LibQUAL+®

2023 Survey

The Hong Kong University of Science and Technology

1 Introduction

1.1 LibQUAL: Defining and Promoting Library Service Quality

This notebook contains information from the 2023 administration of the LibQUAL protocol and provides background information in addition to suggestions for interpreting the data.

LibQUAL is a tool that libraries use to solicit, track, understand, and act upon users' opinions of service quality. These services are offered to the library community by the Association of Research Libraries (ARL). The protocol is a rigorously tested web-based survey that helps libraries assess and improve library services, change organizational culture, and market the library. The survey instrument measures library users' minimum, perceived, and desired service levels of service quality across three dimensions: Affect of Service, Information Control, and Library as Place. The goals of LibQUAL are to:

- Foster a culture of excellence in providing library service
- Help libraries better understand user perceptions of library service quality
- Collect and interpret library user feedback systematically over time
- Provide comparable assessment information from peer institutions
- Identify best practices in library service
- Enhance library staff members' analytical skills for interpreting and acting on data

LibQUAL was initiated in 2000 as an experimental project for benchmarking perceptions of library service quality across 13 Association of Research Libraries member institutions under the leadership of Fred Heath and Colleen Cook, then both at Texas A&M University Libraries, and Martha Kyrillidou, former senior director of statistics and service quality programs at ARL. This effort was supported in part by a three-year grant from the U.S. Department of Education's Fund for the Improvement of Post-Secondary Education (FIPSE).

Since 2000, more than 1,300 libraries have participated in LibQUAL, including college and university libraries, community college libraries, health sciences libraries, academic law libraries, and public libraries—some through various consortia, others as independent participants. Through 2022, there have been 3,354 institutional surveys implemented across 1,349 institutions in 37 countries, 20 language translations, and over 3 million respondents. About 38% of the users who respond to the survey provide rich comments about the ways they use their libraries.The growing LibQUAL community of participants and its extensive dataset are rich resources for improving library services.

1.2   Web Access to Data

Data summaries from the 2023 iteration of the LibQUAL survey will be available to project participants online in the Data Repository via the LibQUAL survey management site:

<http://www.libqual.org/repository>

1.3   Interpreting Your Data

Means

The mean of a collection of numbers is their arithmetic average, computed by adding them up and dividing by their total number.

In this notebook, means are provided for users' minimum, desired, and perceived levels of service quality for each item on the LibQUAL survey. Means are also provided for the general satisfaction and information literacy outcomes questions.

Standard Deviation

Standard deviation (SD) is a measure of the spread of data around their mean. The standard deviation depends on calculating the average distance of each score from the mean. If all users rated an item identically, the SD would be zero. Larger SDs indicate more disparate opinions of the users about library service quality.

Service Adequacy

The service adequacy gap score is calculated by subtracting the minimum score from the perceived score on any given question, for each user. Both means and standard deviations are provided for service adequacy gap scores on each item of the survey, as well as for each of the three dimensions of library service quality. In general, service adequacy is an indicator of the extent to which you are meeting the minimum expectations of your users. A negative service adequacy gap score indicates that your users' perceived level of service quality is below their minimum level of service quality and is printed in red.

Service Superiority

The service superiority gap score is calculated by subtracting the desired score from the perceived score on any given question, for each user. Both means and standard deviations are provided for service superiority gap scores on each item of the survey, as well as for each of the three dimensions of library service quality. In general, service superiority is an indicator of the extent to which you are exceeding the desired expectations of your users. A positive service superiority gap score indicates that your users' perceived level of service quality is above their desired level of service quality and is printed in green.

Radar Charts

Radar charts are commonly used throughout the following pages to display both aggregate results and results from individual institutions. Radar charts are useful when you want to look at several different factors all related to one item. Sometimes called "spider charts" or "polar charts," radar charts feature multiple axes or spokes along which data can be plotted. Variations in the data are shown by distance from the center of the chart. Lines connect the data points for each series, forming a spiral around the center.

In the case of the LibQUAL survey results, each axis represents a different survey question. Questions are identified by a code at the end of each axis. The three dimensions measured by the survey are grouped together on the radar charts, and each dimension is labeled: Affect of Service (AS), Information Control (IC), and Library as Place (LP).

Radar charts are used in this notebook to present the item summaries (the results from the 22 core survey questions).

How to read a radar chart

Radar charts are an effective way to show strengths and weaknesses graphically by enabling you to observe symmetry or uniformity of data. Points close to the center indicate a low value, while points near the edge indicate a high value. When interpreting a radar chart, it is important to check each individual axis as well as the chart's overall shape in order to gain a complete understanding of its meaning. You can see how much data fluctuates by observing whether the spiral is smooth or has spikes of variability.

Respondents' minimum, desired, and perceived levels of service quality are plotted on each axis of your LibQUAL radar charts. The resulting gaps between the three levels are shaded in blue, yellow, green, and red. Generally, a radar graph shaded blue and yellow indicates that users' perceptions of service fall within the "zone of tolerance"; the distance between minimum expectations and perceptions of service quality is shaded in blue, and the distance between their desired and perceived levels of service quality is shown in yellow. When users' perceptions fall outside the "zone of tolerance," the graph will include areas of red and green shading. If the distance between users' minimum expectations and perceptions of service delivery is represented in red, that indicates a negative service adequacy gap score. If the distance between the desired level of service and perceptions of service delivery is represented in green, that indicates a positive service superiority gap score.

Note: Sections with charts and tables are omitted from the following pages when there are three or fewer individuals in a specific group.

Data Screening
In compiling the summary data reported here, several criteria were used to determine which responses to include in the analyses.

1. **Complete Data.** In order to submit the survey successfully, users must provide a rating of (a) minimally-acceptable service, (b) desired service, and (c) perceived service or rate the item "not applicable" ("N/A"). If these conditions are not met, when the user attempts to submit the questionnaire, the software shows the user where missing data are located and requests complete data. The user may of course abandon the survey without completing all the items. *Only records with complete data on the presented core items and where respondents chose a user group were retained in summary statistics.*

2. **"N/A" Responses.** Because some institutions provide incentive prizes for completing the survey, some users might select "N/A" choices for all or most of the items rather than reporting their actual perceptions. Or, some users may have views on such a narrow range of quality issues that their data are not very informative. *Records of the long version of the survey containing more than 11 "N/A" responses and records of the Lite version containing more than 4 "N/A" responses are eliminated from the summary statistics.*

3. **Inconsistent Responses.** One appealing feature of a gap measurement model is that the rating format provides a check for inconsistencies (i.e., score inversions) in the response data (Thompson, Cook & Heath, 2000). Logically, on a given item the "minimum" rating should not be higher than the "desired" rating on the same item. *Records of the long version of the survey containing more than 9 logical inconsistencies and records of the Lite version containing more than 3 logical inconsistencies were eliminated from the summary statistics.*

LibQUAL Analytics

LibQUAL Analytics is a tool that permits participants to dynamically create institution-specific tables and charts for different subgroups and across years. Participants can refine the data by selecting specific years, user groups, and disciplines; view and save the selection in various tables and charts; and download their datasets for further manipulation in their preferred software. As a benefit of registration, libraries have access to their own data in LibQUAL Analytics, as well as to the data for other institutions participating in the same year. Expanded access to LibQUAL data, encompassing all libraries in all years from 2000 to the present, is available for an additional fee through a LibQUAL membership subscription.

LibQUAL Norms

LibQUAL norms are available int he appendix of the following conference paper:

<http://arizona.openrepository.com/arizona/bitstream/10150/106442/1/08.Bruce_Thompson_pp52-60_.pdf>

Selected Bibliography

Begay, Wendy, Daniel R. Lee, Jim Martin, and Michael Ray. "Quantifying Qualitative Data: Using LibQUAL+(TM) Comments for Library-Wide Planning Activities at the University of Arizona." *Journal of Library Administration* 40, no. 3/4 (2004): 111–120.

Berry, L.L. *On Great Service: A Framework For Action*. New York: The Free Press, 1995.

Bradford, Dennis W. and Tim Bower. "Using Content Analysis Software to Analyze Survey Comments." *Portal: Libraries and the Academy* 8, no. 4 (2008): 423–437.

Cabrerizo, Francisco J., Ignacio J. Pérez, Javier López-Gijón, Enrique Herrera-Viedma, An Extended LibQUAL+ Model Based on Fuzzy Linguistic Information. *Modeling Decisions for Artificial Intelligence Lecture Notes in Computer Science 2012*: 90–101.

Calvert, Philip, J. *Assessing the Effectiveness and Quality of Libraries*. Ph.D. Thesis, Victoria University of Wellington, 2008.

Cook, Colleen C., Fred Heath, and Bruce Thompson. "LibQUAL+™ from the UK Perspective." *5th Northumbria International Conference Proceedings*, Durham, UK, July, 2003.

Cook, Colleen C. (Guest Ed.). "Library Decision-Makers Speak to Their Uses of Their LibQUAL+™ Data: Some LibQUAL+™ Case Studies." *Performance Measurement and Metrics*, 3 (2002b).

Cook, Colleen C. "A Mixed-Methods Approach to the Identification and Measurement of Academic Library Service Quality Constructs: LibQUAL+™." (PhD diss., Texas A&M University, 2001) *Dissertation Abstracts International*, 62 (2002A): 2295A (University Microfilms No. AAT3020024).

Cook, Colleen C., and Fred Heath. "Users' Perceptions of Library Service Quality: A 'LibQUAL+™' Qualitative Study." *Library Trends*, 49 (2001): 548–84.

Cook, Colleen C., Fred Heath, and Bruce Thompson. "'Zones of tolerance' in Perceptions of Library Service Quality: A LibQUAL+™ Study." *portal: Libraries and the Academy*, 3 (2003): 113–123.

Cook, Colleen C., Fred Heath and Bruce Thompson. "Score Norms for Improving Library Service Quality: A LibQUAL+™ Study." *portal: Libraries and the Academy*, 2 (2002): 13–26.

Cook, Colleen C., Fred Heath, and Russell L. Thompson. "A Meta-Analysis of Response Rates in Web- or Internet-based Surveys." *Educational and Psychological Measurement*, 60 (2000): 821–36.

Cook, Colleen C., and Bruce Thompson. "Psychometric Properties of Scores from the Web-based LibQUAL+™ Study of Perceptions of Library Service Quality." *Library Trends*, 49 (2001): 585–604.

Cook, C., Bruce Thompson, and Martha Kyrillidou. (2010, May). Does using item sampling methods in library service quality assessment affect score norms?: A LibQUAL+® Lite study. <http://libqual.org/documents/LibQual/publications/lq_gr_3.pdf>. Paper presented at the 2nd Qualitative and Quantitative Methods in Libraries (QQML 2010) International Conference, Chania (Crete), Greece, May 27, 2010.

Cullen, Rowena. "Perspectives on User Satisfaction Surveys." *Library Trends*, 49 (2002): 662–86.

Detlor, Brian and Kathy Ball. "Getting more value from the LibQUAL+ survey: The merits of qualitative analysis and importance-satisfaction matrices in assessing library patron comments." *College and Research Libraries,* 76 (2015): 796–810.

Fagan, Jodi Condit. "The dimensions of library service quality: A confirmatory factor analysis of the LibQUAL+ model."

Library & Information Science Research 36, no. 1 (2014): 36–48.

Greenwood, Judy T., Alex P. Watson, and Melissa Dennis. "Ten Years of LibQual: A Study of Qualitative and Quantitative Survey Results at the University of Mississippi 2001–2010." *The Journal of Academic Librarianship* 37, no. 4 (2011): 312–318.

Guidry, Julie Anna. "LibQUAL+(TM) spring 2001 comments: a qualitative analysis using Atlas.ti ." *Performance Measurement and Metrics* 3, no. 2 (2002): 100–107.

Heath, F., Martha Kyrillidou. and Consuella A. Askew (Guest Eds.). "Libraries Report on Their LibQUAL+® Findings: From Data to Action." *Journal of Library Administration* 40 (3/4) (2004).

Heath, F., Colleen C. Cook, Martha Kyrillidou, and Bruce Thompson. "ARL Index and Other Validity Correlates of LibQUAL+™ Scores." *portal: Libraries and the Academy*, 2 (2002): 27–42.

Jones, Sherri and Kayongo, Jessica. "Identifying Student and Faculty Needs through LibQUAL+™: An Analysis of Qualitative Survey Comments." *College & Research Libraries* 69, no. 6 (2008): 493–509.

Kieftenbeld, Vincent and Prathiba Natesan. "Examining the measurement and structural invariance of LibQUAL+® across user groups." *Library & Information Science Research* 35, no. 2 (2013): 143–150.

Kyrillidou, M. The Globalization of Library Assessment and the Role of LibQUAL+®. From Library Science to Information Science: Studies in Honor of G. Kakouri (Athens, Greece: Tipothito-Giorgos Dardanos, 2005). [In Greek]

Kyrillidou, Martha. "Library Assessment As A Collaborative Enterprise." *Resource Sharing and Information Networks*, 18 ½ (2005–2006): 73–87.

Kyrillidou, Martha. (2006). "Measuring Library Service Quality: A Perceived Outcome for Libraries. This chapter appears in *Revisiting Outcomes Assessment in Higher Education.* Edited by Peter Hernon, Robert E. Dugan, and Candy Schwartz (Westport, CT: Library Unlimited, 2006): 351–66.

Kyrillidou, Martha. (Guest Ed.). "LibQUAL+® and Beyond: Library assessment with a focus on library improvement." *Performance Measurement and Metrics*, 9 (3) (2008).

Kyrillidou, M. "Item Sampling in Service Quality Assessment Surveys to Improve Response Rates and Reduce Respondent Burden: The "LibQUAL+® Lite" Randomized Control Trial (RCT)" (PhD diss., University of Illinois at Urbana-Champaign, 2009). <https://www.ideals.illinois.edu/bitstream/handle/2142/14570/Kyrillidou_Martha.pdf?sequence=3>

Kyrillidou, Martha and Colleen C. Cook. "The evolution of measurement and evaluation of libraries: a perspective from the Association of Research Libraries." *Library Trends* 56 (4) (Spring 2008): 888–909.

Kyrillidou, Martha and Colleen C. Cook and S. Shyam Sunder Rao. "Measuring the Quality of Library Service through LibQUAL+®." In *Academic Library Research: Perspectives and Current Trends.* Edited by Marie L. Radford and Pamela Snelson (Chicago, IL: ACRL/ALA, 2008): 253–301.

Kyrillidou, M., Terry Olshen, Fred Heath, Claude Bonnelly, and Jean-Pierre Côte. "Cross-Cultural Implementation of LibQUAL+™: the French Language Experience." *5th Northumbria International Conference Proceedings* (Durham, UK, 2003): 193–99.

Kyrillidou, M., Colleen Cook. and Bruce Thompson. (2010, May). Does using item sampling methods in library service quality assessment affect zone of tolerance boundaries?: A LibQUAL+® Lite study <http://libqual.org/documents/LibQual/publications/lq_gr_2.pdf>. Paper presented at the 2nd Qualitative and Quantitative Methods in Libraries (QQML 2010) International Conference, Chania (Crete), Greece, May 27, 2010.

Kyrillidou, M. and Mark Young. *ARL Statistics 2003–04*. Washington, DC: Association of Research Libraries, 2005.

Lane, Forrest C., Baaska Anderson, Hector F. Ponce and Prathiba Natesan. "Factorial Invariance of LibQUAL+® as a Measure of Library Service Quality Over Time." *Library & Information Science Research* 34, no. 1 (2012): 22–30.

Miller, Kathleen. *Service Quality in Academic Libraries: An Analysis of LibQUAL+™ Scores and Instiutional Characteristics*. Ed.D. Dissertation, University of Central Florida, 2008.

Nitecki, D.A. "Changing the Concept and Measure of Service Quality in Academic Libraries." *The Journal of Academic Librarianship*, 22 (1996): 181–90.

Parasuraman, A., Leonard Berry, and Valerie Zeithaml. "Refinement and Reassessment of the SERVQUAL Scale" *Journal of Retailing*, 67 (1991): 420–50.

Thompson, B. "Representativeness Versus Response Rate: It Ain't the Response Rate!" Paper presented at the Association of Research Libraries (ARL) Measuring Service Quality Symposium on the New Culture of Assessment: Measuring Service Quality, Washington, DC, October 2002.

Thompson, B., Colleen C. Cook, and Fred Heath. "The LibQUAL+™ Gap Measurement Model: The Bad, the Ugly, and the Good of Gap Measurement." *Performance Measurement and Metrics*, 1 (2002): 165–78.

Thompson, B., Colleen C. Cook, and Fred Heath. "Structure of Perceptions of Service Quality in Libraries: A LibQUAL+™ Study." *Structural Equation Modeling*, 10 (2003): 456–464.

Thompson, B., Colleen C. Cook, and Russell L. Thompson. "Reliability and Structure of LibQUAL+™ Scores: Measuring Perceived Library Service Quality." *portal: Libraries and the Academy*, 2 (2002): 3–12.

Thompson, B., Colleen C. Cook, and Martha Kyrillidou. (2005). "Concurrent validity of LibQUAL+® scores: What do LibQUAL+® scores measure?" *Journal of Academic Librarianship*, 31: 517–22.

Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "Using Localized Survey Items to Augment Standardized Benchmarking Measures: A LibQUAL+® Study." *portal: Libraries and the Academy*, 6(2) (2006): 219–30.

Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "Stability of Library Service Quality Benchmarking Norms Across Time and Cohorts: A LibQUAL+® Study." Paper presented at the Asia-Pacific Conference of Library and Information Education and Practice (A-LIEP), Singapore, April 3–4, 2006.

Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "How Can You Evaluate the Integrity of Your Library Assessment Data: Intercontinental LibQUAL+® Analysis Used as Concrete Heuristic Examples." Paper presented at the Library Assessment Conference: Building Effective, Sustainable, and Practical Assessment, Charlottesville, VA, August 4–6, 2006.

Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "On-premises Library versus Google™-Like Information Gateway Usage Patterns: A LibQUAL+® Study." *portal: Libraries and the Academy* 7 (4) (Oct 2007a): 463–480.

Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "User library service expectations in health science vs. other settings: a LibQUAL+® Study." *Health Information and Libraries Journal* 24 (8) Supplement 1, (Dec 2007b): 38–45.

Thompson, B., Colleen C. C ook, and Martha Kyrillidou. "Library Users Service Desires: a LibQUAL+® Study." *Library Quarterly* 78 (1) (Jan 2008): 1–18.

Thompson, B., Martha Kyrillidou, and Colleen Cook. "Item sampling in service quality assessment surveys to improve response rates and reduce respondent burden: The 'LibQUAL+® Lite' example." *Performance Measurement & Metrics*, 10 (1) (2009): 6–16.

Thompson, B., Martha Kyrillidou, and Colleen Cook. "Equating scores on Lite and long library user survey forms: The LibQUAL+® Lite randomized control trials." *Performance Measurement & Metrics*, 10 (3) (2009): 212–219.

Thompson, B., Martha Kyrillidou, and Colleen Cook. (2010, May). "Does using item sampling methods in library service quality assessment compromise data integrity?: A LibQUAL+® Lite study." <http://libqual.org/documents/LibQual/publications/lq_gr_1.pdf>. Paper presented at the 2nd Qualitative and Quantitative Methods in Libraries (QQML 2010) International Conference, Chania (Crete), Greece, May 27, 2010.

Thompson, B., Martha Kyrillidou, and Colleen Cook. "Does using item sampling methods in library service quality assessment compromise data integrity or zone of tolerance interpretation?: A LibQUAL+® Lite Study." 2010 Library Assessment Conference: Building Effective, Sustainable, Practical Assessment. Baltimore MD, October 25–27, 2010. (Washington DC: Association of Research Libraries, 2011).

Town, S., and Martha Kyrillidou. "Developing a Values Scorecard." *Performance Measurement and Metrics* 14 (1) (2013): 1–16.

Voorbij, H.. "The use of LibQUAL+ by European research libraries," *Performance Measurement and Metrics*, Vol. 13 Iss: 3 (2012): 154–168.

Zeithaml, Valerie, A. Parasuraman, and Leonard L. Berry. *Delivering Quality Service: Balancing Customer Perceptions and Expectations*. New York: Free Press, 1990.

1.4 Library Statistics for The Hong Kong University of Science and Technology

The statistical data below were provided by the participating institution in the online Representativeness* section. Definitions for these items can be found in the *ARL Statistics*: <http://www.arl.org/stats/>.

Note: Participating institutions were not required to complete the Representativeness section. When statistical data is missing or incomplete, it is because this data was not provided.

Total library expenditures (in U.S. $):	**$0**
Personnel - professional staff, FTE:	**0**
Personnel - support staff, FTE:	**0**
Total library materials expenditures (in U.S. $):	**0**
Total salaries and wages for professional staff (in U.S. $):	**0**

1.5 Contact Information for The Hong Kong University of Science and Technology

The person below served as the institution's primary LibQUAL liaison during this survey implementation.

Name:	**Clara Kwan**
Title:	
Address:	**Library**
	Hong Kong Institution of Science and Technology
	Clear Water Bay, Kowloon, NT
	Hong Kong,
	China
Phone:	
Email:	**lbclara@ust.hk**

1.6   Survey Protocol and Language for The Hong Kong University of Science and Technology

The data below indicate the number of valid surveys collected by language and long/Lite breakdowns.

		Long	**Total** *(by Language)*
Chinese (Traditional)	Count	1,839	**1,839**
	% of Protocol	*65.10%*	*65.10%*
	% of Language	*100.00%*	*100.00%*
	% of Total Cases	*65.10*	*65.10*
English (British)	Count	986	**986**
	% of Protocol	*34.90%*	*34.90%*
	% of Language	*100.00%*	*100.00%*
	% of Total Cases	*34.90*	*34.90*
Total *(by Survey Protocol)*	Count	**2,825**	**2,825**
	% of Protocol	*100.00%*	*100.00%*
	% of Language	*100.00%*	*100.00%*
	% of Total Cases	*100.00*	*100.00*

2   Demographic Summary for The Hong Kong University of Science and Technology

2.1   Respondents by User Group

User Group	Respondent n	Respondent %
Undergraduate		
First year	538	19.04%
Second year	420	14.87%
Third year	403	14.27%
Fourth year	343	12.14%
Fifth year and above	26	0.92%
Sub Total:	1,730	61.24%
Postgraduate		
Postgraduate Diploma	47	1.66%
Taught Masters degree	285	10.09%
Research Masters degree	71	2.51%
Doctoral Research degree	203	7.19%
Sub Total:	606	21.45%
Academic Staff		
Chair Professor/ Professor/ Associate Professor/ Assistant Professor/ Visiting Faculty / Adjunct Fac	17	0.60%
Senior Lecturer	1	0.04%
Lecturer I / Lecturer II / Part-time Lecturer	19	0.67%
Instructor / Teaching Associate / Instructional Assistant / Part-time Communication Tutor	31	1.10%
Research Associate Professor / Research Assistant Professor / Research Associate / Post-doctoral Fel	59	2.09%
Sub Total:	127	4.50%
Staff		
Academic Administrator / Senior Managerial	32	1.13%
Management / Senior Professional (Band 7-9)	14	0.50%
Other Staff (Band 1-6)	316	11.19%
Sub Total:	362	12.81%
Total:	**2,825**	**100.00%**

2.2   Population and Respondents by User Sub-Group

The chart and table below show a breakdown of survey respondents by sub-group (e.g. First year, Masters, Professor), based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions in the online Representativeness section*.

The chart maps the percentage of respondents for each user subgroup in red. Population percentages for each user subgroup are mapped in blue. The table shows the number and percentage for each user sub-group for the general population (N) and for survey respondents (n).

Note: Participating institutions were not required to complete the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: All (Excluding Library Staff, Staff)
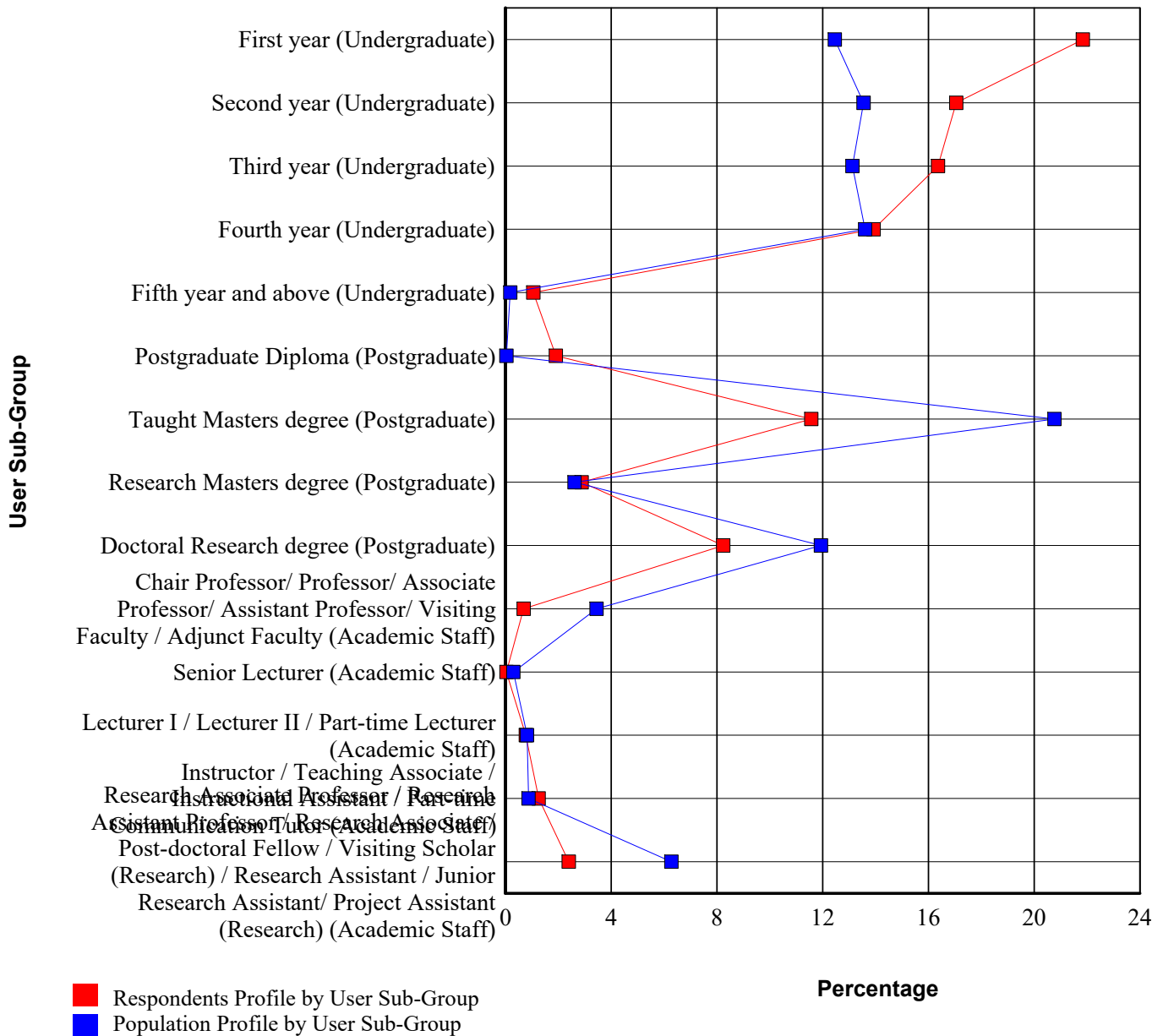
User Sub-Group	Population N	Population %	Respondents n	Respondents %	%N - %n
First year (Undergraduate)	2,522	12.46	538	21.84	-9.38
Second year (Undergraduate)	2,742	13.55	420	17.05	-3.51
Third year (Undergraduate)	2,657	13.13	403	16.36	-3.24
Fourth year (Undergraduate)	2,754	13.61	343	13.93	-0.32
Fifth year and above (Undergraduate)	37	0.18	26	1.06	-0.87
Postgraduate Diploma (Postgraduate)	8	0.04	47	1.91	-1.87
Taught Masters degree (Postgraduate)	4,204	20.77	285	11.57	9.20
Research Masters degree (Postgraduate)	529	2.61	71	2.88	-0.27
Doctoral Research degree (Postgraduate)	2,416	11.94	203	8.24	3.69
Chair Professor/ Professor/ Associate Professor/ Assistant Professor/ Visiting Faculty / Adjunct Faculty (Academic Staff)	698	3.45	17	0.69	2.76
Senior Lecturer (Academic Staff)	61	0.30	1	0.04	0.26
Lecturer I / Lecturer II / Part-time Lecturer (Academic Staff)	166	0.82	19	0.77	0.05
Instructor / Teaching Associate / Instructional Assistant / Part-time Communication Tutor (Academic Staff)	177	0.87	31	1.26	-0.38
Research Associate Professor / Research Assistant Professor / Research Associate / Post-doctoral Fellow / Visiting Scholar (Research) / Research Assistant / Junior Research Assistant/ Project Assistant (Research) (Academic Staff)	1,271	6.28	59	2.40	3.88
Total:	**20,242**	**100.00**	**2,463**	**100.00**	**0.00**

2.3 Population and Respondents by Standard Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.*

This section shows survey respondents broken down based on the LibQUAL standard discipline categories. The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

Note: Participating institutions were not required to complete the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

Respondent Profile by Discipline
Population Profile by Discipline

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture and Related Subjects	0	0.00	0	0.00	0.00
Architecture, Building, & Planning	0	0.00	0	0.00	0.00
Biological Sciences	1,133	5.60	128	5.20	0.40
Business & Administrative Studies	5,776	28.53	689	27.97	0.56
Combined Studies	1,958	9.67	345	14.01	-4.33
Computer Science	1,353	6.68	211	8.57	-1.88
Creative Arts & Design	0	0.00	0	0.00	0.00
Education	148	0.73	30	1.22	-0.49
Engineering & Technology	6,241	30.83	638	25.90	4.93
Humanities	260	1.28	13	0.53	0.76
Languages	0	0.00	0	0.00	0.00
Law	0	0.00	0	0.00	0.00
Librarianship & Information Science	0	0.00	0	0.00	0.00
Mathematical Sciences	975	4.82	84	3.41	1.41
Medicine & Dentistry	0	0.00	0	0.00	0.00
Other	0	0.00	93	3.78	-3.78
Physical Sciences	1,510	7.46	107	4.34	3.12
Social, Economic, & Political Studies	888	4.39	125	5.08	-0.69
Subjects allied to Medicine	0	0.00	0	0.00	0.00
Veterinary Science	0	0.00	0	0.00	0.00
Total:	**20,242**	**100.00**	**2,463**	**100.00**	**0.00**

2.4 Population and Respondents by Customized Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.*

This section shows survey respondents broken down based on the customized discipline categories supplied by the participating library. The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

Note: Participating institutions were not required to complete the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

■ Respondents Profile by User Sub-Group
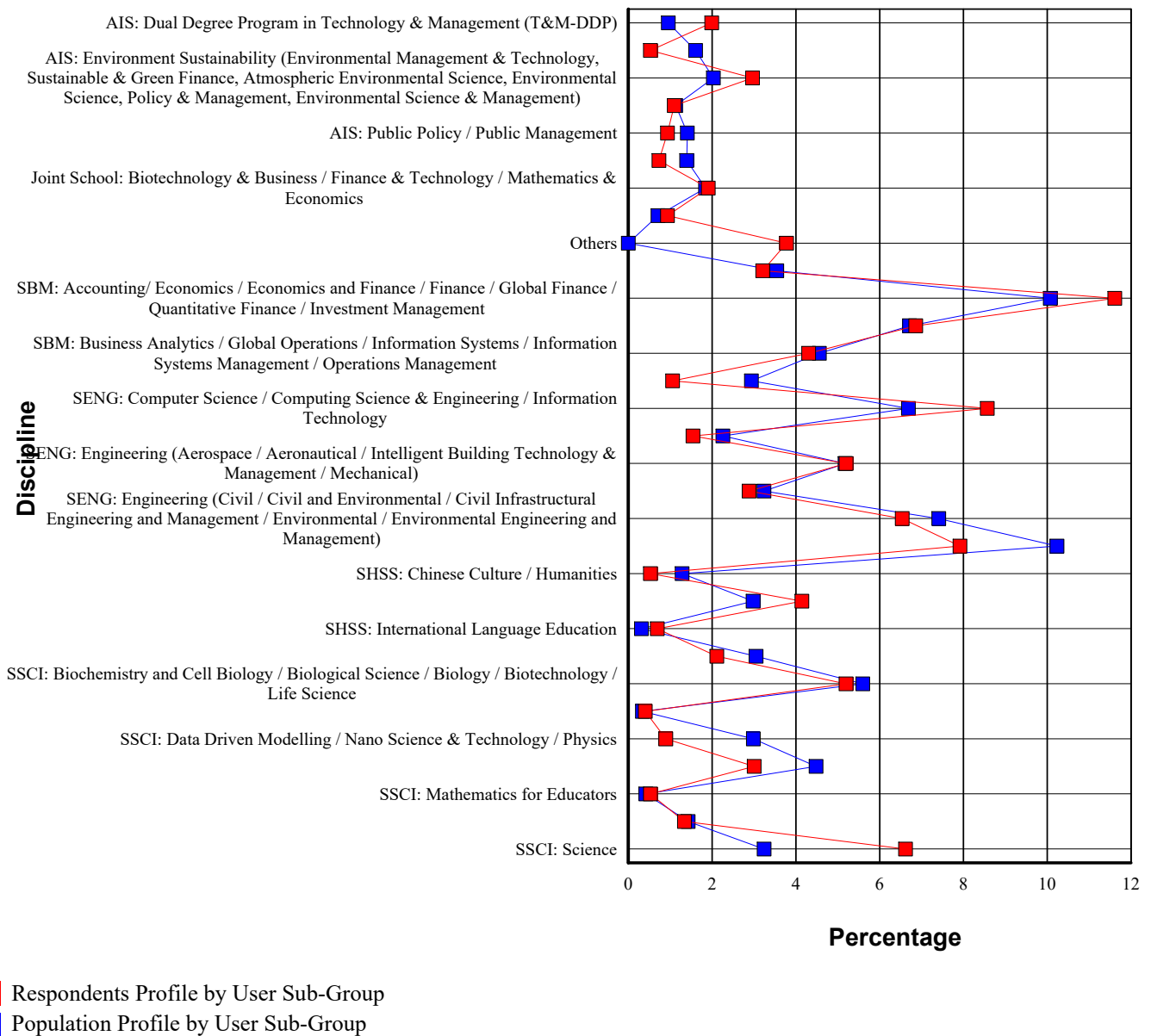■ Population Profile by User Sub-Group

