

**THE 2011 IUPUI
UNDERGRADUATE ALUMNI SURVEY
SUMMARY REPORT FOR THE
SCHOOL OF SCIENCE**

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INTRODUCTION

The IUPUI Undergraduate Alumni Survey began in 1992 with funding IUPUI received as part of the 1990 Perkins Vocational and Applied Technology Act. In 2011, the survey was revised to incorporate items on community service and social responsibility and focus on outcomes most pertinent for assessment purposes. The current iteration of the IUPUI Undergraduate Alumni Survey was created by staff in The Office of Information Management and Institutional Research (IMIR) with feedback from Deans, Associate Deans, and the Center for Service and Learning, and Career Services. Currently, the Undergraduate Alumni Survey has 4 sections focusing on graduates' satisfaction with their overall IUPUI experience, the impact of IUPUI on their learning, further education, and current employment.

A sample of 5,674 undergraduate students who graduated with an Associate's or Bachelor's degree from any Indiana University or Purdue University school located on the IUPUI or IUPUC campus between Spring 2008 and Summer 2010 was provided to The Office of Information Management and Institutional Research (IMIR) by the Indiana University Alumni Association. Every alumnus in this sample was sent an e-mail inviting them to participate in the survey. 804 of those had invalid e-mails and three declined, leading to an adjusted sample size of 4,867. Reminder e-mails were sent to non-respondents two, four, and six weeks following the initial e-mail. A total of 511 alumni responded to the survey for a response rate of 10.5%. Demographic and academic characteristics of School of Science and all respondents appear in Tables 1 and 2 below.

The following is a report of the 73 respondents who received a Bachelor's degree from the School of Science at IUPUI. In order to demonstrate the extent of the difference between the scale means of schools and the scale mean for all IUPUI respondents, effect sizes were generated. Effect sizes represent the number of standard deviation units between the school and campus means. In general, an effect size with an absolute value of less than 0.2 of a standard deviation is seen as "trivial," and an effect size with an absolute value of 0.2 or greater is meaningful. Prudence should be considered when interpreting these results, as the low response rate for this survey may have led to results not consistent with the entire IUPUI population. For further information, including other reports derived from the 2011 IUPUI Graduate and Undergraduate Alumni Surveys, please consult the Alumni Surveys section of the IMIR website, located at imir.iupui.edu/surveys/alumni.

Table 1
Demographic Characteristics of Respondents

	Science Respondents	All Bachelor's Degree Respondents
	<i>Percentages</i>	
Gender		
Female	68.5	58.2
Male	31.5	41.8
Ethnicity ^a		
African-American	15.1	10.4
Asian-American/Pacific Islander	5.5	3.8
Caucasian	74.0	80.6
Hispanic	1.4	1.5
Native American/Alaska Native	1.4	0.4
International Student	0.0	1.7
Unknown	2.7	1.7
Age at graduation ^b		
Less than 25 years of age	57.5	47.0
25 – 29	13.7	19.0
30 – 39	23.3	19.4
40 years of age or older	5.5	14.6

^a Since most participants graduated before the most recent ethnic codes were implemented, pre-2010 ethnic codes were used in this analysis.

^b For spring semester graduates, age is calculated as of the day of commencement. For fall and summer graduates, age is calculated as of the degree date provided by their school. For most schools, the date is December 31 for fall graduates, June 30 for summer I graduates, and August 31 for summer II graduates (though there is variation between schools).

