

TABLE 3b.
Analysis by institutional type of responses to question 1 of the study survey

Q1 Factors motivating new library space	Number of institutions	Not a factor				Weak Motivation				Intermediate Motivation				Strong Motivation				Variability Ungrouped data		Variability Grouped data		
		Sample % responding		± Confidence Interval		Sample % responding		± Confidence Interval		Sample % responding		± Confidence Interval		Sample % responding		± Confidence Interval		Character	Relative magnitude	Character	Relative magnitude	
		affirmatively	0	1	2	3	4	5	X-square significant (when													
a Growth of library staff																						
Doctoral/Research Universities--Extensive (Public)	49	38.6%	14.4%	17.9%	5.0%	7.2%	3.4%	16.1%	4.8%	10.3%	4.0%	8.7%	8.1%	3.9%	9.9%	8.1%	1.85	shift toward 0, 5	0.6	Character	Relative magnitude	
Doctoral/Research Universities--Extensive (Private)	28	53.8%	19.2%	11.5%	12.3%	0.0%	0.0%	11.5%	12.3%	8.7%	10.4%	7.7%	10.2%	13.9%	15.4%	0.0%	6.01	shift toward 3, 4	1.6	Character	Relative magnitude	
Doctoral/Research Universities--Intensive (Public)	18	26.7%	22.4%	13.3%	17.2%	0.0%	0.0%	40.0%	30.0%	20.0%	20.2%	20.0%	20.8%	0.0%	12.5%	22.9%	4.80	shift toward 3, 4	1.3	Character	Relative magnitude	
Doctoral/Research Universities--Intensive (Private)	8	25.0%	30.0%	10.5%	6.2%	12.5%	22.9%	18.9%	7.9%	11.6%	6.4%	6.1%	8.1%	9.5%	9.5%	5.9%						
<i>All Doctoral/Research Universities</i>	36	45.3%	17.1%	12.1%	11.1%	9.1%	9.8%	15.2%	12.2%	11.6%	8.1%	6.1%	8.1%	9.1%	9.8%							
Master's Colleges and Universities I (Public)	19	5.6%	10.6%	38.9%	22.5%	11.1%	14.5%	22.2%	19.2%	5.6%	10.6%	0.0%	0.0%	16.7%	17.2%	5.79		shift toward 1	2.6	Character	Relative magnitude	
Master's Colleges and Universities I (Private)	6	40.8%	52.9%	40.0%	42.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	0.0%	6.44		shift toward 1	1.5	Character	Relative magnitude	
<i>All Master's Colleges and Universities</i>	33.9%	12.4%	23.2%	11.1%	17.7%	8.9%	7.5%	16.1%	9.6%	16.1%	9.6%	5.4%	5.9%	12.5%	8.7%							
Baccalaureate Colleges--Liberal Arts (Public & Private)	29	25.0%	16.0%	35.7%	17.7%	7.1%	8.5%	14.3%	13.0%	17.9%	14.2%	17.9%	14.2%	0.0%	0.0%	3.45		shift toward 1	1.3	Character	Relative magnitude	
Baccalaureate Colleges--General (Public & Private)	13	46.2%	27.1%	15.4%	19.6%	7.7%	14.5%	15.4%	19.6%	16.7%	11.3%	15.4%	19.6%	0.0%	0.0%	1.30		decrease at 5	0.9	Character	Relative magnitude	
<i>All Baccalaureate Colleges</i>	31.0%	14.0%	31.0%	14.0%	14.0%	7.1%	7.8%	14.3%	10.6%	16.7%	11.3%	16.7%	11.3%	0.0%	0.0%	2.27						
Associate's Colleges (Public & Private)	13	38.5%	26.4%	15.4%	19.6%	7.7%	14.5%	15.4%	19.6%	7.7%	14.5%	7.7%	14.5%	15.4%	19.6%							
Specialized Institutions (Public & Private)	17	35.7%	25.1%	14.3%	18.3%	14.3%	18.3%	7.1%	13.5%	11.2%	13.5%	11.2%	13.5%	21.4%	21.5%	2.47		increase at 5	1.1	Character	Relative magnitude	
b Increase in the number of service points																						
Doctoral/Research Universities--Extensive (Public)	49	52.2%	14.4%	10.9%	9.0%	13.0%	9.7%	14.7%	4.7%	14.7%	4.7%	14.7%	4.7%	10.3%	4.0%	1.02		shift toward 0	0.7	Character	Relative magnitude	
Doctoral/Research Universities--Extensive (Private)	28	46.2%	19.2%	11.5%	12.3%	7.7%	10.2%	7.7%	10.2%	22.2%	19.2%	22.2%	19.2%	22.2%	19.2%	5.71		shift toward 4, 5	1.6	Character	Relative magnitude	
Doctoral/Research Universities--Intensive (Public)	18	31.3%	22.7%	6.3%	11.9%	18.8%	19.1%	25.0%	21.2%	16.1%	10.4%	16.1%	10.4%	0.0%	0.0%	1.52		shift toward 2, 3, 4	0.4	Character	Relative magnitude	
Doctoral/Research Universities--Intensive (Private)	8	25.0%	30.0%	37.5%	33.5%	0.0%	0.0%	12.5%	22.9%	12.5%	22.9%	12.5%	22.9%	25.0%	30.0%	9.23		shift toward 1, 5	1.3	Character	Relative magnitude	
<i>All Doctoral/Research Universities</i>	44.8%	9.9%	12.5%	6.6%	11.5%	6.4%	6.4%	13.5%	6.8%	13.5%	6.8%	13.5%	6.8%	30.0%	30.0%							
Master's Colleges and Universities I (Public)	36	39.4%	16.7%	9.1%	9.8%	12.1%	11.1%	21.2%	13.9%	15.2%	12.2%	15.2%	12.2%	30.0%	5.8%	4.01		increase at 5	1.5	Character	Relative magnitude	
