

Gender and higher education experience: a case study

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This research seeks to contribute to current discussion of gender differences in experience of higher education. Its specific focus is to compare the assessment of various university services by male and female students. The research sample consisted of 9793 students who participated in three University of Western Sydney surveys in 2004 and 2005. The results suggest that, first, female students place higher importance on the majority of the university's services than do male students; second, as female students advance through their studies, they appear more demanding about the quality of services, while male students remain comparatively tolerant; and third, while all students consider that some areas warrant improvement, this is significantly more so for female than for male students. Specifically, the key areas for improvement from female students' perspective are the relevance and instructional clarity of the course and efficiency of administration. It is recommended that, considering the current trends in higher education across gender, a sharper focus on these areas for improvement action could help the university ensure equity and better manage competition.

Keywords: gender differences; higher education experience; importance; performance; satisfaction

Introduction

Over recent years, gender differences in higher education have emerged that were not evident in the past. For example, female students now outnumber male students (Australian Bureau of Statistics [ABS], 2002, 2005; Baker & Velez, 1996; Bradley, 2000); female students outperform male students academically (Busch, 1995; Gammie, Paver, Gammie, & Duncan, 2003; Graf, 2005); and female students choose fields of study in which they were previously under-represented, while male students continue to make traditional choices (ABS, 2002, 2005; Ayalon, 2003; Beyer, DeKeuster, Rynes, & DeHeer, 2004; Beyer, DeKeuster, Walter, Colar, & Holcomb, 2005). Women seem to take higher education more seriously than men.

This assumption is supported by contemporary institutional research into gender differences in attitudes to, and expectations from, higher education. For example, Anastasia, Tremblay, Makela and Drennen (1999) investigated the importance incoming university students placed on services and found significant gender differences on seven of twelve survey items. Of these seven items, females rated six higher than did males: awareness of career opportunities; career counselling; graduating in a timely fashion; opportunities to mature; graduate assistants who clearly presented class

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materials; and professor assistance outside of class. Whelchel (1998) reported 'persistent and striking' gender differences in the ratings of self-development and goals in higher education. With few exceptions, female undergraduate students consistently rated their own current development higher than did male students. Female students also tended to rate various educational and personal development goals as more important than did their male course-mates.

The outcomes of recent University of Western Sydney (UWS) surveys support these findings indicating that female students place greater importance on a majority of academic and non-academic aspects of their program than do male students. Female students also have consistently higher retention rates than males each year between 2001 and 2005 (see Table 1).

All these findings suggest that female students make greater use of university services and value higher education more than male students. A possible explanation for this disparity could be a belief that, given comparable jobs, education levels and work experiences, women obtain lower salaries and less prestigious positions than men (Farmer, Wardrop, & Rotella, 1999; Owens, 2003). In order to equal men in pay and career expectations, women may feel they need to be better educated and, thus, need to outperform their male course-mates academically (Gammie et al., 2003). McIntyre's research (as cited in Graf, 2005) also found that female students have to work harder than male students before they are taken seriously by their professors and that they indeed spend more time preparing for classes, studying, reading and doing lab work.

Another possible contributing factor to the current national trends in university enrolment, retention and performance across gender may be the actual decline in male academic performance in senior schooling and the culture, in Australian education at least, of boys under-performing, supported by peer-group pressure (Buckingham, 2003; House of Representatives Standing Committee on Education and Training, 2002; McKew, 2000).

In this situation, it appears important for higher education providers to determine whether such tendencies can be turned to their advantage and, if so, how they can be appropriately actioned. There has been a dramatic fall in the proportion of public funding allocated to Australian universities over the past decade (Australian Vice-Chancellors' Committee, 2005; Soutar & Turner, 2002). This has increased the importance of students as a source of income and thus increased the competition between universities to fill student places and be responsive to student demands. The current trends in student enrolment, retention, expectations and performance suggest that females are likely to be a majority group of customers in the higher education market. In view of their growing importance to the sector, it seems useful to find out what specifically attracts and retains them.

