Advising at the Millennium: Advisor Training, Compensation, and Support

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This is the second in a series of articles in which the results of the NACADA Academic Advising Survey 2000 are presented. In this article, academic training, compensation, professional development opportunities, and technical support are reported by survey respondents. These factors are examined according to the type, mission, and size of the advisors' institutions.

KEY WORDS: advising profession, NACADA Survey 2000, professional development

The NACADA Academic Advising Survey 2000 was conducted electronically via the National Academic Advising Association Web site (www.nacada.ksu.edu) between April 18 and May 31, 2000. A total of 2,695 respondents completed surveys. A demographic profile of the survey respondents was presented in the first article in this series (Lynch & Stucky, 2001).

In this article, I examine advisors' academic preparation in terms of highest degree earned, the salary compensation of academic advisors, and the professional development and technical support provided to them. I examined each of these variables according to the respondent's type of institution (public university or college, private university or college, 2-year college), the mission of the respondent's institution (research university, comprehensive college or university, liberal arts college, 2-year college), and the size of the respondent's institution (undergraduate enrollments <1,000; 1,000–2,499; 2,500–4,999; 5,000–9,999; 10,000–19,999; and ≥ 20,000). I also looked at advisor compensation according to the advisor's highest academic degree and years of advising experience.

I used chi-square analyses to compare responses. In those instances where the chi-square value was significant at the $p = 0.05$ level, I used the standardized residual method to identify the major contributors to the significant chi-square result. Analyses were frequently based upon fewer than the total 2,695 respondents because responses were missing or fell outside the response range for the given item. I reported the number of responses used in each analysis with the data. A significant chi-square in combination with a significant standardized residual indicates that the frequency or percentage for the item differs significantly from the expected value based upon the aggregate distribution for that item.

Analysis of Advisor Academic Training

On the survey, each respondent indicated the title of his or her current position by selecting 1 of 13 position titles. For the analyses of advisor training and advisor compensation, I included only those respondents who indicated that they held 12-month, full-time positions with the titles of academic advisor or advising specialist ($N = 1,059$).

In Table 1, I summarized the advisors' degree levels by type of institution. Significant differences in education level exist among advisors at the defined institutions. The standardized residuals indicate that the differences are significant largely because 2-year colleges employ greater than expected numbers of advisors with associate's or bachelor's degrees. Also shown in Table 1, regardless of institutional type, most academic advisors (two thirds) hold a master's degree or a certificate of advanced studies. Only 27% of advisors reported that the bachelor's degree was the highest degree they had obtained.

When I examined advisor degree level across institutions of differing missions, a pattern similar to that found for institutional type emerged: 2-year colleges employ a greater than expected number of advisors who hold associate's or bachelor's degrees. See Table 2.

The chi-square value in which I compared advisor degree level across institutional size was not significant, indicating similar patterns of advisor academic preparation regardless of institution size. These comparisons are reported in Table 3.

Analysis of Advisor Compensation

In addition to comparing advisor compensation across institutional type, mission, and size, I also examined compensation according to the level of advisor academic training and years of experience in academic advising. Table 4 shows the comparison of advisor compensation by advisor academic degree. The chi-square value was significant: $\chi^2(9, N = 962) = 38.994$, $p < 0.0001$. The analysis of the standardized residuals indicated that the contributors to significance were at the doctoral degree level, where higher than expected frequencies were found in the $40,000–49,999 and $50,000–59,999

Table 1 Advisor degree level by type of institution

Advisor Degree Level	Type of Institution: Public University1 College (n = 676)		Private University1 College (n = 147)		2-Year College (n = 133)		Total (N = 956)	
	n	Yo	n	Yo	n	%	n	%
Doctorate	36	5	6	4	5	4	47	5
Master's or certificate of advanced studies	458	68	104	71	70	53	632	66
Bachelor's	173	26	36	24	53	40	262	27
Associate's	9	1	1	1	5	4	15	2

