The 2011 SIOP Graduate Program Benchmarking Survey Part 6: Assistantships, Fellowships, and Resources

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In this, the sixth installment of the 2011 survey of I-O psychology graduate programs, we present norms on assorted features of student assistantships, fellowships/scholarships, and resources. Funding is an important part of graduate student education. In addition to providing financial subsistence (e.g., to pay the rent), assistantships and fellowships support work that contributes to students' professional development as researchers and teachers. The American Psychological Association (APA; Mulvey, Wicherski, & Kohout, 2010) reported that 91% of doctoral psychology programs offer some form of financial assistance, 91% offer teaching assistantships, 91% research assistantships, and 72% merit-based fellowships/scholarships to graduate students beyond their first year of study.¹ This section of the benchmarking survey sought details of funding and other resources offered by I-O psychology graduate programs.

As we have done in each previous installment, we offer overall norms and compare master's and doctoral programs in psychology and business/ management departments (i.e., 2 x 2 breakouts). We also consider norms for Gibby, Reeve, Grauer, Mohr, and Zickar's (2002) most productive doctoral programs and for Kraiger and Abalos's (2004) top master's and doctoral programs, separately, based on student ratings, in each case relative to peer programs (e.g., other psychology-based doctoral programs for both Gibby et al. and Kraiger & Abalos doctoral). Non-USbased programs are excluded here owing to questionable representativeness, and on-line-only programs are dropped from the 2 x 2 breakouts.² Norms for nominal and continuous variables are presented in separate tables, and statistical tests are offered for the 2 x 2 breakouts as cell sizes permit.

Table 1 Main Assistantship Features: Nominal Variables

						Psych	ology ^b				Busi	ness/M	anager	nent⁵	
	All	progra	ms ^a		Maste	r's		Docto	ral	_	Maste	er's		Docto	ral
Item/variable	N	Freq	%	N	Freq	%	N	Freq	%	N	Freq	%	N	Freq	%
Assistantships offered (yes = 1)	115	92	80.0	49	35	71.4	39	35	89.7	4	3	75.0	11	10	90.9
Assistantship decision process															
Individual faculty have first choice	75	30	40.0	27	11	40.7	29	14	48.3	3	0	.0	10	3	30.0
Junior faculty have first choice	75	8	10.7	27	4	14.8	29	3	10.3	3	0	.0	10	1	10.0
Senior faculty have first choice	75	3	4.0	27	3	11.1	29	0	.0	3	0	.0	10	0	.0
Decisions reached by consensus	75	50	66.7	27	14	51.9	29	22	75.9	3	1	33.3	10	8	80.0
Students allowed to veto their assignments	75	9	12.0	27	2	7.4	29	4	13.8	3	0	.0	10	2	20.0
Students arrange their own assistantships	75	13	17.3	27	7	25.9	29	1	3.4	3	2	66.7	10	0	.0
Restrictions to students on assistantship															
Not allowed to work in other paid jobs	85	22	25.9	32	5	15.6	33	10	30.3	3	0	.0	10	6	60.0
Only allowed to work in career-relevant paid jobs	85	12	14.1	32	3	9.4	33	6	18.2	3	0	.0	10	1	10.0
Must maintain a minimum number of course hours	85	61	71.8	32	21	65.6	33	25	75.8	3	2	66.7	10	7	70.0
Must maintain a minimum grade point average	85	57	67.1	32	18	56.3	33	23	69.7	3	2	66.7	10	7	70.0

^aExcluding non-US. ^bExcluding non-US and online only.

In the survey, an assistantship was defined as "a job undertaken by a student under the auspices of the host program, department, or some other university entity," whereas a fellowship/ scholarship "offers financial support with no putative job duties." Detailed normative results for each funding type are offered respectively in the next two major sections, followed by norms for student resources. We finish with the top-10 comparisons.

Assistantships

Norms for main assistantship nominal variables are provided in Table 1, with corresponding statistical results in Table 2. Of the 88 (US) responding I-O programs, 80% offer assistantships. The rate is higher for doctoral than for master's programs (90% vs. 72%) but does not differ significantly between department types. The primary means of assigning

assistantships to students is by consensus among I-O faculty (66%), which holds especially in doctoral (77%) over master's programs (50%). Secondarily, assistantships appear to be aligned with individual faculty needs in around 40% of programs.³ Yielding to junior or senior faculty preferences is relatively rare (overall 11% and 4%, respectively), although senior faculty appear to have greater say in master's than in doctoral programs (10% vs. 0%, respectively). Students are involved in arranging their own assistantships in around 17% of all responding programs, and the rate is notably higher in master's programs (30% vs. 3% in doctoral).

Norms at the bottom of Table 1 show that two fairly common practices are to require students on assistantship to maintain a minimum number of credit hours (72% of programs offering assistantships) and a minimum GPA (67%).

	Master's vs.	Psych vs.	
Variable	doctoral	Bus/Mgmt	2-way
Assistantships offered by program (yes = 1)	5.32 *	.04	.00
Assistantship decision process			
Individual faculty have first choice	.80	2.60	1.36
Junior faculty have first choice	.09	.20	.71
Senior faculty have first choice	4.56 *	.67	.00
Decisions reached by consensus	5.34 *	.02	.43
Students allowed to veto their assignments	1.17	.06	.59
Students arrange their own assistantships	12.00 **	.86	1.67
Restrictions to students on assistantship			
Not allowed to work in other paid jobs	4.24 *	1.54	2.25
Only allowed to work in career-relevant paid jobs	1.35	.70	.27
Must maintain a minimum number of course hours	.77	.08	.05
Must maintain a minimum grade point average	1.20	.04	.08

Chi Square Results for Main Assistantship Features: Nominal Variables

#p < .10, *p < .05, **p < .01, two-tailed.

Neither proportion varies significantly across degree and department types. Around 26% of programs do not permit students on assistantship to be employed elsewhere, and this rate is higher in doctoral than in master's programs (37% vs. 14%). A small proportion of programs (14%) permit extra employment if career related. We infer from those results that 60% of assistantshipoffering programs⁴ allow students on assistantship to be employed elsewhere without regard to career development.⁵

Overall norms for main continuous variables regarding assistantships are offered in Table 3. The 2 x 2 breakouts are provided in Tables 4 and 5, with corresponding statistical results in Table 6.⁶ At the general level, assistantship types are predominantly teaching only (23.3% + 12.4% = 35.7%), followed by research only (26%), hybrids (22%), and administrative roles (16%).

Patterns vary somewhat across program types (p < .10, two-tailed⁷): both research-only and student-led-teaching assistantships are more prevalent in doctoral than in master's programs (32% vs. 21% and 17% vs. 9%, respectively),⁸ whereas administrative-only assistantships show the reverse pattern (4% vs. 25%). These effects capture predictable differences between degree types in academic skill sets, doctoral students being relied on more than master's students for teaching and research.