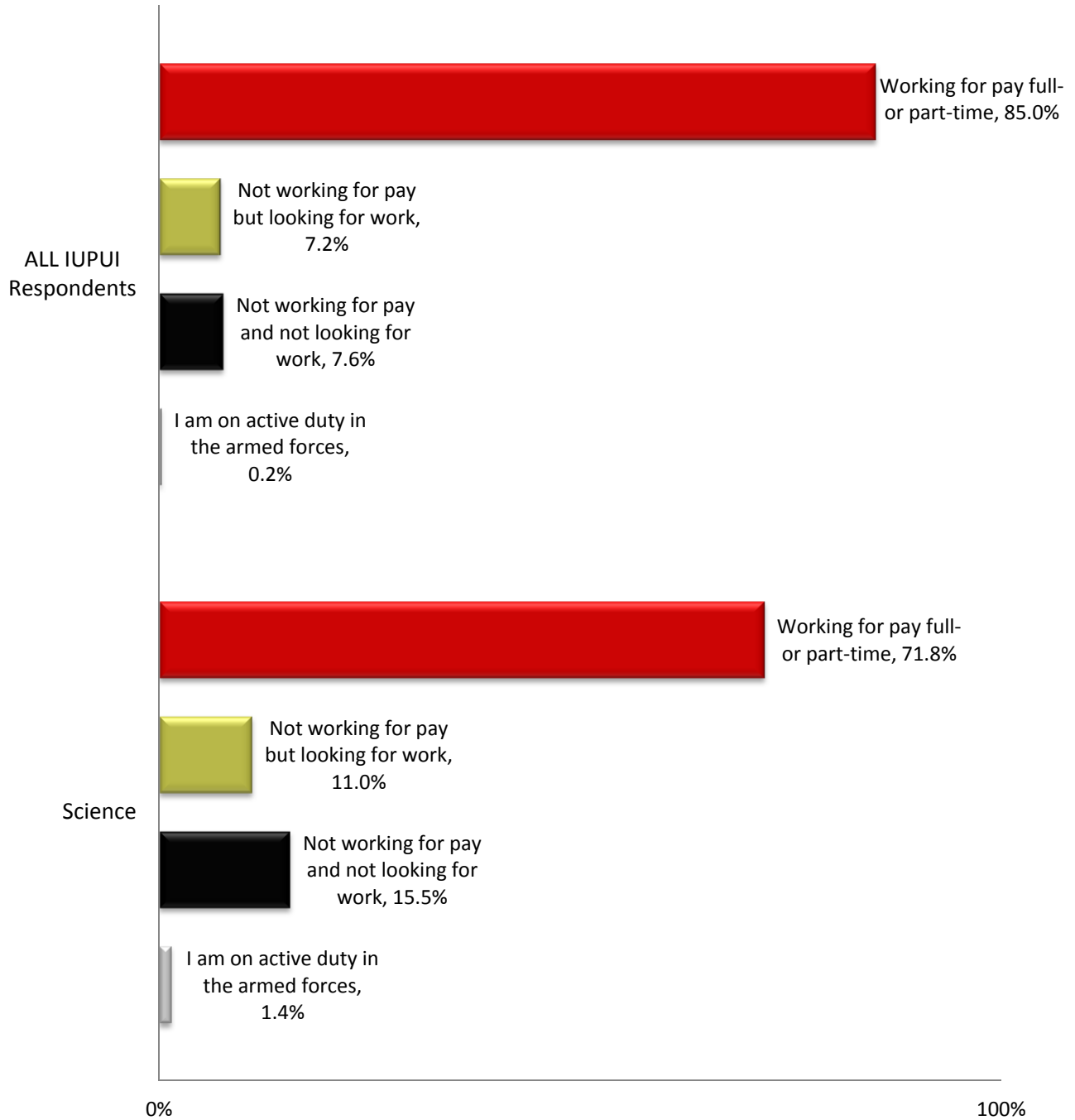
Table 2
Academic Characteristics of Respondents

	Science Respondents	All Bachelor's Degree Respondents
	<i>Percentages</i>	
Academic year of graduation		
2007-2008	19.2	19.2
2008-2009	24.7	35.9
2009-2010	56.2	44.9
Transfer status		
No hours transferred	43.8	43.6
Transferred less than 15 credit hours	17.8	11.3
Transferred 15 credit hours or more	38.4	45.1
Program GPA ^a		
3.50-4.00	43.7	33.8
3.00-3.49	35.2	36.4
2.50-2.99	19.7	23.2
2.49 or lower	1.4	6.6

^a GPA earned for classes completed at an Indiana University campus that would count towards the students' degree. Does not include grades earned in classes transferred from outside of Indiana University.

