

# Postgraduate Research Experience Questionnaire (PREQ) Summary Report – 2019

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## 1.0 Introduction

JCU has several methods of systematically capturing the experiences of research higher degree candidates with respect to their research education, one of which is the Postgraduate Research Experience Questionnaire (PREQ.)

Every year recently completed Higher Degree by Research candidates are invited to take the PREQ, which is part of the nation-wide Graduate Outcomes Survey and is published within the Quality Indicators for Learning and Teaching (QILT). These surveys are administered by the Social Research Centre on behalf of Universities Australia.

This report summarises the results of the PREQ of graduands who completed a Higher Degree by Research in 2017 and 2018 in across the Research Training sector in Australia. The analysed data are provided by QILT to JCU via the Reporting & Analytics Office who collaborated with the Graduate Research School on preparation of this report.

Statistical analyses revealed no significant difference in level of satisfaction between JCU and the Sector, and some differences in satisfaction between demographic groups both at JCU and across the Sector.

## 2.0 Results

### ***2.1 The Survey***

For the purposes of this report, the data for the years of 2017 and 2018 were combined due to the relatively small number of responses for JCU (see Table 1.) The data were filtered to reflect the Tableau workbook version of the data that is reported on the QILT website<sup>1</sup> in which 170 of JCU's responses were included in the analysis. As a percentage of the total number of completions in 2017 and 2018, JCU's valid response rate was 44%.

***Table 1: Number of Respondents.***

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<sup>1</sup> Filters included the following: Online completions of the survey only, study level = 'Postgraduate research' and 'Flags records used in the analysis of QILT data' = 'Graduate' and 'Second course in double degree' only.

	2017	2018	Total
JCU Valid Responses	83	87	170
Sector Valid Responses (not JCU)	6,151	6,242	12,393

The PREQ itself consists of 1 item relating to “Overall Satisfaction” and a further 27 items which roll up into 6 scales as defined below:

#### **Overall Satisfaction Scale**

Asks the graduate to indicate their level of overall satisfaction with their completed research. (1 item)

#### **Supervision Scale**

Evaluates the accessibility and quality of research degree supervision. (6 items)

#### **Intellectual Climate Scale**

Measures the learning community and conditions provided by the institution, and whether the graduate felt that their department had made efforts to integrate them into the academic community. (5 items)

#### **Skill Development Scale**

Assesses the extent of generic analytical and communication skill development. Such skills include the ability to transfer knowledge, apply analytical techniques to new situations, solve problems, plan work, and communicate effectively in writing. (5 items)

#### **Infrastructure Scale**

Asks the student about the quality of learning infrastructures such as space, and equipment and finance and whether resource requirements were met during their period of research. (5 items)

#### **Thesis Examination Process Scale**

Evaluates whether the examination process was timely, fair and satisfactory, and how satisfied the student was with thesis examination. (3 items)

#### **Goals and Expectations Scale**

Measures the clarity of learning structure, requirements and standards, and whether supervisors and others frame learning with appropriate pedagogical structures and expectations. (3 items)