This paper provides a comparative analysis of three relevant surveys conducted at UWS in 2004 and 2005: the UWS Student Satisfaction Survey (SSS) covering the total student experience at UWS; the UWS Research Student Satisfaction Survey

Table 1. Percentages of retention by gender in 2001–2005.

Gender	2001	2002	2003	2004	2005	Total
Female	76.0	73.2	79.6	76.9	75.1	76.4
Male	71.9	69.6	77.4	71.1	71.4	72.3
Total	74.1	71.6	78.7	74.3	73.4	74.6

(RSSS) completed by high degree research (HDR) students; and the Course Experience Questionnaire (CEQ) completed by graduating undergraduate students.

The principle objective of the paper was to examine gender differences in students' experience at the university. Particular attention was focused on the university's services and areas that had low student satisfaction and whether they were assessed significantly differently by female and male students. Identification of such areas where differences were most evident could help the university take appropriate action to ensure the quality of the learning environment for all students.

Methods

Participants and procedure

The participant pool for the SSS comprised 1689 students, of which 1051 were female and 638 were male. The majority of respondents (77%) were undergraduate students at the bachelor level of study. The research sample was representative of the university's profile in terms of gender, age, college, level of study, campus, Aboriginal or Torres Strait Islander descent, medical condition, payment mode and language background.

Similarly representative of the university's profile was the sample of 8224 UWS graduates (5061 female and 3163 male) who completed the CEQ in 2004 and 2005. Of all the respondents 4832 graduates (3013 female and 1819 male) provided additional written comments at the end of the questionnaire.

The RSSS was completed by the sample of 401 UWS HDR students in 2005. Of these respondents, 229 were female and 172 were male.

Instruments

The SSS instrument used at UWS builds on a tool developed in 1994 at the University of Technology, Sydney (UTS) (UTS, 2006). Students rate a set of 85 items, outlining the university's academic and general services and facilities, on their importance and performance using a five-point Likert-style scale (1 = low to 5 = high). The survey items cover such areas as:

- current course experience, e.g. unit content, materials, methods, class sizes, staff;
- outcomes of study, e.g. development of relevant abilities and skills;
- administration of and access to facilities and resources;
- learning support services, e.g. library, WebCT, computing facilities;
- student services, e.g. careers and employment advice, counselling;
- general student facilities, e.g. food services, shops, sport and fitness; and
- UWS Student Association's services and activities.

The CEQ aims to measure students' perceptions of various aspects of the course just completed. Graduates are asked to indicate the extent to which they agree or disagree with each of 25 statements using a five-point Likert-style scale where 1 represents strong disagreement and 5 strong agreement. The items relate to five areas of students' experience: Good Teaching; Clear Goals and Standards; Generic Skills; Appropriate Assessment; and Student Support (Graduate Careers Council of Australia, 2004, 2005). Respondents are also asked to provide comments on the 'best aspects' of the university's performance and on those most 'needing improvement'.

The comments are classified by the *CEQuery* qualitative analysis tool into five domains (Staff; Course Design; Course Outcomes; Assessment; and Support) and 26 subdomains using a custom-tailored dictionary (Scott, 2006).

The UWS RSSS was developed from a parallel instrument used over the past five years at UTS (UTS, 2006). It was reviewed in consultation with UWS staff, trialled with UWS HDR students and further refined in the light of their feedback. The survey's design and structure are very similar to those of the SSS. Its 107 items cover such areas of HRD students' experience as:

- academic support;
- outcomes of study;
- administration and access to facilities and resources;
- library services;
- computing facilities, research support and infrastructure;
- student services;
- minimum resource policy;
- general student facilities; and
- UWS Postgraduate Student Association's services and activities.

Statistical procedures

To determine whether differences between participants' mean ratings of survey items were evident on the basis of gender, an independent *t*-test was conducted for each survey data with gender as the independent variable. Given the large number of observations, there was a concern that many statistically significant differences may carry little meaning in practice, thus the *t*-test was supplemented by the effect size measures. The effect sizes, reported as Cohen's *d* (Cohen, 1988), provided supporting information on the percentage of overlap between the groups compared.