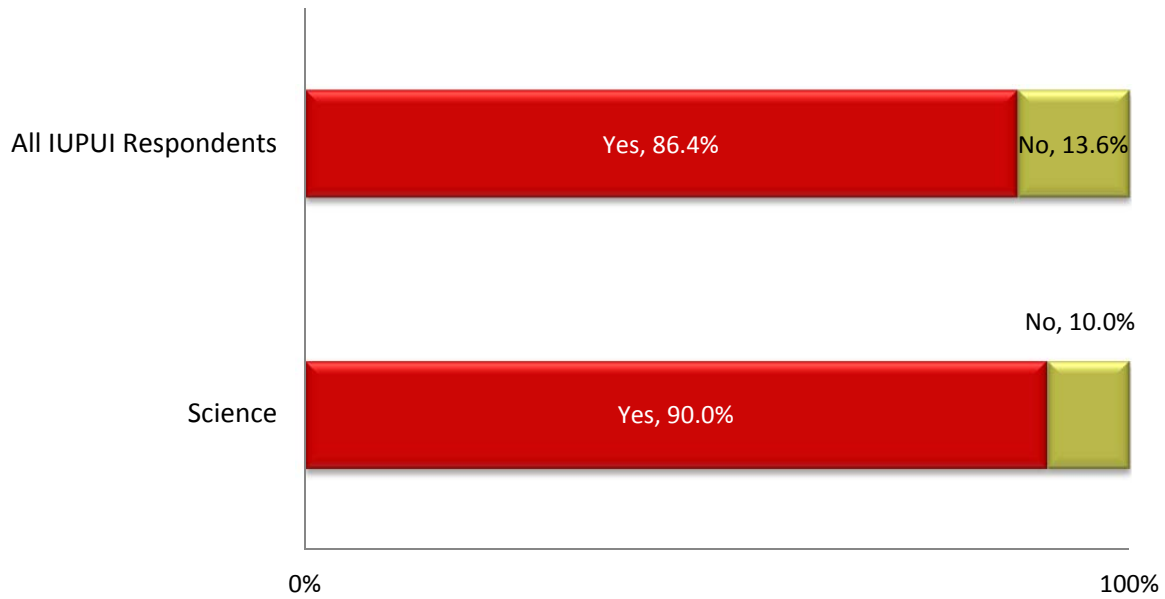
SECTION 1: CURRENT EMPLOYMENT

Figure 1
Which best describes your current employment status? ^a



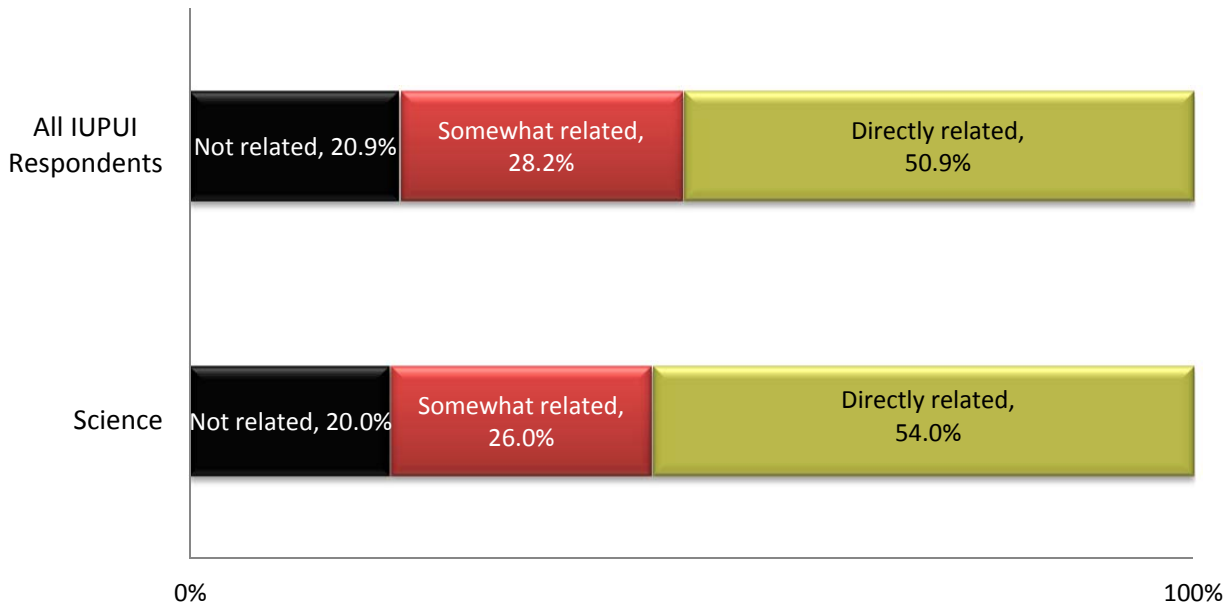
^a All IUPUI N = 474
Science N = 71

Figure 2
Are you working in Indiana? ^a



^a Of respondents indicating they are working full- or part-time.
 All IUPUI N = 398; Science N = 50

Figure 3
How closely does your job relate to your IUPUI major area of study? ^a



^a Of respondents indicating they are working full- or part-time.
 All IUPUI N = 398; Science N = 50

Table 3
IUPUI Education and Work ^a

<i>Please indicate how satisfied you are with each of the following aspects of your IUPUI experience</i>	N	Mean	STD	Standard Error	IUPUI Mean	Effect Size
How well did your IUPUI education prepare you for this job?	50	2.18	0.72	0.10	2.29	-0.16
How well do you think your IUPUI education enhanced your prospects for future advancement?	51	2.33	0.62	0.09	2.41	-0.13

^a 3-point scale in which "Very Well" = 3, "Somewhat" = 2, and "Not at all" = 1. Of respondents indicating they are working full- or part-time.

Figure 4
Science Bachelor' Degree Respondents
Which category best describes your employer