Master's Colleges and Universities I (Private)	19	5.6%	10.6%	16.7%	17.2%	11.1%	14.5%	13.0%	9.7%	22.2%	19.2%	22.2%	19.2%	22.2%	19.2%	5.71		shift toward 4, 5	1.6	Character	Relative magnitude	
Master's Colleges and Universities II (Public & Private)	6	60.0%	42.9%	20.0%	35.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	35.1%	5.09		shift toward 5	0.9	Character	Relative magnitude	
<i>All Master's Colleges and Universities</i>	30.4%	12.0%	12.5%	8.7%	10.7%	8.1%	8.1%	16.1%	10.4%	16.1%	10.4%	16.1%	10.4%	10.7%	11.5%	1.12		shift toward 3	0.7	Character	Relative magnitude	
Baccalaureate Colleges--Liberal Arts (Public & Private)	29	39.3%	18.1%	10.7%	11.5%	3.6%	6.9%	25.0%	16.0%	10.7%	11.5%	10.7%	11.5%	10.7%	11.5%	1.12		shift toward 3	0.7	Character	Relative magnitude	
Baccalaureate Colleges--General (Public & Private)	13	61.5%	26.4%	7.7%	14.5%	0.0%	0.0%	7.7%	14.5%	19.0%	11.9%	16.7%	11.3%	0.0%	0.0%	4.11		shift toward 4	1.0	Character	Relative magnitude	
<i>All Baccalaureate Colleges</i>	42.5%	15.1%	9.8%	8.9%	2.4%	4.6%	4.6%	19.0%	11.9%	16.7%	11.3%	16.7%	11.3%	0.0%	0.0%	4.11		shift toward 4	1.0	Character	Relative magnitude	
Associate's Colleges (Public & Private)	13	53.8%	27.1%	0.0%	0.0%	7.7%	14.5%	7.7%	14.5%	15.4%	19.6%	15.4%	19.6%	15.4%	19.6%	2.03		shift toward 0	0.8	Character	Relative magnitude	
Specialized Institutions (Public & Private)	17	42.9%	25.9%	28.6%	23.7%	14.3%	18.3%	0.0%	0.0%	7.1%	13.5%	7.1%	13.5%	7.1%	13.5%	3.76		shift toward 1	1.2	Character	Relative magnitude	
c Growth of the collections																						
Doctoral/Research Universities--Extensive (Public)	49	17.4%	11.0%	3.5%	2.4%	4.4%	2.7%	11.0%	4.1%	11.0%	4.1%	11.0%	4.1%	56.6%	6.4%	3.76		increase at 0	0.5	Character	Relative magnitude	
Doctoral/Research Universities--Extensive (Private)	28	23.1%	16.2%	7.7%	10.2%	6.5%	7.1%	8.7%	8.1%	10.9%	9.0%	10.9%	9.0%	52.2%	14.4%	5.12		increase at 0	0.5	Character	Relative magnitude	
Doctoral/Research Universities--Intensive (Public)	18	0.0%	0.0%	0.0%	0.0%	5.9%	11.2%	5.9%	11.2%	3.8%	7.4%	3.8%	7.4%	38.5%	18.7%	12.57		shift toward 5	1.0	Character	Relative magnitude	
Doctoral/Research Universities--Intensive (Private)	8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	34.6%	50.0%	34.6%	50.0%	34.6%	8.47		increase at 4	2.4	Character	Relative magnitude	
<i>All Doctoral/Research Universities</i>	103	14.4%	7.0%	4.1%	4.0%	7.2%	5.1%	9.3%	5.8%	11.3%	6.3%	11.3%	6.3%	53.6%	9.9%	3.27		increase at 4	2.4	Character	Relative magnitude	
Master's Colleges and Universities I (Public)	36	4.5%	5.7%	0.1%	0.0%	1.8%	1.5%	0.3%	0.3%	1.5%	1.5%	1.5%	1.5%	0.2%	0.2%	8.3%						
Master's Colleges and Universities I (Private)	19	0.0%	0.0%	0.0%	0.0%	5.9%	7.9%	5.9%	7.9%	20.6%	13.6%	20.6%	13.6%	61.8%	16.3%	3.88		shift toward 4	1.0	Character	Relative magnitude	
Master's Colleges and Universities II (Public & Private)	6	16.7%	29.8%	0.0%	0.0%	0.0%	0.0%	33.3%	37.7%	16.7%	29.8%	16.7%	29.8%	50.0%	23.1%	3.97		increase at 0, 3	1.3	Character	Relative magnitude	
<i>All Master's Colleges and Universities</i>	61	3.4%	4.7%	1.7%	3.4%	3.4%	4.7%	10.3%	7.8%	33.3%	37.7%	33.3%	37.7%	55.2%	12.8%							
Baccalaureate Colleges--Liberal Arts (Public & Private)	29	2.9%	6.9%	3.6%	6.9%	0.0%	0.0%	0.0%	0.0%	5.8%	11.2%	5.8%	11.2%	0.0%	0.0%							
Baccalaureate Colleges--General (Public & Private)	13	0.0%	0.0%	7.7%	14.5%	7.7%	14.5%	7.7%	14.5%	15.4%	19.6%	15.4%	19.6%	61.5%	26.4%	1.14		shift toward 1, 2	0.3	Character	Relative magnitude	
<i>All Baccalaureate Colleges</i>	42	2.4%	4.6%	4.8%	6.4%	2.4%	4.6%	9.5%	8.9%	11.9%	9.8%	11.9%	9.8%	69.0%	14.0%							
Associate's Colleges (Public & Private)	13	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	2.7%							
Specialized Institutions (Public & Private)	17	13.3%	17.2%	0.0%	0.0%	13.3%	17.2%	13.3%	17.2%	50.0%	27.1%	50.0%	27.1%	50.0%	27.1%	8.47		increase at 4	2.4	Character	Relative magnitude	
d Changing character of student study space needs																						
Doctoral/Research Universities--Extensive (Public)	49	10.4%	8.6%	8.3%	7.8%	4.2%	5.7%	14.6%	10.0%	17.0%	4.9%	17.0%	4.9%	43.8%	14.0%	1.05		shift toward 0	0.9	Character	Relative magnitude	