Results

University of Western Sydney Student Satisfaction Survey

The pattern of results presented in Table 2 suggested that female UWS students perceive the majority of university services as more important than do male students. Of 85 survey items, 48 showed significant differences between mean ratings across gender at $p < .01$ and on 47 of these items the female students' ratings were higher. There were fewer differences between the groups in terms of effect size (range = $-.26$ to $.47$), indicating a non-overlap of 15–28% of the females' scores with the males' scores. The only item under 'general facilities' perceived as significantly less important by female students than by male students was 'bars'.

In the areas where respondents rated performance (Table 3) 16 items were rated significantly differently at $p < .01$. There were only four differences between the groups in terms of effect size (range = $.21$ to $.23$), indicating a non-overlap of about 15% in the two distributions. Female students' ratings were higher on all of these items.

Interestingly, many items assessed as very important by female students had, at the same time, significantly different ratings on importance across gender. Of 13 areas on which female students placed the highest importance (mean = > 4.60), 10 were rated

Table 2. Results of independent samples test comparing SSS mean ratings on importance by gender and effect sizes.*

	Female students (n = 1051)		Male students (n = 638)		t	d
	M	SD	M	SD		
Services and areas of provision: Importance						
The course being undertaken						
Has roughly equivalent work loads between units	4.00	.95	3.74	1.07	4.83	.25
Provides clear assessment requirements	4.63	.60	4.49	.71	4.08	.21
Provides timely and constructive feedback	4.58	.67	4.42	.80	4.13	.21
Outcomes of studies to date						
Ethical values like honesty and integrity	4.50	.76	4.26	.92	5.45	.28
A respect for alternative viewpoints	4.47	.70	4.28	.86	4.75	.24
Non-sexist attitudes	4.51	.75	4.05	1.16	9.29	.47
An appreciation for Australia's cultural diversity	4.32	.92	3.92	1.16	7.43	.39
Skills in communicating with people	4.57	.67	4.38	.82	5.10	.26
Administration						
Info on admissions procedures is easy to obtain	4.58	.69	4.42	.82	4.17	.21
Admissions procedures are straightforward	4.56	.68	4.39	.78	4.28	.22
Info on enrolment is clear and accurate	4.63	.65	4.48	.73	4.48	.23
Current & accurate info on HECS/PELS or fees	4.50	.80	4.32	.93	3.99	.22
Accurate info about courses	4.61	.65	4.46	.75	4.22	.22
Access						
Library	4.83	.50	4.70	.61	4.26	.22
Child care	3.21	1.62	2.87	1.66	2.88	.21
Security services	4.35	.94	4.02	1.18	5.59	.32

Table 2. (Continued).

Services and areas of provision: Importance	Female students (<i>n</i> = 1051)		Male students (<i>n</i> = 638)		<i>t</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Learning support						
Learning and study skills assistance	4.37	.86	4.17	1.03	3.87	.21
Aboriginal Tutorial Assistance Scheme	3.48	1.54	3.11	1.60	2.78	.23
IT helpdesk assistance	4.54	.74	4.33	.93	4.55	.25
	4.30	.99	3.97	1.23	4.76	.30
Student services						
Counselling						
Disability	4.21	1.19	3.91	1.33	3.17	.23
Aboriginal Education Centre	3.72	1.40	3.27	1.54	3.76	.31
International student advisors	4.18	1.22	3.84	1.45	3.47	.25
International student office	4.17	1.24	3.84	1.46	3.41	.24
General facilities						
Bars	3.13	1.45	3.49	1.36	-4.39	-.26

Note: *Only significant results at $p < .01$ and $d > .2$ are included in the Table.

