$Supplementary\ material-Data\ extraction\ form\ and\ risk\ of\ bias\ assessment$

General information

Date form completed (dd/mm/yyyy)	21/08/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	What is a Library?: International College Students' Perceptions of Libraries
Report ID (if there are multiple reports of this study)	Datig (2014)
Reference details	Datig, I. (2014). What is a Library?: International College Students' Perceptions of Libraries. Journal of Academic Librarianship, 40(3-4), 350-356. doi:10.1016/j.acalib.2014.05.001
Publication type (e.g. full report, abstract, letter)	Full report, journal article

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Type of study	Mixed method study: an online survey and individual interviews.	p. 351 (methodology)
Aim of study (e.g. efficacy, equivalence, pragmatic)	To gain a greater understanding of students' experiences with libraries before coming to university and also how new students conceptualize and envision libraries in general.	p. 351 (methodology)
Participant description (total number, age, sex, ethnicity)	42 international students from New York University Abu Dhabi (NYUAD) completed the online survey. 17 international students participated in interviews with the primary investigator.	p. 351 (methodology)
Institutions (library, location, quantity)	New York University Abu Dhabi (NYUAD), located in the United Arab Emirates.	p. 350 (introduction)
Outcomes	Themes of students conceptualizations and envisions of libraries.	p. 351 (methodology)

Results	The following themes emerged:		
	A library is for books		
	A library is for academics		
	The library as place		
	Librarians take care of books		
	Culture of libraries		
	Higher purposes of the library		
	"Many students have an elevated view of libraries as an		
	'aspirational' place, for both individuals and society as a		
	whole. This was largely true regardless of the students'		
	previous library experiences. Some of the words related to		
	this theme that students used were motivate, nurture,		
	encourage, and inspire. Libraries help to motivate students to pursue knowledge and get their studying done." (p 355)		
	pursue knowledge and get their studying dolle. (p 333)		
	"In addition to their role in the lives of individuals, libraries		
	should also preserve knowledge for future generations". (p.		
	355)		

Criteria	Risk of bias	Support for judgement	Location in text
	Low/ High/Unclear		(pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	Low risk of bias	11 international students out of 175 international students were interviewed. Interview participants were recruited through social media and the university's student portal.	p. 350-351 (introduction and methods)
A priori values bias	Unclear risk of bias	Themes emerged from the data using a grounded theory approach to qualitative analysis	p. 351-355 (findings)
Outlier bias (e.g., in according to central and periphery values)	Unclear risk of bias	The themes emerging from the data are derived using software to discover patterns and themes as well as count how often certain terms were mentioned.	p. 351-355 (findings)

Date form completed (dd/mm/yyyy)	21/08/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	The essence of the library at a public research university as seen through key constituents' lived experiences.
Report ID (if there are multiple reports of this study)	Fowler (2016)
Reference details	Fowler, G. J. (2016). The essence of the library at a public research university as seen through key constituents' lived experiences. (Ph.D.), Old Dominion University, Ann Arbor.
Publication type (e.g. full report, abstract, letter)	PhD Dissertation

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Type of study	A qualitative, transcendental phenomenological study	p.7 (overview of method)
Aim of study (e.g. efficacy, equivalence, pragmatic)	The purpose of this study was to describe the essence of the library at a public research university from the library's key constituencies' lived experiences.	p. 6 (purpose of the study)
	The researcher conducted semi-structured interviews and focus groups, seeking full descriptions of the participants' experiences with the library.	p. 7-8 (overview or method)
Participant description (total number, age, sex, ethnicity)	Initially, the sample was stratified into the nine constituencies, with five constituencies being narrowed to an individual person. For the remaining four constituencies, a convenience sample was used. The researcher conducted 30-minute individual phone interviews with the chief executive officer, chief administrative officer, chief research officer, and chief student affairs officer, 60-minute individual phone interviews with the library director, and 60- to 90-minute, individual, in-person focus groups with library staff, faculty, graduate students, and undergraduate students at each institution. In total, there were 83 participants, to include representatives from each of the 27 samples.	p. 7-8 (overview or method)
Institutions (library, location, quantity)	Three public research universities in the Mid-Atlantic region of the United States were selected based on the willingness of the library director to facilitate the data collection.	