Note. $\chi^2(6, N = 956) = 19.042, p = 0.0041$

Table 2 Advisor degree level by institutional mission

Advisor Degree Level	Institutional Mission: Research University (n = 544)		Comprehensive College1 University (n = 186)		Liberal Arts College (n = 93)		2-Year College (n = 133)		Total (N = 956)	
	n	%	n	Yo	n	Yo	n	Yo	n	%
Doctorate	34	6	6	3	2	2	5	4	47	5
Master's or certificate of advanced studies	369	68	137	74	56	60	70	53	632	66
Bachelor's	136	25	42	23	31	33	53	40	262	27
Associate's	5	1	1	1	4	4	5	4	15	2

Note. $\chi^2(9, N = 956) = 33.501, p = 0.0001$. Due to the small number of associate-degree advisors and the resulting number of cells with expected frequencies below 5, the initial chi-square analysis may be invalid. Therefore, I completed the chi-square analysis using only the data in the bachelor's, master's or certificate of advanced studies, and doctorate categories. This analysis yielded $\chi^2(6, N = 941) = 22.490, p = 0.001$. The standardized residuals indicated that the same pattern of significance for these categories as that found in the initial chi-square analysis.

categories and fewer than expected were found in the $20,000–29,999 category. Overall, I found an expected pattern of education and earnings: Those with higher degrees earned higher compensation. For associate-degree advisors, the modal range is $20,000–29,999; for all other degree categories, the modal range is $30,000–39,999. Although advisors with doctoral degrees showed the modal salary range of $30,000–39,000, they are more likely than those with other degrees to be compensated in the two higher salary ranges.

Table 5 shows the compensation ranges for advisors according to years of experience in academic advising, broken down in 5-year increments from 4 or fewer to 25 or more years, The chi-square value of the compensation comparisons with years of advising experience is significant: $\chi^2(15, N = 953) = 158.978, p < 0.0001$. The trend is as expected: Salary compensation was higher for those with more years of experience. I found that years of experience had a stronger relationship with compensation (contingency coefficient = 0.3781) than did advisor academic degree (contingency coefficient = 0.1974). The contingency coefficient indicates the degree of relationship between two categorized variables and is interpreted much the same as the more commonly used Pearson's correlation coefficient (r).

When I examined advisor compensation according to institutional type, mission, and size, none of

Table 3 Advisor degree level by size of institution

Advisor Degree Level	Size of Undergraduate Enrollment													
	< 1,000 (n = 27)		1,000–2,499 (n = 92)		2,500–4,999 (n = 108)		5,000–9,999 (n = 129)		10,000–19,999 (n = 283)		≥ 20,000 (n = 321)		Total (N = 960)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Doctorate	0	0	3	3	5	5	7	5	9	3	2 3 7		4 7	5
Master's or certificate of advanced studies	17	63	65	71	67	62	84	65	196	69	203	63	632	66
Bachelor's	10	37	23	25	36	33	35	27	72	25	90	28	266	28
Associate's	0	0	1	1	0	0	3	2	6	2	5	2	1 5	2

Note. $\chi^2(15, N = 960) = 14.593, p > 0.05$. Due to the small number of associate-degree advisors and the resulting number of cells with expected frequencies below 5, the initial chi-square analysis may be invalid. Therefore, I completed the chi-square analysis using only the bachelor's, master's or certificate of advanced studies, and doctorate categories. The second analysis yielded a nonsignificant value: $\chi^2(10, N = 945) = 11.151, p > 0.05$.

Table 4 Advisor salary range by highest degree earned

Annual Salary Range ($)	Highest Degree Earned									
	Associate's (n = 15)		Bachelor's (n = 267)		Master's1 Certificate (n = 634)		Doctorate (n = 46)		Total (N = 962)	
	n	%	n	%	n	%	n	%	n	%
20,000–29,999	9	60	107	40	209	33	7	15	332	35
30,000–39,999	5	33	115	43	342	54	21	46	483	50
40,000–49,999	1	7	40	15	70	11	14	30	125	13
50,000–59,999	0	0	5	2	13	2	4	9	22	2

Note. $\chi^2(9, N = 962) = 38.994, p < 0.0001$

Table 5 Advisor salary range by years experience in academic advising

Annual Salary Range ($)	Years Experience in Academic Advising													
	0 4 (n = 418)		5–9 (n = 275)		10–14 (n = 152)		15–19 (n = 60)		20–24 (n = 28)		225 (n = 20)		Total (N = 953)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
20,000–29,999	200	48	91	33	23	15	7	12	2	7	3	15	326	34
30,000–39,999	190	45	147	53	92	61	29	48	14	50	6	30	478	50
40,000–49,999	20	5	34	12	34	22	21	35	10	36	8	40	127	13
50,000–59,999	8	2	3	1	3	2	3	5	2	7	3	15	22	2