Moving down Tables 3 to 6, we see that assistantships are funded mostly from internal sources (85.5%), which gener-

Item/Variable	Ν	Mean	SD	Skew	Median	Min	Max
% of assistantship types awarded to students							
Research only	90	26.04	25.51	.89 **	20.0	0	100
Teaching only: faculty assistant	90	23.29	28.38	1.07 **	10.0	0	100
Teaching only: student-led courses	90	12.37	19.98	2.42 **	0.0	0	100
Administrative only	90	16.36	28.16	1.99 **	0.0	0	100
Hybrid	90	21.94	35.03	1.43 **	0.0	0	100
% of assistantship funding sources							
Internal	90	85.53	20.78	-1.59 **	95.0	20	100
External granting agency	90	11.20	17.48	1.91 **	0.0	0	75
External business	90	3.27	9.53	3.52 **	0.0	0	50
Award type: dollars per year per student							
Total stipend	72	11,028.18	6,486.21	.08	12,000.0	0	25,000
Total tuition waiver	73	7,967.05	6,472.85	.74 **	7,800.0	0	30,000
Travel expenses	73	178.08	428.09	2.97 **	0.0	0	2,000
Research expenses	73	87.67	236.85	2.87 **	0.0	0	1,000
Other	73	78.08	414.07	5.72 **	0.0	0	2,500
Total	73	19,187.99	10,195.06	.41	19,000.0	0	50,200
% of assistantships supervised by							
Academic advisor	71	41.54	37.10	.44	30.0	0	100
Non-advisor IO faculty member	71	25.66	28.95	1.26 **	20.0	0	100
Non-IO departmental faculty member	71	16.19	25.00	1.91 **	0.0	0	100
Non-departmental faculty member	71	4.42	10.99	2.90 **	0.0	0	60
College administrator	71	10.69	24.70	2.91 **	0.0	0	100
Other	71	1.41	6.77	6.11 **	0.0	0	50
% of students in same assistantship across se	80	62.66	32.93	47	72.5	0	100

Table 3 Main Assistantship Features: Continuous Variables

types. In the next section of the tables, assistantship stipends are shown to average around \$11,000 per year, followed by tuition waivers averaging another \$8,000 per year.⁹ Other remuneration¹⁰ sources (e.g., travel expenses) are relatively trivial. A number of effects emerge for remuneration type by department and degree types (see Table 6). Figure 1 plots the means for the 2 x 2 breakouts on this variable. The significant threeway interaction appears most clearly attributable to the especially low mean for annual stipends in businessmanagement master's programs. More precisely, the difference in stipends be-

ally holds across degree and department tween doctoral and master's programs in business/management departments (\$19,857 - \$3,667 = around \$16,000) is more than double the corresponding difference within psychology departments (\$13,908 - \$6,684 = around \$7,000), whereas the difference in tuition coverage between doctoral and master's programs in business/ management (\$9,981 - \$11,667 = around \$2,000 less for doctoral) is opposite the difference in psychology departments (\$8,991 - \$5,541 = around \$3,000 more for doctoral).

> Summing across remuneration types, total funding is around \$8,300 higher in busi-

וממוד האאוגעווואווף רכענמרפא. כטונותטטא עמוומטופא ווו ואטאנירן א מוע טבערארייקע איז אראירוטוטאן טבקטו נוווגרווא אואראל האמיזאיז		ININIAL STATE	יוות החרוו	Victor's programs		Shrinnin	indan ki	ווובוור	0	6	Doctoral processor	10000000		
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Item/variable	Z	Mean	SD	Skew	Median	Min	Max	N	Mean	SD	Skew	Median	Min	Max
% of assistantship types awarded to students														
Research only	35	20.74	24.94	1.34 **	10.0	0	60	34	28.97	24.80	.93 *	25.0	0	100
Teaching only: faculty assistant	35	26.54	32.26	1.16 **	15.0	0	100	34	27.85	26.79	.55	20.0	0	80
Teaching only: student-led courses	35	10.23	20.72	2.95 **	0.0	0	100	34	17.00	21.75	2.07 **	10.0	0	95
Administrative only	35	25.34	31.22	1.34 **	10.0	0	100	34	5.44	11.57	2.51 **	0.0	0	50
Hybrid	35	17.14	30.25	1.83 **	0.0	0	100	34	20.74	36.21	1.59 **	0.0	0	100
% of assistantship funding sources														
Internal	35	93.00	14.61	-2.46 **	100.0	40	100	34	73.62	24.84	79	80.0	20	100
External granting agency	35	4.71	10.91	2.85 **	0.0	0	50	34	22.00	21.79	1.00 *	15.0	0	75
External business	35	2.29	6.79	3.35 **	0.0	0	30	34	4.38	11.02	2.89 **	0.0	0	50
Award type: dollars per year per student														
Total stipend	26	6,684.04	4,842.75	1.22 *	6,000.0	0	22,000	30	13,908.13	4,330.16	05	13,000.0	3,100	23,000
Total tuition waiver	26	5,541.83	5,542.38	1.02 *	3,917.8	0	18,800	30	8,991.23	6,663.86	1.02 *	8,000.0	0	30,000
Travel expenses	26	44.23	128.32	2.83 **	0.0	0	500	80	133.33	404.36	3.98 **	0.0	0	2,000
Research expenses	26	23.08	99.23	4.82 **	0.0	0	500	30	93.33	267.73	2.98 **	0.0	0	1,000
Other	26	115.38	496.14	4.82 **	0.0	0	2,500	30	90.00	456.64	5.42 **	0.0	0	2,500
Total	26	12,408.56	7,025.88	1.01 *	10,111.0	3,000	31,100		23,216.03	8,424.86	.58	24,528.0	3,100	50,200
% of assistantships supervised by														
Academic advisor	29	30.21	36.27	1.08 *	15.0	0	100	23	52.17	33.87	.17	50.0	0	100
Non-advisor IO faculty member	29	24.03	31.51	1.50 **	10.0	0	100	23	23.26	22.89	1.77 **	20.0	0	100
Non-IO departmental faculty member	29	25.34	33.08	1.21 **	10.0	0	100	24	13.54	17.23	1.43 **	7.5	0	65
Non-departmental faculty member	29	6.52	13.94	2.54 **	0.0	0	60	23	5.43	10.65	1.73 **	0.0	0	30
College administrator	29	12.17	22.66	2.67 **	0.0	0	100	23	3.48	8.32	2.35 **	0.0	0	30
Other	29	1.72	9.29	5.39 **	0.0	0	50	23	1.96	5.79	3.37 **	0.0	0	25
% of students in same assistantship across semesters	31	83.65	20.65	-1.78 **	90.06	20	100	29	46.21	30.99	.24	50.0	0	100
Note: Excluding non-US and on-line only. $*p < .05$, $**p < .01$, two-tailed	ailed													