Outcomes	It begins with the themes, which were developed by clustering the individual horizons. Representative horizons are listed after each theme as an indicator of the data used to inform the creation of the themes.	p. 49 (results)
Results	Following are the themes, with a brief description and representative invariant horizons. Each theme is an abstraction and labeling of the meaning constituting the horizon clustering. • The aspirational library • the library as servant • The commons • Information resources • Stewardship	p. 49-69 (results)

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	High risk of bias	A convenience sample of libraries form the basis for recruiting 83 participants, to include representatives from each of the 27 samples.	p. 7-8 (overview or method)
A priori values bias	Unclear risk of bias	The themes are abstractions and labelings of the meaning constituting the horizon clustering.	p. 49 (results)
Outlier bias (e.g., in according to central and periphery values)	Unclear risk of bias	The transcripts of interview were horizonalized, then significant statements were extracted and grouped together.	p. 46 (data collection)

Date form completed (dd/mm/yyyy)	21/08/2019
Name/ID of person extracting	Consensus TFF & KMS
data	
Report title (title of paper/ abstract/ report that data are extracted from)	Disciplinary differences between faculty in library use and perceptions
Report ID (if there are multiple reports of this study)	Thompson (2014)
Reference details	Thompson, C. M. (2014). Disciplinary differences between faculty in library use and perceptions. (Ph.D.), University of Missouri - Kansas City, Ann Arbor.
Publication type (e.g. full report, abstract, letter)	PhD dissertation

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Type of study	This study will utilize data from the Ithaka S+R 2009 Faculty Survey. The survey is conducted by Ithaka S+R, a non-profit research and consulting firm focused on the ongoing transition to digital formats in academia and publishing	p. 48 (research design)
Aim of study (e.g. efficacy, equivalence, pragmatic)	The purpose of this study is to provide a level of detail on faculty use and perceptions that does not currently exist for librarians and administrators making decisions regarding the future of the academic library.	
Participant description (total number, age, sex, ethnicity)	The population for this study is non-librarian faculty members at colleges and universities in the United States that offer bachelor's degrees or higher, excluding faculty in the health sciences.	p. 49 (research design)
	The researchers utilize a marketing firm, MDR, to obtain the sample, which is randomly selected from the MDR database. Faculty members in the sample are mailed an introductory letter, then a survey questionnaire booklet.	p. 48 (research design)
	1531 respondents	p. 51 (research design)
Institutions (library, location, quantity)	Every three years, researchers with Ithaka S+R revise and distribute the Faculty Survey to a sample of faculty at colleges and universities in the United States that grant bachelor's degrees or higher, excluding faculty in the health sciences.	p. 48 (research design)

Outcomes	One aim of the Ithaka 2009 research was to discern the respondents' views of the modern library's role. Because sub-questions divided the question regarding the current role into separate questions for each of the five roles, this is studied as five separate variables. Earlier studies from Ithaka S+R asked faculty how important it was to them that their library serve as a starting point for locating information for their research ("Gateway"), a purchaser of resources they need ("Buyer"), and as a repository interested in archiving, preserving, and tracking resources ("Archive") Heterick & Schonfeld, 2004; Housewright & chonfeld, 2008). In addition to these three roles, the 2009 iteration of the study also asked if respondents found it important for their libraries to support and facilitate their teaching ("Teaching Support"), and to provide active support that helps increase the productivity of their research as well ("Research Support").	p. 61-62 (role of the library)
	PC analysis resulted in the development of two additional constructs in this area. • Negative perceptions of the continuing relevance of libraries • Perceived dependence on the library	
Results	General groupings of disciplines within the humanities and the sciences tended to have more in common with each other than those in the social sciences, although differences existed within these as well.	p. 138 (Conclusions and Suggestions for Further Research)