Doctoral/Research Universities--Extensive (Private)	28	7.7%	10.2%	0.0%	0.0%	0.0%	0.0%	34.6%	18.3%	11.5%	12.3%	11.5%	12.3%	46.2%	19.2%	3.63		shift toward 3	1.9	Character	Relative magnitude	
Doctoral/Research Universities--Intensive (Public)	18	0.0%	0.0%	5.9%	11.0%	11.8%	15.3%	5.9%	11.2%	35.3%	30.0%	35.3%	30.0%	41.2%	23.4%	3.07		shift toward 2	0.9	Character	Relative magnitude	
Doctoral/Research Universities--Intensive (Private)	8	12.5%	22.9%	0.0%	0.0%	0.0%	0.0%	25.0%	30.0%	25.0%	30.0%	25.0%	30.0%	37.5%	33.5%	1.96		shift toward 0, 3	0.6	Character	Relative magnitude	
<i>All Doctoral/Research Universities</i>	8	8.1%	5.4%	5.1%	4.3%	4.0%	3.9%	19.2%	7.8%	20.2%	7.8%	19.2%	7.8%	43.4%	9.8%							
Master's Colleges and Universities I (Public)	36	2.9%	5.7%	2.9%	5.7%	5.9%	7.9%	17.6%	12.8%	23.5%	14.3%	23.5%	14.3%	47.1%	16.8%							

TABLE 3b (continued)
Analysis by institutional type of responses to question 1 of the study survey

	Not a factor			Weak Motivation			Intermediate Motivation			Strong Motivation			Variability	
	Number of institutions	Sample % responding	± Confidence Interval	Sample % responding	± Confidence Interval	Sample % responding	± Confidence Interval	Sample % responding	± Confidence Interval	Sample % responding	± Confidence Interval	K-square factor (when significant)	Ungrouped data	Grouped data
Masters' Colleges and Universities I (Private)	19	0.0%	0.0%	5.6%	10.6%	11.1%	14.5%	16.7%	17.2%	61.1%	22.5%	2.02	Character shift toward 5	Relative magnitude 1.5
Masters' Colleges and Universities II (Public & Private)	6	20.0%	35.1%	20.0%	35.1%	20.0%	35.1%	20.0%	35.1%	20.0%	35.1%	9.27	Character shift toward 5 increase at 0, 1	Relative magnitude 1.4
All Master's Colleges and Universities	29	3.5%	4.8%	5.3%	5.6%	15.8%	9.8%	21.1%	10.6%	4.9%	13.0%	1.36	Character decrease at 0, 4, 5	Relative magnitude 1.0
Baccalaureate Colleges-Liberal Arts (Public & Private)	13	0.0%	0.0%	0.0%	0.0%	15.4%	19.6%	23.1%	22.9%	53.8%	27.1%	1.82	Character shift toward 2	Relative magnitude 0.5
All Baccalaureate Colleges	13	2.4%	4.6%	2.4%	4.6%	19.0%	11.9%	33.3%	14.3%	40.5%	14.8%	3.77	Character shift toward 5	Relative magnitude 2.4
Associate's Colleges (Public & Private)	13	7.7%	14.5%	7.7%	14.5%	11.1%	14.5%	16.7%	17.2%	69.2%	25.1%	3.33	Character shift toward 5	Relative magnitude 2.4
Specialized Institutions (Public & Private)	17	6.7%	12.6%	6.7%	12.6%	13.3%	17.2%	40.0%	24.8%	33.3%	23.9%	4.48	Character shift toward 1	Relative magnitude 1.1
e Changes in reference services														
Doctoral/Research Universities-Extensive (Public)	49	21.3%	11.7%	14.9%	10.2%	25.5%	12.5%	17.0%	10.7%	14.9%	10.2%	4.64	Character shift toward 2	Relative magnitude 1.2
Doctoral/Research Universities-Extensive (Private)	28	7.7%	10.2%	0.0%	0.0%	34.8%	18.3%	11.5%	12.3%	15.4%	13.9%	3.05	Character shift toward 1	Relative magnitude 1.1
Doctoral/Research Universities-Intensive (Public)	18	0.0%	0.0%	18.8%	18.1%	25.0%	21.2%	31.3%	22.7%	18.8%	19.1%	4.48	Character shift toward 3	Relative magnitude 1.5
Doctoral/Research Universities-Intensive (Private)	8	0.0%	0.0%	12.5%	22.9%	50.0%	34.6%	25.0%	30.0%	12.5%	22.9%	1.66	Character shift toward 3	Relative magnitude 1.1
All Doctoral/Research Universities	36	12.4%	11.1%	11.3%	6.3%	12.4%	6.6%	29.9%	9.1%	18.6%	7.7%	1.44	Character shift toward 4	Relative magnitude 0.8
Masters' Colleges and Universities I (Public)	19	5.9%	11.2%	11.8%	15.3%	18.2%	11.1%	23.5%	20.2%	21.2%	13.9%	1.20	Character shift toward 5	Relative magnitude 0.7
Masters' Colleges and Universities II (Public & Private)	6	0.0%	0.0%	20.0%	35.1%	60.0%	42.9%	27.3%	11.8%	20.0%	35.1%	9.32	Character shift toward 1, 3	Relative magnitude 1.8
All Master's Colleges and Universities	29	7.3%	6.9%	7.3%	6.9%	26.5%	11.5%	27.3%	11.8%	21.8%	70.9%	3.37	Character shift toward 0	Relative magnitude 1.6
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	14.8%	13.4%	18.5%	14.7%	28.6%	17.2%	18.5%	14.7%	14.8%	13.4%	1.41	Character shift toward 0, 3	Relative magnitude 0.7