Table 3. Results of independent samples test comparing SSS mean ratings on performance by gender and effect sizes.*

Services and areas of provision: Performance	Female students (<i>n</i> = 1051)		Male students (<i>n</i> = 638)		<i>t</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Outcomes of studies to date						
An appreciation for Australia's cultural diversity	3.95	.87	3.76	.98	3.77	.21
Access						
Bookshop	3.81	.99	3.60	1.10	3.76	.21
General student facilities						
Shops and newsagencies	3.44	1.06	3.21	1.10	3.77	.21
Social activities	3.07	.99	2.83	1.12	3.64	.23

Note: *Only significant results at $p < .01$ and $d > .2$ are included in the Table.

significantly lower by male students. The items that emerged as particularly important to female students were:

- access to library;
- access to computers;
- library: photocopiers and printing;
- provision of clear assessment requirements;
- clear and accurate information about enrolment procedures;
- enrolling and re-enrolling is quick and convenient;
- quality of computing equipment;
- gaining up-to-date knowledge and skills needed by employers;
- accurate information about courses; and
- problems with administrative matters effectively resolved.

Of these 10 areas ranked highest on importance, four were rated 2nd, 4th, 12th and 14th lowest on performance by female students (mean range = 2.83–3.12). These items, which may indicate priority areas for quality improvement from female students' perspective, were:

- problems with administrative matters are effectively resolved;
- enrolling and re-enrolling is quick and convenient;
- clear and accurate information about enrolment procedures; and
- accurate information about courses.

It is worth noting that male students ranked the first two of these four items also very low on performance (mean < 3.00). Nevertheless, the female students' ratings still revealed larger gaps between expectations and satisfaction than did the male students' ratings. Therefore, these items may warrant more attention from the female than from the male students' point of view.

Table 3 contains the results on perceived performance. It shows that female students appeared more satisfied with appreciation for Australia's cultural diversity, as an

outcome of their study, with social activities and with a few general facilities. No difference between the samples was evident in satisfaction with administrative and academic areas. Male students did not rate the performance of any services significantly higher than female students.

Course Experience Questionnaire

As may be seen in Table 4, of 25 CEQ items the mean scores on 10 items appeared significantly different on the basis of gender. Female graduates rated higher all three items of the Appropriate Assessment scale (all reversed scored as they are negatively phrased). Male graduates rated higher three of six items of the Generic Skills scale, three of four items of the Clear Goals and Standards scale and one item of the Student Support scale.

The very small effect sizes (range = $-.11$ to $.11$) may imply that this statistical significance is an artefact of the large number of observations, with about 92% of overlap between the groups. However, the vast majority of all mean scores were lower for female graduates (mean range = 3.12 – 3.75) than for their male course-mates (mean range = 3.14 – 3.77). One item: 'It was always easy to know the standard of work expected' was rated the lowest of all 25 items by female students ($M = 3.12$, $SD = 1.03$), while it was rated significantly higher by male students ($M = 3.21$, $SD = 1.00$). No significant differences across gender were found for the Good Teaching scale.

The CEQ's open-ended comments classified using *CEQuery* were scored and an independent *t*-test was conducted with gender as the independent variable to examine

Table 4. Results of independent samples test comparing CEQ mean ratings by gender and effect sizes.*

Scale codes and items	Female students ($n = 5061$)		Male students ($n = 3163$)		<i>t</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
AA: To do well in this course all you really needed was a good memory**	3.47	1.21	3.32	1.87	5.54	.10
AA: The staff seemed more interested in testing what I had memorised than what I had understood**	3.37	1.15	3.24	1.15	5.08	.11
AA: Too many staff asked me just about facts**	3.42	.97	3.32	.98	4.60	.10
GS: The course sharpened my analytical skills	3.65	.97	3.73	.97	-3.72	-.08
GS: The course developed my problem solving skills	3.57	.92	3.63	.92	-2.61	-.09
GS: As a result of my course, I feel confident about tackling unfamiliar problems	3.44	.90	3.52	.91	-3.98	-.09
CG: It was always easy to know the standard of work expected	3.12	1.03	3.21	1.00	-4.15	-.09
CG: I usually had a clear idea of where I was going and what was expected of me in this course	3.40	.98	3.46	.97	-2.87	-.06
CG: The staff made it clear right from the start what they expected from students	3.35	.98	3.41	.95	-2.76	-.06
SS: Relevant learning resources were accessible when I needed them	3.30	1.00	3.41	.99	-4.8	-.11

Notes: *Only significant results at $p < .01$ are included in the Table; **Reversed scored items. AA = Appropriate Assessment; GS = Generic Skills; CG = Clear Goals; SS = Student Support.