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)		A random sample of Non-librarian faculty members at colleges and universities in the United States that offer bachelor's degrees or higher, excluding faculty in the health sciences.	p. 48-49 (research design)
A priori values bias	High risk of bias	Five a priori values are analyzed and the analysis resulted in the development of two additional constructs in this area.	p. 61-62 (role of the library)
Outlier bias (e.g., in according to central and periphery values)	Low risk of bias	The random sample is analyzed to determine whether it can be considered representative. Values are ranked by the respondents.	p. 51-52 (study sample)

Date form completed (dd/mm/yyyy)	21/08/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	Professional values in Norwegian librarianship
Report ID (if there are multiple reports of this study)	Vaagan and Holm (2004)
Reference details	Vaagan, R., & Holm, S. (2004). Professional values in Norwegian librarianship. New Library World, 105, 213-217. doi:10.1108/03074800410536649
Publication type (e.g. full report, abstract, letter)	Preliminary findings, journal article

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Type of study	Survey	
Aim of study (e.g. efficacy, equivalence, pragmatic)	Study of value orientation among Norwegian librarians, library staff and information professionals.	p. 213 (Methodology)
Participant description (total number, age, sex, ethnicity)	372 Norwegian librarians 85 college/university libraries	p. 213 (Methodology) p. 214 (Libraries, staff and respondents)
Institutions (library, location, quantity)	The respondents represent all of Norway's 19 counties and a majority of its 435 municipalities, all types of Norwegian libraries, all levels of management, all career stages, both genders, and also both qualified librarians and others with another professional background.	p. 213 (Methodology)

Outcomes	Prioritization of the following values:	p. 215
	Free access to materials and information	(value
	Creation of culture of reading	preferences)
	Spreading knowledge and literacy	
	Professional neutrality and objectivity	
	Encouragement and provision of lifelong learning	
	Providing services to users	
	Providing equitable access	
	Spreading information literacy	
	Encouragement of cultural diversity	
	Preservation and maintaining the book record	
	Selection of quality information and collection building	
	Efficient management and organisation	
	Creation of quality bibliographic record	
	Protection of user confidentiality	
	Respect of copyright	
Results	college/ university librarians (85) prioritised "spreading	p. 215
	information literacy" the highest (20 per cent). Almost as	(value
	many (19 per cent) preferred "free access to materials and to	preferences)
	information", and also "spreading knowledge and literacy" (12 per cent). Conversely, the three lowest value preferences	
	were "protection of user confidentiality" (0.8 per cent),	
	"creation of culture of reading" and also "encouragement of	
	cultural diversity" (both 0.4 per cent).	

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	High risk of bias	The method [] was non-random and not statistically representative	p. 213 (Methodology)
A priori values bias	High risk of bias	Respondents were then requested to prioritise among a total of 15 selected values, and select three values considered the most important.	p. 213 (Methodology)
Outlier bias (e.g., in according to central and periphery values)		Respondents were then requested to prioritise among a total of 15 selected values, and select three values considered the most important.	p. 213 (Methodology)

Date form completed (dd/mm/yyyy)	23/8/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	Value of academic reading and value of the library in academics' own words
Report ID (if there are multiple reports of this study)	Volentine and Tenopir (2013)
Reference details	Volentine, R., & Tenopir, C. (2013). Value of academic reading and value of the library in academics' own words. Aslib Proceedings: New Information Perspectives, 65(4), 425-440. doi:10.1108/AP-03-2012-0025
Publication type (e.g. full report, abstract, letter)	Full report, journal article

Methods and results

	Descriptions as stated in report/paper	Location in text
		(pg & ¶/fig/table)
Type of study	Survey collecting both qualitative and quantitative data.	p. 427-428 (Method)
Aim of study (e.g. efficacy, equivalence, pragmatic)	What is the value and outcome of scholarly reading for academic staff? How do academic library collections support research and teaching activities of academic staff? How do reading patterns of articles, books, and other materials differ? What is the role of the academic library collections in teaching and learning?	p. 426 (Introduction)
Participant description (total number, age, sex, ethnicity)	A librarian at each university e-mailed a survey link to all academic staff members at six universities from March 2011 through May 2011. Over 2,000 academic staff members completed the survey, for an overall response rate of 16.8 percent.	p. 427-428 (Method)
Institutions (library, location, quantity)	Academic staff members at six UK higher learning institutions – Cranfield University, Durham University, Imperial College London, University of Dundee, University of East Anglia, and the University of Manchester	p. 427-428 (Method)
Outcomes	Role of the library	p. 433 (Results)
Results	Anecdotal evidence that is not summarized in specific values	p. 427-428 (Results)
		p. 438 (Conclusion)