Baccalaureate Colleges-General (Public & Private)	13	30.8%	25.1%	7.7%	14.5%	30.8%	25.1%	24.4%	13.1%	15.4%	19.6%	4.30	Character increase at 2	Relative magnitude 1.5
All Baccalaureate Colleges	13	19.5%	12.1%	4.9%	6.6%	14.6%	10.8%	24.4%	13.1%	14.6%	10.8%	1.66	Character shift toward 3	Relative magnitude 1.1
Associate's Colleges (Public & Private)	17	15.4%	19.6%	7.7%	14.5%	38.5%	26.4%	21.4%	21.5%	23.1%	22.9%	3.40	Character shift toward 0	Relative magnitude 1.3
Specialized Institutions (Public & Private)	17	28.6%	23.7%	7.1%	13.5%	21.4%	21.5%	22.2%	5.4%	0.0%	0.0%	1.41	Character shift toward 0, 3	Relative magnitude 0.7
f Changes in public services other than reference														
Doctoral/Research Universities-Extensive (Public)	49	23.4%	12.1%	6.4%	7.0%	29.8%	13.1%	19.1%	11.2%	19.1%	11.2%	1.41	Character increase at 2	Relative magnitude 1.5
Doctoral/Research Universities-Extensive (Private)	28	11.5%	12.3%	0.0%	0.0%	19.2%	15.1%	15.4%	13.9%	30.8%	17.7%	4.14	Character shift toward 1	Relative magnitude 1.2
Doctoral/Research Universities-Intensive (Public)	18	0.0%	0.0%	18.8%	19.1%	31.3%	22.7%	18.8%	19.1%	31.3%	22.7%	5.55	Character shift toward 0	Relative magnitude 1.5
Doctoral/Research Universities-Intensive (Private)	8	37.5%	33.5%	12.5%	22.9%	12.5%	22.9%	12.5%	22.9%	25.0%	30.0%	1.07	Character shift toward 1, 5	Relative magnitude 2.2
All Doctoral/Research Universities	36	17.5%	7.6%	7.2%	5.1%	25.8%	8.7%	17.5%	7.6%	34.7%	16.4%	1.28	Character shift toward 2, 5	Relative magnitude 0.7
Masters' Colleges and Universities I (Public)	19	6.1%	8.1%	6.1%	8.1%	12.1%	11.1%	12.1%	14.6%	24.2%	14.6%	2.59	Character decrease at 0, 2	Relative magnitude 1.0
Masters' Colleges and Universities II (Private)	6	0.0%	0.0%	11.1%	14.5%	27.8%	20.7%	33.3%	21.8%	27.8%	20.7%	10.10	Character shift toward 1, 5	Relative magnitude 2.2
Masters' Colleges and Universities II (Public & Private)	6	0.0%	0.0%	20.0%	35.1%	20.0%	35.1%	25.0%	11.3%	60.0%	42.9%	1.07	Character shift toward 1, 5	Relative magnitude 2.2
All Master's Colleges and Universities	29	3.6%	4.9%	8.9%	7.5%	19.6%	10.4%	25.0%	11.3%	35.7%	12.8%	1.07	Character shift toward 4	Relative magnitude 2.1
Baccalaureate Colleges-Liberal Arts (Public & Private)	13	10.7%	11.5%	3.6%	6.9%	28.6%	16.7%	25.0%	16.0%	21.4%	15.2%	5.41	Character shift toward 4	Relative magnitude 2.1
Baccalaureate Colleges-General (Public & Private)	13	15.4%	19.6%	7.7%	14.5%	7.7%	14.5%	53.8%	27.1%	15.4%	19.6%	1.12	Character shift toward 4	Relative magnitude 2.3
All Baccalaureate Colleges	13	11.9%	9.8%	2.4%	4.6%	21.4%	12.4%	35.7%	14.5%	19.0%	11.9%	30.8%	Character shift toward 4	Relative magnitude 2.3
Associate's Colleges (Public & Private)	17	15.4%	19.6%	7.7%	14.5%	23.1%	22.9%	23.1%	22.9%	30.8%	25.1%	1.32	Character shift toward 0, 2	Relative magnitude 0.7
Specialized Institutions (Public & Private)	17	21.4%	21.5%	7.1%	13.5%	14.3%	18.3%	28.6%	23.7%	21.4%	21.5%	4.98	Character increase at 1	Relative magnitude 1.5
g Changes in or growth of library instruction programs														
Doctoral/Research Universities-Extensive (Public)	49	11.8%	4.2%	11.8%	4.2%	17.1%	4.9%	17.4%	5.0%	32.0%	6.7%	1.32	Character increase at 1	Relative magnitude 1.5
Doctoral/Research Universities-Extensive (Private)	28	3.8%	7.4%	3.8%	7.4%	18.8%	11.0%	18.8%	11.0%	22.9%	17.0%	2.71	Character shift toward 4	Relative magnitude 1.5
Doctoral/Research Universities-Intensive (Public)	18	5.9%	11.2%	11.8%	15.3%	5.9%	11.2%	36.3%	22.7%	35.3%	22.7%	4.36	Character shift toward 2	Relative magnitude 1.5
Doctoral/Research Universities-Intensive (Private)	8	12.5%	22.9%	0.0%	0.0%	12.5%	22.9%	12.5%	22.9%	26.3%	8.7%	1.15	Character shift toward 5	Relative magnitude 0.9
All Doctoral/Research Universities	36	8.8%	9.5%	8.8%	9.5%	15.2%	14.3%	20.6%	13.6%	32.4%	15.7%	1.32	Character shift toward 5	Relative magnitude 0.9
Masters' Colleges and Universities I (Public)	19	8.8%	10.6%	11.1%	14.5%	11.1%	14.5%	22.2%	19.2%	44.4%	23.0%	4.99	Character shift toward 3	Relative magnitude 1.5
Masters' Colleges and Universities II (Public & Private)	6	20.0%	35.1%	0.0%	0.0%	40.0%	42.9%	19.3%	10.2%	36.8%	12.8%	2.85	Character shift toward 5	Relative magnitude 1.6