Note. $\chi^2(15, N = 953) = 158.978, p < 0.0001$. Due to the small number of advisors who reported earning $50,000–59,999 and the resulting number of cells with expected frequencies below 5, the initial chi-square analysis may be invalid. Therefore, I repeated the chi-square analysis using only the $20,000–29,999; $30,000–39,999; and $40,00049,999 ranges. The second analysis yielded a significant value: $\chi^2(10, N = 931) = 148.681, p < 0.0001$. The standardized residuals indicated the same pattern of significance for the remaining salary ranges as did the initial analysis.

the three chi-square comparisons were significant at the $p < 0.05$ level. As a result, one can argue that academic training and years of advising experience are more relevant in determining advisor compensation than are the three institutional characteristics. Tables 6, 7, and 8 show these comparisons.

Professional Development Resources

Through the NACADA Survey, I assessed two categories of advisor support: professional development resources and technological, print, and other support available. I compared the areas of advisor support among types of institutions (public university or college, private university or college, and 2-year college); institutions of varying missions (research university, comprehensive college or university, liberal arts college, and 2-year institution); and institutions of varying size (<1,000; 1,000–2,499; 2,500–4,999; 5,000–9,999; 10,000–19,999; 220,000 enrollments).

When I compared professional-development support across institutions of varying types, I found that the availability of all but one of the seven professional development resources differed significantly among institutions (Table 9). Seventy to 76% of the advisors from all types of institutions travel to regional and state conferences and workshops. Travel support to national conferences and workshops is as expected for those at both public and private universities and colleges but less than expected for advisors from 2-year institutions: $\chi^2(2, N = 2,597) = 11.946, p = .0100$. The availability of outside speakers and consultants is as expected at public universities and colleges, lower than expected at private institutions, and greater than expected at 2-year institutions: $\chi^2(2, N = 2,597) = 25.335, p < 0.0001$. For the remaining four areas of professional development support, I found deviations from the expected levels only for responses of advisors at private university and colleges. Stipends for workshops, $\chi^2(2, N = 2,597) = 8.228, p = 0.0163$, and on-campus in-service, $\chi^2(2, N = 2,597) = 16.505, p = 0.0003$, are less available for advisors at private institutions than was expected. Advisors at private institutions reported that organizational memberships, $\chi^2(2, N = 2,597) = 12.865$, $p = 0.0016$, and access to printed and video resources, $\chi^2(2, N = 2,597) = 17.049, p = 0.0002$, at higher than expected levels.

When I compared professional-development resources across institutions of varying missions (Table 10), I found that three of the seven categories of resources are available as expected: stipends for workshops (ranging from 29 to 37% availability), support for organizational memberships (mean availability of 57%), and printed and video resources (38–43% availability). According to the chi-square, the differences in availability of stipends for workshops were significant, $\chi^2(3, N = 2,597) = 9.386$, $p = 0.0246$; however, the standardized residuals did not show any meaningful differences among the categories.

With respect to the remaining four areas of professional development resources, advisors from research universities reported less than expected support for travel to regional and state conferences and workshops, $\chi^2(3, N = 2,597) = 10.388$, $p = 0.0200$, and advisors from 2-year colleges reported less than expected support for travel to national conferences and workshops, $\chi^2(3, N = 2,597) = 18.179, p < 0.0001$. Advisors from liberal arts colleges reported less than expected support for on-campus in-service activities: $\chi^2(3, N = 2,597) = 17.728, p = 0.0005$. Advisors from liberal arts colleges indicated less than expected utilization of outside speakers and consultants, while participants at 2-year colleges reported higher than expected utilization of outside support: $\chi^2(3, N = 2,597) = 24.560, p < 0.0001$.