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: All (Excluding Library Staff, Staff)

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
AIS: Dual Degree Program in Technology & Management (T&M-DDP)	193	0.95	49	1.99	-1.04
AIS: EMIA - Individualized Interdisciplinary Major / Individualized Interdisciplinary Program	325	1.61	13	0.53	1.08
AIS: Environment Sustainability (Environmental Management & Technology, Sustainable & Green Finance, Atmospheric Environmental Science, Environmental Science, Policy & Management, Environmental Science & Management)	411	2.03	73	2.96	-0.93
AIS: Integrative Systems and Design / Technology Leadership and Entrepreneurship	229	1.13	27	1.10	0.04
AIS: Public Policy / Public Management	285	1.41	23	0.93	0.47
Joint School: Big Data Technology / Data Science & Technology	282	1.39	18	0.73	0.66
Joint School: Biotechnology & Business / Finance & Technology / Mathematics & Economics	373	1.84	47	1.91	-0.07
Joint School: Risk Management & Business Intelligence	143	0.71	23	0.93	-0.23
Others	0	0.00	93	3.78	-3.78
SBM: International Management / Management / Marketing	717	3.54	79	3.21	0.33
SBM: Accounting/ Economics / Economics and Finance / Finance / Global Finance / Quantitative Finance / Investment Management	2,039	10.07	286	11.61	-1.54
SBM: BBA / General Business Management / Global Business / World Business	1,359	6.71	169	6.86	-0.15
SBM: Business Analytics / Global Operations / Information Systems / Information Systems Management / Operations Management	923	4.56	106	4.30	0.26
SBM: DBA / EMBA / MBA	595	2.94	26	1.06	1.88
SENG: Computer Science / Computing Science & Engineering / Information Technology	1,353	6.68	211	8.57	-1.88
SENG: Decision Analytics / Industrial Engineering & Decision Analytics / Industrial Engineering and Engineering Management / Industrial Engineering and Logistics Management/ Engineering Enterprise Management	457	2.26	38	1.54	0.71
SENG: Engineering (Aerospace / Aeronautical / Intelligent Building Technology & Management / Mechanical)	1,047	5.17	128	5.20	-0.02
SENG: Engineering (Bioengineering / Chemical & Biomolecular / Chemical / Chemical & Environmental / Sustainable Energy / Biomolecular Engineering and Health Informatics / Chemical and Energy)	655	3.24	71	2.88	0.35
SENG: Engineering (Civil / Civil and Environmental / Civil Infrastructural Engineering and Management / Environmental / Environmental Engineering and Management)	1,500	7.41	161	6.54	0.87
SENG: Engineering (Electronic / Computer / Electronic and Computer / IC Design / Telecommunications)	2,071	10.23	195	7.92	2.31

SHSS: Chinese Culture / Humanities	260	1.28	13	0.53	0.76
SHSS: Global China Studies / Social Science / Quantitative Social Analysis	603	2.98	102	4.14	-1.16
SHSS: International Language Education	63	0.31	17	0.69	-0.38
SSCI: Analytical Chemistry / Chemistry	617	3.05	52	2.11	0.94
SSCI: Biochemistry and Cell Biology / Biological Science / Biology / Biotechnology / Life Science	1,133	5.60	128	5.20	0.40
SSCI: Data Analytics in Science	68	0.34	10	0.41	-0.07
SSCI: Data Driven Modelling / Nano Science & Technology / Physics	604	2.98	22	0.89	2.09
SSCI: Financial Mathematics / Mathematics	907	4.48	74	3.00	1.48
SSCI: Mathematics for Educators	85	0.42	13	0.53	-0.11
SSCI: Ocean Science and Technology / Environmental Health & Safety / Global Marine Resources Management / Marine Environmental Science	289	1.43	33	1.34	0.09
SSCI: Science	656	3.24	163	6.62	-3.38
Total:	**20,242**	**100.00**	**2,463**	**100.00**	**0.00**

2.5   Respondent Profile by Sex:

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

Sex:	Population N	Population %	Respondents n	Respondents %
Female	7,634	37.71	1,398	49.98
Male	12,608	62.29	1,399	50.02
Total:	**20,242**	**100.00**	**2,797**	**100.00**

2.6   Respondent Profile by Age:

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed.

Age:	Respondents n	Respondents %
18 - 22	1,718	60.84
23 - 30	665	23.55
31 - 45	293	10.38
46 - 65	95	3.36
Over 65	2	0.07
Under 18	51	1.81
Total:	**2,824**	**100.00**

2.7   Respondent Profile by Full or part-time student?

Full or part-time student?	Population N	Population %	Respondents n	Respondents %
Does not apply / NA	2,373	11.72	467	16.61
Full-time	16,609	82.05	2,264	80.54
Part-time	1,260	6.22	80	2.85
Total:	**20,242**	**100.00**	**2,811**	**100.00**

3. Survey Item Summary for The Hong Kong University of Science and Technology

3.1 Core Questions Summary

This radar chart shows the aggregate results for the core survey questions. Each axis represents one question. A code to identify each question is displayed at the outer point of each axis. While questions for each dimension of library service quality are scattered randomly throughout the survey, on this chart they are grouped into sections: Affect of Service, Information Control, and Library as Place.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The following two tables show mean scores and standard deviations for each question, where *n* is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

Legend:
- **Perceived Less Than Minimum** (red)
- **Perceived Greater Than Minimum** (blue)
- **Perceived Less Than Desired** (yellow)
- **Perceived Greater Than Desired** (green)

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: All (Excluding Library Staff)

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Library staff who instill confidence in users	5.50	7.27	6.92	1.42	-0.34	2,750
AS-2	Giving users individual attention	4.96	6.24	6.05	1.10	-0.19	2,656
AS-3	Library staff who are consistently courteous	6.14	7.48	7.34	1.20	-0.15	2,788
AS-4	Readiness to respond to users' enquiries	6.11	7.36	7.21	1.09	-0.15	2,582
AS-5	Library staff who have the knowledge to answer user questions	5.94	7.22	7.03	1.09	-0.20	2,531
AS-6	Library staff who deal with users in a caring fashion	5.81	7.15	6.92	1.11	-0.23	2,622
AS-7	Library staff who understand the needs of their users	5.83	7.16	6.89	1.06	-0.27	2,551
AS-8	Willingness to help users	6.13	7.43	7.21	1.08	-0.22	2,671
AS-9	Dependability in handling users' service problems	6.12	7.41	7.16	1.04	-0.25	2,576
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.00	7.55	7.05	1.06	-0.50	2,732
IC-2	A library Web site enabling me to locate information on my own	6.15	7.55	7.13	0.97	-0.43	2,768
IC-3	The printed library materials I need for my work	5.79	7.14	6.91	1.12	-0.24	2,496
IC-4	The electronic information resources I need	6.10	7.48	7.10	1.00	-0.38	2,725
IC-5	Modern equipment that lets me easily access needed information	6.16	7.52	7.21	1.04	-0.32	2,739
IC-6	Easy-to-use access tools that allow me to find things on my own	6.20	7.56	7.18	0.98	-0.39	2,745
IC-7	Making information easily accessible for independent use	6.25	7.57	7.23	0.98	-0.34	2,747
IC-8	Print and/or electronic journal collections I require for my work	6.07	7.41	7.05	0.98	-0.35	2,486
Library as Place							
LP-1	Library space that inspires study and learning	6.15	7.70	7.18	1.03	-0.52	2,807
LP-2	Quiet space for individual work	6.43	7.95	6.93	0.50	-1.02	2,799
LP-3	A comfortable and inviting location	6.32	7.77	7.18	0.87	-0.59	2,803
LP-4	A haven for study, learning, or research	6.54	7.94	7.32	0.79	-0.62	2,805
LP-5	Space for group learning and group study	6.25	7.74	7.07	0.82	-0.67	2,701
Overall:		6.05	7.45	7.06	1.01	-0.39	2,825

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Library staff who instill confidence in users	1.86	1.46	1.54	1.70	1.47	2,750
AS-2	Giving users individual attention	2.16	2.03	1.92	1.66	1.56	2,656
AS-3	Library staff who are consistently courteous	1.81	1.44	1.52	1.73	1.52	2,788
AS-4	Readiness to respond to users' enquiries	1.80	1.45	1.43	1.61	1.30	2,582
AS-5	Library staff who have the knowledge to answer user questions	1.89	1.56	1.54	1.66	1.39	2,531
AS-6	Library staff who deal with users in a caring fashion	1.91	1.59	1.61	1.70	1.52	2,622
AS-7	Library staff who understand the needs of their users	1.87	1.57	1.57	1.67	1.47	2,551
AS-8	Willingness to help users	1.83	1.43	1.48	1.62	1.35	2,671
AS-9	Dependability in handling users' service problems	1.75	1.40	1.42	1.54	1.26	2,576
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.80	1.41	1.49	1.73	1.54	2,732
IC-2	A library Web site enabling me to locate information on my own	1.78	1.42	1.53	1.66	1.48	2,768
IC-3	The printed library materials I need for my work	1.96	1.68	1.56	1.74	1.52	2,496
IC-4	The electronic information resources I need	1.76	1.42	1.38	1.59	1.41	2,725
IC-5	Modern equipment that lets me easily access needed information	1.75	1.37	1.41	1.65	1.42	2,739
IC-6	Easy-to-use access tools that allow me to find things on my own	1.76	1.37	1.43	1.67	1.44	2,745
IC-7	Making information easily accessible for independent use	1.73	1.31	1.35	1.56	1.34	2,747
IC-8	Print and/or electronic journal collections I require for my work	1.85	1.53	1.48	1.69	1.50	2,486
Library as Place							
LP-1	Library space that inspires study and learning	1.82	1.39	1.58	1.92	1.72	2,807
LP-2	Quiet space for individual work	1.82	1.31	1.76	2.08	1.93	2,799
LP-3	A comfortable and inviting location	1.75	1.31	1.59	1.82	1.66	2,803
LP-4	A haven for study, learning, or research	1.75	1.25	1.53	1.85	1.60	2,805
LP-5	Space for group learning and group study	1.78	1.36	1.64	2.00	1.83	2,701
Overall:		1.45	1.05	1.11	1.26	1.04	2,825

3.2   Core Question Dimensions Summary

On the chart below, scores for each dimension of library service quality have been plotted graphically. The exterior bars represent the range of minimum to desired mean scores for each dimension. The interior bars represent the range of minimum to perceived mean scores (the service adequacy gap) for each dimension of library service quality.

| Range of Minimum to Desired |
| Range of Minimum to Perceived ("Adequacy Gap") |

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	5.81	7.17	6.95	1.14	-0.23	2,820
Information Control	6.09	7.48	7.10	1.01	-0.38	2,825
Library as Place	6.34	7.82	7.14	0.80	-0.68	2,824
Overall	6.05	7.45	7.06	1.01	-0.39	2,825

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL survey, where *n* is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.59	1.24	1.28	1.31	1.09	2,820
Information Control	1.50	1.13	1.15	1.30	1.10	2,825
Library as Place	1.48	1.06	1.29	1.53	1.37	2,824
Overall	1.45	1.05	1.11	1.26	1.04	2,825

3.3   Local Question Summary

This table shows mean scores of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A pleasant or productive place to spend time while on campus	6.41	7.85	7.20	0.80	-0.65	2,808
Acceptable service support from librarians, whether on campus or virtually	5.83	7.13	6.98	1.15	-0.15	2,546
Library Collections, print and online, sufficient to meet my research and learning needs	6.17	7.55	7.13	0.95	-0.43	2,621
Spaces and technology that support creativity	5.61	7.05	6.68	1.07	-0.37	2,604
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	5.62	7.03	6.93	1.31	-0.09	2,607

This table shows the standard deviations for each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
A pleasant or productive place to spend time while on campus	1.76	1.31	1.60	1.88	1.70	2,808
Acceptable service support from librarians, whether on campus or virtually	1.89	1.57	1.54	1.65	1.41	2,546
Library Collections, print and online, sufficient to meet my research and learning needs	1.77	1.40	1.41	1.64	1.42	2,621
Spaces and technology that support creativity	1.96	1.64	1.64	1.84	1.66	2,604
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	1.94	1.61	1.50	1.67	1.44	2,607

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: All (Excluding Library Staff)

3.4   General Satisfaction Questions Summary

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9.

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.29	1.39	2,825
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.22	1.39	2,825
How would you rate the overall quality of the service provided by the library?	7.28	1.20	2,825

3.5   Information Literacy Outcomes Questions Summary

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where *n* is the number of respondents for each question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9 with 1 being "strongly disagree" and 9 representing "strongly agree."

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.65	1.56	2,825
The library aids my advancement in my academic discipline or work.	7.05	1.40	2,825
The library enables me to be more efficient in my academic pursuits or work.	7.23	1.42	2,825
The library helps me distinguish between trustworthy and untrustworthy information.	6.45	1.73	2,825
The library provides me with the information skills I need in my work or study.	6.85	1.52	2,825

3.6   Library Use Summary

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo and Google. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.

Frequency

- How often do you use resources within the library?
- How often do you access library resources through a library Web page?
- How often do you use YahooTM, GoogleTM, or non-library gateways for information?

	Daily	Weekly	Monthly	Quarterly	Never	n/%
How often do you use resources within the library?	670	1,192	596	311	56	2,825
	23.72%	42.19%	21.10%	11.01%	1.98%	100.00%
How often do you access library resources through a library Web page?	292	1,051	871	408	203	2,825
	10.34%	37.20%	30.83%	14.44%	7.19%	100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	1,998	441	154	108	124	2,825
	70.73%	15.61%	5.45%	3.82%	4.39%	100.00%

4   Undergraduate Summary for The Hong Kong University of Science and Technology

4.1   Demographic Summary for Undergraduate

4.1.1   Population and Respondent Profiles for Undergraduate by Standard Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the LibQUAL standard discipline categories. The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

Respondent Profile by Discipline
Population Profile by Discipline

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture and Related Subjects	0	0.00	0	0.00	0.00
Architecture, Building, & Planning	0	0.00	0	0.00	0.00
Biological Sciences	608	5.68	107	6.18	-0.51
Business & Administrative Studies	3,737	34.89	590	34.10	0.78
Combined Studies	1,279	11.94	251	14.51	-2.57
Computer Science	622	5.81	159	9.19	-3.38
Creative Arts & Design	0	0.00	0	0.00	0.00
Education	0	0.00	5	0.29	-0.29
Engineering & Technology	3,109	29.02	368	21.27	7.75
Humanities	0	0.00	7	0.40	-0.40
Languages	0	0.00	0	0.00	0.00
Law	0	0.00	0	0.00	0.00
Librarianship & Information Science	0	0.00	0	0.00	0.00
Mathematical Sciences	510	4.76	54	3.12	1.64
Medicine & Dentistry	0	0.00	0	0.00	0.00
Other	0	0.00	63	3.64	-3.64
Physical Sciences	496	4.63	56	3.24	1.39
Social, Economic, & Political Studies	351	3.28	70	4.05	-0.77
Subjects allied to Medicine	0	0.00	0	0.00	0.00
Veterinary Science	0	0.00	0	0.00	0.00
Total:	**10,712**	**100.00**	**1,730**	**100.00**	**0.00**

Language: **English (British), Chinese (Traditional)**
Institution Type: **College or University**
Consortium: **JULAC**
User Group: **Undergraduate**