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	Unclear risk of bias	Participants are academic staff members at six universities and there is an overall response rate of 16.8 percent. Characteristics of respondents are provided but not compared to population. Furthermore, in the present analysis only 941 of over 2000 responses are included. Characteristics of these respondents are unknown.	p. 428 (Method) p. 429 (Findings)
A priori values bias	Low risk of bias	Analysis is made on the basis of 941comments to the two open-ended questions in the survey: what role scholarly articles play in their research, teaching, and other scholarly activities and final comments.	p. 428 (Methods) p. 429 (Findings)
Outlier bias (e.g., in according to central and periphery values)	High risk of bias	The analysis contains examples: "We received many comments on the value and importance of the library's electronic collections. The following are examples of these comments"	p. 433 (Findings)

Date form completed (dd/mm/yyyy)	14/04/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	Exploring the cause and effect of library value
Report ID (if there are multiple reports of this study)	Nitecki & Abels (2013)
Reference details	Nitecki, D. A., & Abels, E. G. (2013). Exploring the cause and effect of library value. Performance Measurement and Metrics, 14(1), 17-24. doi:10.1108/14678041311316103
Publication type (e.g., full report, abstract, letter)	Full report, journal article

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Type of study	Interview and focus groups	P.19 (Methods)
Aim of study (e.g. efficacy, equivalence, pragmatic)	"[I]dentif[ies] areas of library values from the perspective of stakeholders' perceptions of most valued effects of the library, and then exploring the root causes of these effects as a way to identify the valued impact the library has for them."	P.18 (Purpose)
Participant description (total number, age, sex, ethnicity)	Participants reflected the diverse makeup of the university's faculty, including tenure track research faculty, non-tenure track teaching faculty, and those with intense administrative responsibilities. Interviews with ten faculty members and a focus group composed of six members of the Library Advisory Group reviewed the identified factors and causes to validate results.	P. 20 (Methods)
Institutions (library, location, quantity)	One US university.	P.17
Outcomes	The input factors were identified as key to contributing to the library's perceived value. List below presents the input factors identified: . information resources (archives, reserves, stacks, electronic); . staff; . space; . access (circulation, ILL, online catalog); . assistance (instruction and reference); and . purpose of use (e.g. reason to use the library).	P.21 (Findings)

Results Focus group members supported the following five root P.21-22 causes: (Findings) (1) To increase my productivity (e.g. could not do as much or as well without the library). (2) To expand student ability to get information. (3) To do my job for teaching, research, and writing (e.g. prepare online class, write book chapters, prepare grant, save time). Low value was noted when library is perceived as not needed to do work. (4) To save money (e.g. cannot afford to buy publications). (5) To indulge intellectual curiosity. The next three root causes were not supported by the focus group but they were mentioned during the individual interviews: (6) To (not) feel frustrated (e.g. due to clunky process, hard to use or not intuitive interface, not sure how to search). Exploring library value (7) To meet accreditation criteria specifically for faculty performance (e.g. to understand how to do research, publish, and present). (8) To change the university (e.g. to change the way we think about learning and learning outcomes). Four factors were additionally identified during the interviews: - archival or historic value of student work (e.g. make student work available for future generations; students get jobs due to preparation with institutional repository materials; recognized valuable to be member of a team identified through recorded work); - finding (material and information) online (e.g. saving time and being efficient); - space for faculty (e.g. shapes scholarly attitude; "sense of place creates sense ofmind": "feel scholarship"; "feel different"); and

space for students (e.g. makes stronger students; faculty sensed they get better work from students

who use library space).