Table 11 presents the availability of professional development support according to institutional size. I found significant chi-square and supporting standardized-residual values solely for the category of travel support to national conferences and workshops: $\chi^2(5, N = 2,604) = 17.707, p = 0.0100$. In this comparison, the standardized residuals indicated a lower than expected level for institutions in the 1,000–2,499 enrollments category. I found significant chi-square values for on-campus in-service, $\chi^2(5, N = 2,604) = 18.180$, $p = 0.0027$; organizational memberships, $\chi^2(5, N = 2,604) = 13.169$, $p = 0.0218$; and the availability of printed and video resources, $\chi^2(5, N = 2,604) = 12.373$, $p = 0.0300$. However, in the latter three cases, the standardized residuals failed to identify any major contributors to significance.

Technological, Print, and Other Resources

Survey respondents indicated the availability of 10 technological, video, and print resources. The resources are listed in Table 12 as are the comparisons of responses from advisors at various types of institution. I found no significant differences among advisors from various types of institutions on access to photocopiers. Access to professional journals and other publications appeared to be significantly different among those from various institutions, $\chi^2(2, N = 2,597) = 14.157$,

Table 6 Advisor salary range by type of institution

Annual Salary Range ($)	Tywe of Institution: Public University1 College (tz = 680)		Private University1 College (n = 145)		2-Year College (n = 133)		Total (N = 958)	
	n	%	n	Yo	n	%	n	Yo
20,000–29,999	237	35	47	32	49	37	333	35
30,000–39,999	345	51	80	55	54	41	479	50
40,00049,999	85	13	16	11	24	18	125	13
50,000–59,999	13	2	2	1	6	5	21	2

Note. $\chi^2(6, N = 958) = 10.693$, $p > 0.05$. Due to the small number of advisors who reported earning *$50,000–59,999* and the resulting number of cells with expected cell frequencies below 5, the initial chi-square analysis may be invalid. Therefore, I repeated the chi-square analysis using only the *$20,000–29,999; $30,000–39,999,* and *$40,00049,999* salary ranges. The second analysis yielded a nonsignificant value: $\chi^2(4, N = 937) = 6.747$, $p > 0.05$.

Table 7 Advisor salary range by institutional mission

Annual Salary Range ($)	Institutional Mission: Research University (n = 549)		Comprehensive College/ University (n = 184)		Liberal Arts College (n = 92)		2-Year College (n = 133)		Total (N = 958)	
	n	%	n	%	n	%	n	%	n	%
20,000–29,999	186	34	60	33	38	41	49	37	333	35
30,000–39,999	284	52	97	53	44	48	54	41	479	50
40,000–49,999	69	13	24	13	8	9	24	18	125	13
50,000–59,999	10	2	3	2	2	2	6	5	21	2

Note. $\chi^2(9, N = 958) = 12.554$, $p > 0.05$

Table 8 Advisor salary range by institutional size

Annual Salary Range ($)	Size of Undergraduate Enrollment: <1,000 (n = 28)		1,000–2,499 (n = 90)		2.500–4,999 (n = 107)		5,000–9,999 (n = 127)		10,000–19,999 (n = 287)		220,000 (n = 321)		Total (N = 960)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
20,000–29,999	15	54	36	40	38	36	40	31	104	36	101	31	334	35
30,000–39,999	10	36	45	50	56	52	61	48	139	48	168	52	479	50
40,00049,999	3	11	9	10	12	11	18	14	39	14	45	14	126	13
50,000–59,999	0	0	0	0	1	1	8	6	5	2	7	2	2 1	2

Note. $\chi^2(15, N = 960) = 21.862$, $p > 0.05$. Due to the small number of advisors who earn *$50,000-59,999* and the resulting number of cells with expected cell frequencies below 5, the initial chi-square analysis may be invalid. Therefore, I repeated the chi-square analysis using only the *$20,000–29,999; $30,000–39,999;* and *$40,00049,999* salary ranges. The second analysis yielded a nonsignificant value: $\chi^2(10, N = 939) = 8.263$, $p > 0.05$.

Table 9 Professional development activities available to advisors by type of institution

Professional Development Activity	Type of Institution: Public University1 College (n = 1,607)		Private University1 College (n = 481)		2-Year College (n = 509)		Total (N= 2,597)	
	n	*Yo*	*n*	*Yo*	*n*	*Yo*	*n*	*Yo*
Travel support to national conferenceslworkshops*	1,162	72	331	69	328	64	1,821	70
Travel support to regional1 state conferenceslworkshops	1,158	72	335	70	385	76	1,878	72
Stipends for workshops*	573	36	140	29	187	37	900	35
On-campus in-service*	837	52	210	44	286	56	1,333	51
Organizational memberships*	877	55	305	63	301	59	1,483	57
Printed/video resources*	598	37	229	48	209	41	1,036	40
Outside speakerslconsultants*	424	26	91	19	168	33	683	26

Note. * Indicates a significant chi-square value and one or more significant standardized residuals among the categories.