All Master's Colleges and Universities	29	8.8%	7.3%	8.8%	7.3%	21.1%	10.6%	19.3%	10.2%	40.0%	42.9%	2.41	Character shift toward 0, 1	Relative magnitude 1.0
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	10.7%	11.5%	10.7%	11.5%	10.7%	11.5%	19.3%	10.2%	38.3%	18.1%	1.15	Character shift toward 5	Relative magnitude 1.0
Baccalaureate Colleges-General (Public & Private)	13	15.4%	19.6%	0.0%	0.0%	38.5%	26.4%	7.7%	14.5%	38.5%	26.4%	6.5%	Character shift toward 0, 1	Relative magnitude 1.0
All Baccalaureate Colleges	13	11.9%	9.8%	7.1%	7.8%	16.7%	11.9%	16.7%	11.3%	36.1%	14.7%	7.77%	Character shift toward 5	Relative magnitude 1.6
Associate's Colleges (Public & Private)	17	15.4%	19.6%	7.7%	14.5%	7.7%	14.5%	15.4%	19.6%	58.8%	27.1%	2.41	Character shift toward 0, 1	Relative magnitude 1.0
Specialized Institutions (Public & Private)	17	21.4%	21.5%	7.1%	13.5%	21.4%	21.5%	12.1%	4.3%	6.7%	3.3%	1.15	Character shift toward 0, 1	Relative magnitude 1.0
h Changes in technical services														
Doctoral/Research Universities-Extensive (Public)	49	32.6%	13.5%	19.6%	11.5%	21.9%	10.4%	15.2%	10.4%	15.2%	10.4%	6.5%	Character shift toward 0, 1	Relative magnitude 1.0
Doctoral/Research Universities-Extensive (Private)	28	30.8%	17.7%	19.2%	15.1%	15.4%	13.9%	11.5%	12.3%	7.7%	14.5%	7.77%	Character shift toward 0, 1	Relative magnitude 1.0

TABLE 3b (continued)
Analysis by institutional type of responses to question 1 of the study survey

	Number of institutions	Not a factor			Weak Motivation			Intermediate Motivation			Strong Motivation			Variability		Character
		Sample % responding affirmatively	± Confidence Interval	Sample % responding affirmatively	± Confidence Interval	Sample % responding affirmatively	± Confidence Interval	Sample % responding affirmatively	± Confidence Interval	Sample % responding affirmatively	± Confidence Interval	K-square factor (when significant)	Ungrouped data	Grouped data		
Doctoral/Research Universities-Intensive (Public)	18	25.0%	21.2%	6.3%	11.9%	18.8%	19.1%	31.3%	22.7%	12.5%	16.2%	6.3%	11.9%	1.78	Character shift toward 2	1.2
Doctoral/Research Universities-Intensive (Private)	8	25.0%	30.0%	25.0%	30.0%	25.0%	30.0%	20.0%	20.0%	0.0%	0.0%	0.0%	0.0%	3.36	Character shift toward 2	1.4
<i>All Doctoral/Research Universities</i>		30.2%	9.2%	17.7%	7.6%	12.5%	6.6%	20.8%	8.1%	12.5%	6.6%	6.3%	4.8%			
Masters' Colleges and Universities (Public)	36	18.2%	13.2%	33.3%	13.2%	9.1%	13.2%	18.2%	13.2%	15.2%	12.2%	6.1%	8.1%	1.09	Character shift toward 1	1.2
Masters' Colleges and Universities I (Private)	19	16.7%	17.2%	16.7%	17.2%	5.6%	10.6%	50.0%	23.1%	5.6%	10.6%	5.6%	10.6%	4.29	Character increase at 3	3.0
Masters' Colleges and Universities II (Public & Private)	6	20.0%	35.1%	20.0%	35.1%	20.0%	35.1%	20.0%	25.1%	0.0%	0.0%	20.0%	35.1%	4.29	Character shift toward 5	1.4
<i>All Master's Colleges and Universities</i>		17.9%	10.0%	8.9%	11.6%	26.6%	7.5%	28.6%	11.8%	10.7%	8.1%	7.1%	6.7%			
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	21.4%	15.2%	25.0%	16.0%	14.3%	13.0%	17.9%	14.2%	14.3%	13.0%	7.1%	9.5%	2.75	Character shift toward 0	1.7
Baccalaureate Colleges-General (Public & Private)	13	46.2%	27.1%	7.7%	14.5%	14.3%	14.5%	23.1%	22.9%	15.4%	19.6%	0.0%	0.0%			
<i>All Baccalaureate Colleges</i>		28.6%	13.7%	19.0%	11.9%	14.3%	10.6%	19.0%	11.9%	14.3%	10.6%	4.8%	6.4%			
Associate's Colleges (Public & Private)	13	35.7%	25.1%	14.3%	18.3%	10.0%	0.0%	23.1%	22.9%	7.7%	14.5%	15.4%	19.6%	2.43	Character shift toward 5	1.1
Specialized Institutions (Public & Private)	17	22.2%	5.4%	10.7%	4.0%	14.3%	18.3%	20.9%	5.3%	13.8%	4.5%	7.1%	13.5%			
i Preservation of the collections																
Doctoral/Research Universities-Extensive (Public)	49	9.1%	11.5%	15.2%	10.4%	13.0%	9.7%	19.6%	11.5%	13.0%	9.7%	12.1%	11.1%	2.57	Character shift toward 1, 3	0.9
Doctoral/Research Universities-Extensive (Private)	28	34.6%	18.3%	11.5%	12.3%	0.0%	0.0%	3.8%	7.4%	7.7%	10.2%	34.6%	18.3%	3.01	Character shift toward 0, 5	1.2
