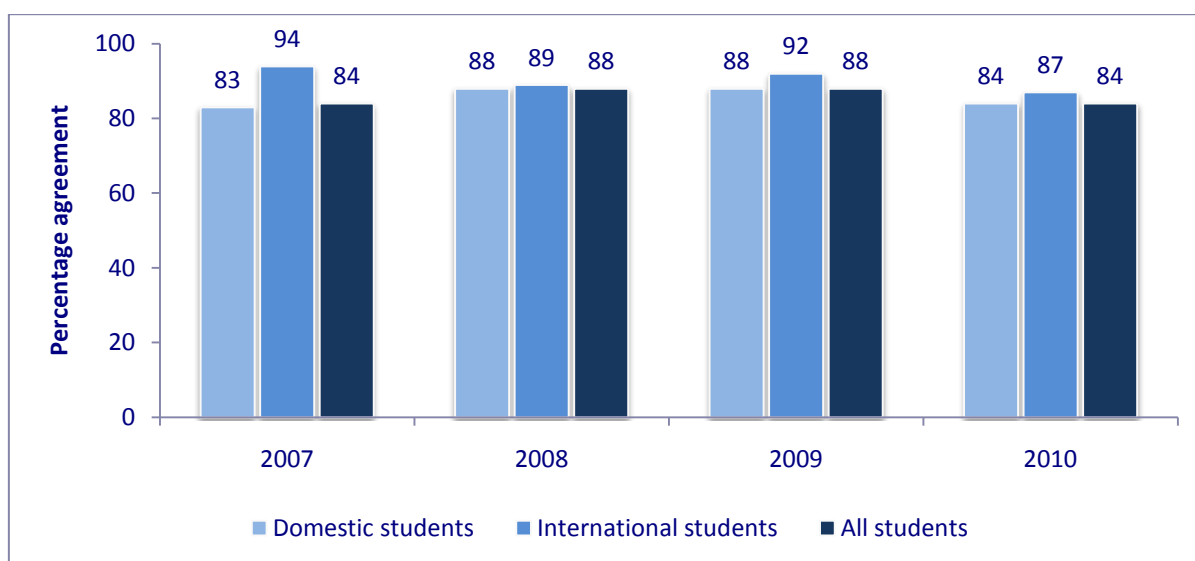
6.1 BACKGROUND INFORMATION

This single item asks graduates about their overall level of satisfaction with their research higher degree experience. In the analysis of the qualitative data, additional aspects, which are not covered in other areas of the survey, but which contribute to the overall satisfaction of the research higher degree student experience area included e.g. satisfaction with research, quality of degree (coursework, pressure to complete, practical components), flexibility of program, writing and completion of dissertation, and reputation of the university/faculty/academic staff.

6.3 COMPARATIVE RESULTS: QUANTITATIVE DATA 2007 – 2010

The following graph shows the proportion of graduates who either strongly agreed or agreed with the Overall Satisfaction item in the PREQ between 2007 and 2010.

Figure 14: Overall Satisfaction Item: Percentage agreement results: PREQ 2007 - 2010



6.3 FOCUS OF WRITTEN OBSERVATIONS: 2007 – 2010

The following chart provides an indication of trends in the research higher degree student experience aspects which fall within the remit of Overall Satisfaction, as indicated in their responses to the open questions in the 2007 – 2010 PREQ. It demonstrates the relationship between areas of best practice and areas in need of improvement. Results are reported as a percentage of the total number of comments received from all respondents who supplied written observations.

Figure 15: Overall Satisfaction: Focus of written observations: PREQ 2007 - 2010



6.4 KEY ISSUES: PREQ 2010

This section provides information on the aspects of Overall Satisfaction that were considered significant enough in the research higher degree student experience to merit mention by over 5% of the graduates who provided written observations in their responses to the 2010 PREQ. Results are expressed as a percentage of comments received per aspect by domestic, international and all graduates.

6.4.1 Areas of best practice

| | Domestic (n=222) | International (n=49) | All (n=269) |
|--|---------------------|-------------------------|----------------|
| Overall satisfaction | 50% | 36% | 47% |
| - Satisfaction with research | 21% | 15% | 20% |
| - Flexibility of program | 11% | 9% | 10% |
| - Quality of degree (incl. coursework and practical aspects) | 9% | 4% | 9% |

Sample comments

- *I enjoy the independence of research work, as well as the challenge of presenting a good written argument*
- *The credibility University of Sydney gave me to conduct the research in schools*
- *The coursework provided a really strong basis for the development of my research project*
- *My research was quite successful in providing new theory and insight into a technical problem*