Table 10 Professional development activities available to advisors by institutional mission

Professional Development Activity	Institutional Mission: Research University (n = 1,211)		Comprehensive College1 University (n = 564)		Liberal Arts College (n = 313)		2-Year College (n = 509)		Total (N= 2,597)	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
Travel support to national conferenceslworkshops*	880	74	409	73	204	65	328	64	1,821	70
Travel support to regional1 state conferenceslworkshops*	857	71	423	75	213	68	385	76	1,878	72
Stipends for workshops	443	37	179	32	91	29	187	37	900	35
On-campus in-service*	643	53	269	48	135	43	286	56	1,333	51
Organizational memberships	683	56	318	56	181	58	301	59	1,483	57
Printed/video resources	462	38	245	43	120	38	209	41	1,036	40
Outside speakerslconsultants*	309	26	151	27	55	18	168	33	683	26

Note. * Indicates a significant chi-square value and one or more significant standardized residuals among the categories.

p = 0.0008, but the standardized residuals did not identify any major contributors.

I found a consistent pattern of significant differences among the availabilities of all four computer-related resources. Advisors from public universities and colleges reported higher than expected access to computer technology while those from private universities and colleges reported lower than expected access to both hardware and software. Advisors at 2-year colleges have an expected amount of access to computer technologies. In particular, chi-square analysis revealed significant values for computer hardware utilization, $\chi^2(2, N = 2,597) = 18.179$, $p < 0.0001$; computer software utilization, $\chi^2(2, N = 2,597) = 33.761$, $p < 0.0001$; Internet access, $\chi^2(2, N = 2,597) = 13.847$, $p = 0.0010$; and E-mail usage, $\chi^2(2, N = 2,597) = 12.645$, $p = 0.0018$. Advisors at public institutions also expressed a higher than expected utilization of fax machines while those at private institutions and those at 2-year schools reported less fax utilization, $\chi^2(2, N = 2,597) = 36.725$, $p < 0.0001$.

On the availability of TV and VCR resources, advisors at public universities and colleges and 2-year colleges reported expected levels of access, but advisors from private universities and colleges

Table 11 Professional development activities available to advisors by size of institution

Professional Development Activity	Size of Undergraduate Enrollment													
	<1,000 (*n* = 124)		1,000 · 2,499 (*n* = 361)		2,500– 4,999 (*n* = 347)		5,000– 9,999 (*n* = 427)		10,000– 19,999 (*n* = 703)		220,000 (*n* = 642)		Total (*N* = 2,604)	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Travel support to national conferences /workshops*	78	63	228	63	249	72	297	70	506	72	475	74	1,833	70
Travel support to regionallstate conferences1 workshops	83	67	256	71	256	74	316	74	501	71	470	73	1,882	72
Stipends for workshops	40	32	120	33	106	31	150	35	258	37	237	37	911	35
On-campus in-service	55	44	170	47	168	48	202	47	388	55	358	56	1,341	51
Organizational memberships	80	65	213	59	215	62	225	53	410	58	346	54	1,489	57
Printed/video resources	48	39	163	45	149	43	184	43	268	38	231	36	1,043	40
Outside speakers1 consultants	25	20	84	23	98	28	106	25	199	28	172	27	684	26

Note. * Indicates a significant chi-square value and one or more significant standardized residuals among the categories.