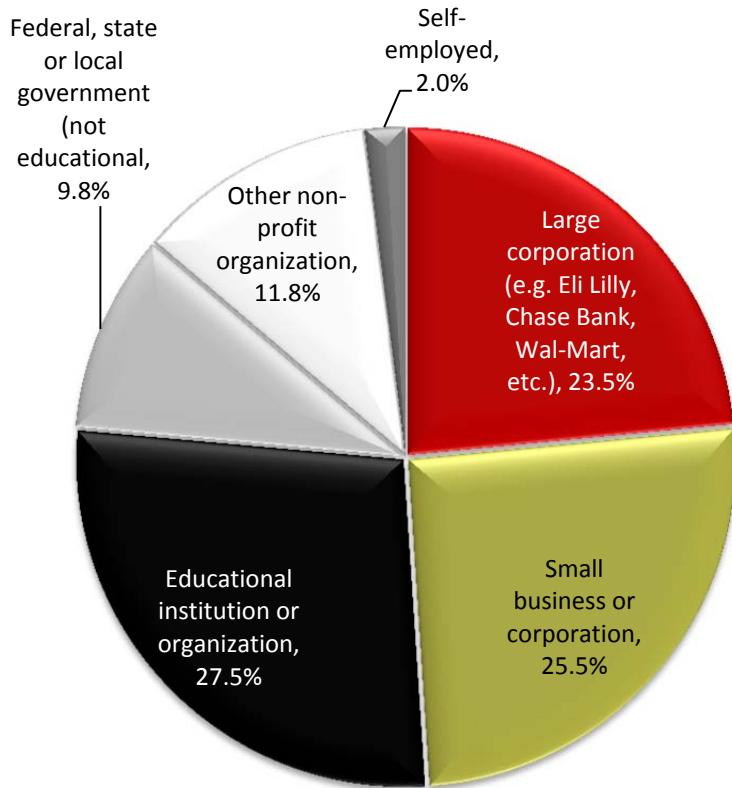
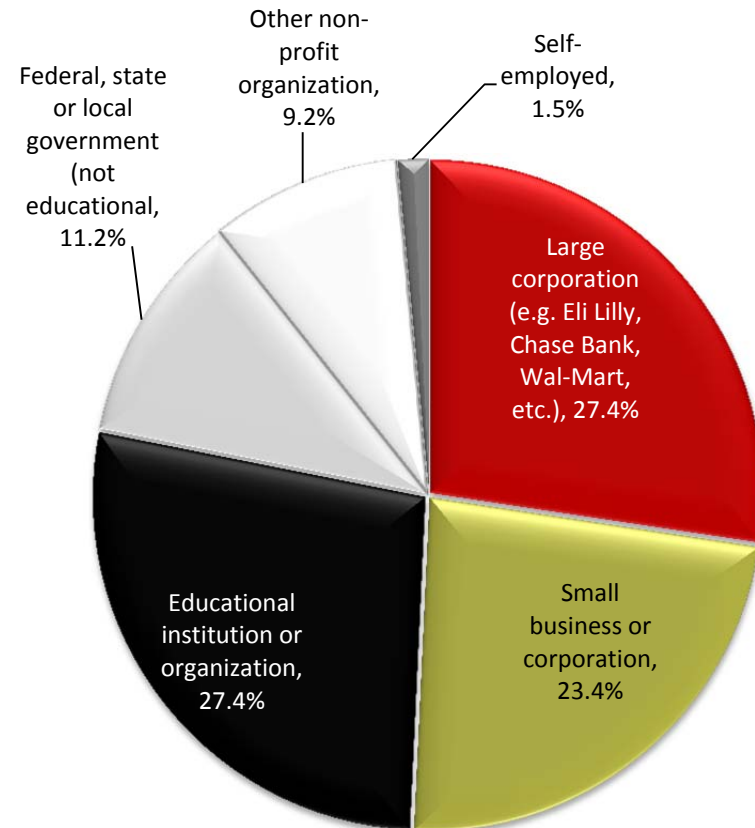


Figure 5
All IUPUI Bachelor's Degree Respondents
Which category best describes your employer



IUPUI N = 402
 Science N = 51

Figure 6
Science Bachelor' Degree Respondents
Within which category does your personal annual gross salary fall?