Table 4 Main Assistantship Features: Continuous Variables in Master's and Doctoral Programs in Psychology Departments

Table 5 Main Assistantship Features: Continuous Variables in Master's and Doctoral Programs in Business/Management Departments.	ibles i	n Master'	s and Doc	storal Pro	grams in B	usiness/	'Manage	ment	Departm	ents.	-			
	I			Master's programs	ograms			1			Doctoral programs	rograms		
ltem/Variable	Z	Mean	SD	Skew	Median	Min	Max	2	Mean	SD	Skew	Median	Min	Max
% of assistantship types awarded to students	ſ	00 00	30.40		0.04	c	C	07	00.01	10.00	ç	0 0 1	c	00
	n	30.00	20.40	0+T-	40.0	5	DC -	2	40.80	15.05	70	0.00	5	20
Teaching only: faculty assistant	m	0.00	0.00	0.	0.0	0	0	10	14.00	23.66	1.35	0.0	0	60
Teaching only: student-led courses	m	0.00	0.00	00.	0.0	0	0	10	16.70	17.35	.93	12.5	0	50
Administrative only	e	20.00	20.00	00:	20.0	0	40	10	0.00	00.0	00	0.0	0	0
Hybrid	e	50.00	43.59	1.63	30.0	20	100	10	28.50	41.64	1.16	0.0	0	100
% of assistantship funding sources														
Internal	m	100.00	0.00	00	100.0	100	100	10	95.50	5.99	72	100.0	85	100
External granting agency	ŝ	0.00	0.00	00.	0.0	0	0	10	4.00	5.16	.48	0.0	0	10
External business	e	0.00	0.00	00	0.0	0	0	10	0.50	1.58	3.16 **	0.0	0	S
Award type: dollars per year per student														
Total stipend	e	3,666.67	3,785.94	1.60	2,000.0	1,000	8,000	2	19,857.14	2,672.61	1.24	20,000.0	17,000	25,000
Total tuition waiver	ŝ	11,666.67	1,527.53	94		10,000	13,000	7	9,981.43	6,037.26	.92	10,000.0	1,400	21,504
Travel expenses	e	0.00	0.00	00			0	7	1,050.00	548.48	.83	1,000.0	500	2,000
Research expenses	e	0.00	0.00	00	0.0	0	0	7	428.57	345.03	.17	500.0	0	1,000
Other	e	0.00	0.00	00	0.0	0	0	7	0.00	0.00	00	0.0	0	0
Total		15.333.33	4.932.88	1.65	13.000.0	12.000	21.000	~	31.317.14	6.851.30	.13	32.000.0	20.500	42.754
% of assistantships supervised by														
Academic advisor	m	9.33	16.17	1.73	0.0	0	28	6	54.44	34.32	22	50.0	0	100
Non-advisor IO faculty member	ŝ	73.33	30.55	94	80.0	40	100	6	33.33	28.28	.03	40.0	0	80
Non-IO departmental faculty member	e	12.00	10.58	-1.46	16.0	0	20	6	1.11	3.33	3.00 **		0	10
Non-departmental faculty member	e	0.00	0.00	00	0.0	0	0	6	0.00	0.00	00		0	0
College administrator	e	5.33	9.24	1.73	0.0	0	16	6	11.11	33.33	3.00 **	0.0	0	100
Other	e	0.00	0.00	00.	0.0	0	0	6	0.00	00.0	00		0	0
% of students in same assistantship across semesters	ŝ	63.33	23.09	1.73	50.0	50	06	6	48.33	28.40	.20	50.0	0	100
Note: Excluding non-US and on-line only. * $p < .05$, ** $p < .01$, two-tailed	iled													
Table 6														
ANOVA Results for Repeated Measures Continuous Variables Involving Assistantships	es Co	ntinuous	s Variab.	les Invol	vina Assis	stantsh.	ias							
					0				F					
		N levels						Mas	Masters vs.	Maste	Masters vs.	Psych vs.		
		of RM			Masters vs.	s. Psych vs.	n vs.	doc	doctoral by	docto	doctoral by	Bus/Mgmt by	λc	
Repeated measures (RM) variable		variable	RM võ	RM variable	doctoral	Bus/Mgmt		sych	Psych vs. Bus/M		RM variable	RM variable		3-way
% of assistantship types awarded to students		ы		3.75 **	I	1	1		I	2.3	2.35 #	1.71		.31
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The Industrial Organizational Psychologist

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.84

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22.42 **

67.35 ** 39.00 **

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% of assistantships supervised by . . . 6 Note: Excluding non-US and online only. #p < .10, *p < .05, **p < .01, two-tailed

Award type: dollars per year per student

ness/management than in psychology departments (\$26,522 vs. \$18,198) and around \$12,000 higher in doctoral than in master's programs (\$24,749 vs. \$12,711). The gap in total assistantship funding is greater between department types at the doctoral level (\$31,317 - \$23,216 = around \$8,100) than at the master's level (i.e., \$15,333-\$12,409 = around \$2,900). These latter four means also show that master's students in both department types earn about half what their doctoral counterparts earn (i.e., \$12,409 vs. \$23,216, respectively, for psychology, and \$15,333 vs. \$31,317 for business/management). As values for business/management master's programs are based on just three cases (and the number of business/management doctoral programs is only seven), representativeness of corresponding populations is uncertain. Results nonetheless suggest complex patterns of assistantship funding by types of remuneration, department, and degree.

Norms for assistantship supervisor types are offered further down Tables 3 to 5. Corresponding statistical results in Table 6 show a main effect for supervisor type. As shown in Table 3, the modal type for all programs combined is the student's academic advisor (41.5%), followed by other I -O faculty members (25.7%). There is also a significant two-way interaction between supervisor and department types: Proportions for most supervisor types are similar between departments except nonadvisor I -O faculty are relied on more in business/ management (43.3% vs. 23.7% in psychology), whereas non-I-O department faculty are relied on more in psychology (20.0% vs. 3.8% in business/management). This may reflect greater uniqueness of I-O student skill sets in business/management than in psychology departments. That is, I-O students may have less to contribute (as assistants) to non-I-O business faculty than to non-I-O psychology faculty.

The last rows in Tables 3 to 5 contain results for the stability of assistantship assignments across semesters. Based on all contributing programs, the mean of 62.7% suggests a norm of relative stability. An F test (top of Table 7) shows that stability is significantly greater in master's than in doctoral programs (81.9% vs. 46.7%). This no doubt reflects the shorter timeline for the master's degree, limiting opportunity for switching, but could further reflect greater demand in doctoral programs for studentsupervisor compatibility in research interests and work styles (i.e., doctoral students may switch more in pursuit of the best-fitting research advisor).