Table 12 Technological, print, and other resources available by type of institution

Resource	Type of Institution							
	Public University1 College (*n* = 1,607)		Private University1 College (*n* = 481)		2-Year College (*n* = 509)		Total (*N* = 2,597)	
	n	Yo	*n*	Yo	*n*	%	*n*	Yo
Computer hardware*	1,528	95	432	90	472	93	2,432	94
Computer software*	1,496	93	409	85	450	88	2,355	91
Internet access*	1,565	97	452	94	486	95	2,503	96
E-mail*	1,595	99	469	98	497	98	2,561	99
Scanner*	846	53	205	43	206	40	1,257	48
Photocopier	1,275	79	370	77	386	76	2,031	78
Fax machine*	1,478	92	411	85	425	83	2,314	89
TV and VCR*	914	57	224	47	293	58	1,431	55
Videos*	569	35	138	29	234	46	941	36
Professional journalslpublications	845	53	292	61	303	60	1,440	55

Note. * Indicates a significant chi-square value and one or more significant standardized residuals among the categories.

Table 13 Technological, print, and other resources available by institutional mission

Resource	Institutional Mission									
	Research University (n = 1,211)		Comprehensive College1 University (n = 564)		Liberal Arts College (n = 313)		2-Year College (n = 509)		Total (N = 2,597)	
	n	*Yo*	*n*	%	*n*	%	*n*	*Yo*	*n*	*Yo*
Computer hardware*	1,159	96	527	93	274	88	472	93	2,432	94
Computer software*	1,134	94	509	90	262	84	450	88	2,355	91
Internet access*	1,180	97	544	96	293	94	486	95	2,503	96
E-mail	1,202	99	555	98	307	98	497	98	2,561	99
Scanner*	642	53	276	49	133	42	206	40	1,257	48
Photocopier*	981	81	424	75	240	77	386	76	2,031	78
Fax machine*	1,136	94	501	89	252	81	425	83	2,314	89
TV and VCR	697	58	291	52	150	48	293	58	1,431	55
Videos*	417	34	189	34	101	32	234	46	941	36
Professional journals1 publications *	608	50	340	60	189	60	303	60	1,440	55

Note. * Indicates a significant chi-square value and one or more significant standardized residuals among the categories.

Table 14 Technological, print, and other resources available by size of institution

Resource	Size of Undergraduate Enrollment													
	4,000 (n = 124)		1,000–2,499 (n = 361)		2,500–4,999 (n = 347)		5,000–9,999 (n = 427)		10,000–19,999 (n = 703)		220,000 (n = 642)		Total (N = 2,604)	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Computerhardware*	107	86	318	88	322	93	404	95	666	95	620	97	2,437	94
Computersoftware*	100	81	308	85	307	88	380	89	656	93	611	95	2,362	91
Internet access*	116	94	336	93	332	96	412	96	682	97	634	99	2,512	96
E-mail	121	98	354	98	338	97	421	99	693	99	640	100	2,567	99
Scanner*	42	34	154	43	152	44	192	45	371	53	348	54	1,259	48
Photocopier	93	75	274	76	260	75	319	75	564	80	524	82	2,034	78
Fax machine*	90	73	309	86	295	85	374	88	646	92	603	94	2,317	89
TV and VCR	54	44	187	52	181	52	236	55	403	57	375	58	1,436	55
Videos	40	32	139	39	128	37	154	36	257	37	230	36	948	36
Professional journals/ publications	62	50	221	61	200	58	244	57	388	55	326	51	1,441	55

Note. * Indicates a significant chi-square value and one or more significant standardized residual among the categories.

reported a lower than expected level of access: $\chi^2(2, N = 2,597) = 17.446, p = 0.0002$.

Advisors at public universities and colleges reported the expected level of access to video resources; those from private universities and colleges reported lower than expected access to them; and their colleagues at 2-year colleges reported a higher than expected level to video resources, $\chi^2(2, N = 2,597) = 33.215, p < 0.0001$.

When I examined access to technological, print, and other resources according to college mission, I found that all of the chi-square analyses were significant at $\alpha = 0.05$ (Table 13). However, the data show no significant residual values for E-mail usage, $\chi^2(3, N = 2,597) = 8.002, p = 0.046$, and TV and VCR availability, $\chi^2(3, N = 2,597) = 13.517$, $p = 0.0036$. Advisors reported significant differences in access to computer hardware, $\chi^2(3, N = 2,597) = 28.587, p = 0.0001$, and computer software, $\chi^2(3, N = 2,597) = 36.358$, $p < 0.0001$. Those from research universities indicated higher than expected access; those from liberal arts colleges reported lower than expected access; and advisors from comprehensive colleges and universities as well as 2-year colleges expressed an expected level of access to computer hardware and software.

