Canada Lite: impact of LibQUAL+® Lite on the members of the LibQUAL+ Canada Consortium

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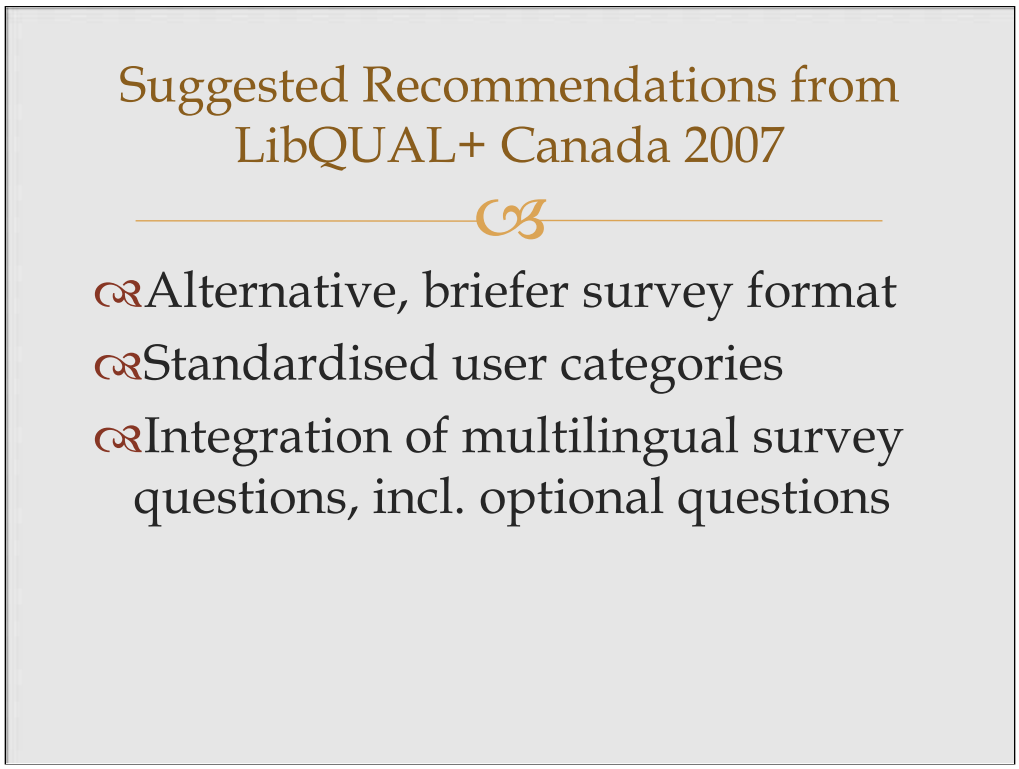
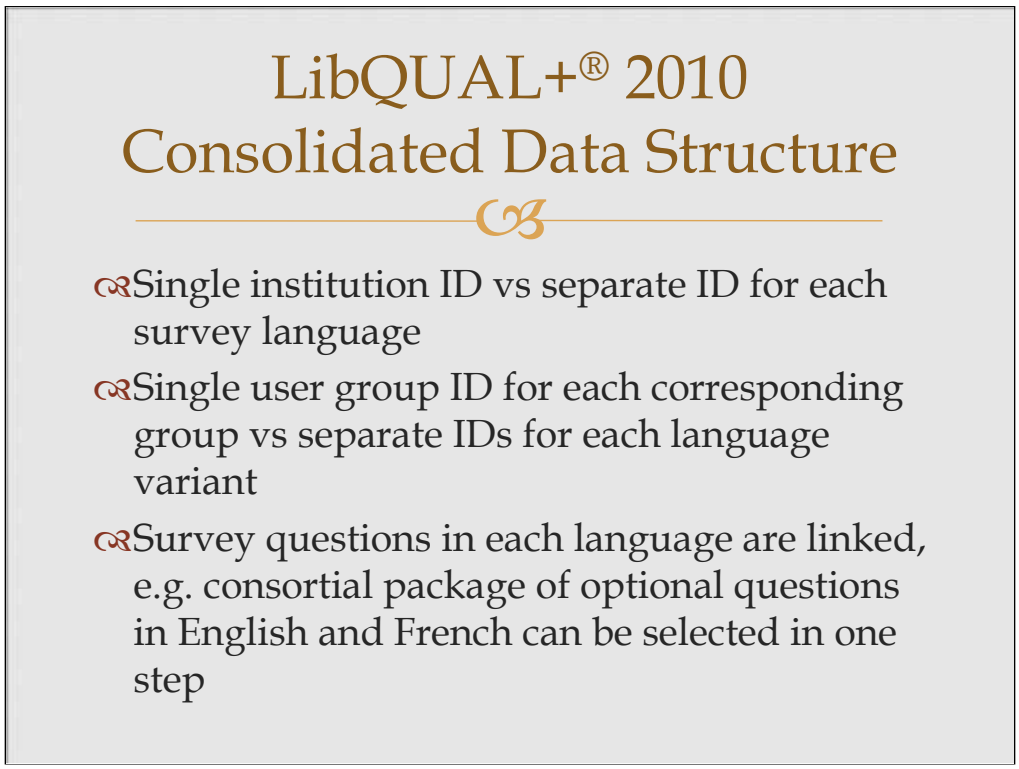
LibQUAL+ Canada Consortium