4.1.2 Population and Respondent Profiles for Undergraduate by Customized Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the customized discipline categories supplied by the participating library. The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).
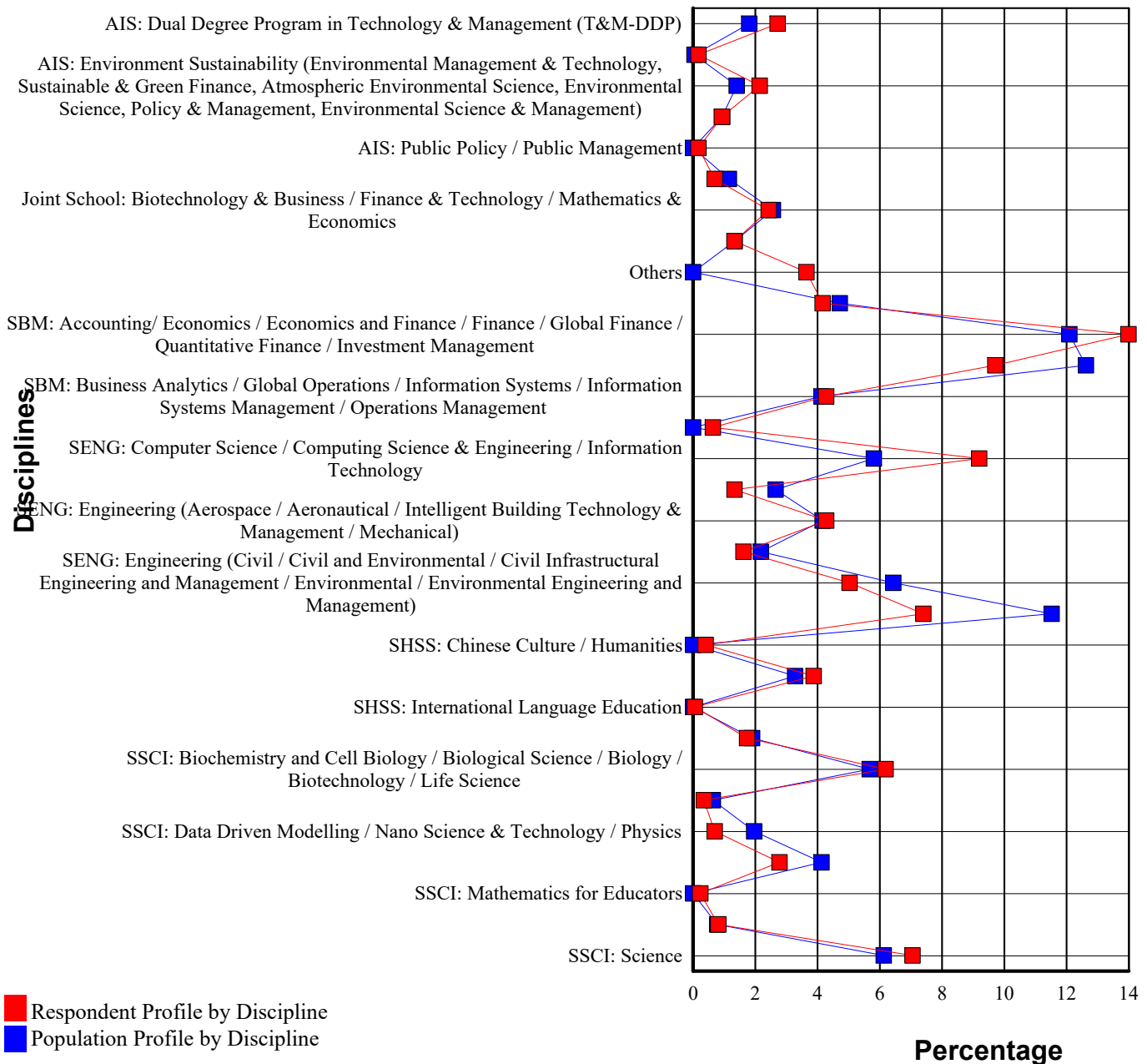

■ Respondent Profile by Discipline
■ Population Profile by Discipline

Percentage

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
AIS: Dual Degree Program in Technology & Management (T&M-DDP)	193	1.80	47	2.72	-0.92
AIS: EMIA - Individualized Interdisciplinary Major / Individualized Interdisciplinary Program	5	0.05	3	0.17	-0.13
AIS: Environment Sustainability (Environmental Management & Technology, Sustainable & Green Finance, Atmospheric Environmental Science, Environmental Science, Policy & Management, Environmental Science & Management)	150	1.40	37	2.14	-0.74
AIS: Integrative Systems and Design / Technology Leadership and Entrepreneurship	100	0.93	16	0.92	0.01
AIS: Public Policy / Public Management	0	0.00	3	0.17	-0.17
Joint School: Big Data Technology / Data Science & Technology	123	1.15	12	0.69	0.45
Joint School: Biotechnology & Business / Finance & Technology / Mathematics & Economics	275	2.57	42	2.43	0.14
Joint School: Risk Management & Business Intelligence	143	1.33	23	1.33	0.01
Others	0	0.00	63	3.64	-3.64
SBM: International Management / Management / Marketing	505	4.71	72	4.16	0.55
SBM: Accounting/ Economics / Economics and Finance / Finance / Global Finance / Quantitative Finance / Investment Management	1,295	12.09	242	13.99	-1.90
SBM: BBA / General Business Management / Global Business / World Business	1,352	12.62	168	9.71	2.91
SBM: Business Analytics / Global Operations / Information Systems / Information Systems Management / Operations Management	442	4.13	74	4.28	-0.15
SBM: DBA / EMBA / MBA	0	0.00	11	0.64	-0.64
SENG: Computer Science / Computing Science & Engineering / Information Technology	622	5.81	159	9.19	-3.38
SENG: Decision Analytics / Industrial Engineering & Decision Analytics / Industrial Engineering and Engineering Management / Industrial Engineering and Logistics Management/ Engineering Enterprise Management	284	2.65	23	1.33	1.32
SENG: Engineering (Aerospace / Aeronautical / Intelligent Building Technology & Management / Mechanical)	446	4.16	74	4.28	-0.11
SENG: Engineering (Bioengineering / Chemical & Biomolecular / Chemical / Chemical & Environmental / Sustainable Energy / Biomolecular Engineering and Health Informatics / Chemical and Energy)	233	2.18	28	1.62	0.56
SENG: Engineering (Civil / Civil and Environmental / Civil Infrastructural Engineering and Management / Environmental / Environmental Engineering and Management)	689	6.43	87	5.03	1.40
SENG: Engineering (Electronic / Computer / Electronic and Computer / IC Design / Telecommunications)	1,234	11.52	128	7.40	4.12
SHSS: Chinese Culture / Humanities	0	0.00	7	0.40	-0.40

SHSS: Global China Studies / Social Science / Quantitative Social Analysis	351	3.28	67	3.87	-0.60
SHSS: International Language Education	0	0.00	1	0.06	-0.06
SSCI: Analytical Chemistry / Chemistry	203	1.90	30	1.73	0.16
SSCI: Biochemistry and Cell Biology / Biological Science / Biology / Biotechnology / Life Science	608	5.68	107	6.18	-0.51
SSCI: Data Analytics in Science	68	0.63	6	0.35	0.29
SSCI: Data Driven Modelling / Nano Science & Technology / Physics	210	1.96	12	0.69	1.27
SSCI: Financial Mathematics / Mathematics	442	4.13	48	2.77	1.35
SSCI: Mathematics for Educators	0	0.00	4	0.23	-0.23
SSCI: Ocean Science and Technology / Environmental Health & Safety / Global Marine Resources Management / Marine Environmental Science	83	0.77	14	0.81	-0.03
SSCI: Science	656	6.12	122	7.05	-0.93
Total:	**10,712**	**100.00**	**1,730**	**100.00**	**0.00**

4.1.3 Respondent Profile by Sex:

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

Sex:	Population N	Population %	Respondents n	Respondents %
Female	4,000	37.34	845	49.27
Male	6,712	62.66	870	50.73
Total:	**10,712**	**100.00**	**1,715**	**100.00**

4.1.4 Respondent Profile by Age:

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed.

Age:	Respondents n	Respondents %
18 - 22	1,582	91.45
23 - 30	84	4.86
31 - 45	13	0.75
46 - 65	1	0.06
Over 65	0	0.00
Under 18	50	2.89
Total:	**1,730**	**100.00**

4.1.5 Respondent Profile by Full or part-time student?

Full or part-time student?	Population N	Population %	Respondents n	Respondents %
Does not apply / NA		0.00	14	0.81
Full-time	10,712	100.00	1,685	97.79
Part-time		0.00	24	1.39
Total:	**10,712**	**100.00**	**1,723**	**100.00**

4.2 Core Questions Summary for Undergraduate

This radar chart shows the aggregate results for the core survey questions. Each axis represents one question. A code to identify each question is displayed at the outer point of each axis. While questions for each dimension of library service quality are scattered randomly throughout the survey, on this chart they are grouped into sections: Affect of Service, Information Control, and Library as Place.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The following two tables show mean scores and standard deviations for each question, where *n* is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Library staff who instill confidence in users	5.25	7.06	6.62	1.37	-0.44	1,672
AS-2	Giving users individual attention	4.72	5.98	5.72	1.00	-0.25	1,622
AS-3	Library staff who are consistently courteous	5.90	7.31	7.04	1.14	-0.27	1,696
AS-4	Readiness to respond to users' enquiries	5.87	7.12	6.92	1.06	-0.20	1,549
AS-5	Library staff who have the knowledge to answer user questions	5.72	7.04	6.76	1.05	-0.28	1,505
AS-6	Library staff who deal with users in a caring fashion	5.57	6.89	6.58	1.01	-0.31	1,585
AS-7	Library staff who understand the needs of their users	5.60	6.92	6.61	1.02	-0.31	1,530
AS-8	Willingness to help users	5.89	7.20	6.91	1.02	-0.29	1,605
AS-9	Dependability in handling users' service problems	5.88	7.20	6.91	1.03	-0.30	1,543
Information Control							
IC-1	Making electronic resources accessible from my home or office	5.78	7.39	6.88	1.10	-0.51	1,664
IC-2	A library Web site enabling me to locate information on my own	5.94	7.35	6.95	1.01	-0.40	1,688
IC-3	The printed library materials I need for my work	5.61	6.95	6.70	1.08	-0.25	1,536
IC-4	The electronic information resources I need	5.89	7.29	6.95	1.05	-0.34	1,653
IC-5	Modern equipment that lets me easily access needed information	6.01	7.38	7.04	1.03	-0.33	1,666
IC-6	Easy-to-use access tools that allow me to find things on my own	6.00	7.39	6.98	0.99	-0.40	1,669
IC-7	Making information easily accessible for independent use	6.04	7.37	7.02	0.97	-0.36	1,668
IC-8	Print and/or electronic journal collections I require for my work	5.83	7.15	6.84	1.01	-0.31	1,512
Library as Place							
LP-1	Library space that inspires study and learning	5.99	7.63	7.02	1.03	-0.60	1,725
LP-2	Quiet space for individual work	6.37	7.92	6.81	0.44	-1.12	1,727
LP-3	A comfortable and inviting location	6.16	7.67	6.90	0.74	-0.76	1,719
LP-4	A haven for study, learning, or research	6.45	7.88	7.16	0.71	-0.72	1,720
LP-5	Space for group learning and group study	6.19	7.71	6.87	0.68	-0.84	1,704
Overall:		5.85	7.28	6.83	0.97	-0.45	1,730

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Library staff who instill confidence in users	1.86	1.51	1.60	1.70	1.54	1,672
AS-2	Giving users individual attention	2.19	2.09	1.97	1.62	1.56	1,622
AS-3	Library staff who are consistently courteous	1.81	1.47	1.59	1.75	1.59	1,696
AS-4	Readiness to respond to users' enquiries	1.81	1.51	1.49	1.63	1.37	1,549
AS-5	Library staff who have the knowledge to answer user questions	1.89	1.60	1.61	1.66	1.42	1,505
AS-6	Library staff who deal with users in a caring fashion	1.89	1.64	1.68	1.72	1.62	1,585
AS-7	Library staff who understand the needs of their users	1.86	1.62	1.61	1.68	1.53	1,530
AS-8	Willingness to help users	1.82	1.49	1.56	1.65	1.44	1,605
AS-9	Dependability in handling users' service problems	1.73	1.44	1.47	1.53	1.30	1,543
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.81	1.44	1.53	1.74	1.57	1,664
IC-2	A library Web site enabling me to locate information on my own	1.80	1.50	1.58	1.65	1.53	1,688
IC-3	The printed library materials I need for my work	2.01	1.75	1.62	1.79	1.60	1,536
IC-4	The electronic information resources I need	1.75	1.45	1.41	1.56	1.40	1,653
IC-5	Modern equipment that lets me easily access needed information	1.76	1.41	1.45	1.67	1.45	1,666
IC-6	Easy-to-use access tools that allow me to find things on my own	1.77	1.42	1.48	1.68	1.50	1,669
IC-7	Making information easily accessible for independent use	1.76	1.37	1.39	1.58	1.38	1,668
IC-8	Print and/or electronic journal collections I require for my work	1.88	1.59	1.51	1.69	1.53	1,512
Library as Place							
LP-1	Library space that inspires study and learning	1.84	1.42	1.66	2.02	1.83	1,725
LP-2	Quiet space for individual work	1.81	1.33	1.79	2.08	1.95	1,727
LP-3	A comfortable and inviting location	1.76	1.35	1.67	1.89	1.76	1,719
LP-4	A haven for study, learning, or research	1.77	1.28	1.59	1.91	1.65	1,720
LP-5	Space for group learning and group study	1.80	1.38	1.74	2.11	1.96	1,704
Overall:		1.42	1.06	1.13	1.24	1.06	1,730

4.3   Core Question Dimensions Summary for Undergraduate

On the chart below, scores for each dimension of library service quality have been plotted graphically. The exterior bars represent the range of minimum to desired mean scores for each dimension. The interior bars represent the range of minimum to perceived mean scores (the service adequacy gap) for each dimension of library service quality.

	Range of Minimum to Desired
	Range of Minimum to Perceived ("Adequacy Gap")

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	5.57	6.95	6.65	1.08	-0.30	1,725
Information Control	5.89	7.29	6.91	1.03	-0.38	1,730
Library as Place	6.23	7.76	6.95	0.72	-0.81	1,730
Overall	5.85	7.28	6.83	0.97	-0.45	1,730

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.55	1.26	1.30	1.30	1.13	1,725
Information Control	1.49	1.15	1.17	1.28	1.12	1,730
Library as Place	1.47	1.08	1.34	1.58	1.43	1,730
Overall	1.42	1.06	1.13	1.24	1.06	1,730

4.4   Local Question Summary for Undergraduate

This table shows mean scores of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A pleasant or productive place to spend time while on campus	6.29	7.78	6.96	0.67	-0.81	1,724
Acceptable service support from librarians, whether on campus or virtually	5.59	6.87	6.70	1.12	-0.17	1,526
Library Collections, print and online, sufficient to meet my research and learning needs	5.98	7.35	6.96	0.98	-0.39	1,598
Spaces and technology that support creativity	5.44	6.91	6.43	1.00	-0.48	1,590
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	5.39	6.78	6.69	1.30	-0.08	1,605

This table displays the standard deviations of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
A pleasant or productive place to spend time while on campus	1.80	1.37	1.70	1.98	1.82	1,724
Acceptable service support from librarians, whether on campus or virtually	1.87	1.63	1.59	1.65	1.46	1,526
Library Collections, print and online, sufficient to meet my research and learning needs	1.79	1.45	1.43	1.64	1.42	1,598
Spaces and technology that support creativity	1.92	1.65	1.69	1.86	1.73	1,590
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	1.98	1.67	1.54	1.70	1.49	1,605

4.5   General Satisfaction Questions Summary for Undergraduate

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9.

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.07	1.48	1,730
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.02	1.45	1,730
How would you rate the overall quality of the service provided by the library?	7.09	1.25	1,730

4.6   Information Literacy Outcomes Questions Summary for Undergraduate

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where *n* is the number of respondents for each question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9 with 1 being "strongly disagree" and 9 representing "strongly agree."

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.36	1.60	1,730
The library aids my advancement in my academic discipline or work.	6.88	1.44	1,730
The library enables me to be more efficient in my academic pursuits or work.	7.11	1.47	1,730
The library helps me distinguish between trustworthy and untrustworthy information.	6.28	1.76	1,730
The library provides me with the information skills I need in my work or study.	6.63	1.58	1,730

4.7　Library Use Summary for Undergraduate

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo and Google. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.