Advisors at all but liberal arts schools, who indicated a less than expected level of access ($\chi^2[3, N = 2,5971 = 11.972, p = 0.0075$), reported an expected level of Internet access. With regard to the other three types of technology, advisors from research universities reported higher than expected access to scanners, $\chi^2(3, N = 2,597) = 27.574, p < 0.0001$; photocopiers, $\chi^2(3, N = 2,597) = 10.719, p = 0.0133$; and fax machines, $\chi^2(3, N = 2,597) = 67.909, p < 0.0001$. For each of these three types of technology, advisors at comprehensive colleges and universities reported expected usage. Respondents at liberal arts colleges indicated an expected level of scanner and copier use but lower then expected usage of fax machines. Those from 2-year colleges expressed an expected availability of copiers but reported less than expected access to scanners and fax machines. All respondents, except those at 2-year colleges, who reported higher than expected access ($\chi^2[3, N = 2,5971 = 26.531, p < 0.0001$), reported that they had an expected level of access to videos. In a surprising result, advisors from research universities reported a lower than expected access to journals and other printed materials: $\chi^2(3, N = 2,597) = 25.324$, $p < 0.0001$. Advisors at comprehensive universities and colleges and 2-year colleges reported higher than expected access, and those from liberal arts colleges reported expected access to journals and other printed materials.

When I examined access to technology, print, and other advising-support resources by institutional size, I found that E-mail usage and video access were not significantly different among advisors at institutions of various sizes (Table 14). In addition, I found significant chi-square values but not significant standardized residuals for data regarding access to photocopiers, $\chi^2(5, N = 2,604) = 13.149, p = 0.0220$; TV and VCR, $\chi^2(5, N = 2,604) = 13.746$, $p = 0.0216$; and journals and other print materials, $\chi^2(5, N = 2,604) = 13.191$, $p = 0.00163$.

A general pattern emerged when I compared advisor use of technology-based resources by institutional size. Respondents from smaller institutions reported expected or lower than expected access to technology. Those from larger institutions reported expected or higher than expected levels of access to technology resources.

Advisors at schools with fewer than 1,000 and 1,000–2,499 undergraduates reported lower than expected access to computer hardware. An expected number of advisors from schools with enrollments ranging from 2,500 through 19,999 implied that hardware was available to them. Respondents from the largest institutions (20,000 or more undergraduates) had greater than expected access to hardware: $\chi^2(5, N = 2,604) = 41.404, p < 0.0001$.

For computer software availability, I found a similar pattern of responses as for hardware, except that advisors from institutions in the 10,000–19,999 undergraduates category also reported greater than expected access, $\chi^2(5, N = 2,604) = 52.340$, $p = 0.0001$. Internet access is as expected for advisors at all but small (1,000–2,499 enrollments) academies, who reported lower than expected access, and those from the largest institutions (20,000 or more enrollments) who reported greater than expected levels of access: $\chi^2(5, N = 2,604) = 26.389$, $p < 0.0001$.

Respondents from the smallest colleges (fewer than 1,000 undergraduates) indicated that access to scanners is less than expected, but for those at the largest institutions (20,000 or more enrollments), it is higher than expected: $\chi^2(5, N = 2,604) = 34.246$, $p < 0.0001$. Advisors at the small schools (fewer than 1,000 and 2,500–4,999 enrollments) also have less fax support than expected and those from institutions with 10,000 or more undergraduates have greater fax availability.

Reference

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NACADA Journal, 21(1 & 2), 15–31.

Author's Note

Readers are encouraged to exercise appropriate caution in generalizing the data and analyses herein reported. The voluntary nature of the respondents, coupled with the fact that 75% of the respondents were NACADA members, precludes us from considering these data to be representative of all advising in higher education. However, the number of respondents (2,695) lends credibility to the profile presented by the data. The frequencies and percentages are intended to provide a profile of overall academic advising and advising according to various subcategories of institutions (type, mission, and size) as reported by the NACADA membership and their associates. The chi-square analyses are intended to indicate those categories of institutions or advisors who differ significantly from the overall aggregate.

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A copy of the NACADA Academic Advising Survey 2000 may be obtained by contacting the NACADA Executive Office by E-mail at nacada@ksu.edu or by calling (785) 532-5717.

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