Table 5. Results of independent samples test comparing CEQ comment mean scores by gender and effect sizes.*

CEQuery subdomains	Female students (<i>n</i> = 3013)		Male students (<i>n</i> = 1819)		<i>t</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Course design: flexibility	.00	.45	.03	.44	-2.24	-0.07
Course design: relevance to work/life	-.05	.39	-.02	.38	-2.41	-0.08
Course design: structure	-.14	.41	-.11	.39	-2.57	-0.07
Outcomes: intellectual	.08	.28	.10	.31	-2.20	-0.07
Outcomes: personal	.02	.11	.01	.14	2.32	0.08
Assessment: expectations	-.03	.16	-.01	.13	-2.89	-0.14
Support: library	-.03	.23	-.02	.19	-2.14	-0.05

Note: *Only significant results at $p < .05$ are included in the Table.

the differences between the mean scores on the *CEQuery* domains and subdomains. These means were calculated based on $-1 =$ 'Needs Improvement', $0 =$ 'No Comment', $1 =$ 'Best Aspect'. Thus, positive mean values denoted more positive than negative comments on an issue, negative mean values denoted more critical than positive comments, mean values close to 0.00 indicated balanced or patchy opinions. Only the data containing at least one comment were analysed.

The outcomes of this analysis, presented in Table 5, were consistent with the CEQ analysis results. Of the 35 *CEQuery* aspects, seven showed significant differences between the group mean scores at $p < .05$. The effect sizes were very small (range = $-.14$ to $.08$) and the large majority of all mean scores were lower for female graduates.

The only area that attracted significantly more positive comments from female than from male students was 'Personal Outcomes'. The other six areas attracted fewer positive (and accordingly more negative) comments from female students than from male students. This referred to flexibility, structure and vocational relevance of their recently completed course; intellectual outcomes of the program; expectations for assessment; and quality of library. It must be noted that both subsamples demonstrated an agreement about all rated course experiences, even when significant differences between groups were evident. For example, such areas as relevance and structure of course design and expectations for assessment attracted more negative than positive comments from both subsamples. Even so, female students made less positive and more critical comments regarding these areas than their male course-mates.

University of Western Sydney Research Student Satisfaction Survey

The results indicated that female HDR students viewed the importance of most of the university's services higher than male HDR students (Table 6).

Female students' mean ratings were higher in 13 of 14 cases where gender differences were significant and in a large majority of non-significant cases. The effect sizes (range = $-.34$ to $.47$) indicated from 22–30% of non-overlap between the group score distributions. Major disparities were evident in such areas as administration, primarily the Office of Research Services and Office of Academic Registrar, library, research support and infrastructure. The only item rated significantly lower on importance by female research students than by male students was 'access to computers'. Similarly

Table 6. Results of independent samples test comparing RSSS mean ratings on importance by gender and effect sizes.*