Table 8 contains norms on assorted temporal features of assistantships for the total available sample and the 2 x 2 breakouts. The overall average of official assistantship hours per week is around 17, the mean actual hours worked per week is 15.5, and the mean percentage of actualto-official hours is 92%. Assistantships av-

		F	
Univariate dependent variable	Master's vs. doctoral	Psych vs. Bus/Mgmt	2-way
% of students remaining in assistantship across semesters	7.75 **	* .93	1.42
Assistantship duration variables			
Official hours per week of typical assistantship	22.10 **	* 4.50 *	6.07 *
Average hours per week of actual work	12.70 **	* .41	6.04 *
% official hours actually worked	.18	2.64 #	.14
Overall duration of assistantship in months	7.01 **	* 1.13	4.22 *
Years of assistantship funding typically awarded	81.79 **	* .17	2.09
Years of guaranteed assistantship funding	54.22 **	* 1.61	5.36 *
Fellowships/scholarships			
% of students on fellowships/scholarships	1.11	.77	1.27
Avg./typical F/S funding per student per yr. (\$)	12.55 **	* .08	.19
Max research funding available per student	1.10	.18	.10

Table 7 Univariate ANOVA Results for Variables Involving Assistantships and Fellowships/Scholarships

Note: Excluding non-US and on-line only. p < .10, p < .05, p < .01, two-tailed

erage 8.4 months in overall duration, and funding is offered for 1.3 years, on average, in the context of mean assurances to fund for .5 years. Providing more years of funding than what has been guaranteed may reflect a legally minded avoidance of overpromising. Dispersion indices (e.g., ranges) show substantial variability across programs on each of those variables, weakening normative generalizations. Some of that variability is explained by program and degree types, as follows.

Statistical test results for the 2 x 2 breakouts on the six duration variables are offered in Table 7. A number of significant effects are evident, including two-way interactions in four cases. To facilitate interpretations, subgroup means on all six variables are plotted in Figures 2 to 7. Two major patterns of findings are that (a) assistantships tend to last longer in doctoral than in master's programs, and (b) durational differences between master's and doctoral assistantships are more pronounced in business/management than in psychology

departments. The first theme reflects the overall difference in timelines for earning the two degrees (typically 2 vs. 5 years). The second suggests greater differentiation in investments between master's and doctoral students in business/management departments. Guaranteed funding for doctoral assistants, in particular, averages a year and a half longer in business/management than in psychology departments (and, operating in the opposite direction, 0 vs. 5 months at the master's level).

Also noteworthy is a departmental difference in mean percentages of official hours per week actually worked: business/management = 99.8% and psychology = 89.4% (p < .10, two-tailed). Two possible (and compatible) reasons for this are that (a) business school I-O programs expect more out of their student assistants, and (b) business students are especially primed and eager to make strong professional impressions on their supervisors and mentors.¹¹

Assistantship Work Duration Variables

Subgroup/variable	Ν	Mean	SD	Skew	Median	Min	Max
All programs ^a							
Official hrs/week of typical assistantship	90	16.96	4.60	-1.11 **	20.0	5	22
Average hrs/week of actual work	87	15.51	5.31	.08	15.0	5	30
% official hours actually worked	87	92.11	19.82	.61 *	100.0	50	167
Overall duration of typical assistantship in months	89	8.43	2.38	95 **	9.0	3	12
Yrs of funding typically awarded per student	86	2.84	1.75	.16	2.0	0	6
Yrs of guaranteed funding	85	1.75	1.83	.65 *	1.0	0	6
Psychology master's programs ^b							
Official hrs/week of typical assistantship	35	15.34	4.91	40	15.0	5	20
Average hrs/week of actual work	34	14.06	4.78	22	15.0	5	20
% official hours actually worked	34	91.90	14.78	97 *	100.0	50	120
Overall duration of typical assistantship in months	35	8.17	2.44	89 *	9.0	3	12
Yrs of funding typically awarded per student	32	1.34	0.65	49	1.0	0	2
Yrs of guaranteed funding	33	0.45	0.67	1.19 **	0.0	0	2
Psychology doctoral programs ^b							
Official hrs/week of typical assistantship	34	18.60	3.86	-2.58 **	20.0	5	22
Average hrs/week of actual work	32	15.98	5.21	.01	15.0	5	30
% official hours actually worked	32	86.72	21.14	.36	90.5	50	150
Overall duration of typical assistantship in months	34	8.65	1.95	-1.78 **	9.0	3	12
Yrs of funding typically awarded per student	33	4.12	1.39	-1.13 **	5.0	1	6
Yrs of guaranteed funding	31	2.65	1.76	.15	3.0	0	6
Business master's programs ^b							
Official hrs/week of typical assistantship	3	8.67	1.15	1.73	8.0	8	10
Average hrs/week of actual work	3	8.67	1.16	1.73	8.0	8	10
% official hours actually worked	3	100.00	0.00	.00	100.0	100	100
Overall duration of typical assistantship in months	3	5.67	2.89	1.73	4.0	4	9
Yrs of funding typically awarded per student	3	0.67	0.58	-1.73	1.0	0	1
Yrs of guaranteed funding	3	0.00	0.00	.00	0.0	0	0
Business doctoral programs ^b							
Official hrs/week of typical assistantship	10	19.10	1.91	-1.85 *	20.0	15	20
Average hrs/week of actual work	10	19.15	5.21	.99	19.0	13	30
% official hours actually worked	10	99.71	22.52	1.40	96.9	75	150
Overall duration of typical assistantship in months	9	9.44	2.51	-1.14	9.0	4	12
Yrs of funding typically awarded per student	10	4.50	0.71	-1.18	5.0	3	5
Yrs of guaranteed funding	10	4.20	0.63	13	4.0	3	5

^aExcluding non-US. ^bExcluding non-US and on-line only. *p < .05, **p < .01, two-tailed.

Fellowships

Norms for two nominal fellowship variables are provided in Table 9 and corresponding statistical results are in Table 10. All told, around 78% of programs offer fellowships, and the rate is higher for doctoral (98%) than for master's programs (64%). Summer fellowship funding is provided in 63% of programs offering fellowships, and this rate is also higher in doctoral than in master's programs (89% vs. 40%, respectively). Norms for continuous variables regarding fellowships are reported Table 11, with corresponding statistical results in Tables 7 and 12.¹²

Averaging across all responding programs, around 20% of students are on fellowship, a proportion not significantly different across program types. The mean annual funding for fellowships is around \$12,000 per student, with substantially greater funds provided in doctoral programs (\$15,859) than in master's programs (\$5,932). The overall mean percentage of students on fellowship who receive summer funding is 51%. The percentage in psychology master's programs (12%) is significantly less, however, than that in psychology doctoral programs (52%), which, in turn, is significantly less than that in business/ management doctoral programs (95%).

The overall mean summer funding is around \$3,300 per student, and this varies significantly (p < .10, two-tailed) between psychology master's (\$2,700) and doctoral programs (\$3,768). Maximum research funding for students on fellowship averages around \$2,900, which is relatively consistent across program types. A general theme in these norms is that fellowships are more common and better funded in doctoral than in master's programs. Differences in fellowships between department types are less prominent.