6.4.2 Areas needing improvement

| | Domestic (n=175) | International (n=53) | All (n=228) |
|--|---------------------|-------------------------|----------------|
| Overall satisfaction | 17% | 12% | 16% |
| - Quality of degree (incl. coursework and practical aspects) | 8% | 5% | 8% |

Sample comments

- *Compulsory yet unhelpful research classes (3 course over the degree)*
- *lack of coursework component that relates to my research area*
- *More structured learning may be helpful, as occurs in north America and Europe. students there are expected to take courses and be examined on their area of study. Whilst our undergraduate courses in Australia are perhaps more thorough, it may be beneficial for PhD students (who may have been out of uni for a few years) to undertake some courses related to their area of research*
- *The Faculty in which I completed my PhD, would really benefit from having more postdoctoral researchers and technicians to give support and advice, and to help with developing research ideas and in writing papers*

ATTACHMENT ONE: STATISTICAL DATA PREQ 2007 - 2010**1 QUANTITATIVE DATA ANALYSIS**

| Number of research higher degree graduations 2006 – 2009⁴ | | | | |
|---|------------|------------|------------|------------|
| | 2006 | 2007 | 2008 | 2009 |
| | n= | n= | n= | n= |
| Doctorate (Res) | 484 | 523 | 483 | 557 |
| Master (Res) | 182 | 162 | 140 | 163 |
| Total | 666 | 685 | 623 | 720 |

| Number of respondents to the PREQ 2007 – 2010 (i.e. students who graduated 2006 – 2009 and answered the PREQ) | | | | |
|---|------------|------------|------------|------------|
| | 2007 | 2008 | 2009 | 2010 |
| | n= | n= | n= | n= |
| Domestic graduates | 289 | 266 | 263 | 287 |
| International graduates | 31 | 47 | 61 | 53 |
| Total | 320 | 313 | 324 | 341 |
| <i>% who responded</i> | 48% | 46% | 52% | 47% |

2 QUALITATIVE DATA ANALYSIS

The analysis of the qualitative data is based on responses to the open questions received from respondents to the PREQ.

| Number of respondents who answered the open questions PREQ 2006 – 2009 | | | | | |
|---|--------------------------------|------------|------------|------------|------------|
| | Date of survey | 2007 | 2008 | 2009 | 2010 |
| | | n= | n= | n= | n= |
| <i>Areas of best practice</i> | Domestic graduates | 164 | 231 | 212 | 222 |
| | International graduates | 18 | 42 | 57 | 47 |
| | Total | 182 | 273 | 269 | 269 |
| | <i>% who provided comments</i> | 57% | 87% | 83% | 79% |

| | | | | | |
|-----------------------------|--------------------------------|------------|------------|------------|------------|
| <i>Areas of improvement</i> | Domestic graduates | 131 | 191 | 175 | 192 |
| | International graduates | 14 | 35 | 53 | 41 |
| | Total | 145 | 226 | 228 | 233 |
| | <i>% who provided comments</i> | 45% | 72% | 70% | 68% |

3 RELIABILITY OF QUANTITATIVE AND QUALITATIVE DATA

The following information on the reliability of statistical data in the above tables should be taken into consideration when reading this report:

Qualitative data

Where the number of respondents is between 5 and 20 results should be viewed with caution. The minimum sample size recommended for statistical analysis is 20

⁴ Data retrieved from University Statistics Office website 26.10.10

ATTACHMENT TWO: NOTES ON ANALYSIS AND COUNTING OF COMMENTS

1 ANALYSIS OF COMMENTS

The components of categories and sub-categories used in the analysis of qualitative data are based on:

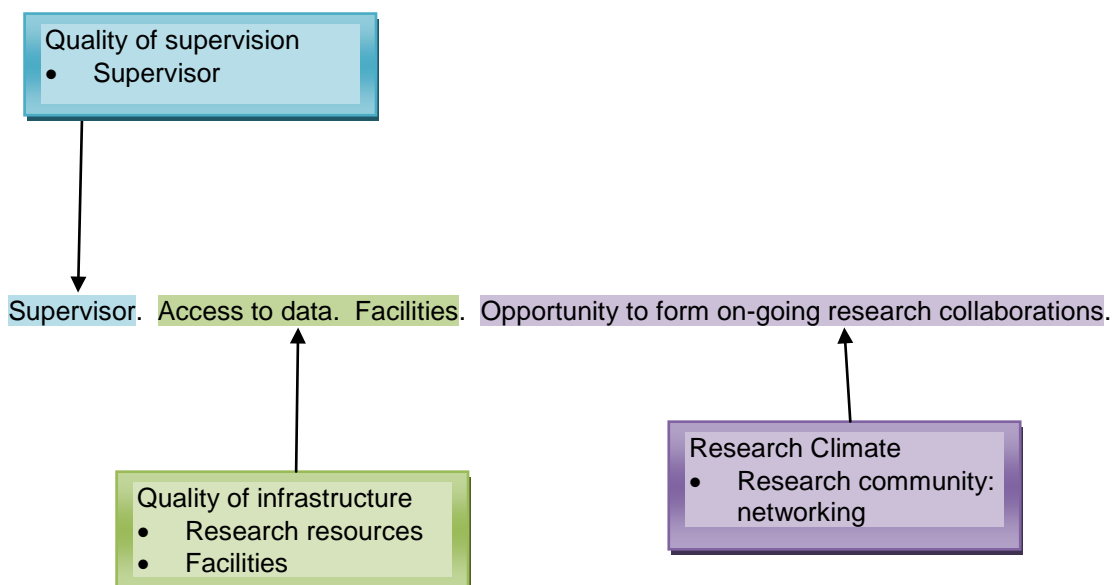
- Characteristics that define the area of the student experience
- PREQ survey items
- recurring themes in graduates' comments and have been developed over many years of analysing qualitative data from graduates' surveys.

Together, they represent the range of features of each aspect which are considered to be essential to student satisfaction with their research training experience

2 COUNTING OF COMMENTS

Each comment is analysed according to the *Taxonomy for analysing qualitative data from the SREQ and PREQ*, which is based on the Factors used in the SREQ and PREQ. Based on the premise that a comment is what is written by an individual respondent in response to one of the open response questions, and a tally in the statistics being a specific phrase or sentence referring to one aspect of the student experience, the total number of times an aspect is mentioned in any one set of comments is calculated as a percentage of comments received in the year of the survey. As a general rule, only those aspects which receive over 5% of comments from the whole cohort (i.e. domestic and international combined) are considered significant enough to be included as specific issues in the report.

For example, the following comment is counted as ONE COMMENT RECEIVED; but as it is mentioned in Quality of supervision (Supervisor); Quality of Infrastructure (Research resources; Facilities); and Research Climate (Research community: networking); the highlighted phrases within the comment are counted ONCE in each of the relevant categories i.e. 4 aspects in one comment.



ATTACHMENT THREE: PREQ SCALES: COVERAGE OF QUANTITATIVE AND QUALITATIVE DATA

The University of Sydney Postgraduate Research Experience Questionnaire (PREQ) survey items have been shown to cluster together to form factor scales: Supervision, Climate, Infrastructure, Generic Skills and Thesis Examination, and the Overall Satisfaction Item. These items, together with recurring themes in graduates' comments are used as the basis for categories, sub-categories and components for the analysis of qualitative data. This attachment lists the relevant survey items and sub-categories and components used in the analysis of qualitative and quantitative data from the PREQ.

1 SUPERVISION SCALE/ QUALITY OF SUPERVISION

1.1 PREQ Survey items

- Supervision was available when I needed it
- My supervisor(s) made a real effort to understand difficulties I faced
- My supervisor(s) provided me with additional information relevant to my topic
- I was given good guidance in topic selection and refinement
- My supervisor(s) provided helpful feedback on my progress
- I received good guidance in my literature search

1.2 Qualitative data analysis

There are 4 sub-categories within *Quality of Supervision*, against which graduates comments are analysed. Each of these sub-categories may be further broken down into relevant aspects (or components) of the research student experience of Supervision. The components of these sub-categories are based on the PREQ survey items together with recurring themes in graduates' comments:

- Supervisor(s) (*supervisor/ associate supervisor; usefulness of sessions with; availability and frequency of meetings with; feedback on work; understanding and empathy*)
- Supervision processes within faculty (*general comments on supervision; evaluation of supervisors by faculty; training*)
- Management of Candidature (*guidance on thesis, literature review; topic etc; workload; progress reports; help with writing the thesis*)
- IP and plagiarism

2 INFRASTRUCTURE SCALE/ QUALITY OF INFRASTRUCTURE

2.1 PREQ Survey items

- I had access to a suitable working space
- I had good access to the technical support I need
- I was able to organise good access to necessary equipment
- I had good access to computing facilities and services
- There was appropriate financial support for research activities

2.2 Qualitative data analysis

There are 7 sub-categories within *Quality of Infrastructure*, against which graduates comments are analysed. Each of these sub-categories may be further broken down into relevant aspects (or components) of the research graduates' perceptions of the quality of infrastructure. The components of these sub-categories are based on the PREQ survey items together with recurring themes in graduates' comments.