Services and areas of provision: Importance	Female students (<i>n</i> = 229)		Male students (<i>n</i> = 172)		<i>t</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Outcomes of study						
Skill in oral and written communication	4.69	.65	4.41	.86	3.75	.37
Administration and access						
The Office of the Academic Registrar is effective	4.30	.87	4.00	.98	2.83	.32
Re-enrolment processes are easy and convenient	4.48	.73	4.14	.95	3.77	.40
The Office of Research Services is helpful	4.58	.61	4.34	.84	3.18	.33
Problems with admin. matters are effectively resolved	4.55	.68	4.21	.95	3.67	.41
Access to computers	4.14	1.36	4.54	.92	-2.87	-.34
Library						
Information services	4.53	.78	4.29	.84	2.64	.30
Assistance provided by library staff	4.70	.57	4.49	.75	2.98	.32
Intercampus book and materials delivery services	4.77	.57	4.53	.75	3.26	.36
Research support and infrastructure						
Workshops run by the Office of Research Services	4.37	.78	4.08	1.00	2.77	0.32
Timely information about seminars and workshops	4.46	.73	4.09	1.00	3.94	.42
Knowing where to go in my College for assistance	4.56	.76	4.28	.84	3.13	.35
Knowing where to go at UWS for assistance	4.47	.82	4.02	1.08	4.06	.47
Appropriate financial support for research activities	4.64	.73	4.33	1.05	3.19	.34

Note: *Only significant results at $p < .01$ and $d > .2$ are included in the Table.

to the SSS outcomes, many items assessed as very important by female students had, at the same time, significantly different ratings on importance across gender. Of 11 aspects on which female students placed the highest importance (mean = > 4.60), four were rated significantly lower by male students. Thus, the items, which emerged as particularly important to female HRD students were:

- intercampus book and materials delivery services;
- assistance provided by library staff;
- skill in oral and written communication;
- appropriate financial support for research activities.

In the areas where respondents rated performance, fewer gender-based differences appeared to be significant (Table 7). The large majority of differences, both significant and not, indicated lower satisfaction of female HRD students than male HRD students. One survey item rated significantly higher by female HRD students on importance and at the same time very low on performance, compared to male students, was 'knowing where to go in my college for assistance if I have issues about my research or supervision'. This issue may warrant particular attention from the female HRD students' perspective.

Table 7. Results of independent samples test comparing RSSS mean ratings on performance by gender and effect sizes.*

	Female students (<i>n</i> = 229)		Male students (<i>n</i> = 172)		<i>t</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Services and areas of provision:						
Performance						
Research support and infrastructure						
Knowing where to go in my College for assistance	2.84	1.43	3.28	1.28	-2.88	-.32
Minimum resources policy						
Allows equal access to resources to all students	2.65	1.39	3.39	1.32	-3.42	-.55
Has been clearly explained and I know how to access the resources I am entitled to	2.17	1.34	2.78	1.44	-3.02	-.44
Has clear pathways to follow in accessing resources	2.06	1.18	2.93	1.41	-4.51	-.67

Note: Only significant results at $p < .01$ and $d > .2$ are included in the Table.

Discussion

This case study using the data from three UWS surveys makes a number of contributions to understanding gender differences in experience of higher education in Australia. It reinforces the findings outlined in the literature review and shows that, firstly, female students place higher importance on the majority of university services than do male students. Secondly, as female students advance through their studies (from undergraduates to graduates and HDR), they appear more demanding about the quality of services, while male students remain comparatively tolerant. While at the undergraduate level at least some services were rated significantly higher on performance by female students and none were rated higher by male students; at the graduate and HDR levels, almost all significant results indicated lower satisfaction of female compared to male students. Finally, a number of university services receive high importance and low performance ratings from female students, while they receive significantly different ratings from male students. That is, male students tended to rate the level of importance lower and the level of performance higher than did females. These areas, summarised in Table 8, are administrative systems, support services, availability of, and access to, resources and infrastructure.

It is important to emphasise the variability within the category of gender. This variability is shown in the relatively large standard deviations and small effect sizes,

Table 8. Comparison of the main results across the surveys.