Doctoral/Research Universities-Intensive (Public)	18	6.3%	11.9%	12.5%	16.2%	18.8%	19.1%	37.5%	33.5%	0.0%	0.0%	18.8%	19.1%	3.16	Character shift toward 2, 3	1.1
Doctoral/Research Universities-Intensive (Private)	8	0.0%	0.0%	0.0%	0.0%	17.9%	14.5%	30.8%	11.5%	17.9%	14.5%	0.0%	0.0%	11.70	Character shift toward 2	1.7
<i>All Doctoral/Research Universities</i>		19.8%	8.0%	12.5%	6.6%	14.6%	7.1%	19.8%	8.0%	9.4%	5.8%	24.0%	8.5%			
Masters' Colleges and Universities I (Public)	36	9.1%	13.9%	21.2%	13.9%	6.1%	8.1%	33.3%	16.1%	18.2%	13.2%	12.1%	11.1%	2.57	Character shift toward 1, 3	0.9
Masters' Colleges and Universities II (Private)	19	17.6%	18.1%	11.8%	15.3%	11.8%	15.3%	17.6%	18.1%	23.5%	20.2%	17.6%	18.1%			
Masters' Colleges and Universities II (Public & Private)	6	50.0%	40.0%	0.0%	0.0%	0.0%	0.0%	16.7%	29.8%	0.0%	0.0%	33.3%	37.7%	7.21	Character shift toward 0	1.5
<i>All Master's Colleges and Universities</i>		16.1%	9.6%	16.1%	9.6%	7.1%	6.7%	26.8%	11.6%	17.9%	10.0%	16.1%	9.6%			
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	21.4%	15.2%	3.6%	6.9%	10.7%	11.5%	14.3%	13.0%	15.4%	19.6%	32.1%	17.3%	1.40	Character shift toward 5	0.8
Baccalaureate Colleges-General (Public & Private)	13	30.8%	25.1%	15.4%	19.6%	10.7%	14.5%	30.8%	25.1%	15.4%	19.6%	0.0%	0.0%	2.78	Character shift toward 3	1.3
<i>All Baccalaureate Colleges</i>		23.8%	12.9%	11.9%	7.8%	11.9%	9.8%	19.0%	11.9%	16.7%	11.3%	21.4%	12.4%	12.61	Character shift toward 0	2.5
Associate's Colleges (Public & Private)	13	69.2%	25.1%	0.0%	0.0%	0.0%	0.0%	7.7%	14.5%	15.4%	19.6%	7.7%	14.5%			
Specialized Institutions (Public & Private)	17	20.0%	20.2%	13.3%	17.2%	26.1%	12.6%	22.4%	22.4%	20.0%	20.2%	13.3%	17.2%			
j Need to accommodate non-library operations																
Doctoral/Research Universities-Extensive (Public)	49	33.3%	13.3%	9.3%	3.6%	8.0%	3.5%	10.2%	3.9%	12.8%	4.4%	10.4%	8.6%	3.71	Character shift toward 1, 5	1.4
Doctoral/Research Universities-Extensive (Private)	28	15.4%	13.9%	19.2%	15.1%	0.0%	0.0%	3.8%	7.4%	7.7%	10.2%	58.8%	19.2%	2.72	Character shift toward 5	1.3
Doctoral/Research Universities-Intensive (Public)	18	29.4%	20.0%	5.9%	11.2%	12.5%	22.9%	11.8%	15.3%	11.8%	15.3%	35.3%	22.7%			
Doctoral/Research Universities-Intensive (Private)	8	27.3%	8.8%	9.1%	5.7%	8.1%	5.4%	8.1%	5.4%	10.1%	5.9%	37.4%	9.5%			
<i>All Doctoral/Research Universities</i>		26.5%	14.8%	11.1%	14.5%	11.1%	14.5%	11.1%	14.5%	14.7%	11.9%	29.4%	15.3%			
Masters' Colleges and Universities I (Public)	36	16.7%	17.2%	11.1%	14.5%	11.1%	14.5%	20.0%	35.1%	5.6%	10.6%	44.4%	23.0%	1.13	Character shift toward 5	1.0
Masters' Colleges and Universities II (Private)	19	20.0%	35.1%	20.0%	35.1%	0.0%	0.0%	20.0%	35.1%	0.0%	0.0%	40.0%	42.9%	3.75	Character shift toward 1, 3	1.2
Masters' Colleges and Universities II (Public & Private)	6	22.8%	10.9%	8.8%	7.3%	6.7%	12.6%	14.0%	9.0%	10.5%	8.0%	35.1%	12.4%	1.92	Character shift toward 0	1.6
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	26.9%	17.0%	7.7%	10.2%	11.5%	12.3%	11.5%	12.3%	26.9%	17.0%	19.2%	15.1%	2.00	Character shift toward 4	1.6
Baccalaureate Colleges-General (Public & Private)	13	33.3%	26.7%	8.3%	15.6%	0.0%	0.0%	16.7%	21.1%	25.0%	24.5%	16.7%	21.1%	3.10	Character shift toward 4	1.4
<i>All Baccalaureate Colleges</i>		28.2%	14.1%	7.7%	8.4%	12.8%	10.5%	10.5%	10.5%	25.6%	13.7%	17.9%	12.0%			
Associate's Colleges (Public & Private)	13	46.2%	27.1%	7.7%	14.5%	0.0%	0.0%	0.0%	0.0%	7.7%	14.5%	38.5%	26.4%	3.32	Character shift toward 0	1.4
Specialized Institutions (Public & Private)	17	6.9%	12.6%	20.0%	20.2%	6.7%	12.6%	13.3%	17.2%	13.3%	17.2%	40.0%	24.8%	2.60	Character shift toward 1	1.7
k Building safety issues																
Doctoral/Research Universities-Extensive (Public)	49	34.0%	13.5%	10.6%	8.8%	9.7%	3.9%	19.9%	5.2%	8.8%	3.7%	14.2%	4.5%	2.08	Character shift toward 0	1.8
Doctoral/Research Universities-Extensive (Private)	28	50.0%	19.2%	11.5%	12.3%	7.7%	10.2%	21.3%	11.7%	3.8%	7.4%	14.9%	10.2%	2.59	Character shift toward 1	1.8
Doctoral/Research Universities-Intensive (Public)	18	18.8%	19.1%	31.3%	22.9%	12.5%	16.2%	12.5%	16.2%	12.5%	22.9%	12.5%	22.9%			