Table 9

Main Fellowship/Scholarship (F/S) Features: Nominal Variables

	-		
Subgroup/Variable	Ν	Freq	%
All programs ^a			
Students are eligible for fellowships/scholarships	117	91	77.8
Summer F/S funding granted to students	131	83	63.4
Psychology master's programs ^b			
Students are eligible for fellowships/scholarships	50	31	62.0
Summer F/S funding granted to students	55	22	40.0
Psychology doctoral programs ^b			
Students are eligible for fellowships/scholarships	39	38	97.4
Summer F/S funding granted to students	42	38	90.5
Business master's programs ^b			
Students are eligible for fellowships/scholarships	5	4	80.0
Summer F/S funding granted to students	7	3	42.9
Business doctoral programs ^b			
Students are eligible for fellowships/scholarships	11	11	100.0
Summer F/S funding granted to students	12	10	83.3
Note ^{, a} Excluding non-LIS ^b Excluding non-LIS and online only			

Note: ^a Excluding non-US. ^D Excluding non-US and online only.

	Masters vs.	Psych vs.	
Variable	doctoral	Bus/Mgmt	2-way
Students are eligible for fellowships/scholarships	21.40 **	.99	.21
Summer funding granted to students	31.48 **	.10	.37

Chi Square Results for Main Fellowship/Scholarship Features Nominal Variables

#p < .10, *p < .05, **p < .01, two-tailed.

Table 11

Table 10

Main Fellowship/Scholarship (F/S) Features: Continuous Variables

Subgroup/variable	Ν	Mean	SD	Skew	Median	Min	Max
All programs ^a							
% of students on fellowships/scholarships	83	20.10	24.50	2.41 **	10.0	0	100
Average/typical F/S funding per student per year (\$)	64	12,057.00	9,157.19	.45	10,000.0	500	30,000
% of students receiving F/S summer funding	49	51.10	35.84	.13	50.0	1	100
Avg./typical summer F/S funding per student (\$)	42	3,303.51	1,597.53	.57	3,000.0	465	7,000
Max research funding available per student (\$)	79	2,921.52	8,267.36	4.99 **	500.0	0	50,000
Psychology master's programs ^b							
% of students on fellowships/scholarships	26	18.25	24.39	2.46 **	10.0	0	95
Average/typical F/S funding per student per year (\$)	18	5,861.11	6,340.73	1.87 **	5,000.0	500	25,000
% of students receiving F/S summer funding	11	12.00	10.56	.80	10.0	1	33
Avg./typical summer F/S funding per student (\$)	13	2,699.81	1,803.16	1.18	2,432.5	465	7,000
Max research funding available per student (\$)	34	2,120.59	8,631.80	5.51 **	250.0	0	50,000
Psychology doctoral programs ^b							
% of students on fellowships/scholarships	37	17.68	23.07	2.86 **	10.0	0	100
Average/typical F/S funding per student per year (\$)	30	16,254.93	7,821.95	.04	16,750.0	3,000	30,000
% of students receiving F/S summer funding	27	51.74	29.22	.11	50.0	2	100
Avg./typical summer F/S funding per student (\$)	22	3,768.18	1,508.27	.44	3,750.0	1,500	7,000
Max research funding available per student (\$)	24	4,220.83	10,545.35	4.01 **	1,100.0	0	50,000
Business master's programs ^b							
% of students on fellowships/scholarships	4	16.25	9.46	1.66	12.5	10	30
Average/typical F/S funding per student per year (\$)	4	6,250.00	6,184.66	.20	5,500.0	1,000	13,000
% of students receiving F/S summer funding	0	-	-	-	-	-	-
Avg./typical summer F/S funding per student (\$)	0	_	_	-	-	-	-
Max research funding available per student (\$)	4	0.00	0.00	.00	0.0	0	0
Business doctoral programs ^b							
% of students on fellowships/scholarships	11	33.64	34.79	1.52 *	20.0	5	100
Average/typical F/S funding per student per year (\$)	8	14,375.00	10,193.66	.00	15,000.0	2,500	27,000
% of students receiving F/S summer funding	9	95.00	10.00	-1.69 *	100.0	75	100
Avg./typical summer F/S funding per student (\$)	5	3,350.00	1,112.43	.10	3,000.0	2,000	4,500
Max research funding available per student (\$)	9	3,900.00	2,911.62	.94	4,000.0	500	10,000

^aExcluding non-US. ^bExcluding non-US and online only. bExcluding non-US and online only.

Student Resources

We asked programs to rate students' dependence on having their own personal computers using a 0 = *highly de*- pendent to 3 = highly independent scale, and to rate 18 specific resources using a 0 = unavailable to 4 = superior scale. Overall norms per resource are reported in Table 13 and the 2 x 2 breakouts in

Univariate t-Test Results for Variables Involving Fellowships/Scholarships (F/S)

	t	
	Psych	Doctoral
	master's vs.	Psych vs.
Univariate dependent variable	doctoral	Bus/Mgmt
% of students receiving F/S summer funding	-6.15 **	-6.62 **
Avg./typical summer F/S funding per student (\$)	-1.88 #	.71

Note: Excluding non-US and online only. #p < .10, *p < .05, **p < .01, two-tailed

Tables 14 and 15. Of the 18 specific resources, the highest overall ratings are for access to library services (mean = 3.72) and literature search platforms (mean = 3.69), whereas the lowest ratings are for on-campus childcare (mean = 1.52) and phone privileges (mean = 1.86). ANOVA results for the 2 x 2 breakouts are reported in Table 16. No 2 x 2 interactions were identified, but several main effects emerged. Specifically, doctoral programs rated the following resources higher than did master's programs: university-sponsored health insurance, printing, photocopying, literature search platforms, and access to computers. Ratings were also significantly higher for business/management programs than for psychology programs on phone privileges, on-campus housing, university-sponsored health insurance, on-campus medical services, and access to computers.

In an effort to consolidate comparisons on resources across program types, we entered the 18 resource variables into a principal components analysis (PCA) using varimax rotation (N = 98). One variable (graduate student lounge) defined its own factor and so was dropped from the analysis. PCA results based on the remaining 17 variables (subject-to-variable ratio = 5.8:1) are reported in Table 17, and ANOVA results for components are at the bottom of Table 16. First, with respect to the PCA per se, five interpretable factors were identified (minimum eigenvalue = 1.01), together accounting for 74% of the variance. The factors were labeled campus life (e.g., on-campus housing), computing services (e.g., computer hardware), library services (e.g., access to library services), administrative services (e.g., printing), and food and entertainment (e.g., local cultural amenities/entertainment). ANOVA (per component as DV) yielded a total of three significant effects out of 15 possibilities (20%).