Frequency

■ How often do you use resources within the library?　■ How often do you access library resources through a library Web page?　■ How often do you use YahooTM, GoogleTM, or non-library gateways for information?
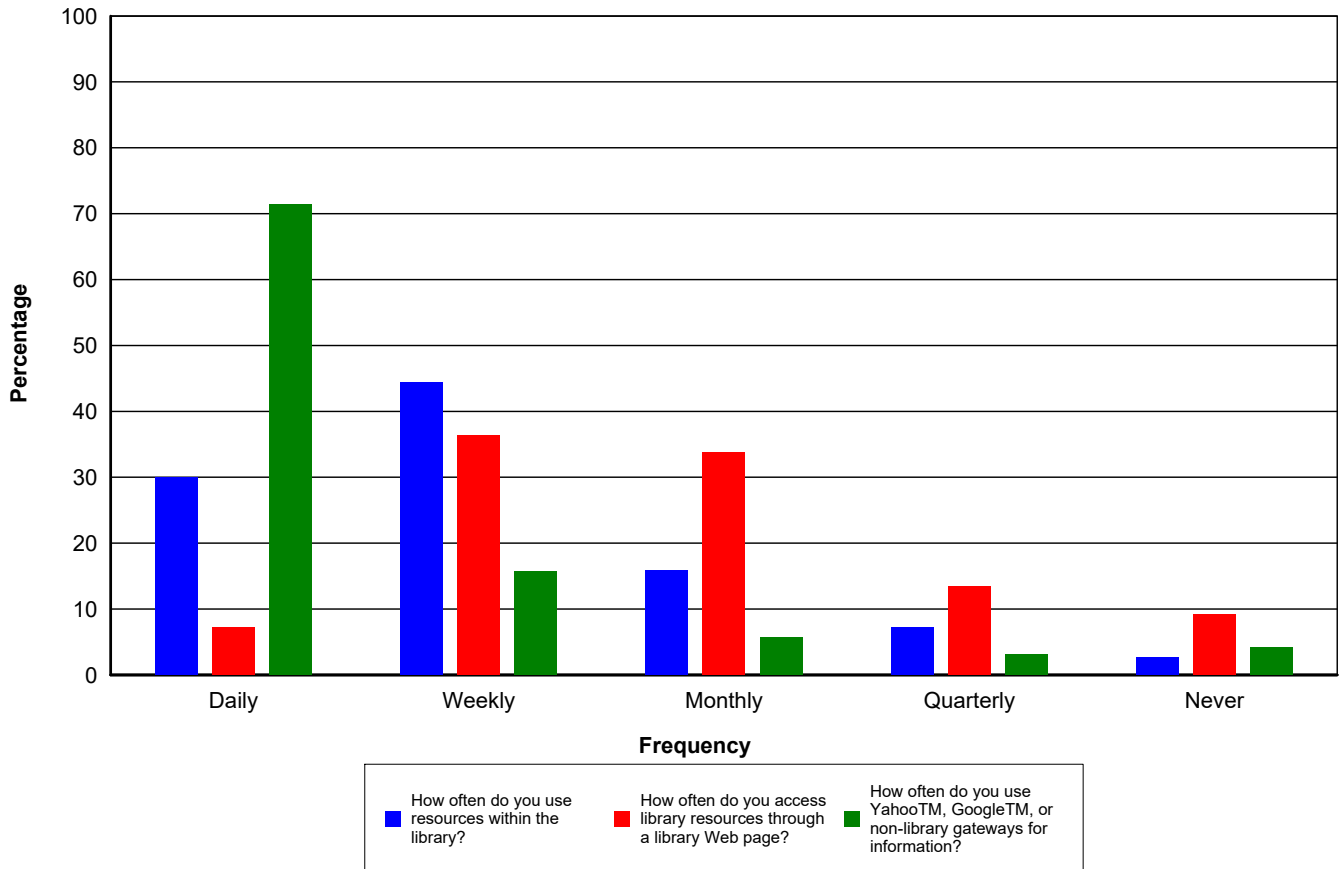
	Daily	**Weekly**	**Monthly**	**Quarterly**	**Never**	**n/%**
How often do you use resources within the library?	518 29.94%	768 44.39%	274 15.84%	124 7.17%	46 2.66%	1,730 100.00%
How often do you access library resources through a library Web page?	124 7.17%	629 36.36%	585 33.82%	233 13.47%	159 9.19%	1,730 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	1,236 71.45%	271 15.66%	98 5.66%	54 3.12%	71 4.10%	1,730 100.00%

5 Postgraduate Summary for The Hong Kong University of Science and Technology

5.1 Demographic Summary for Postgraduate

5.1.1 Population and Respondent Profiles for Postgraduate by Standard Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the LibQUAL standard discipline categories. The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

■ Respondent Profile by Discipline
■ Population Profile by Discipline

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture and Related Subjects	0	0.00	0	0.00	0.00
Architecture, Building, & Planning	0	0.00	0	0.00	0.00
Biological Sciences	321	4.49	18	2.97	1.51
Business & Administrative Studies	1,693	23.66	87	14.36	9.30
Combined Studies	595	8.31	80	13.20	-4.89
Computer Science	513	7.17	41	6.77	0.40
Creative Arts & Design	0	0.00	0	0.00	0.00
Education	148	2.07	20	3.30	-1.23
Engineering & Technology	2,360	32.97	238	39.27	-6.30
Humanities	95	1.33	3	0.50	0.83
Languages	0	0.00	0	0.00	0.00
Law	0	0.00	0	0.00	0.00
Librarianship & Information Science	0	0.00	0	0.00	0.00
Mathematical Sciences	329	4.60	26	4.29	0.31
Medicine & Dentistry	0	0.00	0	0.00	0.00
Other	0	0.00	7	1.16	-1.16
Physical Sciences	661	9.24	40	6.60	2.64
Social, Economic, & Political Studies	442	6.18	46	7.59	-1.41
Subjects allied to Medicine	0	0.00	0	0.00	0.00
Veterinary Science	0	0.00	0	0.00	0.00
Total:	**7,157**	**100.00**	**606**	**100.00**	**0.00**

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: Postgraduate

5.1.2 Population and Respondent Profiles for Postgraduate by Customized Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the customized discipline categories supplied by the participating library. The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).
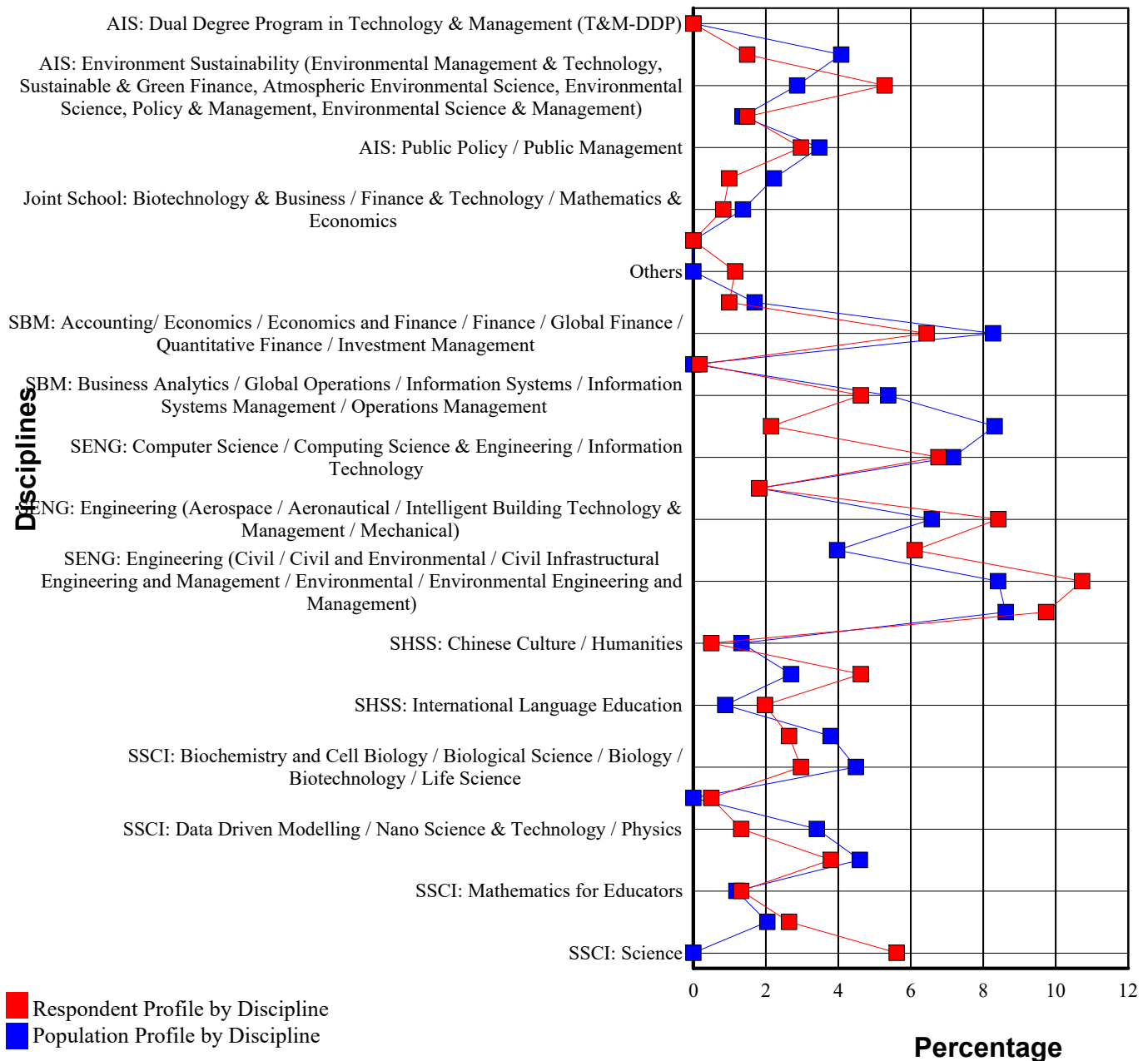

Respondent Profile by Discipline
Population Profile by Discipline

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
AIS: Dual Degree Program in Technology & Management (T&M-DDP)	0	0.00	0	0.00	0.00
AIS: EMIA - Individualized Interdisciplinary Major / Individualized Interdisciplinary Program	292	4.08	9	1.49	2.59
AIS: Environment Sustainability (Environmental Management & Technology, Sustainable & Green Finance, Atmospheric Environmental Science, Environmental Science, Policy & Management, Environmental Science & Management)	205	2.86	32	5.28	-2.42
AIS: Integrative Systems and Design / Technology Leadership and Entrepreneurship	97	1.36	9	1.49	-0.13
AIS: Public Policy / Public Management	249	3.48	18	2.97	0.51
Joint School: Big Data Technology / Data Science & Technology	159	2.22	6	0.99	1.23
Joint School: Biotechnology & Business / Finance & Technology / Mathematics & Economics	98	1.37	5	0.83	0.54
Joint School: Risk Management & Business Intelligence	0	0.00	0	0.00	0.00
Others	0	0.00	7	1.16	-1.16
SBM: International Management / Management / Marketing	121	1.69	6	0.99	0.70
SBM: Accounting/ Economics / Economics and Finance / Finance / Global Finance / Quantitative Finance / Investment Management	592	8.27	39	6.44	1.84
SBM: BBA / General Business Management / Global Business / World Business	0	0.00	1	0.17	-0.17
SBM: Business Analytics / Global Operations / Information Systems / Information Systems Management / Operations Management	385	5.38	28	4.62	0.76
SBM: DBA / EMBA / MBA	595	8.31	13	2.15	6.17
SENG: Computer Science / Computing Science & Engineering / Information Technology	513	7.17	41	6.77	0.40
SENG: Decision Analytics / Industrial Engineering & Decision Analytics / Industrial Engineering and Engineering Management / Industrial Engineering and Logistics Management/ Engineering Enterprise Management	130	1.82	11	1.82	0.00
SENG: Engineering (Aerospace / Aeronautical / Intelligent Building Technology & Management / Mechanical)	471	6.58	51	8.42	-1.83
SENG: Engineering (Bioengineering / Chemical & Biomolecular / Chemical / Chemical & Environmental / Sustainable Energy / Biomolecular Engineering and Health Informatics / Chemical and Energy)	284	3.97	37	6.11	-2.14
SENG: Engineering (Civil / Civil and Environmental / Civil Infrastructural Engineering and Management / Environmental / Environmental Engineering and Management)	602	8.41	65	10.73	-2.31
SENG: Engineering (Electronic / Computer / Electronic and Computer / IC Design / Telecommunications)	617	8.62	59	9.74	-1.12
SHSS: Chinese Culture / Humanities	95	1.33	3	0.50	0.83

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: Postgraduate

SHSS: Global China Studies / Social Science / Quantitative Social Analysis	193	2.70	28	4.62	-1.92
SHSS: International Language Education	63	0.88	12	1.98	-1.10
SSCI: Analytical Chemistry / Chemistry	271	3.79	16	2.64	1.15
SSCI: Biochemistry and Cell Biology / Biological Science / Biology / Biotechnology / Life Science	321	4.49	18	2.97	1.51
SSCI: Data Analytics in Science	0	0.00	3	0.50	-0.50
SSCI: Data Driven Modelling / Nano Science & Technology / Physics	244	3.41	8	1.32	2.09
SSCI: Financial Mathematics / Mathematics	329	4.60	23	3.80	0.80
SSCI: Mathematics for Educators	85	1.19	8	1.32	-0.13
SSCI: Ocean Science and Technology / Environmental Health & Safety / Global Marine Resources Management / Marine Environmental Science	146	2.04	16	2.64	-0.60
SSCI: Science	0	0.00	34	5.61	-5.61
Total:	**7,157**	**100.00**	**606**	**100.00**	**0.00**

5.1.3 Respondent Profile by Sex:

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

Sex:	Population N	Population %	Respondents n	Respondents %
Female	2,949	41.20	286	47.43
Male	4,208	58.80	317	52.57
Total:	**7,157**	**100.00**	**603**	**100.00**

5.1.4 Respondent Profile by Age:

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed.

Age:	Respondents n	Respondents %
18 - 22	130	21.45
23 - 30	431	71.12
31 - 45	42	6.93
46 - 65	2	0.33
Over 65	0	0.00
Under 18	1	0.17
Total:	**606**	**100.00**

5.1.5 Respondent Profile by Full or part-time student?

Full or part-time student?	Population N	Population %	Respondents n	Respondents %
Does not apply / NA		0.00	8	1.32
Full-time	5,897	82.39	548	90.58
Part-time	1,260	17.61	49	8.10
Total:	**7,157**	**100.00**	**605**	**100.00**

5.2   Core Questions Summary for Postgraduate

This radar chart shows the aggregate results for the core survey questions. Each axis represents one question. A code to identify each question is displayed at the outer point of each axis. While questions for each dimension of library service quality are scattered randomly throughout the survey, on this chart they are grouped into sections: Affect of Service, Information Control, and Library as Place.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The following two tables show mean scores and standard deviations for each question, where *n* is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

Legend:
- 🟥 Perceived Less Than Minimum
- 🟦 Perceived Greater Than Minimum
- 🟨 Perceived Less Than Desired
- 🟩 Perceived Greater Than Desired

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: Postgraduate

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Library staff who instill confidence in users	5.90	7.78	7.53	1.63	-0.25	600
AS-2	Giving users individual attention	5.24	6.73	6.67	1.43	-0.06	574
AS-3	Library staff who are consistently courteous	6.54	7.89	7.93	1.39	0.04	605
AS-4	Readiness to respond to users' enquiries	6.53	7.89	7.73	1.20	-0.16	571
AS-5	Library staff who have the knowledge to answer user questions	6.24	7.61	7.52	1.28	-0.09	569
AS-6	Library staff who deal with users in a caring fashion	6.29	7.74	7.61	1.32	-0.13	578
AS-7	Library staff who understand the needs of their users	6.18	7.67	7.44	1.26	-0.23	563
AS-8	Willingness to help users	6.51	7.91	7.76	1.26	-0.15	588
AS-9	Dependability in handling users' service problems	6.49	7.90	7.69	1.19	-0.21	575
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.31	7.99	7.34	1.03	-0.65	595
IC-2	A library Web site enabling me to locate information on my own	6.46	8.02	7.50	1.04	-0.52	600
IC-3	The printed library materials I need for my work	6.09	7.58	7.35	1.25	-0.23	549
IC-4	The electronic information resources I need	6.50	7.99	7.46	0.96	-0.53	597
IC-5	Modern equipment that lets me easily access needed information	6.44	7.92	7.59	1.15	-0.32	596
IC-6	Easy-to-use access tools that allow me to find things on my own	6.53	8.02	7.60	1.07	-0.41	599
IC-7	Making information easily accessible for independent use	6.62	8.06	7.68	1.05	-0.39	594
IC-8	Print and/or electronic journal collections I require for my work	6.52	7.99	7.50	0.98	-0.49	562
Library as Place							
LP-1	Library space that inspires study and learning	6.49	8.05	7.51	1.02	-0.55	604
LP-2	Quiet space for individual work	6.51	8.19	6.90	0.40	-1.28	599
LP-3	A comfortable and inviting location	6.50	8.04	7.58	1.07	-0.47	602
LP-4	A haven for study, learning, or research	6.73	8.25	7.60	0.87	-0.65	605
LP-5	Space for group learning and group study	6.38	7.97	7.48	1.09	-0.50	593
Overall:		6.36	7.88	7.49	1.13	-0.39	606

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Library staff who instill confidence in users	1.85	1.27	1.29	1.68	1.38	600
AS-2	Giving users individual attention	2.17	1.93	1.74	1.66	1.53	574
AS-3	Library staff who are consistently courteous	1.84	1.34	1.28	1.76	1.47	605
AS-4	Readiness to respond to users' enquiries	1.78	1.25	1.18	1.60	1.24	571
AS-5	Library staff who have the knowledge to answer user questions	1.98	1.48	1.37	1.71	1.38	569
AS-6	Library staff who deal with users in a caring fashion	1.98	1.38	1.32	1.72	1.41	578
AS-7	Library staff who understand the needs of their users	1.97	1.47	1.44	1.68	1.42	563
AS-8	Willingness to help users	1.86	1.26	1.25	1.64	1.26	588
AS-9	Dependability in handling users' service problems	1.77	1.23	1.25	1.60	1.23	575
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.77	1.29	1.40	1.75	1.52	595
IC-2	A library Web site enabling me to locate information on my own	1.73	1.21	1.44	1.71	1.49	600
IC-3	The printed library materials I need for my work	1.97	1.57	1.43	1.69	1.46	549
IC-4	The electronic information resources I need	1.79	1.24	1.35	1.68	1.43	597
IC-5	Modern equipment that lets me easily access needed information	1.81	1.27	1.32	1.68	1.39	596
IC-6	Easy-to-use access tools that allow me to find things on my own	1.74	1.19	1.31	1.65	1.36	599
IC-7	Making information easily accessible for independent use	1.68	1.10	1.20	1.55	1.25	594
IC-8	Print and/or electronic journal collections I require for my work	1.82	1.32	1.38	1.75	1.50	562
Library as Place							
LP-1	Library space that inspires study and learning	1.77	1.21	1.45	1.78	1.57	604
LP-2	Quiet space for individual work	1.90	1.21	1.89	2.28	2.10	599
LP-3	A comfortable and inviting location	1.81	1.26	1.45	1.79	1.56	602
LP-4	A haven for study, learning, or research	1.73	1.11	1.47	1.85	1.62	605
LP-5	Space for group learning and group study	1.79	1.25	1.47	1.83	1.65	593
Overall:		1.48	0.93	1.00	1.29	1.01	606

5.3   Core Question Dimensions Summary for Postgraduate

On the chart below, scores for each dimension of library service quality have been plotted graphically. The exterior bars represent the range of minimum to desired mean scores for each dimension. The interior bars represent the range of minimum to perceived mean scores (the service adequacy gap) for each dimension of library service quality.