- Largest LibQUAL+® consortium
- Bilingual (English and French)
- 2010: 47 members (43 universities, 4 community colleges)
- 2007: 53 members (42 universities, 5 community colleges, 6 federal government libraries)

What made the consortium notable in 2007 was it's size, national scope and its strongly multi-lingual character continued in 2010, including 8 French-language universities and another 6 offering the survey in both English and French. More than 40% of all university respondents took the French-language survey.



After the 2007 survey, the consortium prepared a report to its members, CARL, ARL's Canadian equivalent and to ARL including recommendations for improvements.



With the 2010 survey, the consortium's major concerns had been addressed. Among the major changes in 2010 was the consolidation of key data elements. Prior to 2010, if a library elected to do the survey in more than one language, they were assigned a separate institution id, for each survey language even though there already was a language field in the survey. Similarly, language variants for user groups, such as graduate students, had separate codes and translations of survey questions had no links to the English original. Consequently, libraries doing the survey in more than one language and multilingual consortia such as LibQUAL® Canada could not get consolidated survey results for both languages without contracting with ARL for custom reports.

In the 2010 survey, each registered participant is assigned a single institution ID, a single user group code for each corresponding user group and the survey questions in each language are now linked. All results from an institution or a consortium can be consolidated quite easily into one results set in the standard notebook.

With 2010, LibQUAL+®'s new interface made registration for our bi-lingual consortium and for French language and bi-lingual member libraries much easier and more efficient. Our French language members were able to automatically select the French language version of the Consortial local questions package, during registration, instead of having to select them individually from the whole list of local questions as in 2007 because the consortium's package of English and French local questions were not linked.