Student Resources							
Subgroup/variable	Ν	Mean	SD	Skew	Median	Min	Max
Student dependence on personal computers ^a	114	2.01	.79	45 *	2.0	0	3
Overall quality of student resources ^b							
Computer hardware	111	3.24	.59	-1.19 **	3.0	0	4
Basic computer software	112	3.30	.61	-1.24 **	3.0	0	4
Statistical software	111	3.28	.65	-1.16 **	3.0	0	4
Access to computers	114	3.36	.58	-1.35 **	3.0	0	4
Basic library services	114	3.59	.58	-1.34 **	4.0	1	4
Literature search platforms	114	3.69	.48	-1.09 **	4.0	2	4
Access to library services	114	3.72	.49	-1.44 **	4.0	2	4
Printing	114	2.99	.84	-1.19 **	3.0	0	4
Photocopying	113	2.92	.87	-1.26 **	3.0	0	4
University-sponsored health insurance	113	2.79	1.07	-1.38 **	3.0	0	4
On-campus medical services	112	2.71	1.13	-1.41 **	3.0	0	4
On-campus housing	107	2.17	1.31	62 **	3.0	0	4
Child-care	110	1.52	1.46	.19	2.0	0	4
Intramural sports	107	2.50	1.38	88 **	3.0	0	4
Phone privileges	105	1.86	1.43	21	2.0	0	4
Graduate student lounge	109	2.26	1.20	84 **	3.0	0	4
Food services	109	2.76	1.04	-1.59 **	3.0	0	4
Local cultural amenities/entertainment	112	3.40	.74	-1.48 **	4.0	0	4

Note: Excluding non-US and online only. *p < .05, **p < .01, two-tailed

^a 0 = Highly dependent: students lacking their own computer are likely to fail, 1 = moderately dependent: students lacking
 ^b 0 = Unavailable, 1 = Very poor, 2 = Poor, 3 = Adequate, 4 = Superior

Specifically, (a) campus life was rated higher by business/management than by psychology programs, (b) administrative services received higher ratings in doctoral than in master's programs, and (c) there was also a two-way interaction on this latter variable, such that the gap between degree types was more pronounced in business/management (mean component scores = -.87 vs. .57 for master's and doctoral programs, respectively) than in psychology (-.13 vs. .21).

Top-10 Programs

Statistical tests comparing each of the three top-10 program sets (Gibby et al., 2002; Kraiger & Abalos, 2004) to corresponding peer programs (e.g., other psychology doctoral I-O programs for both Gibby and K&A doctoral sets) yielded a total of 21 significant effects (p < .10, two-tailed) out of a possible 207 (i.e., 69 variables per set). As the proportion of significant effects (10.1%) is very close

Master's programs								
-					Doctoral programs	ograms		
Skew Median	Median Min Max	lax	N Mean	1 SD	Skew	Median Min Max	Min	Иах
38 2.0	0	m	38 2.03	3 .72	04	2.0	Ļ	m
30 3.0	7	4	37 3.24	t .50	.49	3.0	2	4
.19 3.0	2	4	37 3.32	53	.18	3.0	2	4
13 3.0	2	4	37 3.35	59	25	3.0	2	4
.80 * 3.0	ŝ	4	38 3.37	7 .49	.57	3.0	ŝ	4
1.14 ** 3.0	1	4	38 3.63	3 .54	-1.10 **	4.0	2	4
74 * 4.0	2	4	38 3.68	3 .47	83 *	4.0	ŝ	4
91 ** 4.0	2	4	38 3.84	t .37	-1.95 **	4.0	ŝ	4
51 3.0	1	4	38 3.16	5 .72	-1.17 **	3.0	-	4
47 3.0	1	4	38 3.00) .84	-1.74 **	3.0	0	4
1.18 ** 3.0	0	4	38 3.03	3 .82	67	3.0	-	4
1.47 ** 3.0	0	4	38 2.62	l 1.26	-1.23 **	3.0	0	4
42 3.0	0	4	36 2.08	3 1.23	66	2.0	0	4
.44 0.0	0	4	37 1.59	9 1.46	.14	2.0	0	4
77 * 3.0	0	4	35 2.69	9 1.43	-1.01 *	3.0	0	4
.31 1.0	0	4	34 2.03	3 1.36	52	2.0	0	4
94 ** 3.0	0	4	36 2.25	5 1.25	97 *	3.0	0	4
2.14 ** 3.0	0	4	37 2.57	7 1.28	-1.21 **	3.0	0	4
-1.28 ** 4.0	1	4	38 3.39	68.	69	3.5	7	4
				$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$

^a 0 = Highly dependent: students lacking their own computer are likely to fail, 1 = moderately dependent: students lacking their own computer are disadvantaged, 2 = moderately . : . . ^b 0 = Unavailable, 1 = Very poor, 2 = Poor, 3 = Adequate, 4 = Superior

Table 14

	Student Resources in Master's and Doctoral Programs in Bu	
Table 15	Student Resources in	

Student Resources in Master's and Doctoral Programs in Business/Management Departments	cton	al Pro	grams	in Busin	ess/Mai	nage	ment l	npdəc	tment	S				
			Z	Master's programs	ograms						Doctoral programs	ograms		
Item/variable	2 2	Mean	SD	Skew	Median	Min	Max	2	Mean	SD	Skew	Median	Min Max	Мах
Student dependence on personal computers ^a 5		2.20	.84	51	2.0	1	3	11	1.64	1.12	16	2.0	0	ю
Overall quality of student resources ^b														
Computer hardware	ъ	3.40	.55	.61	3.0	£	4	11	3.55	.52	21	4.0	ŝ	4
Basic computer software	ъ	3.40	.55	.61	3.0	ŝ	4	11	3.64	.51	66	4.0	ŝ	4
Statistical software	4	3.25	.50	2.00	3.0	£	4	11	3.45	.52	.21	3.0	ŝ	4
Access to computers	ъ	3.40	.55	.61	3.0	£	4	11	3.82	.41	-1.92 **	4.0	ε	4
Basic library services	ъ	3.60	.55	61	4.0	ŝ	4	11	3.82	.41	-1.92 **	4.0	ŝ	4
Literature search platforms	ъ	3.60	.55	61	4.0	£	4	11	4.00	8 [.]	00.	4.0	4	4
Access to library services	ы	3.80	.45	-2.24 *	4.0	e	4	11	3.82	.41	-1.92 **	4.0	e	4
Printing	ъ	2.60	1.34	.17	2.0	Ч	4	11	3.45	.52	.21	3.0	ŝ	4
Photocopying	4	2.50	1.29	00 [.]	2.5	1	4	11	3.45	69.	93	4.0	7	4
University-sponsored health insurance	ъ	2.80	1.10	-1.29	3.0	Ч	4	11	3.64	.51	66	4.0	ŝ	4
On-campus medical services	ഹ	3.00	.71	00 [.]	3.0	2	4	11	3.45	.52	.21	3.0	e	4
On-campus housing	4	3.25	96.	86	3.5	2	4	11	2.91	.70	.12	3.0	2	4
Child-care	4	2.00	1.41	-1.41	2.5	0	ŝ	11	1.73	1.42	44	2.0	0	e
Intramural sports	4	3.25	.50	2.00	3.0	e	4	11	3.00	.78	-1.58 *	3.0	1	4
Phone privileges	4	2.75	.50	-2.00	3.0	2	ŝ	11	3.09	.94	-1.08	3.0	1	4
Graduate student lounge	4	2.00	1.41	-1.41	2.5	0	ŝ	11	2.36	.67	59	2.0	1	ŝ
Food services	4	3.25	96.	86	3.5	2	4	11	2.82	.60	.03	3.0	2	4
Local cultural amenities/entertainment	4	3.50	.58	00 [.]	3.5	з	4	11	3.45	.52	.21	3.0	3	4
Excluding non-US and on-line only. * p < .05, ** p < .01, two-tailed	two-ta	iled												