Issue	SSS (mostly undergraduate)		CEQ (graduating)	RSSS (postgraduate)	
	Importance	Performance	Satisfaction	Importance	Performance
Efficient, accessible and responsive administration	F – higher M – lower	Low in both subsamples		F – higher M – lower	F – lower M – higher
Clarity of standards and expectations			F – lower M – higher		
Support services, resources, and infrastructure	F – higher M – lower	F – higher M – lower	F – lower M – higher	F – higher M – lower	F – lower M – higher

which indicate that there are large overlaps between males and females. That is, the females' results do not pertain to all females and may be relevant to many individuals in the male sample. This may limit the extent to which the gender differences can be ratified. Nevertheless, this research reinforces prior findings and shows that female students' expectations regarding most of university's services are higher and their satisfaction tends to be lower compared to those of their male course-mates. In some areas this disparity is particularly evident and may warrant attention.

For example, there are four SSS items rated very high on importance and, at the same time, very low on performance by female students. All these items reveal significant difference across gender and they relate to efficiency of administrative systems and procedures, such as quick and convenient enrolling and re-enrolling, clear and accurate information about enrolment and accurate information about courses. Further, of 13 aspects on which female undergraduate students placed the highest importance, 10 were rated significantly lower by male students. Two of these 10 items were associated with educational activities while the remaining eight items related to support services, administrative systems and infrastructure.

Of the four RSSS items rated as very important by female students and significantly less important by male students, three related to administration, support and infrastructure. One of these items was also rated very low on performance by female students. It was 'knowing where to go in my College for assistance if I have issues about my research or supervision'. The other three items rated significantly lower on performance by female than by male students were about access to resources.

In summary, the SSS and RSSS results indicate that female students are more sensitive and demanding in respect of efficient administration, support services, resources and infrastructure compared to their male course-mates.

The CEQ results also suggest different course experience across gender, however, the differences in perception of educational aspects of the course are most evident. Despite the noticeable level of agreement between the samples – the same areas having similarly high or low mean ranks – graduating female students demonstrate lower satisfaction with assessment; clarity in requirements and expectations; development of analytical and problem-solving skills; flexibility, structure and vocational relevance of the course; intellectual outcomes of the program; and the quality of the library. Special mention must be given to the CEQ item 'It was always easy to know the standard of work expected', which was rated the lowest of all items by female students and significantly higher by male students.

Finally, this study offers a new way of determining the priority areas needing enhancement within the provision of university services. Traditionally such areas were identified as ones attracting a high importance (mean = > 4.00) and, at the same time, low performance ratings (mean ≤ 3.00) for such surveys as the SSS and RSSS; low explicit satisfaction rating (mean < 3.00) for such questionnaires as the CEQ; and the predominance of negative over positive thematic comments in the content analyses of open-ended comments.

We propose that the analysis and subsequent highlighting of items that are significantly different across gender (or other independent variable of interest) would add considerable value to the understanding of survey outcomes. Thus, we should not only identify areas having wide gaps between importance and performance, or areas showing low explicit satisfaction, but also understand whether there are particular groups within the student population that contribute to such outcomes to a larger or smaller extent. For example, this research identifies the areas that not only warrant improvement from

the perspective of all students, but significantly more so from the female than from the male students' perspective. These areas are:

- effective resolution of problems with administrative matters;
- quick and convenient enrolling and re-enrolling;
- clear and accurate information about enrolment procedures and courses;
- easy obtainable knowledge of the standard of work expected;
- course content relevant to work/life/discipline;
- course well structured and managed;
- clear assessment tasks, guidelines, deadlines and grading criteria; and
- knowing where to go in the college for assistance on issues about research or supervision.

These eight aspects of university experience can be classified into two themes: (1) efficient, accessible and responsive administration; and (2) relevance and instructional clarity of the course. It would appear reasonable for the university to focus on these two specific areas warranting improvement action, rather than on many areas at a time, in order to ensure equity and better manage competition. Any initiatives that could be put in place to address these generic areas would rightly benefit both female and male students, however more targeted initiatives might also be appropriate. This could include highlighting the issue of differences between female and male expectations, to front line full-time, part-time and contract academic and general staff via induction programs, seminars and professional development programs.

In general, more focus on the female cohort, while identifying priorities for improvement efforts, could also be beneficial for other Australian higher educational providers, considering the current national trends in student enrolment, retention and performance across gender.

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