LibQUAL+® 2010

Lite SurveyFormat

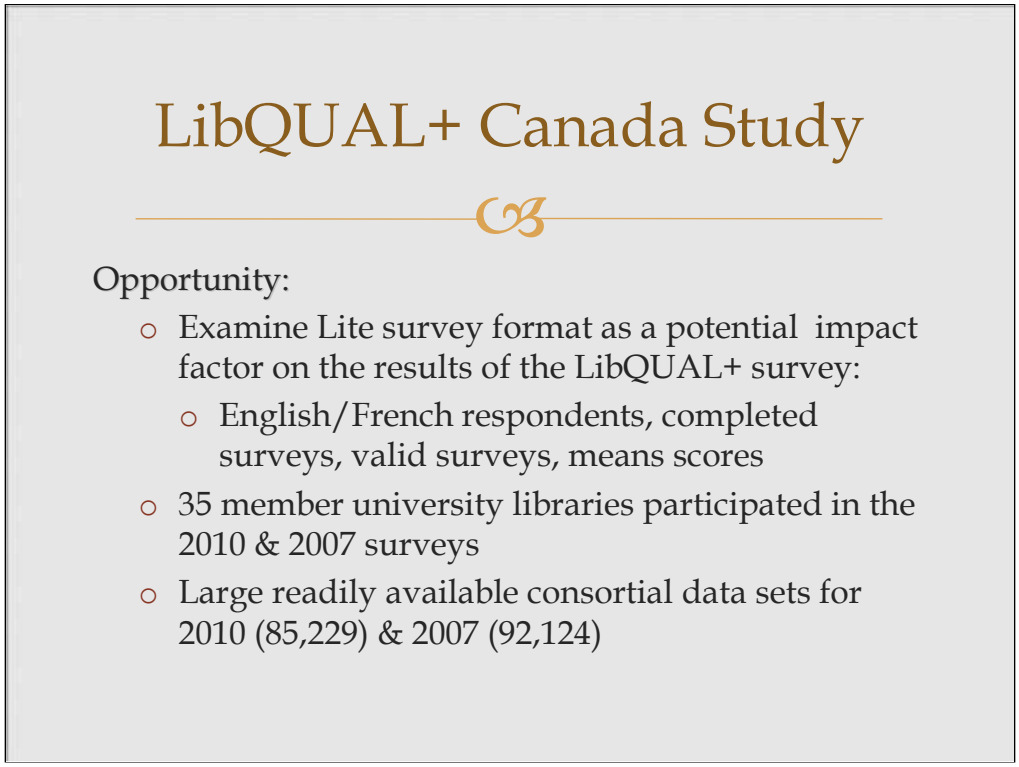
LibQUAL+ Canada 2010
Survey Formats

¾ of members selected Lite format

Total LibQUAL+® Canada Members 2010		Full	Lite	Total
Universities	Count	11	33	43*
	% of Protocol	84.6	91.7	
	% of Total Cases	23.4	70.2	91.5*
Community Colleges	Count	2	3	4*
	% of Protocol	15.4	8.3	
	% of Total Cases	4.3	6.4	8.5*
Total *(by Survey Protocol)*	Count	13	36	47*
	% of Protocol	100	100	
	% of Total Cases	27.7	76.6	100*

In addition to the potential benefits of a briefer survey, the desire to compare their results with peer institutions was also a motivating factor in our member's selection of survey format. Of the French-language universities, 7 of 8 chose the Lite format. Overall, 80% of total respondents took the Lite survey, rising to 94% in the case of the French language respondents. All of the libraries that opted for the long form in 2010 had done the survey before in 2007. A major concern about the Lite format discussed on the Consortium's listserv was the possible loss of granularity in analyzing the results when tracking particular questions or survey dimensions, such as Library as Place and "Library that you use most often" across multiple years.

A survey of Consortium members planned for the fall of 2010 will examine their experience with LibQUAL+ in 2010 and the Lite format.