^a 0 = Highly dependent: students lacking their own computer are likely to fail, 1 = moderately dependent: students lacking their own computer are disadvantaged, 2 = moderately

 $^{\rm b}$ 0 = Unavailable, 1 = Very poor, 2 = Poor, 3 = Adequate, 4 = Superior

to the Type I error rate (10%), we urge caution in interpreting the following observed effects.

The Gibby et al. (all psychology doctoral) programs are more likely than peer programs to (a) have individual faculty choose their own assistants (83% vs.

Table 16

FUnivariate dependent variableMaster's vs.Psych vs.Univariate dependence on personal computersdoctoralBus/Mgmt2-wayStudent dependence on personal computers1.54.221.60Overall quality of student resourcesComputer hardware.292.54.20Basic computer software.922.11.33Statistical software.73.09.07Access to computers2.86 #3.69 #1.80Basic library services1.621.18.00Literature search platforms3.20 #1.421.10Access to library services1.12.58.87Printing7.01 **.001.82Photocopying5.25 *.062.67University-sponsored health insurance5.78 *2.71 #.16On-campus medical services.343.26 #.70
Univariate dependent variabledoctoralBus/Mgmt2-wayStudent dependence on personal computers1.54.221.60Overall quality of student resources292.54.20Basic computer hardware.922.11.33Statistical software.73.09.07Access to computers2.86 #3.69 #1.80Basic library services1.621.18.00Literature search platforms3.20 #1.421.10Access to library services1.12.58.87Printing7.01 **.001.82Photocopying5.25 *.062.67University-sponsored health insurance5.78 *2.71 #.16
Student dependence on personal computers 1.54 $.22$ 1.60 Overall quality of student resources 29 2.54 $.20$ Basic computer hardware $.92$ 2.11 $.33$ Statistical software $.73$ $.09$ $.07$ Access to computers 2.86 3.69 1.80 Basic library services 1.62 1.18 $.00$ Literature search platforms 3.20 1.42 1.10 Access to library services 1.12 $.58$ $.87$ Printing 7.01 $**$ $.00$ 1.82 Photocopying 5.25 $.06$ 2.67 University-sponsored health insurance 5.78 $*$ 2.71
Overall quality of student resources ^b Computer hardware .29 2.54 .20 Basic computer software .92 2.11 .33 Statistical software .73 .09 .07 Access to computers 2.86 # 3.69 # 1.80 Basic library services 1.62 1.18 .00 Literature search platforms 3.20 # 1.42 1.10 Access to library services 1.12 .58 .87 Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Computer hardware .29 2.54 .20 Basic computer software .92 2.11 .33 Statistical software .73 .09 .07 Access to computers 2.86 # 3.69 # 1.80 Basic library services 1.62 1.18 .00 Literature search platforms 3.20 # 1.42 1.10 Access to library services 1.12 .58 .87 Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Basic computer software .92 2.11 .33 Statistical software .73 .09 .07 Access to computers 2.86 # 3.69 # 1.80 Basic library services 1.62 1.18 .00 Literature search platforms 3.20 # 1.42 1.10 Access to library services 1.12 .58 .87 Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Statistical software .73 .09 .07 Access to computers 2.86 # 3.69 # 1.80 Basic library services 1.62 1.18 .00 Literature search platforms 3.20 # 1.42 1.10 Access to library services 1.12 .58 .87 Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Access to computers 2.86 # 3.69 # 1.80 Basic library services 1.62 1.18 .00 Literature search platforms 3.20 # 1.42 1.10 Access to library services 1.12 .58 .87 Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Basic library services 1.62 1.18 .00 Literature search platforms 3.20 # 1.42 1.10 Access to library services 1.12 .58 .87 Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Literature search platforms 3.20 # 1.42 1.10 Access to library services 1.12 .58 .87 Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Access to library services 1.12 .58 .87 Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Printing 7.01 ** .00 1.82 Photocopying 5.25 * .06 2.67 University-sponsored health insurance 5.78 * 2.71 # .16
Photocopying5.25 *.062.67University-sponsored health insurance5.78 *2.71 #.16
University-sponsored health insurance 5.78 * 2.71 # .16
, ,
On-campus medical services 34 3 26 # 70
On-campus housing .09 6.74 ** .31
Child-care .00 .66 .28
Intramural sports .00 1.96 .43
Phone privileges 1.27 8.20 ** .09
Graduate student lounge .06 .20 .57
Food services 1.15 1.08 .07
Local cultural amenities/entertainment .06 .07 .00
PCA component
Campus life .00 5.47 * .53
Computing services .42 .22 1.31
Library services 2.32 .86 .00
Administrative services 11.10 ** .49 4.17 *
Food & entertainment1.94.24.01

Univariate ANOVA Results for Student Resources

Excluding non-US and on-line only. #p < .10, *p < .05, **p < .01, two-tailed

		C	omponent		· · · · ·	
	1	2	3	4	5	
	Campus	Computing	Library	Admin.	Food &	
Component/resource	life	services	services	services	entertain.	hŕ
Campus life						
On-campus medical services	.78	.25	05	.19	.27	.79
On-campus housing	.78	.25	04	.00	09	.68
Intramural sports	.77	.10	.07	01	.24	.66
Childcare	.72	03	.02	.09	07	.53
Phone privileges	.64	.11	.11	.13	.20	.49
Computing services						
Computer hardware	.13	.92	.15	.13	.07	.90
Basic computer software	.04	.92	.13	.18	.01	.90
Statistical software	.17	.81	.24	.10	.20	.78
Access to computers	.24	.75	.16	.14	.17	.70
Library services						
Basic library services	.10	.09	.91	.09	.05	.86
Access to library services	.13	.21	.80	.04	.10	.71
Literature search platforms	16	.23	.77	.08	12	.69
Administrative services						
Printing	.09	.27	.09	.86	.24	.88
Photocopying	.08	.29	.08	.85	.13	.83
University-sponsored health ins.	.52	17	.15	.57	31	.74
Food & entertainment						
Local cultural amenities/ent.	.10	.16	.07	.23	.79	.71
Food services	.52	.18	06	.00	.59	.66
Eigenvalue	5.72	2.69	1.68	1.43	1.01	12.52
% variance explained	33.64	15.81	9.90	8.38	5.93	73.67

Results of Principal Components Analysis of Seventeen Student Resources a (N = 98)

^aGraduate student lounge is omitted due to its uniqueness

Table 17

 h^2 = communality = proportion of variance explained by all retained components combined.