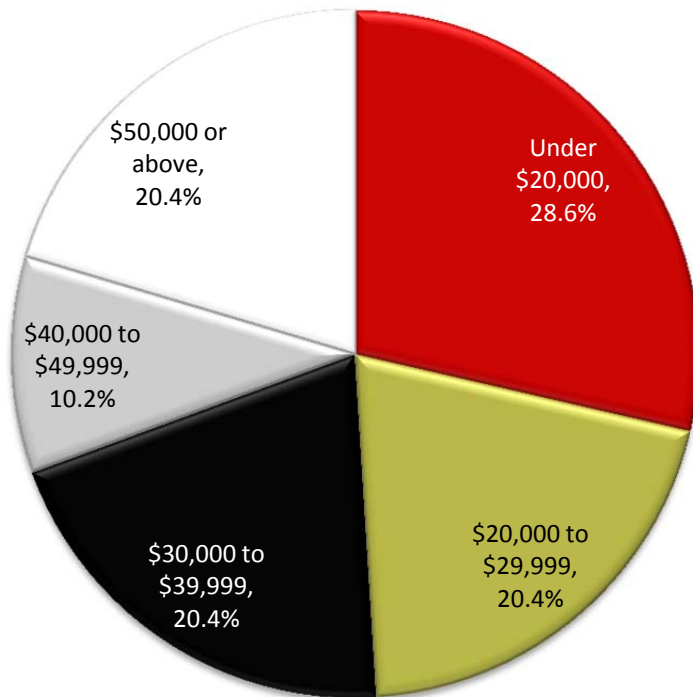
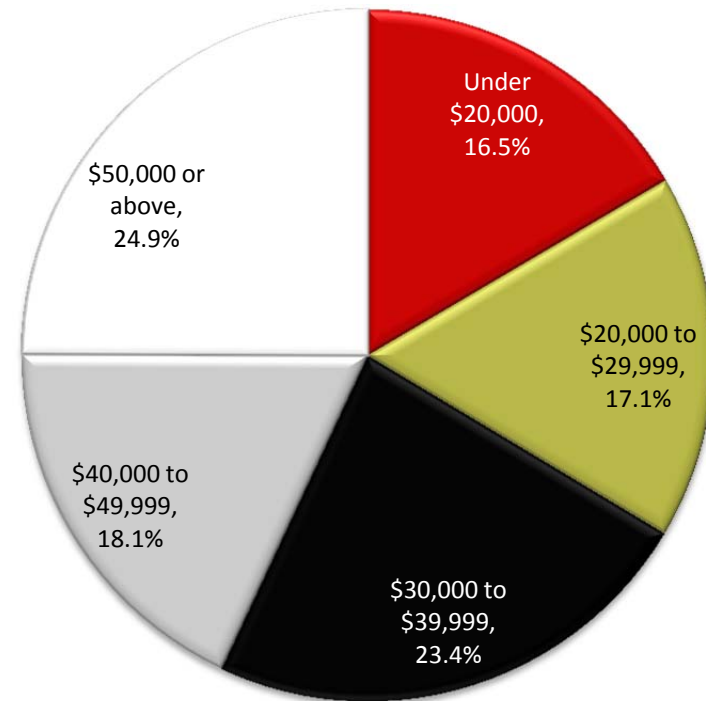