Doctoral/Research Universities-Intensive (Private)	8	25.0%	30.0%	12.5%	22.9%	12.5%	22.9%	25.0%	30.0%	8.2%	5.5%	15.5%	7.2%			
<i>All Doctoral/Research Universities</i>		35.1%	9.5%	14.4%	7.0%	10.3%	6.1%	16.5%	7.4%	8.2%	5.5%	15.5%	7.2%			
Masters' Colleges and Universities I (Public)	36	20.6%	13.6%	14.7%	11.9%	8.8%	9.5%	29.4%	15.3%	8.8%	9.5%	17.6%	12.8%	1.74	Character shift toward 4	1.4
Masters' Colleges and Universities II (Private)	19	16.7%	17.2%	22.2%	19.2%	11.1%	14.5%	22.2%	19.2%	16.7%	17.2%	11.1%	14.5%	11.93	Character shift toward 2	3.0
Masters' Colleges and Universities II (Public & Private)	6	20.0%	35.1%	20.0%	35.1%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	35.1%			
<i>All Master's Colleges and Universities</i>		19.3%	10.2%	17.5%	9.9%	24.6%	8.5%	24.6%	11.2%	10.5%	8.0%	15.8%	9.5%			
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	35.7%	17.7%	14.3%	13.0%	10.7%	11.5%	21.4%	15.2%	3.6%	6.9%	14.3%	13.0%			
Baccalaureate Colleges-General (Public & Private)	13	30.8%	25.1%	7.7%	14.5%	7.7%	14.5%	23.1%	22.9%	15.4%	19.6%	15.4%	19.6%			
<i>All Baccalaureate Colleges</i>		33.9%	14.3%	14.3%	10.6%	9.5%	8.9%	21.4%	12.4%	7.1%	7.8%	14.3%	10.6%			
Associate's Colleges (Public & Private)	13	53.8%	27.1%	7.7%	14.5%	0.0%	0.0%	23.1%	22.9%	7.7%	14.5%	7.7%	14.5%	2.82	Character shift toward 0	1.8

shift toward 4 1.7

**TABLE 3b (continued)
Analysis by institutional type of responses to question 1 of the study survey**

	Number of institutions	Not a factor			Weak Motivation			Intermediate Motivation			Strong Motivation			Variability		Variability Grouped data
		Sample % responding affirmatively	± Confidence Interval	K-square (when significant)	Sample % responding affirmatively	± Confidence Interval	K-square (when significant)	Sample % responding affirmatively	± Confidence Interval	K-square (when significant)	Sample % responding affirmatively	± Confidence Interval	K-square (when significant)	Character	Relative magnitude	
Specialized institutions (Public & Private)	17	42.9%	25.9%	7.1%	13.5%	18.3%	1.35%	7.1%	13.5%	18.3%	1.35%	7.1%	13.5%	2.00	1.3	Character shift toward 0, 4
i Building mechanical systems obsolescence		32.8%	6.5%	16.2%	4.0%	0.0%	0.0%	14.3%	18.3%	1.35%	27.3%	4.9%	6.2%			
Doctoral/Research Universities-Extensive (Public)	49	34.1%	14.5%	14.6%	10.8%	0.0%	0.0%	16.2%	10.0%	7.3%	8.0%	31.7%	14.2%			Character shift toward 0
Doctoral/Research Universities-Extensive (Private)	28	44.0%	19.5%	12.0%	12.7%	0.0%	0.0%	8.0%	10.6%	4.0%	22.8%	27.3%	18.3%	1.57	0.9	
Doctoral/Research Universities-Intensive (Public)	18	36.4%	28.4%	9.1%	17.0%	0.0%	0.0%	17.0%	17.0%	18.2%	26.3%	27.3%	26.3%			Character increase at 3
Doctoral/Research Universities-Intensive (Private)	8	25.0%	30.0%	0.0%	0.0%	0.0%	0.0%	50.8%	34.8%	12.5%	22.8%	12.5%	22.9%	8.11	1.5	
<i>All Doctoral/Research Universities</i>		36.5%	10.2%	11.8%	6.8%	0.0%	0.0%	14.1%	7.4%	8.2%	5.8%	29.4%	9.7%			
Master's Colleges and Universities I (Public)	36	18.8%	13.5%	6.3%	8.4%	0.0%	0.0%	18.8%	13.5%	28.1%	15.6%	28.1%	15.6%	1.79	1.2	Character shift toward 4
Master's Colleges and Universities I (Private)	19	25.0%	21.2%	6.3%	11.9%	0.0%	0.0%	25.0%	21.2%	31.3%	22.7%	31.3%	16.2%	3.13	1.5	
Master's Colleges and Universities II (Public & Private)	6	33.3%	53.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	53.3%	33.3%	53.3%	4.57	1.5	Character increase at 4
All Master's Colleges and Universities		21.6%	11.3%	5.9%	6.5%	0.0%	0.0%	19.6%	10.9%	29.4%	12.5%	23.5%	11.6%	1.91	1.5	
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	27.3%	18.6%	9.1%	12.0%	0.0%	0.0%	18.2%	16.1%	22.7%	17.5%	22.7%	17.5%	1.85	1.4	Character increase at 3
Baccalaureate Colleges-General (Public & Private)	13	36.4%	28.4%	9.1%	17.0%	0.0%	0.0%	18.2%	16.1%	16.2%	22.8%	36.4%	28.4%			
<i>All Baccalaureate Colleges</i>		32.4%	15.7%	8.8%	9.8%	0.0%	0.0%	17.8%	10.8%	20.6%	13.6%	26.5%	14.8%			
Associate's Colleges (Public & Private)	13	58.3%	27.9%	0.0%	0.0%	0.0%	0.0%	16.7%	21.1%	0.0%	0.0%	25.0%	24.5%	3.95	1.8	Character shift toward 0
Specialized institutions (Public & Private)	17	30.8%	25.1%	15.4%	19.6%	0.0%	0.0%	15.4%	19.6%	0.0%	0.0%	38.5%	28.4%	2.14	1.1	