39%) and (b) restrict students on assistantship from working in other paid jobs (57% vs. 23%). They also reported smaller proportions of (c) administrative -only (1.4% vs. 6.5%) and (d) hybrid (3.6% vs. 25.2%) assistantships. Regarding the assistantship duration variables, (e) official working hours-per-week are uniformly 20 (i.e., SD = 0) in the Gibby et al. programs compared to an average of 18.2 hours in peer programs, and (f) total years of funding averages 5.0 in the Gibby set relative to 3.9 in peer programs. The last difference involving the Gibby et al. top-10 programs is (g) a higher mean rating for the student resource of intramural sports (3.43 vs. 2.50 for peer programs). None of the fellowship variables and none of the student resource components yielded significant effects distinguishing the Gibby et al. programs from peer programs.

The K&A top-10 doctoral programs vielded five significant effects: (a) They reported a higher mean percentage of students on assistantships with I-O faculty members other than their primary research advisors (50.0% vs. 20.7% in peer programs) and (b) a lower mean percentage of assistantships with non-psychology faculty (0% vs. 6%). Regarding student resources, the K&A doctoral programs rated both (c) food services and (d) local cultural amenities/entertainment higher than did peer programs (mean = 3.0 vs. 2.5 and 3.8 vs. 3.3, respectively). A corresponding difference emerged for (e) the food and entertainment component (mean component score = .42 vs. -.19 for peer programs).

The K&A top-10 master programs averaged lower than peer programs on (a) the proportion of assistantships devoted exclusively to helping faculty with their teaching (4.0% vs. 30.3%), (b) mean travel expenses per student (\$0 vs. \$52), (c) assistantship supervision by non-I-O psychology faculty (5.0% vs. 28.6%), (d) assistantship supervision from outside the department (0.0% vs. 7.6%), (e) years of guaranteed funding (.0 vs. .5), (f) student independence from having their own computer (1.4 vs. 2.1; i.e., K&A master's programs reported higher student reliance on owning a personal computer), (g) mean ratings of basic library services (3.0 vs. 3.5), and (h) mean ratings of access to library services (3.1 vs. 3.6).

All told, significant differences involving the three top-10 lists offer few clearly interpretable patterns. A possible exception (notwithstanding the noted Type I error rate) is that the Gibby et al. top-10 programs may take their assistantships more seriously as academic jobs (e.g., offering more years of support, offering fewer administrative assistantships, restricting other paid employment).

Conclusions

Two main themes emerge from our benchmarking efforts in this installment. First, results confirm what most readers would have predicted, that funding is a bigger part of doctoral-level than master's -level enrollment: both assistantships and fellowships are more common at the doctoral level, doctoral assistantships are arranged more often by faculty than are master's assistantships (which are more often arranged by students themselves), restrictions against alternative paid employment are more common at the doctoral level, as is summer fellowship support. Stipend amounts and tuition waivers are higher than in master's programs, summer funding is also higher, doctoral assistantships last longer, and doctoral programs also rate administrative support higher. All these differences may not be surprising. The norms, nonetheless, replace anecdotal hunches with concrete data, offering benchmarks for tracking changes in funding patterns over time.

A second theme evident from the current analyses is that disparities in funding between master's and doctoral programs are greater in business/ management departments than in psychology departments. In particular, funding tends to be exceptionally good for doctoral students in business schools and especially not-so-good for their master's student counterparts. The reasons for this are not entirely clear. One possibility is that business schools may especially emphasize research productivity as a marker of faculty success. If so, this could lead business programs to invest more in doctoral students, whose skill sets are more conducive to research productivity. In psychology departments, research may be a more uniform focus in both degree types. The difference in research skills and interests between degree types would accordingly be diminished and so also differences in funding used to support students offering those skills and interests. Broader budgetary differences between department types, and perhaps cultural differences (e.g., business vs. scientific values), may also help explain observed results. Such is beyond the scope of the survey, however, and so also this primarily descriptive report.

In the next, and penultimate, installment, we will offer norms and comparisons for theses, dissertations, and performance expectations of I-O graduate students. Then, in the last installment, we will attempt to identify some general themes from all the various components of the survey covered in previous installments. Until then, we hope the norms provided here help individual programs see more clearly where they stand on assistantships, fellowships, and student resources, and offer the discipline more broadly a snapshot of current (2011) funding patterns in I -O graduate programs.

¹ For more information regarding funding of graduate education, the APA Center for Workforce Studies aims in spring of 2014 to launch a study of graduate stipend levels (G. Fowler, personal communication, October 9, 2013).

² See earlier installments for other caveats.

³ This does not preclude overall consensus in such decisions: some programs endorsed both individual faculty choice and consensus (note that sum > 100%). ⁴ i.e., 100 - (25.9 + 14.1) = 60.

⁵ We did not ask whether programs have students working extra jobs and in what proportions. There may be no rule about outside noncareer employment because no student on assistantship can afford the time without jeopardizing academic success. Such questions could be pursued in follow-up surveys.

⁶ Each of the four major sections of Tables 4 and 5 permitted ANOVA with two between-subjects variables (degree type and department type) and a repeated measures variable (e.g., five assistantship types in the first section). In three of those four cases (all but annual dollar amounts per award type), responses across levels of the repeated measures variable sum to 100% per program, precluding main effects for the betweensubjects variables and the associated two-way interaction.

⁷ This permits assessment as p < .05 to the degree observed directional differences are predictable. Directional predictions were not offered in this primarily descriptive effort, but the observed patterns per degree type in this case appear quite readily interpreted. ⁸ Values collapsing across categories (here and forward)

are *N*-weighted means. ⁹ In retrospect, it would have been informative to ask

what percentage of tuition is compensated, as the raw

numbers are confounded by tuition rate differences across programs and institutions. This could be readily addressed in follow-up surveys.

¹⁰ For present purposes, "remuneration" is any compensation or funding for work undertaken as part of an assistantship; in most cases, we expect it to be tax exempt.

¹¹ We should hardly be surprised if business/ management-based programs have assistantships that are more business like.

¹² ANOVAs (bottom of Table 7) are replaced by independent samples *t*-tests (Table 12) for two variables owing to lack of data on those variables from master's programs in business/management departments.

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