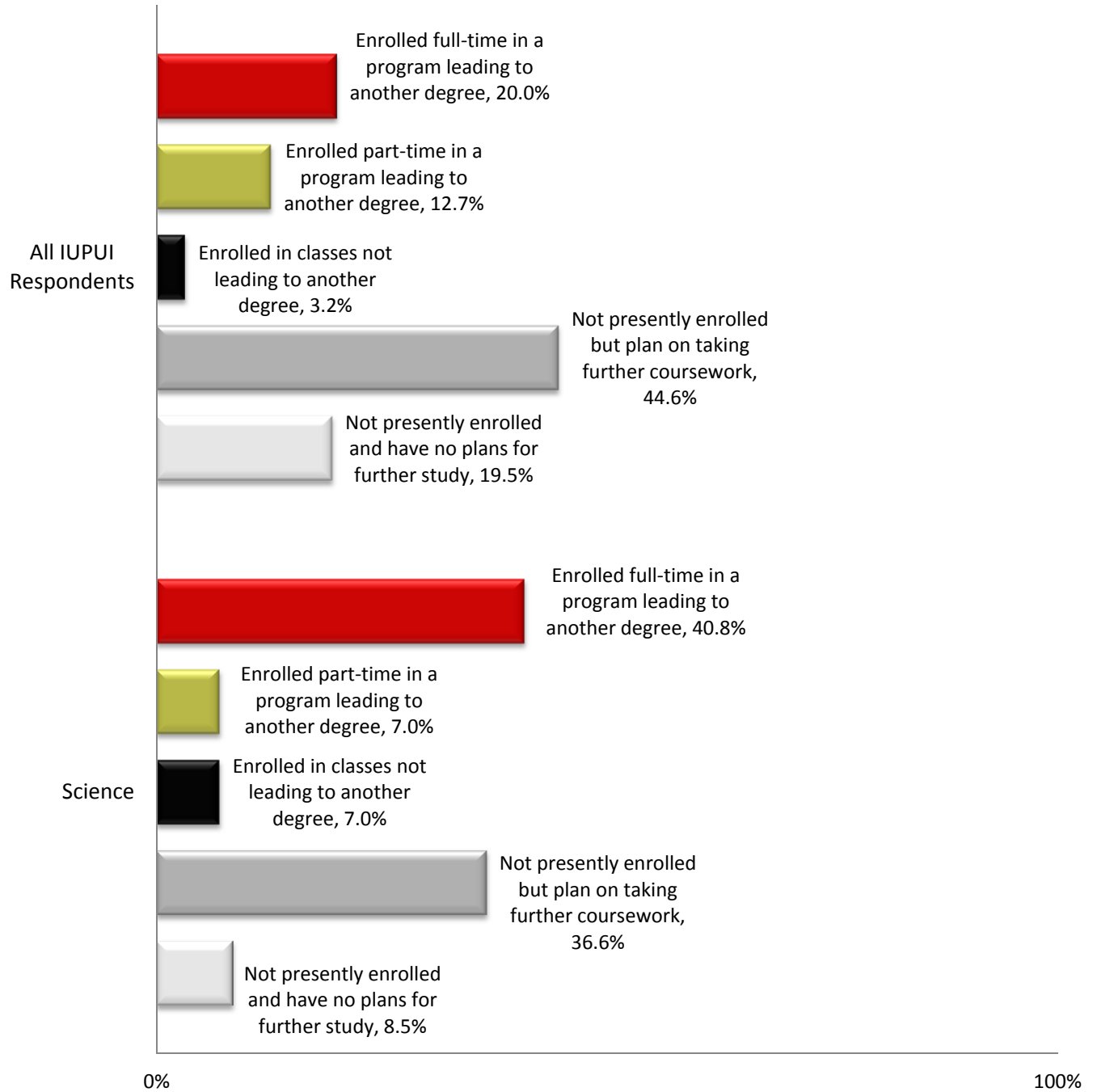
Figure 7
All IUPUI Bachelor's Degree Respondents
Within which category does your personal annual gross salary fall?