	Range of Minimum to Desired
	Range of Minimum to Perceived ("Adequacy Gap")

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.19	7.67	7.53	1.34	-0.14	606
Information Control	6.43	7.95	7.50	1.07	-0.45	606
Library as Place	6.52	8.10	7.41	0.89	-0.69	606
Overall	6.36	7.88	7.49	1.13	-0.39	606

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL survey, where *n* is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.63	1.09	1.07	1.35	1.06	606
Information Control	1.51	0.99	1.07	1.34	1.09	606
Library as Place	1.49	0.94	1.23	1.49	1.33	606
Overall	1.48	0.93	1.00	1.29	1.01	606

5.4   Local Question Summary for Postgraduate

This table shows mean scores of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A pleasant or productive place to spend time while on campus	6.63	8.16	7.58	0.94	-0.59	604
Acceptable service support from librarians, whether on campus or virtually	6.18	7.61	7.49	1.31	-0.12	568
Library Collections, print and online, sufficient to meet my research and learning needs	6.51	8.05	7.49	0.98	-0.56	585
Spaces and technology that support creativity	5.79	7.35	7.18	1.39	-0.16	570
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	6.04	7.63	7.50	1.46	-0.13	578

This table displays the standard deviations of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
A pleasant or productive place to spend time while on campus	1.75	1.13	1.44	1.72	1.58	604
Acceptable service support from librarians, whether on campus or virtually	1.95	1.44	1.43	1.71	1.39	568
Library Collections, print and online, sufficient to meet my research and learning needs	1.77	1.24	1.37	1.69	1.43	585
Spaces and technology that support creativity	2.16	1.66	1.54	1.85	1.62	570
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	1.92	1.41	1.36	1.66	1.48	578

5.5   General Satisfaction Questions Summary for Postgraduate

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9.

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.72	1.17	606
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.66	1.24	606
How would you rate the overall quality of the service provided by the library?	7.67	1.09	606

5.6   Information Literacy Outcomes Questions Summary for Postgraduate

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where *n* is the number of respondents for each question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9 with 1 being "strongly disagree" and 9 representing "strongly agree."

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	7.21	1.44	606
The library aids my advancement in my academic discipline or work.	7.49	1.30	606
The library enables me to be more efficient in my academic pursuits or work.	7.62	1.30	606
The library helps me distinguish between trustworthy and untrustworthy information.	6.69	1.77	606
The library provides me with the information skills I need in my work or study.	7.30	1.39	606

5.7   Library Use Summary for Postgraduate

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo and Google. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.

Legend:
- How often do you use resources within the library?
- How often do you access library resources through a library Web page?
- How often do you use YahooTM, GoogleTM, or non-library gateways for information?
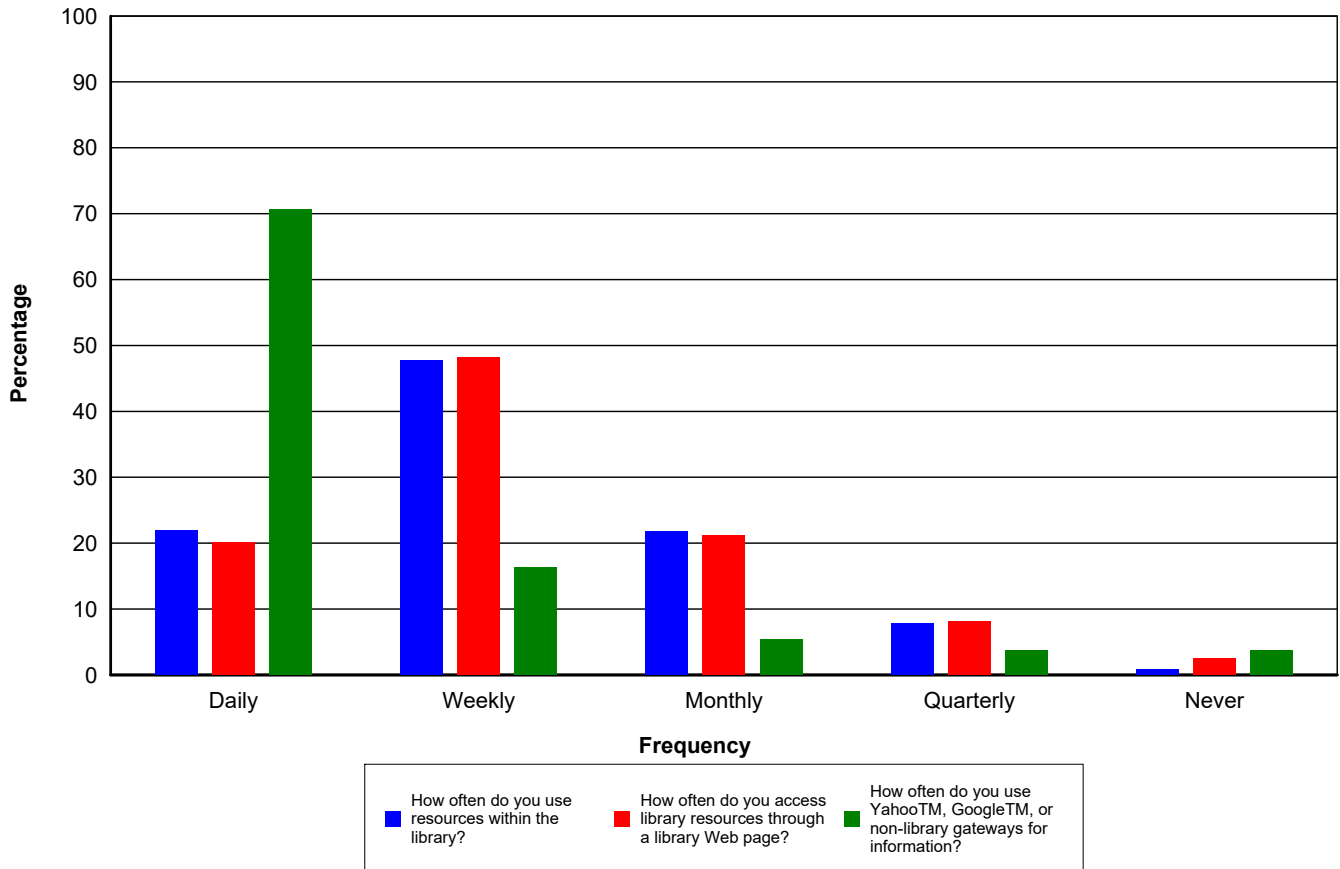
	Daily	Weekly	Monthly	Quarterly	Never	n/%
How often do you use resources within the library?	133 21.95%	289 47.69%	132 21.78%	47 7.76%	5 0.83%	606 100.00%
How often do you access library resources through a library Web page?	122 20.13%	292 48.18%	128 21.12%	49 8.09%	15 2.48%	606 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	428 70.63%	99 16.34%	33 5.45%	23 3.80%	23 3.80%	606 100.00%

6   Academic Staff Summary for The Hong Kong University of Science and Technology

6.1   Demographic Summary for Academic Staff

6.1.1   Population and Respondent Profiles for Academic Staff by Standard Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the LibQUAL standard discipline categories. The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

■ Respondent Profile by Discipline
■ Population Profile by Discipline

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: Academic Staff

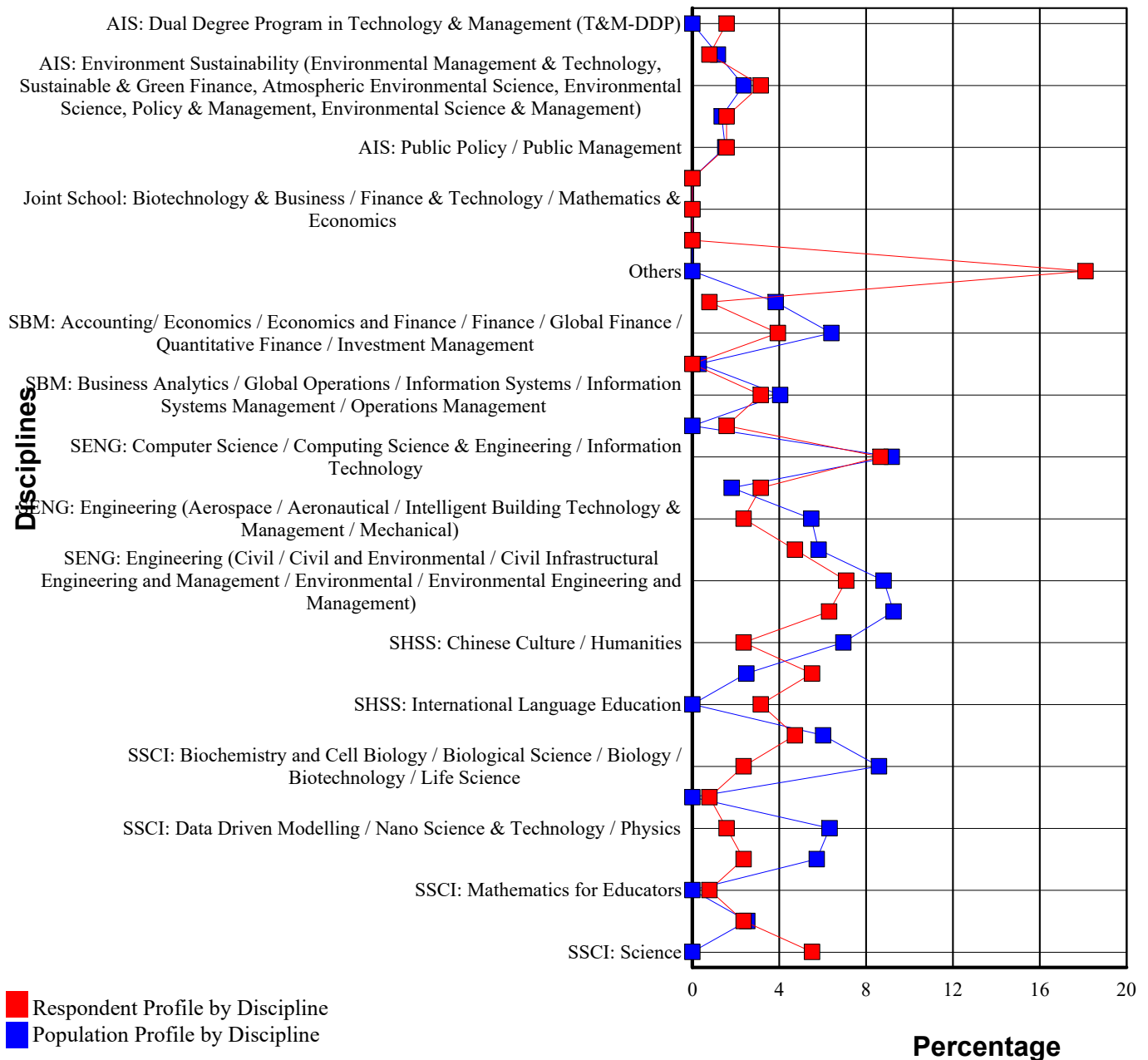| Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture and Related Subjects	0	0.00	0	0.00	0.00
Architecture, Building, & Planning	0	0.00	0	0.00	0.00
Biological Sciences	204	8.60	3	2.36	6.23
Business & Administrative Studies	346	14.58	12	9.45	5.13
Combined Studies	84	3.54	14	11.02	-7.48
Computer Science	218	9.19	11	8.66	0.53
Creative Arts & Design	0	0.00	0	0.00	0.00
Education	0	0.00	5	3.94	-3.94
Engineering & Technology	772	32.53	32	25.20	7.34
Humanities	165	6.95	3	2.36	4.59
Languages	0	0.00	0	0.00	0.00
Law	0	0.00	0	0.00	0.00
Librarianship & Information Science	0	0.00	0	0.00	0.00
Mathematical Sciences	136	5.73	4	3.15	2.58
Medicine & Dentistry	0	0.00	0	0.00	0.00
Other	0	0.00	23	18.11	-18.11
Physical Sciences	353	14.88	11	8.66	6.21
Social, Economic, & Political Studies	95	4.00	9	7.09	-3.08
Subjects allied to Medicine	0	0.00	0	0.00	0.00
Veterinary Science	0	0.00	0	0.00	0.00
Total:	**2,373**	**100.00**	**127**	**100.00**	**0.00**

Language: **English (British), Chinese (Traditional)**
Institution Type: **College or University**
Consortium: **JULAC**
User Group: **Academic Staff**

6.1.2 Population and Respondent Profiles for Academic Staff by Customized Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the customized discipline categories supplied by the participating library. The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

■ Respondent Profile by Discipline
■ Population Profile by Discipline

Percentage

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
AIS: Dual Degree Program in Technology & Management (T&M-DDP)	0	0.00	2	1.57	-1.57
AIS: EMIA - Individualized Interdisciplinary Major / Individualized Interdisciplinary Program	28	1.18	1	0.79	0.39
AIS: Environment Sustainability (Environmental Management & Technology, Sustainable & Green Finance, Atmospheric Environmental Science, Environmental Science, Policy & Management, Environmental Science & Management)	56	2.36	4	3.15	-0.79
AIS: Integrative Systems and Design / Technology Leadership and Entrepreneurship	32	1.35	2	1.57	-0.23
AIS: Public Policy / Public Management	36	1.52	2	1.57	-0.06
Joint School: Big Data Technology / Data Science & Technology	0	0.00	0	0.00	0.00
Joint School: Biotechnology & Business / Finance & Technology / Mathematics & Economics	0	0.00	0	0.00	0.00
Joint School: Risk Management & Business Intelligence	0	0.00	0	0.00	0.00
Others	0	0.00	23	18.11	-18.11
SBM: International Management / Management / Marketing	91	3.83	1	0.79	3.05
SBM: Accounting/ Economics / Economics and Finance / Finance / Global Finance / Quantitative Finance / Investment Management	152	6.41	5	3.94	2.47
SBM: BBA / General Business Management / Global Business / World Business	7	0.29	0	0.00	0.29
SBM: Business Analytics / Global Operations / Information Systems / Information Systems Management / Operations Management	96	4.05	4	3.15	0.90
SBM: DBA / EMBA / MBA	0	0.00	2	1.57	-1.57
SENG: Computer Science / Computing Science & Engineering / Information Technology	218	9.19	11	8.66	0.53
SENG: Decision Analytics / Industrial Engineering & Decision Analytics / Industrial Engineering and Engineering Management / Industrial Engineering and Logistics Management/ Engineering Enterprise Management	43	1.81	4	3.15	-1.34
SENG: Engineering (Aerospace / Aeronautical / Intelligent Building Technology & Management / Mechanical)	130	5.48	3	2.36	3.12
SENG: Engineering (Bioengineering / Chemical & Biomolecular / Chemical / Chemical & Environmental / Sustainable Energy / Biomolecular Engineering and Health Informatics / Chemical and Energy)	138	5.82	6	4.72	1.09
SENG: Engineering (Civil / Civil and Environmental / Civil Infrastructural Engineering and Management / Environmental / Environmental Engineering and Management)	209	8.81	9	7.09	1.72
SENG: Engineering (Electronic / Computer / Electronic and Computer / IC Design / Telecommunications)	220	9.27	8	6.30	2.97
SHSS: Chinese Culture / Humanities	165	6.95	3	2.36	4.59

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: Academic Staff

SHSS: Global China Studies / Social Science / Quantitative Social Analysis	59	2.49	7	5.51	-3.03
SHSS: International Language Education	0	0.00	4	3.15	-3.15
SSCI: Analytical Chemistry / Chemistry	143	6.03	6	4.72	1.30
SSCI: Biochemistry and Cell Biology / Biological Science / Biology / Biotechnology / Life Science	204	8.60	3	2.36	6.23
SSCI: Data Analytics in Science	0	0.00	1	0.79	-0.79
SSCI: Data Driven Modelling / Nano Science & Technology / Physics	150	6.32	2	1.57	4.75
SSCI: Financial Mathematics / Mathematics	136	5.73	3	2.36	3.37
SSCI: Mathematics for Educators	0	0.00	1	0.79	-0.79
SSCI: Ocean Science and Technology / Environmental Health & Safety / Global Marine Resources Management / Marine Environmental Science	60	2.53	3	2.36	0.17
SSCI: Science	0	0.00	7	5.51	-5.51
Total:	**2,373**	**100.00**	**127**	**100.00**	**0.00**

6.1.3 Respondent Profile by Sex:

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

Sex:	Population N	Population %	Respondents n	Respondents %
Female	685	28.87	43	34.96
Male	1,688	71.13	80	65.04
Total:	**2,373**	**100.00**	**123**	**100.00**

6.1.4 Respondent Profile by Age:

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed.