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	High risk of bias	The study focusses on one stakeholder group, faculty members, and pilots an approach to empirically explore the framework but does not complete its validation or design. Furthermore, the study is limited to a small sample of faculty members in one	P.20 (Limitations of the study)
A priori values bias		institution, which limits the ability to generalize the findings.	P.19
A priori values bias	Low risk of bias	The study explores the perceptions of faculty, one slice in the wheel. In the literature, productivity is identified as a key indicator of value. The study in part confirms this but identifies other perceived root causes why the library's effect is valued by faculty.	(Purpose)
Outlier bias (e.g., in according to central and periphery values)	Low risk of bias	In-person interviews were conducted with an initial group of ten faculty members. Focus group composed of six members of the Library Advisory Group reviewed the identified factors and causes to validate results.	P.20 (methods)

Date form completed (dd/mm/yyyy)	14/04/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	Providing effective library services for research
Report ID (if there are multiple reports of this study)	Webb (2007)
Reference details	Webb, J., Gannon-Leary, P., & Bent, M. (2007). Providing effective library services for research: Facet Publishing.
Publication type (e.g., full report, abstract, letter)	Book

Methods and results

	Descriptions as stated in report/paper	Location in text
	Sections as stated in report paper	(pg & ¶/fig/table)
Type of study	Interviews and workshop	P. 7-8 (chapter 1)
Aim of study (e.g. efficacy, equivalence, pragmatic)	To explore "the ways in which libraries support scholarship and enhance research activity"	P. 10 (chapter 1)
Participant description (total number, age, sex, ethnicity)	Researchers at various career stages. Interviews are not structured or extensice. The number is of participants is unkown.	P. 7-8 (chapter 1)
Institutions (library, location, quantity)	The authors' current and former work places in the UK	P. 4-6 (chapter 1)
Outcomes	Principles of libraries supporting research activity	P. 9 (chapter 1)
Results	Gatekeeper Translator Information specialist Subject expert Safe harbour The fount of all knowledge Counsel, colleague and critical friend	P. 142-144 (chapter 6)

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	Unclear risk of bias	The interviews and analysis of these are not described in detail.	P. 4-10 (chapter 1)
A priori values bias	Unclear risk of bias	The interviews and analysis of these are not described in detail.	P. 4-10 (chapter 1)
Outlier bias (e.g., in according to central and periphery values)	Unclear risk of bias	The interviews and analysis of these are not described in detail.	P. 4-10 (chapter 1)

Date form completed	14/04/2019
(dd/mm/yyyy)	
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	Information Behavior and Expectations of Veterinary Researchers and Their Requirements for Academic Library Services
Report ID (if there are multiple reports of this study)	Nel & Fourie (2016)
Reference details	Nel, M. A., & Fourie, I. (2016). Information Behavior and Expectations of Veterinary Researchers and Their Requirements for Academic Library Services. Journal of Academic Librarianship, 42(1), 44-54. doi:10.1016/j.acalib.2015.10.007
Publication type (e.g., full report, abstract, letter)	Full report

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Type of study	Questionnaire and focus groups	P.13 (Data collected from the researchers)
Aim of study (e.g. efficacy, equivalence, pragmatic)	[][T]to show the value of using a diversity of methods of data collection to plan and adapt library services according to environmental pressures, the realities of research output, the needs of the users (i.e. the researchers), and the opinion and perceptions of the library staff providing the services and support.	P.3 (Introduction)
Participant description (total number, age, sex, ethnicity)	[V]eterinary researchers (masters and doctoral students and faculty/academic staff) and three information specialists from the Library. Researchers at the Faculty of Veterinary Science, UP: n=361	P.3 (Introduction) P. 11, Table 1 (Research participants)
Institutions (library, location, quantity)	[] [T]he University of Pretoria and from the South African perspective[].	P.5 (Background and scope of the study)
Outcomes	[][T]he information needs, information seeking and information use of the researchers.	P.13 (Data collected from the researchers)

Results	 Access to information and information resources 	P.24, fig.5
	(support with literature searches; excellent	(Needs of
	collections, ILL)	researchers and
	 Affect of services (Good interactions, helpfulness, 	how these needs
	competent staff)	are addressed by
	 Training and workshops 	the library)