Building structural problems		50.0%	6.5%	14.3%	4.6%	7.1%	4.1%	10.7%	4.1%	8.0%	3.9%	8.0%	3.9%			Character shift toward 5
Doctoral/Research Universities-Extensive (Public)	49	43.5%	14.3%	13.0%	9.7%	0.0%	0.0%	13.0%	9.7%	8.7%	8.1%	19.6%	11.5%	1.33	0.6	
Doctoral/Research Universities-Extensive (Private)	28	69.2%	17.7%	19.2%	15.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	7.4%	2.84	1.1	Character shift toward 1
Doctoral/Research Universities-Intensive (Public)	18	43.8%	24.3%	25.0%	21.2%	12.5%	22.9%	6.3%	11.9%	6.3%	11.9%	12.5%	16.2%	2.23	0.9	
Doctoral/Research Universities-Intensive (Private)	8	37.5%	33.5%	37.5%	33.5%	12.5%	22.9%	12.5%	22.9%	0.0%	0.0%	0.0%	0.0%	5.69	1.4	Character shift toward 1
<i>All Doctoral/Research Universities</i>		50.0%	10.0%	18.8%	7.8%	6.3%	4.8%	7.3%	5.2%	5.2%	4.4%	12.5%	6.6%			
Master's Colleges and Universities I (Public)	36	50.0%	26.8%	11.8%	10.8%	5.9%	7.9%	17.6%	12.8%	5.9%	7.9%	8.8%	9.5%	1.33	0.6	Character shift toward 0
Master's Colleges and Universities I (Private)	19	27.8%	20.7%	11.1%	14.5%	11.1%	14.5%	16.7%	17.2%	11.1%	14.5%	22.2%	19.2%	2.99	1.5	
Master's Colleges and Universities II (Public & Private)	6	40.0%	42.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	42.8%	0.0%	0.0%	17.00	2.0	Character increase at 2, 4
<i>All Master's Colleges and Universities</i>		42.1%	12.6%	10.5%	8.0%	8.6%	7.3%	15.8%	9.5%	10.5%	8.0%	12.3%	8.6%			
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	46.4%	18.5%	17.9%	14.2%	10.7%	11.5%	0.0%	0.0%	14.3%	13.0%	10.7%	11.5%	1.69	0.7	Character shift toward 2, 3
Baccalaureate Colleges-General (Public & Private)	13	53.8%	27.1%	7.7%	14.5%	15.4%	19.6%	23.1%	22.9%	0.0%	0.0%	0.0%	0.0%	4.08	0.9	
<i>All Baccalaureate Colleges</i>		50.0%	27.2%	14.3%	19.0%	11.9%	17.6%	7.1%	14.0%	9.5%	16.0%	7.1%	14.0%			Character shift toward 3
Associate's Colleges (Public & Private)	13	69.2%	25.1%	0.0%	0.0%	0.0%	0.0%	23.1%	22.8%	7.7%	14.5%	0.0%	0.0%	4.78	1.1	
Specialized institutions (Public & Private)	17	61.5%	26.4%	15.4%	19.6%	0.0%	0.0%	7.7%	14.5%	15.4%	19.6%	0.0%	0.0%	2.47	0.7	Character increase at 2, 4
Dysfunctional design of previous space		11.6%	4.2%	8.9%	3.7%	5.6%	3.0%	15.6%	4.7%	17.8%	5.0%	40.4%	6.4%			
Doctoral/Research Universities-Extensive (Public)	49	13.3%	9.9%	8.9%	8.3%	4.4%	6.0%	15.6%	10.6%	17.8%	11.2%	40.0%	14.3%	1.27	0.8	Character increase at 1, 2
Doctoral/Research Universities-Extensive (Private)	28	7.7%	10.2%	7.7%	10.2%	11.5%	12.3%	15.4%	13.9%	26.9%	17.0%	30.8%	17.7%	6.92	1.7	
Doctoral/Research Universities-Intensive (Public)	18	6.3%	11.9%	31.3%	22.7%	12.5%	16.2%	12.5%	16.2%	6.3%	11.9%	31.3%	22.7%	4.06	1.3	Character shift toward 2, 4
Doctoral/Research Universities-Intensive (Private)	8	12.5%	22.8%	0.0%	0.0%	8.4%	5.6%	12.5%	22.8%	37.5%	33.5%	25.5%	30.0%			
<i>All Doctoral/Research Universities</i>		10.5%	6.2%	11.6%	6.4%	14.7%	7.1%	14.7%	7.1%	20.0%	8.0%	34.7%	9.8%			
Master's Colleges and Universities I (Public)	36	11.8%	10.8%	8.8%	9.5%	5.9%	7.9%	23.5%	14.3%	14.7%	11.9%	35.3%	16.1%	2.81	1.4	Character shift toward 5
Master's Colleges and Universities I (Private)	19	0.0%	0.0%	11.1%	14.5%	0.0%	0.0%	16.7%	17.2%	11.1%	14.5%	61.1%	22.5%	4.17	1.7	
Master's Colleges and Universities II (Public & Private)	6	20.0%	35.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	35.1%	60.0%	42.9%			Character shift toward 2
<i>All Master's Colleges and Universities</i>		8.8%	7.3%	8.8%	7.3%	3.5%	4.8%	19.3%	10.2%	14.0%	9.0%	45.6%	12.9%			
Baccalaureate Colleges-Liberal Arts (Public & Private)	29	10.7%	11.5%	7.1%	9.5%	3.6%	6.9%	7.1%	9.5%	25.0%	16.0%	46.4%	18.5%	1.96	1.0	Character decrease at 2, 3
Baccalaureate Colleges-General (Public & Private)	13	15.4%	19.6%	7.7%	14.5%	15.4%	19.6%	7.7%	14.5%	21.4%	12.4%	45.2%	15.1%	2.60	1.2	
Associate's Colleges (Public & Private)	13	15.4%	19.6%	7.7%	14.5%	0.0%	0.0%	0.0%	0.0%	23.1%	22.8%	53.8%	27.1%	7.60	1.8	Character shift toward 0, 3
Specialized institutions (Public & Private)	17	26.7%	22.4%	0.0%	0.0%	0.0%	0.0%	40.0%	24.8%	6.7%	12.6%	26.7%	22.4%			