- Administration (*enrolment and admission; communication between faculty and graduates; general comments on administration (faculty and university); graduation; enrolment; postgraduate coordinator; ethics process*)
- Facilities (*common room; workspace, buildings, etc; computer hardware and software; equipment; transport and parking*)
- Finance and funding (*funding for resources, equipment etc; scholarships and grants; travel and conference funding*)
- Research resources (*provided by faculty; provided by internal and external libraries and archive centres*)
- Student support services (*Research Office; International Office etc*)
- Support (*IT; technical; laboratory*)

3 CLIMATE SCALE/ RESEARCH CLIMATE

3.1 PREQ Survey items

- The department provided opportunities for social contact with other postgraduate graduates
- I was integrated into the department's community
- The department provided opportunities for me to become involved in the broader research culture
- A good seminar program for postgraduate graduates was provided
- The research ambience in the department or faculty stimulated my work

3.2 Qualitative data analysis

There are 7 sub-categories within *Research Climate*, against which graduates comments are analysed. Each of these sub-categories may be further broken down into relevant aspects (or components) of the student experience of the prevailing research climate within the faculty. The components of these sub-categories are based on the PREQ survey items together with recurring themes in graduates' comments.

- Social inclusion (*cultural diversity; equity, discrimination, and harassment*)
- Research culture/ community (*internal and external to faculty /general comments; faculty seminars, workshops, and discussion groups; networking/ collaborating; participation in conferences; opportunities for and encouragement to publish*)
- Work environment (*challenging and stimulating; induction/ orientation programme; integration into faculty/ department/ school; isolation (emotional); respect as fellow researcher; supportive environment; support for part-time, distance, international students*)
- Interaction with other research higher degree students (*academic; social; support of peers*)
- Location and physical environment
- Interaction with industry partners e.g. ARC projects
- Career preparation (*academic/research (e.g. availability of tutoring, lecturing); industry/ government; general comments*)

4 GENERIC SKILLS SCALE/ GRADUATE ATTRIBUTES

4.1 PREQ Survey items

- My research further developed my problem-solving skills
- I learned to develop my ideas and present them in my written work
- My research sharpened my analytical skills
- Doing my research developed my ability to plan my own work
- As a result of my research I feel confident about tackling unfamiliar problems

4.2 Qualitative data analysis

There are 5 sub-categories within Graduate Attributes, against which graduates comments are analysed. These match the five main University Generic Graduate Attributes. The components of these sub-categories are allied to the skills and abilities for each attribute provided in the University policy framework for Graduate Attributes.

- Communication (*oral communication; written communication; presentation*)
- Ethical, social, professional understanding (*collaboration/ team work; ethical, social, cultural understanding; professional skills including academic*)
- Information literacy (*retrieval and use of information; computing skills e.g. using endnote, searching databases etc; referencing*)
- Personal and intellectual autonomy (*independent learning; planning own work; intellectually curious; new ways of thinking, etc*)
- Research and inquiry (*analytical, critical, problem solving; expanding knowledge base; creativity and imagination; statistical skills; research skills*)

5 THESIS EXAMINATION SCALE/ PROCESS

5.1 PREQ Survey items

- The thesis examination process was fair
- I developed an understanding of the standard of work required
- I understood the required standard for the thesis
- I was satisfied with the examination process
- I understood the requirements of thesis examination
- The examination of my thesis was completed in a reasonable time.

5.2 Qualitative data analysis

There are 5 sub-categories within Thesis examination process. The components of these sub-categories are based on the PREQ survey items together with recurring themes in graduates' comments.

- Examiners
- Feedback from examiners
- Marking (*including time taken to examine thesis*)
- Process (*including comments on whole process; individual elements are analysed according to other sub-categories*)
- Standard of thesis (*understanding of*)

5 OVERALL SATISFACTION

5.1 PREQ Survey item

Overall, I am satisfied with the quality of my research higher degree experience.

5.2 Qualitative data analysis

There are 9 sub-categories within Overall Satisfaction. They represent the range of aspects of the postgraduate research student experience which are considered to have a major influence on the quality of the research degree experience, and which are not covered elsewhere.

- General comments
- Quality of degree/ program (*length; inclusion of coursework, etc; practical components*)
- Pressure to complete (*i.e. within time frame set by APA conditions etc*)
- Satisfaction with research (*topic, contribution to field*)
- Writing and completing (*the process of completing the thesis and submitting for examination; finishing*)
- Flexibility of the program (*freedom to follow own research; choose own topics; compared to undergraduate degree; flexible working hours*)
- Reputation/ prestige of university/ faculty/ department/ academic staff
- Quality of fellow students (*calibre; education level etc*)