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	Low risk of bias	Research participants consisted of researchers (including faculty/academic staff, masters' and doctoral students) from the Faculty of Veterinary Science, University of Pretoria at the time of data collection, as well as three information specialists from the Library.	P.11, table 1 (Research participants)
A priori values bias	Low risk of bias	The qualitative data collected from the open ended questions in the uestionnaire as well as from the focus group nterviews with the researchers revealed that veterinary researchers need access to all needed information and information resources.	P.15 (Data collected from the researchers)
Outlier bias (e.g., in according to central and periphery values)	Unclear risk of bias	The study presents graphical illustrations of the collected data (Fig.3), but does not consider outlier risks related to the focus group interviews. "Similar to findings from these studies, nearly all participants from the focus group interviews indicated a preference for online sources, allowing easy, effortless and limitless access."	P.19 (Data collected from the researchers) P.15 (Data collected from the researchers)

Date form completed (dd/mm/yyyy)	14/04/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	Provosts' perceptions of academic library value and preferences for communication: A national study
Report ID (if there are multiple reports of this study)	Murray & Ireland (2018)
Reference details	Murray, A., & Ireland, A. (2018). Provosts' perceptions of academic library value and preferences for communication: A national study. Coll. Res. Libr., 79(3), 336-365. doi:10.5860/crl.79.3.336
Publication type (e.g. full report, abstract, letter)	Full report, journal article

Methods and results

	Descriptions as stated in report/paper	Location in text
		(pg & ¶/fig/table)
Type of study	Survey study	P.339 (Methodology)
Aim of study (e.g. efficacy, equivalence, pragmatic)	[] [S]eeks to explore provosts' perceptions of academic library involvement with institutional initiatives, their preferences for communicating library impact, and the types of data that will make library budget requests more successful in the face of many competing priorities.	P.337 (Introduction)
Participant description (total number, age, sex, ethnicity)	[] [P]rovosts or chief academic officers at public and private (not-for-profit) colleges/universities with a Carnegie classification of master's or above [].	P.339 (Methodology)
	N=197	P.341, table 1 (Results)
Institutions (library, location, quantity)	[] [P]ublic and private (not-for-profit) colleges/universities with a Carnegie classification of master's or above [].	P.339 (Methodology)
Outcomes	Provost perceptions of their institution's involvement with university initiatives, and communication preferences.	P.340 (Results)
Results	When asked "are there specific library services, resources, or practices that stand out as evidence" of involvement with Kuh's high impact practices, provosts provided examples that broadly championed the academic library trifecta: space, staffing and instructional outreach, and	P.359 (Conclusion)

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	Low risk of bias	This study used a survey of provosts/chief academic officers in the United States.	P.339 (Methodology)
A priori values bias	High risk of bias	The ten high-impact educational practices (HIPs) identified by George Kuh served as a framework for examining provosts' perceptions of library involvement in educationally purposeful activities that have an impact on student academic and social integration (and thus on retention, completion, and success).2	P.342 (Results)
Outlier bias (e.g., in according to central and periphery values)	Low risk of bias	Tables and figures support the indication of potential outliers.	Results section

Date form completed (dd/mm/yyyy)	14/04/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	Academic library impact: Improving practice and essential areas to research
Report ID (if there are multiple reports of this study)	Connaway et al. (2017)
Reference details	Connaway, L. S., Harvey, W., Kitzie, V., & Mikitish, S. (2017). Academic library impact: Improving practice and essential areas to research.
Publication type (e.g., full report, abstract, letter)	Full report

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Type of study	Qualitative: Focus groups and semi-structured interviews	P.16-17 (Data Collection)
Aim of study (e.g. efficacy, equivalence, pragmatic)	The goal is to investigate how libraries can increase student learning and success while communicating their value to higher education stakeholders.	P.1 (Introduction: Demonstrate the library's value)
Participant description (total number, age, sex, ethnicity)	Focus group interviews with library administrators comprising the advisory group, and semi-structured individual interviews with their provosts. N = 14 library administrators N = 14 provosts	P.16 (Data collection)
Institutions (library, location, quantity)	[][A]cademic library administrators from fourteen institutions that include community colleges (n=2), four-year colleges (n=2), and research universities (n=10); the members were from secular (n=11), nonsecular (n=3), public (n=9), and private (n=5) institutions representing the four geographical regions of the United States[].	P.16 (Data collection)
Outcomes	Values	P.33, figure 6 (Findings)