## **2.2 Analysis**

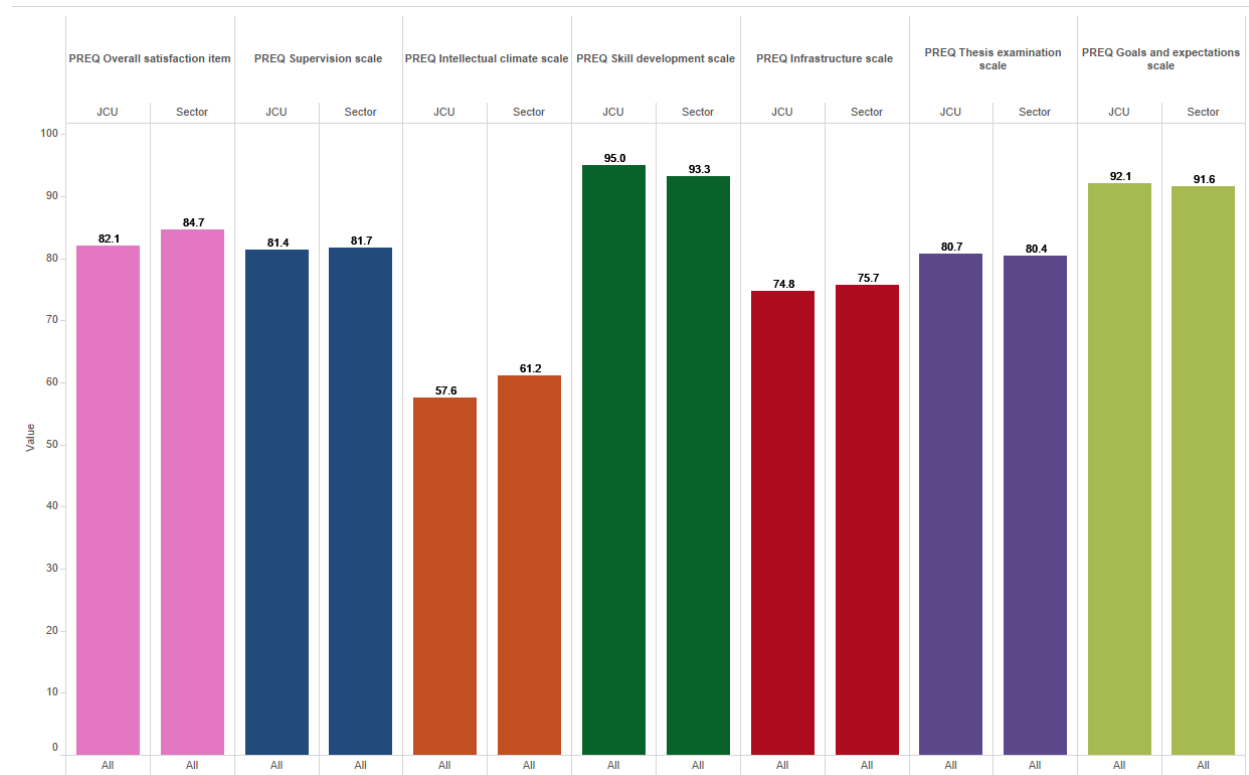
### **2.2.1 Scale Level Comparison of JCU vs Sector**

A series of one way ANOVA tests were used to examine if there were differences between JCU and the rest of the sector. The first analyses examined whether there were significant ( $p < 0.05$ ) differences between JCU and the sector on the PREQ scales and Overall Satisfaction item. No significant differences were found at this level of the survey. Tests for differences in all items (individual questions) used to create the scales also revealed no differences between JCU and the sector at the  $p < 0.05$  level.

Figure 1 illustrates the average satisfaction for each scale for JCU and the Sector. Despite there being no statistically significant differences between JCU and the Sector it is worth noting that JCU HDR graduates have slightly lower levels of satisfaction for the Overall item, Infrastructure, Supervision and Intellectual Climate scales, and slightly higher levels of satisfaction for the Skills Development, Thesis Examination and Goals and Expectations scales. Furthermore, and against recommendations to avoid comparisons

between scales, it is worth noting that the satisfaction of Intellectual Climate in general is much lower than satisfaction in the other scales. Indeed Intellectual Climate has had the lowest satisfaction rating of all scales traditionally in the PREQ (see [PREQ 2015, Figure 1.](#))

**Figure 1: Average satisfaction levels for each PREQ Scale for JCU and the Sector.**



### 2.2.2 Scale Level Comparison of Demographic Groups within JCU and the Sector

The dataset contained the following demographic and academic context variables which were used to test whether there were significant differences in responses within JCU and across the entire Australian sector:

- Study mode (internal/external)
- Attendance mode (full time/part time)
- Survey completion year
- If from non-English speaking background
- Citizenship (Overseas/domestic)
- Broad field of education of study
- Gender

Differences in satisfaction were found for the above groups in the following PREQ scales at both JCU and across the sector:

- Domestic students and part-time students had lower scores for the infrastructure scale than international and full-time students;
- Students with a disability had lower scores on the Supervision scale than those without a disability; and
- External students had lower scores for 'intellectual climate' than internal students.

### **2.2.3 Item Level Comparison of Demographic Groups within JCU**

The JCU data were then interrogated at the level of each individual item making up each scale, for each of the demographic groups in Table 1 showing satisfaction differences at the scale level (see Table 2.)