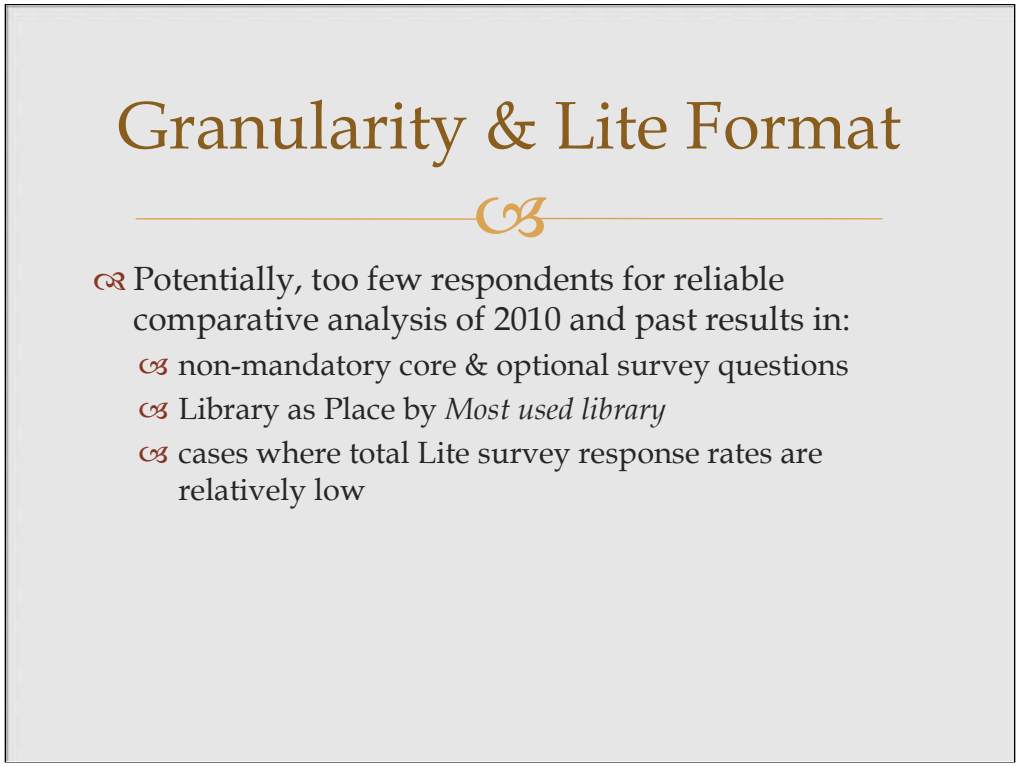


The primary reason for the study was to offer consortium members additional data from a Canadian context to help them in deciding which LibQUAL+ format they might want to use in the future. The size of the consortium offered the authors a large data set to study.

In 2007, French language respondents had higher completion rates and higher satisfaction (mean gap scores) than English language respondents. So, survey language was included as a variable in the study.

The authors acknowledge that this is not a controlled study and that other variables than survey format have undoubtedly shaped the results studied by the authors.

Now I will turn the mike over to Eun-ha who will highlight the methodology and results of the study.



In analyzing past LibQUAL+® surveys, McGill largely focused on responses to individual questions. The survey results usually had sufficient responses for a reasonable analysis of each question at the level of the nine 'Faculty-level' Libraries. With the Lite version this is no longer the case. There were too few responses for question-level analysis, except for the three largest libraries.

This is a considerable loss of information. For example, in the 2010 Lite survey, one of McGill's mid-size libraries generated a negative mean Adequacy Gap score of -0.43 in response to the question "Quiet space for individual activities" based on 21 responses. In 2008, this library's mean Adequacy Gap score for that question was 0.33, based on 69 responses. Such sizeable swings in scores had not occurred in previous years. Can such a swing be interpreted as meaningful, or are useful analyses at the individual question level with LibQUAL+® Lite unreliable except for large populations?

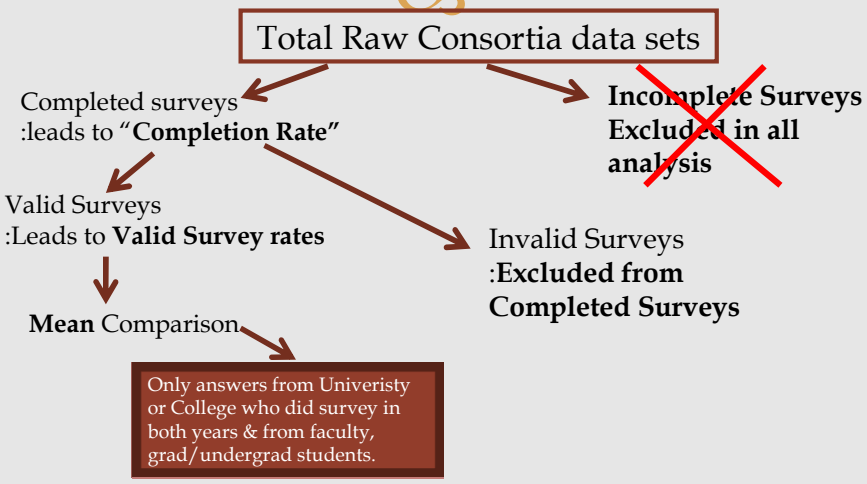
The potential loss in granularity will be a consideration in McGill's decision about whether to use the full or Lite format in the future.