Age:	Respondents n	Respondents %
18 - 22	2	1.57
23 - 30	44	34.65
31 - 45	58	45.67
46 - 65	22	17.32
Over 65	1	0.79
Under 18	0	0.00
Total:	**127**	**100.00**

6.1.5 Respondent Profile by Full or part-time student?

Full or part-time student?	Population N	Population %	Respondents n	Respondents %
Does not apply / NA	2,373	100.00	97	77.60
Full-time		0.00	24	19.20
Part-time		0.00	4	3.20
Total:	**2,373**	**100.00**	**125**	**100.00**

6.2 Core Questions Summary for Academic Staff

This radar chart shows the aggregate results for the core survey questions. Each axis represents one question. A code to identify each question is displayed at the outer point of each axis. While questions for each dimension of library service quality are scattered randomly throughout the survey, on this chart they are grouped into sections: Affect of Service, Information Control, and Library as Place.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The following two tables show mean scores and standard deviations for each question, where *n* is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)
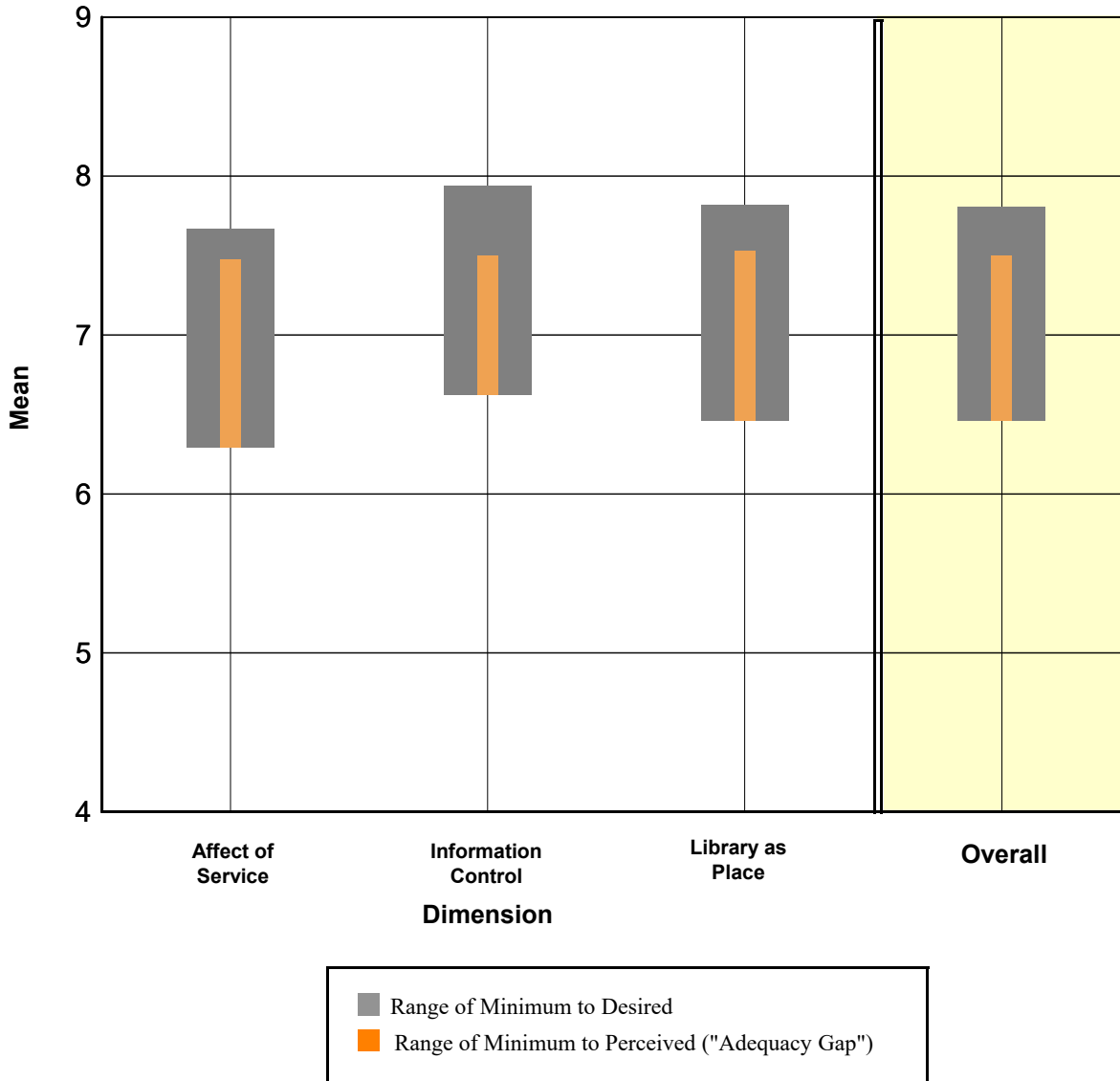

Legend:
- Perceived Less Than Minimum
- Perceived Greater Than Minimum
- Perceived Less Than Desired
- Perceived Greater Than Desired

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Library staff who instill confidence in users	5.79	7.60	7.34	1.55	-0.27	124
AS-2	Giving users individual attention	5.48	6.95	6.67	1.18	-0.28	114
AS-3	Library staff who are consistently courteous	6.49	7.75	7.80	1.31	0.05	126
AS-4	Readiness to respond to users' enquiries	6.45	7.82	7.75	1.30	-0.07	120
AS-5	Library staff who have the knowledge to answer user questions	6.55	7.68	7.53	0.97	-0.16	116
AS-6	Library staff who deal with users in a caring fashion	6.05	7.76	7.54	1.49	-0.22	119
AS-7	Library staff who understand the needs of their users	6.31	7.68	7.32	1.02	-0.36	118
AS-8	Willingness to help users	6.66	7.90	7.77	1.11	-0.14	125
AS-9	Dependability in handling users' service problems	6.62	7.83	7.59	0.97	-0.24	124
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.81	8.08	7.55	0.74	-0.53	127
IC-2	A library Web site enabling me to locate information on my own	6.62	8.02	7.41	0.79	-0.61	124
IC-3	The printed library materials I need for my work	6.08	7.65	7.39	1.31	-0.25	110
IC-4	The electronic information resources I need	6.57	8.05	7.47	0.90	-0.57	127
IC-5	Modern equipment that lets me easily access needed information	6.54	7.93	7.59	1.05	-0.33	123
IC-6	Easy-to-use access tools that allow me to find things on my own	6.69	7.98	7.50	0.81	-0.48	124
IC-7	Making information easily accessible for independent use	6.71	7.81	7.53	0.82	-0.28	126
IC-8	Print and/or electronic journal collections I require for my work	6.72	7.94	7.48	0.76	-0.46	118
Library as Place							
LP-1	Library space that inspires study and learning	6.23	7.67	7.45	1.21	-0.22	121
LP-2	Quiet space for individual work	6.48	7.89	7.47	0.99	-0.42	119
LP-3	A comfortable and inviting location	6.63	7.94	7.70	1.07	-0.24	123
LP-4	A haven for study, learning, or research	6.66	7.98	7.61	0.95	-0.36	122
LP-5	Space for group learning and group study	6.18	7.54	7.46	1.28	-0.08	104
Overall:		6.46	7.81	7.50	1.04	-0.31	127

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Library staff who instill confidence in users	1.94	1.40	1.46	2.04	1.58	124
AS-2	Giving users individual attention	2.15	1.73	1.88	1.75	1.44	114
AS-3	Library staff who are consistently courteous	1.65	1.31	1.23	1.69	1.34	126
AS-4	Readiness to respond to users' enquiries	1.77	1.22	1.18	1.64	1.10	120
AS-5	Library staff who have the knowledge to answer user questions	1.81	1.48	1.50	1.79	1.30	116
AS-6	Library staff who deal with users in a caring fashion	1.89	1.28	1.19	1.65	1.31	119
AS-7	Library staff who understand the needs of their users	1.78	1.30	1.46	1.66	1.31	118
AS-8	Willingness to help users	1.76	1.19	1.21	1.60	1.11	125
AS-9	Dependability in handling users' service problems	1.75	1.27	1.24	1.65	1.23	124
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.67	1.15	1.44	1.85	1.62	127
IC-2	A library Web site enabling me to locate information on my own	1.84	1.35	1.57	1.88	1.41	124
IC-3	The printed library materials I need for my work	1.76	1.41	1.29	1.78	1.52	110
IC-4	The electronic information resources I need	1.66	1.21	1.33	1.78	1.49	127
IC-5	Modern equipment that lets me easily access needed information	1.66	1.25	1.29	1.59	1.41	123
IC-6	Easy-to-use access tools that allow me to find things on my own	1.73	1.25	1.35	1.80	1.32	124
IC-7	Making information easily accessible for independent use	1.65	1.20	1.22	1.61	1.31	126
IC-8	Print and/or electronic journal collections I require for my work	1.72	1.30	1.26	1.73	1.58	118
Library as Place							
LP-1	Library space that inspires study and learning	1.95	1.49	1.35	1.95	1.68	121
LP-2	Quiet space for individual work	1.83	1.37	1.37	1.99	1.60	119
LP-3	A comfortable and inviting location	1.69	1.30	1.29	1.81	1.44	123
LP-4	A haven for study, learning, or research	1.71	1.16	1.35	1.95	1.52	122
LP-5	Space for group learning and group study	1.87	1.64	1.31	1.81	1.36	104
Overall:		1.50	1.00	1.00	1.40	1.02	127

6.3   Core Question Dimensions Summary for Academic Staff

On the chart below, scores for each dimension of library service quality have been plotted graphically. The exterior bars represent the range of minimum to desired mean scores for each dimension. The interior bars represent the range of minimum to perceived mean scores (the service adequacy gap) for each dimension of library service quality.

Range of Minimum to Desired

Range of Minimum to Perceived ("Adequacy Gap")

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.29	7.67	7.47	1.18	-0.19	127
Information Control	6.63	7.94	7.50	0.87	-0.44	127
Library as Place	6.46	7.82	7.53	1.07	-0.29	126
Overall	6.46	7.81	7.50	1.04	-0.31	127

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.59	1.07	1.08	1.42	1.02	127
Information Control	1.49	0.99	1.05	1.47	1.16	127
Library as Place	1.60	1.15	1.07	1.62	1.22	126
Overall	1.50	1.00	1.00	1.40	1.02	127

6.4   Local Question Summary for Academic Staff

This table shows mean scores of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A pleasant or productive place to spend time while on campus	6.60	7.97	7.76	1.17	-0.21	121
Acceptable service support from librarians, whether on campus or virtually	6.42	7.77	7.65	1.23	-0.11	115
Library Collections, print and online, sufficient to meet my research and learning needs	6.67	7.99	7.46	0.79	-0.53	125
Spaces and technology that support creativity	6.02	7.44	7.10	1.08	-0.35	113
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	5.82	7.23	7.06	1.25	-0.17	109

This table displays the standard deviations of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
A pleasant or productive place to spend time while on campus	1.66	1.26	1.10	1.88	1.50	121
Acceptable service support from librarians, whether on campus or virtually	1.81	1.28	1.24	1.70	1.26	115
Library Collections, print and online, sufficient to meet my research and learning needs	1.74	1.21	1.28	1.80	1.46	125
Spaces and technology that support creativity	1.87	1.57	1.56	1.76	1.60	113
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	1.89	1.61	1.40	1.55	1.09	109

6.5   General Satisfaction Questions Summary for Academic Staff

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9.

| Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.64	1.28	127
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.54	1.31	127
How would you rate the overall quality of the service provided by the library?	7.57	1.12	127

6.6   Information Literacy Outcomes Questions Summary for Academic Staff

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where *n* is the number of respondents for each question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9 with 1 being "strongly disagree" and 9 representing "strongly agree."

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.96	1.60	127
The library aids my advancement in my academic discipline or work.	7.23	1.57	127
The library enables me to be more efficient in my academic pursuits or work.	7.38	1.53	127
The library helps me distinguish between trustworthy and untrustworthy information.	6.75	1.68	127
The library provides me with the information skills I need in my work or study.	7.09	1.53	127

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: Academic Staff

6.7   Library Use Summary for Academic Staff

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo and Google. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.
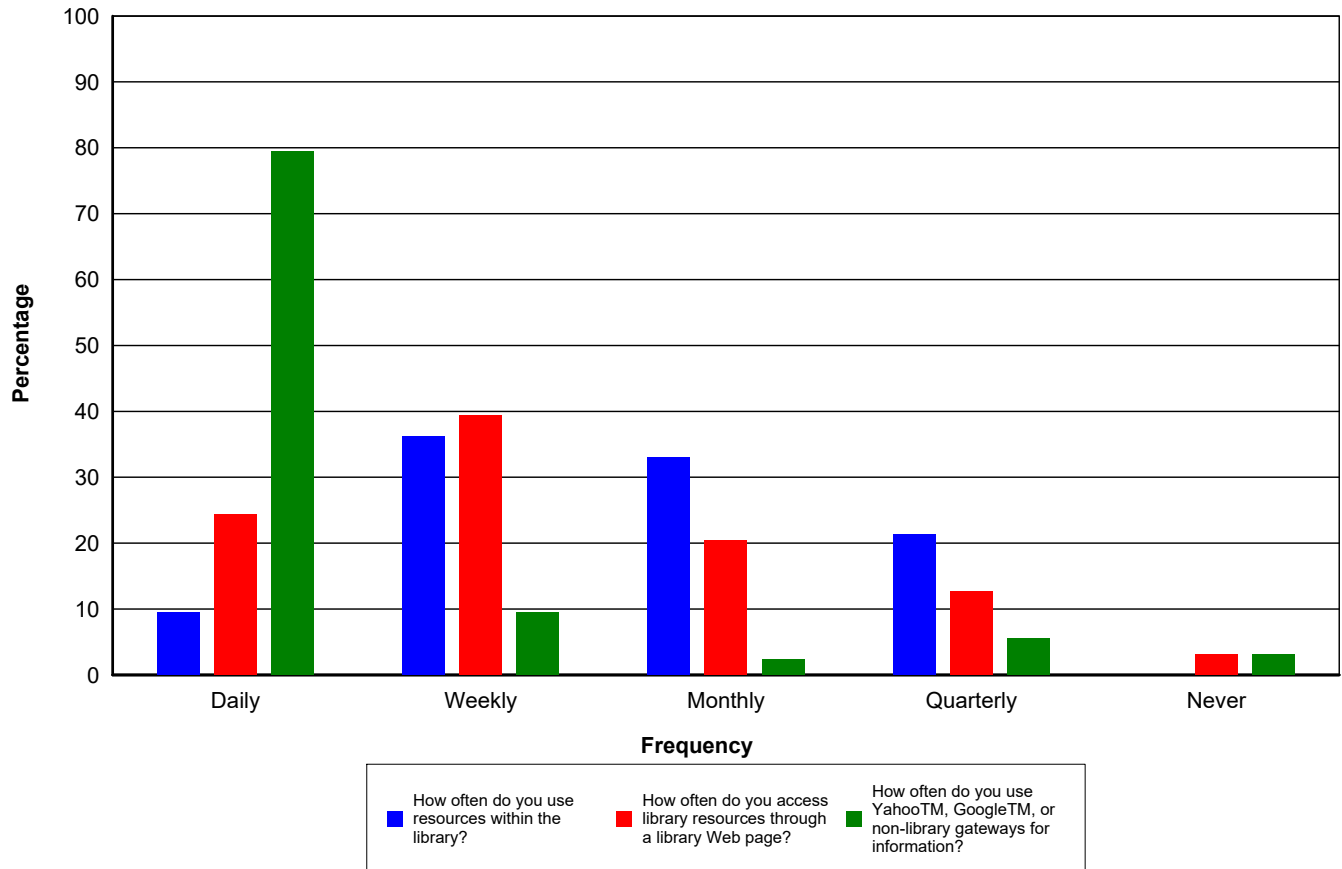
	Daily	Weekly	Monthly	Quarterly	Never	n/%
How often do you use resources within the library?	12 9.45%	46 36.22%	42 33.07%	27 21.26%	0 0 %	127 100.00%
How often do you access library resources through a library Web page?	31 24.41%	50 39.37%	26 20.47%	16 12.60%	4 3.15%	127 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	101 79.53%	12 9.45%	3 2.36%	7 5.51%	4 3.15%	127 100.00%

7 Staff Summary for The Hong Kong University of Science and Technology

7.1 Demographic Summary for Staff

7.1.1 Respondent Profile by Sex:

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

Sex:	Respondents n	Respondents %
Female	224	62.92
Male	132	37.08
Total:	**356**	**100.00**

7.1.2 Respondent Profile by Age:

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed.