Results	- Communication	P.33, figure 6
	 Teaching and learning 	(Findings)
	- Collaboration	
	- Service	
	- Space	
	- Collection	
	- Student success	
	- Research support	
	- Inclusivity/Diversity	
	- Provision of tech	
	- Teaching support	
	- Accreditation	

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	Low risk of bias	We created an advisory group to ensure that the findings from this report resonate with professional librarians and administrators in higher education.	P.16-17 (Methods)
		Three team members conducted semi- structured individual interviews with provosts from each of the advisory group members' institutions.	
A priori values bias	<mark>Low risk of</mark> bias	Figure 6: Frequency of themes coded in provost interviews	P.33, figure 6 (Findings)
Outlier bias (e.g., in according to central and periphery values)	Low risk of bias	Figure 3 shows the differences in proportion of codes between theoretical and research documents.	P.23, figure 3 (Findings)

Date form completed (dd/mm/yyyy)	14/04/2019
Name/ID of person extracting data	Consensus TFF & KMS
Report title (title of paper/ abstract/ report that data are extracted from)	Information Behavior of Electrical Engineering and Computing Doctoral Students and Their Perception of the Academic Library's Role: A Case Study in Croatia
Report ID (if there are multiple reports of this study)	Balog, Badurina & Lisek (2018)
Reference details	Balog, K. P., Badurina, B., & Lisek, J. (2018). Information Behavior of Electrical Engineering and Computing Doctoral Students and Their Perception of the Academic Library's Role: A Case Study in Croatia. Libri, 68(1), 13-32. doi:10.1515/libri-2017-0017
Publication type (e.g. full report, abstract, letter)	Full report, journal article

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Type of study	Quantitative and qualitative	P.17 (Research design)
Aim of study (e.g. efficacy, equivalence, pragmatic)	The research described in this paper was conducted to determine whether doctoral students at the Faculty of Electrical Engineering and Computing (FEEC) in the University of Zagreb perceive the faculty's academic library as an important partner in their academic and research work.	P.14 (Introduction)
Participant description (total number, age, sex, ethnicity)	Doctoral students: n=138	P.17 (Methodology, Instrument and Sample)
Institutions (library, location, quantity)	The Faculty of Electrical Engineering and Computing (FEEC) of the University of Zagreb[].	P.16 (Institutional Context)
Outcomes	Doctoral students "[]perception of the role and significance of the university's FEEC library."	P.16 (Literature review)
Results	The few respondents who use the FEEC library are mostly satisfied with its services. They mostly praise the availability of both library staff and information, speed of service and staff that is friendly, accommodating and courteous. They appreciate the library staff and believe they are highly competent in finding information they need (mean 4.15) and are fairly convinced librarians can secure access to all necessary information sources (mean 3.81).	P.25 (Discussion and Conclusions)

Criteria	Risk of bias Low/ High/Unclear	Support for judgement	Location in text (pg & ¶/fig/table)
Selection bias (e.g., gender, ethnicity, non-users, library staff, politicians)	Low risk of bias	The survey was filled out by 138 doctoral students (out of 138 students enrolled in the academic year 2014/2015), which yielded the completely unexpected 100 % response rate. Such an ideal response rate might be explained by the fact that this was the first such survey conducted among the FEEC doctoral students, hence explaining students' motivation to supply answers.	P.17 (Methodology, Instrument and Sample)
A priori values bias	Low risk of bias	One of our respondents (S4) loves working on the library premises ("I feel good in the library and immediately get the urge to learn new things."). Even though some of the respondents pointed out that they feel good when they come to the library (S1, S3), they mostly prefer working at home and not in the library reading rooms (S1, S2, S3, S5).	P.22 (Interview data)
Outlier bias (e.g., in according to central and periphery values)	Unclear risk of bias	The report does not disclose potential outlier bias.	