Design/Methodology/Approach

Statistical Analysis Overview

- Completion rate calculation
  (includes both valid and invalid surveys.)
- Valid survey rate calculation
  (includes only surveys which met the criteria set by ARL to be valid.)
- Mean comparison: Averages

Design/Methodology/Approach



Factors

- Completion rate, the valid survey rate, and the variation by language as a potential indicator of the difference between LibQUAL+® in 2007 and 2010
  - Z tests for completion rate
  - Z tests for valid survey rate
  - T-tests for the comparison of the mean scores in three dimensions and further divided by user groups.

Factors cont'…

- Analysis Process examined in three stages using Completion rate and Valid survey rate

  2007 full vs. 2010 full-> Z test : There is a difference
  2010 full vs. 2010 Lite-> Z test : There is a difference
  2010 Lite vs.2007 full -> Z test : There is a difference

Conclusion: There is a DIFFERENCE between using Lite and Full format.

Factors cont'…

- Now we can look at the direction with certainty : Completion Rate and Valid Survey Rate

Analysis of Complete & Valid Surveys by Format

	Comparison		Hypothesis	Z value	P value	Conclusion
Complete Surveys	2007 Full 2010 Full	48.8% 54.3%	H0c : μ07f=μ10f H1c: μ07f≠ μ10f	13.24	01	Reject Null: H0c
	2010 Lite 2010 Full	61.7% 54.3%	H0c : μ10f=μ10 H1c: μ10f≠ μ10t	17.603	01	Reject Null: H0c
	2010 Lite 2007 Full	61.7% 48.8%	H0c : μ10t=μ07f H1c: μ10t≠ μ07f	51.44	01	Reject Null: H0c
Valid Surveys	2007 Full 2010 Full	46.7% 51.8%	H0v : μ07f=μ10f H1v: μ07f≠ μ10f	12.06	01	Reject Null:H0v
	2010 Lite 2010 Full	57.9% 51.8%	H0v : μ10f=μ10t, H1v: μ10f≠ μ10t	14.398	01	Reject Null:H0v
	2010 Lite 2007 Full	57.9% 46.7%	H0v : μ10t=μ07f H1v: μ10t≠ μ07f	44.258	01	Reject Null:H0v

Factors cont'…

- Now we can look at the difference with certainty : Language Variations

Year /Format	Comparison	Valid Survey Rate	Hypothesis	Z value		Conclusion
English	2010 Lite 2007 full	56.2% 47.9%	H0a : μ07e,f=μ07e,t H1a: μ07e,f ≠ μ07e,t	34.331	.01	Reject Null: H0a
French	2010 Lite 2007 full	59% 43.5%	H0a : μ07fr,f=μ07fr,t H1a: μ07fr,f ≠ μ07fr,t	20.754	.01	Reject Null: H0a

Mean Values – 2010 Lite vs 2007 Full Format

Version		Undergraduate mean score					Graduate Mean Scores					Faculty Mean Scores				
2007 FULL + 2010 Lite		N	Mean	Std.D.	T	P	N	Mean	Std.D	T score	P	N	Mean	Std.D.	T	P
Average Desired	2010	20627	7.804	1.024	4.394	0.000	9159	7.852	1.011	5.558	.000	3309	7.529	1.203	3.133	.002
	2007	20900	7.755	1.273			6753	7.749	1.312			4630	7.424	1.637		
Average Minimum	2010	20627	6.479	1.303	3.804	0.000	9159	6.627	1.279	6.230	.000	3309	6.472	1.351	3.917	.000
	2007	20900	6.427	1.458			6753	6.491	1.458			4630	6.335	1.646		
Average Perceived	2010	20627	6.902	1.166	11.242	0.000	9159	6.940	1.128	10.240	.000	3309	6.783	1.199	8.264	.000
	2007	20900	6.763	1.337			6753	6.738	1.356			4630	6.509	1.610		
Adequacy Gap	2010	20627	0.423	1.422	6.270	0.000	9159	0.314	1.424	2.957	.003	3309	0.311	1.469	4.279	.000
	2007	20900	0.336	1.399			6753	0.247	1.363			4630	0.174	1.359		
Superiority Gap	2010	20627	-0.903	1.215	7.695	0.000	9159	-0.911	1.225	5.194	.000	3309	-0.747	1.376	5.770	.000
	2007	20900	-0.991	1.131			6753	-1.011	1.155			4630	-0.915	1.210		