Age:	Respondents n	Respondents %
18 - 22	4	1.11
23 - 30	106	29.36
31 - 45	180	49.86
46 - 65	70	19.39
Over 65	1	0.28
Under 18	0	0.00
Total:	**361**	**100.00**

7.1.3 Respondent Profile by Full or part-time student?

Full or part-time student?	Respondents n	Respondents %
Does not apply / NA	348	97.21
Full-time	7	1.96
Part-time	3	0.84
Total:	**358**	**100.00**

7.2   Core Questions Summary for Staff

This radar chart shows the aggregate results for the core survey questions. Each axis represents one question. A code to identify each question is displayed at the outer point of each axis. While questions for each dimension of library service quality are scattered randomly throughout the survey, on this chart they are grouped into sections: Affect of Service, Information Control, and Library as Place.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The following two tables show mean scores and standard deviations for each question, where *n* is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

Legend:
- Perceived Less Than Minimum (red)
- Perceived Greater Than Minimum (blue)
- Perceived Less Than Desired (yellow)
- Perceived Greater Than Desired (green)

Language: **English (British), Chinese (Traditional)**
Institution Type: **College or University**
Consortium: **JULAC**
User Group: **Staff**

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Library staff who instill confidence in users	5.90	7.25	7.18	1.28	-0.07	354
AS-2	Giving users individual attention	5.44	6.45	6.38	0.94	-0.06	346
AS-3	Library staff who are consistently courteous	6.43	7.52	7.57	1.13	0.05	361
AS-4	Readiness to respond to users' enquiries	6.40	7.40	7.43	1.03	0.03	342
AS-5	Library staff who have the knowledge to answer user questions	6.21	7.23	7.21	1.00	-0.03	341
AS-6	Library staff who deal with users in a caring fashion	6.01	7.14	7.12	1.11	-0.02	340
AS-7	Library staff who understand the needs of their users	6.10	7.21	7.07	0.96	-0.14	340
AS-8	Willingness to help users	6.39	7.48	7.45	1.06	-0.03	353
AS-9	Dependability in handling users' service problems	6.40	7.39	7.29	0.89	-0.09	334
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.20	7.41	7.22	1.02	-0.19	346
IC-2	A library Web site enabling me to locate information on my own	6.48	7.59	7.22	0.74	-0.37	356
IC-3	The printed library materials I need for my work	6.02	7.14	7.00	0.98	-0.14	301
IC-4	The electronic information resources I need	6.24	7.32	7.08	0.84	-0.24	348
IC-5	Modern equipment that lets me easily access needed information	6.29	7.41	7.18	0.90	-0.23	354
IC-6	Easy-to-use access tools that allow me to find things on my own	6.40	7.49	7.26	0.86	-0.23	353
IC-7	Making information easily accessible for independent use	6.47	7.60	7.40	0.93	-0.20	359
IC-8	Print and/or electronic journal collections I require for my work	6.21	7.37	7.13	0.92	-0.24	294
Library as Place							
LP-1	Library space that inspires study and learning	6.33	7.47	7.32	0.99	-0.15	357
LP-2	Quiet space for individual work	6.61	7.72	7.42	0.81	-0.31	354
LP-3	A comfortable and inviting location	6.63	7.75	7.69	1.06	-0.06	359
LP-4	A haven for study, learning, or research	6.58	7.70	7.55	0.97	-0.16	358
LP-5	Space for group learning and group study	6.36	7.51	7.28	0.92	-0.23	300
Overall:		6.29	7.40	7.26	0.97	-0.14	362

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Library staff who instill confidence in users	1.64	1.29	1.24	1.56	1.23	354
AS-2	Giving users individual attention	1.85	1.79	1.67	1.74	1.67	346
AS-3	Library staff who are consistently courteous	1.67	1.30	1.27	1.59	1.24	361
AS-4	Readiness to respond to users' enquiries	1.58	1.25	1.23	1.51	1.11	342
AS-5	Library staff who have the knowledge to answer user questions	1.65	1.39	1.28	1.51	1.22	341
AS-6	Library staff who deal with users in a caring fashion	1.72	1.44	1.34	1.53	1.20	340
AS-7	Library staff who understand the needs of their users	1.62	1.32	1.32	1.56	1.27	340
AS-8	Willingness to help users	1.65	1.27	1.18	1.44	1.17	353
AS-9	Dependability in handling users' service problems	1.57	1.27	1.21	1.42	1.09	334
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.60	1.33	1.27	1.62	1.32	346
IC-2	A library Web site enabling me to locate information on my own	1.55	1.18	1.22	1.54	1.22	356
IC-3	The printed library materials I need for my work	1.65	1.46	1.37	1.56	1.20	301
IC-4	The electronic information resources I need	1.60	1.33	1.16	1.54	1.34	348
IC-5	Modern equipment that lets me easily access needed information	1.57	1.21	1.26	1.52	1.29	354
IC-6	Easy-to-use access tools that allow me to find things on my own	1.60	1.20	1.26	1.57	1.32	353
IC-7	Making information easily accessible for independent use	1.55	1.15	1.18	1.49	1.30	359
IC-8	Print and/or electronic journal collections I require for my work	1.62	1.36	1.35	1.50	1.32	294
Library as Place							
LP-1	Library space that inspires study and learning	1.71	1.41	1.36	1.61	1.33	357
LP-2	Quiet space for individual work	1.67	1.26	1.36	1.69	1.28	354
LP-3	A comfortable and inviting location	1.49	1.12	1.14	1.50	1.24	359
LP-4	A haven for study, learning, or research	1.62	1.27	1.25	1.45	1.19	358
LP-5	Space for group learning and group study	1.61	1.33	1.29	1.59	1.33	300
Overall:		1.36	0.99	0.95	1.22	0.90	362

7.3 Core Question Dimensions Summary for Staff

On the chart below, scores for each dimension of library service quality have been plotted graphically. The exterior bars represent the range of minimum to desired mean scores for each dimension. The interior bars represent the range of minimum to perceived mean scores (the service adequacy gap) for each dimension of library service quality.

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.14	7.22	7.19	1.05	-0.03	362
Information Control	6.30	7.43	7.20	0.90	-0.23	362
Library as Place	6.51	7.63	7.46	0.95	-0.17	362
Overall	6.29	7.40	7.26	0.97	-0.14	362

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL survey, where *n* is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix A.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.46	1.11	1.08	1.29	0.95	362
Information Control	1.36	1.01	0.98	1.26	0.99	362
Library as Place	1.43	1.07	1.06	1.32	1.03	362
Overall	1.36	0.99	0.95	1.22	0.90	362

7.4 Local Question Summary for Staff

This table shows mean scores of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A pleasant or productive place to spend time while on campus	6.53	7.66	7.55	1.02	-0.11	359
Acceptable service support from librarians, whether on campus or virtually	6.17	7.28	7.17	1.01	-0.11	337
Library Collections, print and online, sufficient to meet my research and learning needs	6.33	7.46	7.14	0.81	-0.33	313
Spaces and technology that support creativity	5.98	7.06	6.87	0.89	-0.19	331
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	5.97	7.13	7.08	1.11	-0.05	315

This table displays the standard deviations of each of the local questions added by the individual library or consortium, where *n* is the number of respondents for each particular question. For a more detailed explanation of the headings, see the introduction to this notebook.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
A pleasant or productive place to spend time while on campus	1.61	1.23	1.22	1.57	1.20	359
Acceptable service support from librarians, whether on campus or virtually	1.69	1.33	1.23	1.50	1.23	337
Library Collections, print and online, sufficient to meet my research and learning needs	1.55	1.25	1.25	1.47	1.32	313
Spaces and technology that support creativity	1.74	1.49	1.33	1.64	1.34	331
The Library's workshops and seminars helping me develop my ability to seek, find, use, create, and communicate research knowledge, information, and data effectively and ethically	1.63	1.33	1.26	1.56	1.23	315

7.5   General Satisfaction Questions Summary for Staff

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9.

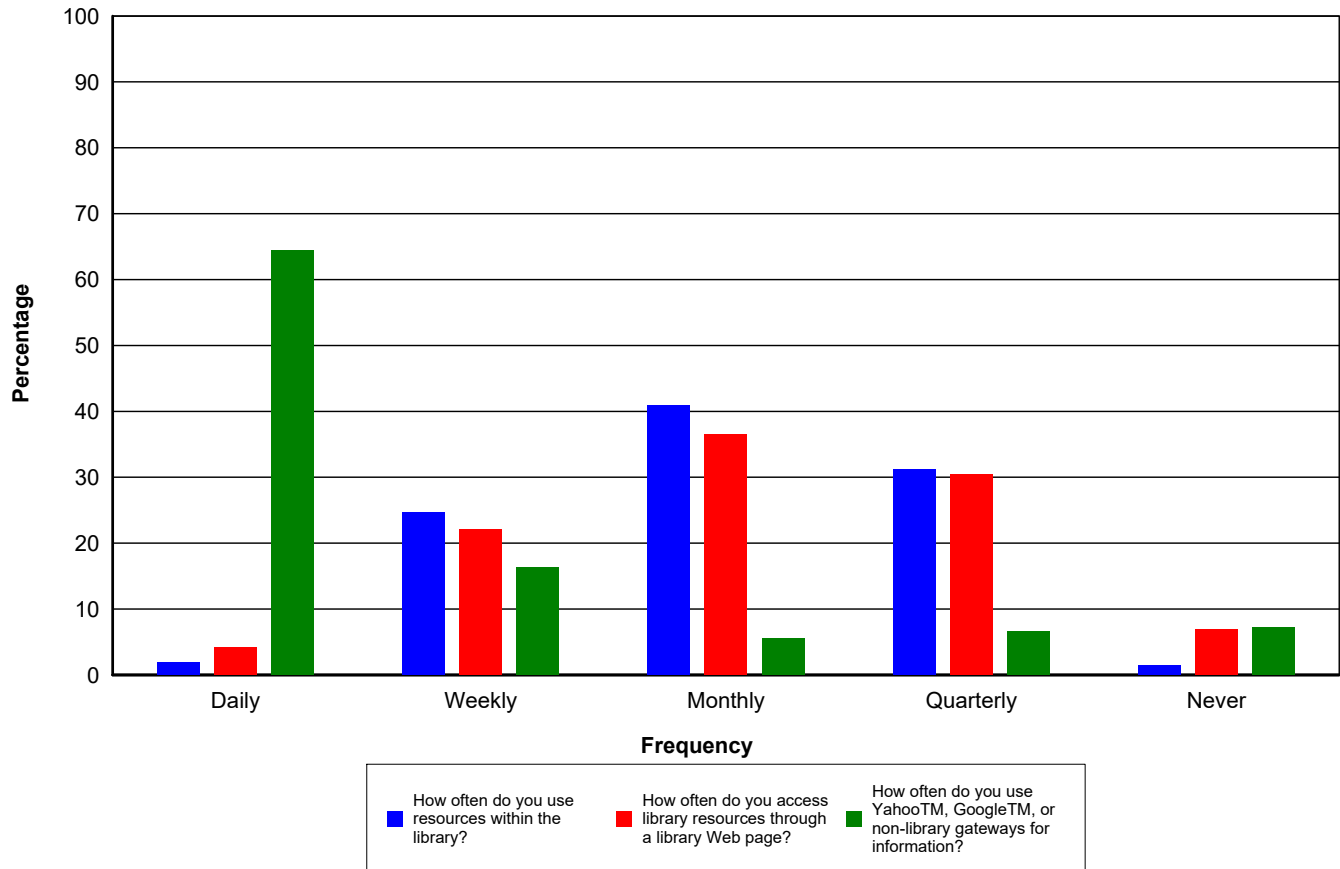| Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.53	1.04	362
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.35	1.12	362
How would you rate the overall quality of the service provided by the library?	7.45	0.98	362

7.6   Information Literacy Outcomes Questions Summary for Staff

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where *n* is the number of respondents for each question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL survey, in which respondents rated their levels of general satisfaction on a scale from 1 to 9 with 1 being "strongly disagree" and 9 representing "strongly agree."

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.99	1.21	362
The library aids my advancement in my academic discipline or work.	7.07	1.15	362
The library enables me to be more efficient in my academic pursuits or work.	7.12	1.18	362
The library helps me distinguish between trustworthy and untrustworthy information.	6.74	1.39	362
The library provides me with the information skills I need in my work or study.	7.06	1.22	362

7.7   Library Use Summary for Staff

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo and Google. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.

Legend:
- How often do you use resources within the library?
- How often do you access library resources through a library Web page?
- How often do you use YahooTM, GoogleTM, or non-library gateways for information?

	Daily	Weekly	Monthly	Quarterly	Never	n/%
How often do you use resources within the library?	7 / 1.93%	89 / 24.59%	148 / 40.88%	113 / 31.22%	5 / 1.38%	362 / 100.00%
How often do you access library resources through a library Web page?	15 / 4.14%	80 / 22.10%	132 / 36.46%	110 / 30.39%	25 / 6.91%	362 / 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	233 / 64.36%	59 / 16.30%	20 / 5.52%	24 / 6.63%	26 / 7.18%	362 / 100.00%

Language: English (British), Chinese (Traditional)
Institution Type: College or University
Consortium: JULAC
User Group: Staff

Appendix A: LibQUAL Dimensions

LibQUAL measures dimensions of perceived library quality—that is, each survey question is part of a broader category (a dimension), and scores within those categories are analyzed in order to derive more general information about library users' perceptions of service. These dimensions were first based on the original SERVQUAL survey instrument (the framework for the LibQUAL survey tool; for more information on the origins of LibQUAL, go to <http://www.libqual.org/Publications/>). The LibQUAL survey dimensions have evolved with each iteration, becoming more refined and focused for application to the library context. Dimensions for each iteration of the LibQUAL survey are outlined below.

LibQUAL 2000 Dimensions

The 2000 iteration of the LibQUAL survey, which had 41 questions, measured eight separate dimensions:
- Assurance (the knowledge and courtesy of employees, and their ability to convey trust and confidence)
- Empathy (caring, individual attention)
- Library as Place (library as a sanctuary/haven or site for learning and contemplation)
- Reliability (ability to perform the promised service dependably and accurately)
- Responsiveness (willingness to help customers and provide prompt service)
- Tangibles (appearance of physical facilities, equipment, personnel and communications materials)
- Instructions/Custom Items
- Self-Reliance

LibQUAL 2001 Dimensions

After careful analysis of the results from the 2000 survey, the dimensions were further refined to re-ground the SERVQUAL items in the library context. Four sub-dimensions resulted for the 2001 iteration:
- Service Affect (nine items, such as "willingness to help users")
- Library as Place (five items, such as "a haven for quiet and solitude")
- Personal Control (six items, such as "website enabling me to locate information on my own"), and
- Information Access (five items, such as "comprehensive print collections" and "convenient business hours")

LibQUAL 2002 and 2003 Dimensions

For the 2002 iteration of the LibQUAL survey, the dimensions were once again refined based on analysis of the previous year's results. While the four dimensions were retained, their titles were changed slightly to more clearly represent the questions and data. The same four dimensions were also used on the 2003 survey:
- Access to Information
- Affect of Service
- Library as Place
- Personal Control

LibQUAL 2004 to Present Dimensions
After the 2003 survey was completed, factor and reliability analyses on the resulting data revealed that two of the

dimensions measured by the survey-Access to Information and Personal Control-had collapsed into one. The following three dimensions have been measured since then: Affect of Service, Information Control, and Library as Place. In addition, three core items were eliminated from the 2003 version of the survey, leaving 22 core items on the final survey instrument.

The list below displays the dimensions used to present the results in the 2012 notebooks, along with the questions that relate to each dimension. *(Note: The questions below are those used in the College and University implementation of the survey, American English version.)*

Affect of Service
    [AS-1]   Employees who instill confidence in users
    [AS-2]   Giving users individual attention
    [AS-3]   Employees who are consistently courteous
    [AS-4]   Readiness to respond to users' questions
    [AS-5]   Employees who have the knowledge to answer user questions
    [AS-6]   Employees who deal with users in a caring fashion
    [AS-7]   Employees who understand the needs of their users
    [AS-8]   Willingness to help users
    [AS-9]   Dependability in handling users' service problems

Information Control
    [IC-1]   Making electronic resources accessible from my home or office
    [IC-2]   A library Web site enabling me to locate information on my own
    [IC-3]   The printed library materials I need for my work
    [IC-4]   The electronic information resources I need
    [IC-5]   Modern equipment that lets me easily access needed information
    [IC-6]   Easy-to-use access tools that allow me to find things on my own
    [IC-7]   Making information easily accessible for independent use
    [IC-8]   Print and/or electronic journal collections I require for my work

Library as Place
    [LP-1]   Library space that inspires study and learning
    [LP-2]   Quiet space for individual activities
    [LP-3]   A comfortable and inviting location
    [LP-4]   A getaway for study, learning or research
    [LP-5]   Community space for group learning and group study

ASSOCIATION
OF RESEARCH
LIBRARIES

21 Dupont Circle NW, Suite 800
Washington, DC 20036
Phone 202-296-2296
Fax 202-872-0884
http://www.libqual.org