Some of these differences in satisfaction in certain subsets of the student population are easier to interpret and understand than others. These findings provide an excellent opportunity to unpack their origins through targeted focus groups, which the Graduate Research School conducts biennially. The next round of HDR focus groups are due to be conducted in 2019, and these findings will inform those sessions.

Across the individual items the greatest differences in satisfaction were between full-time and part-time candidates, with full-time candidates consistently more satisfied than part-time candidates on the following items:

- I had good access to the technical support I needed (IS)
- Doing my research helped me to develop my ability to plan my own work (SDS)
- The research ambience in the department or faculty stimulated my work (ICS)
- I received good guidance in my literature search (SC)
- The examination of my thesis was completed in a reasonable time (TES) and
- Overall, I was satisfied with the quality of my higher degree research experience (OS)

Students from overseas were more satisfied they had access to computing facilities and services.

## **3.0 Conclusions**

The 2018 PREQ Report<sup>2</sup> (released January 2019) compares the satisfaction of HDR graduates from JCU in 2017 and 2018 to those of the entire sector. There were no differences in the levels of satisfaction of JCU HDR Graduates and Sector HDR Graduates at any level of the survey. The survey data did highlight differences in satisfaction for particular demographic groups within JCU for select items in the survey. These differences in satisfaction were reflected in the sector-wide data indicating that they are national phenomena. The differences in satisfaction for certain demographic groups provide an excellent base-line for focus groups within JCU with the aim of improving the HDR experience.

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<sup>2</sup> Available from: [https://www.qilt.edu.au/docs/default-source/gos-reports/2018-gos/2018-gos-national-report-2018.pdf?sfvrsn=a729e33c\\_4](https://www.qilt.edu.au/docs/default-source/gos-reports/2018-gos/2018-gos-national-report-2018.pdf?sfvrsn=a729e33c_4)

**Table 2: Item level comparison of demographic groups within JCU. Demographics highlighted red/green are those where a significant difference in satisfaction was found, with red being less satisfied and green being more satisfied.**

PREQ item	Scale	Domestic	Overseas	Part-time	Full-time
I developed an understanding of the standard of work expected (GES)	Goals and Expectations				
I understood the required standard for the thesis (GES)	Goals and Expectations				
I understood the requirements of thesis examination (GES)	Goals and Expectations				
The department provided opportunities for social contact with other postgraduate students (ICS)	Intellectual Climate				
I was integrated into the department's community (ICS)	Intellectual Climate				
The department provided opportunities for me to become involved in the broader research culture (ICS)	Intellectual Climate				
A good seminar program for postgraduate students was provided (ICS)	Intellectual Climate				
The research ambience in the department or faculty stimulated my work (ICS)	Intellectual Climate				
I had access to a suitable working space (IS)	Infrastructure				
I had good access to the technical support I needed (IS)	Infrastructure				
I was able to organise good access to necessary equipment (IS)	Infrastructure				
I had good access to computing facilities and services (IS)	Infrastructure				
There was appropriate financial support for research activities (IS)	Infrastructure				
Supervision was available when I needed it (SC)	Supervision				
My supervisor(s) made a real effort to understand difficulties I faced (SC)	Supervision				
My supervisor(s) provided additional information relevant to my topic (SC)	Supervision				
I was given good guidance in topic selection and refinement (SC)	Supervision				
My supervisor(s) provided helpful feedback on my progress (SC)	Supervision				
I received good guidance in my literature search (SC)	Supervision				
My research further developed my problem solving skills (SDS)	Skills Development				
I learned to develop my ideas and present them in my written work (SDS)	Skills Development				
My research sharpened my analytical skills (SDS)	Skills Development				
Doing my research helped me to develop my ability to plan my own work (SDS)	Skills Development				
As a result of my research, I feel confident about tackling unfamiliar problems (SDS)	Skills Development				
The thesis examination process was fair (TES)	Thesis Examination				
I was satisfied with the thesis examination process (TES)	Thesis Examination				
The examination of my thesis was completed in a reasonable time (TES)	Thesis Examination				
Overall, I was satisfied with the quality of my higher degree research experience (OS)	Overall Satisfaction				