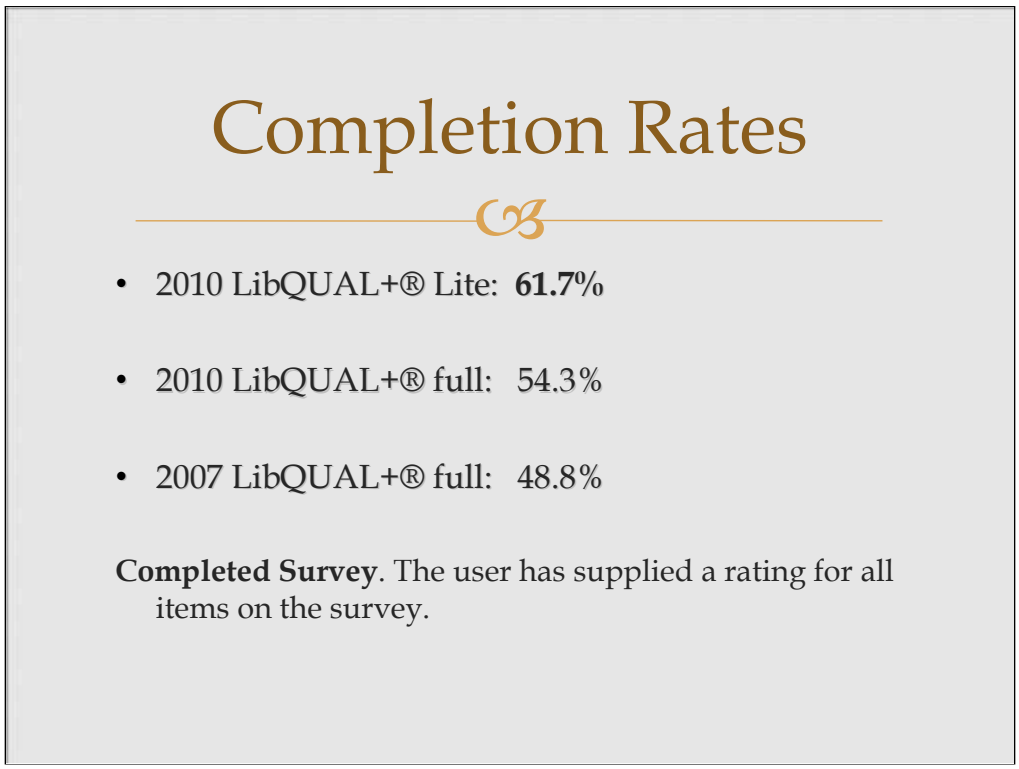
Mean Values – 2010 Lite vs 2007 Full Format

- All comparisons show significance with less than .01 p value.
- Average scores for all dimensions have gone up
- This result is consistent among different group types: undergraduates, graduates, faculty

Caution: Very large dataset with multiple T tests but given the limitation of our datasets, this is the best conclusion we can draw with some level of confidence.

Challenge in comparing 2007 & 2010 data sets

- Change in the variable names
- Variations of dummy variable treatments
- Establishing the comparison of two datasets based on different formats(Full vs Lite)
- Changes in the participating institutions
- Extremely large set to implicate potential errors in the analysis
- 3 year gap: possibility of many unknown factors affecting the result.



The consortial results confirmed previous findings that the Lite format would yield higher completion rates. Interestingly, the average consortial completion rate for those consortial members that opted for the full survey in 2010 was also notably higher than the 2007 rates. There was considerable disparity in the completion rates of individual consortium members using the Lite format, from increased completion rates of 70% or more to a couple of members who experienced lower completion rates with the 2010 Lite format than the full format in 2007.

Obviously, there are a number of other factors play in determining survey completion rates.

LibQUAL+ Canada Study

Thank you!

Any Question?