IUPUI N = 381
Science N = 49

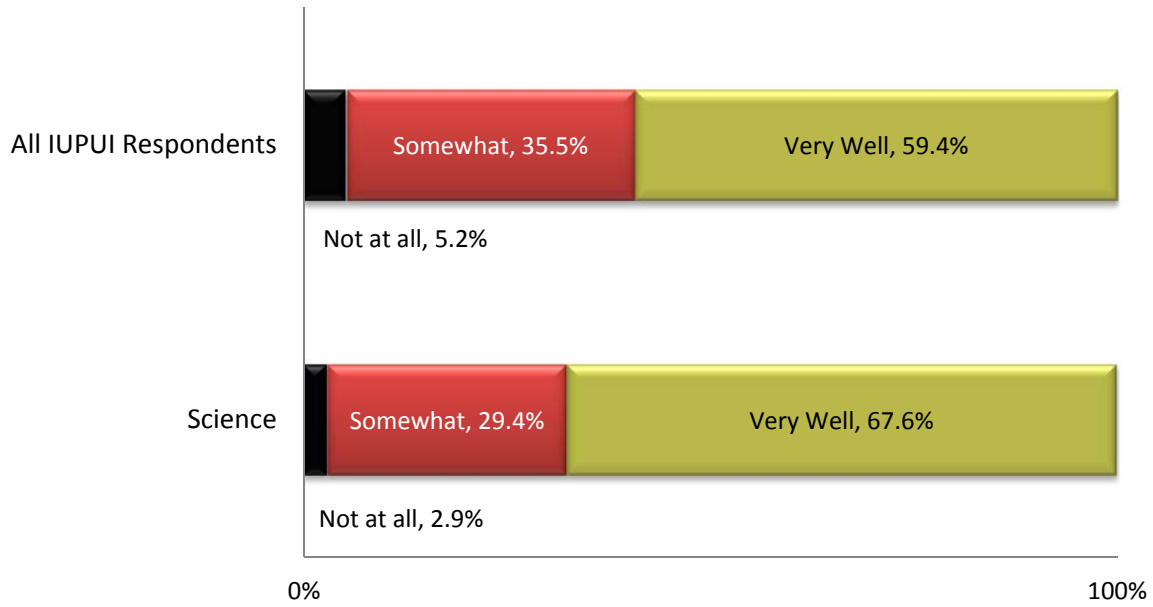
SECTION 2: FURTHER EDUCATION

Figure 8
Which of the following best describes your current educational status? ^a



^a All IUPUI N = 474
Science N = 71

Figure 9
How well did your IUPUI education prepare you to pursue this degree? ^a



^a Of respondents indicating they are enrolled full or part-time in a program leading to another degree
All IUPUI N = 474
Science N = 34

**SECTION 3:
IUPUI'S IMPACT ON LEARNING AND SATISFACTION WITH
IUPUI**

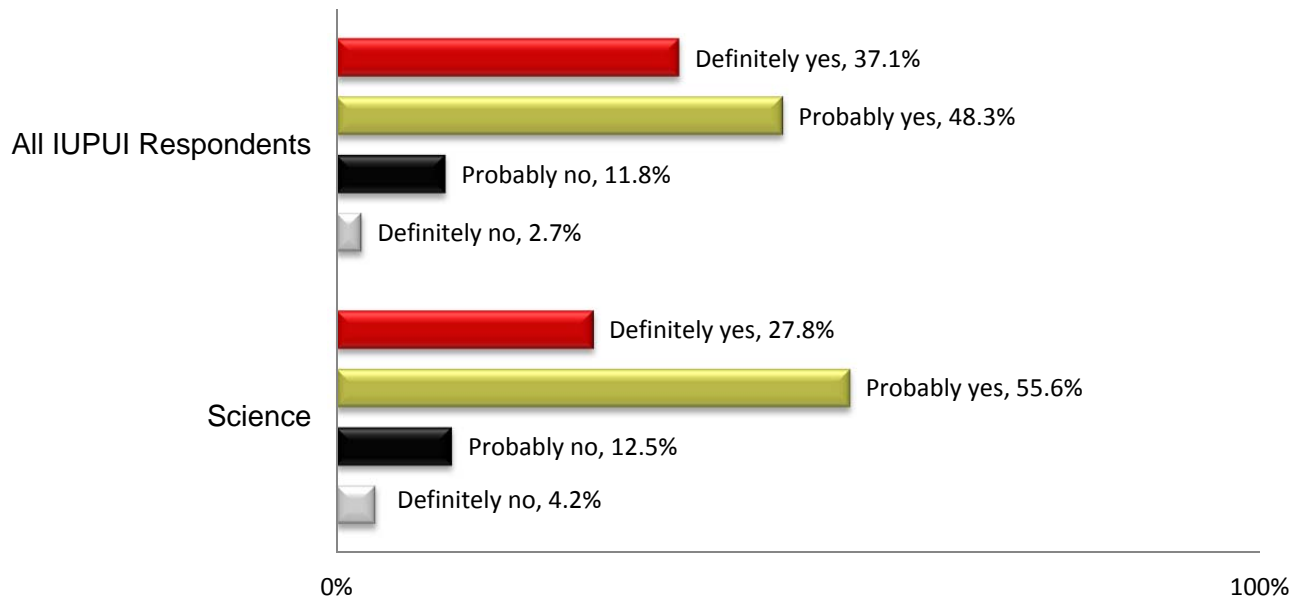
**Table 4
Impact of IUPUI on Your Learning ^a**

<i>Indicate how effectively you can perform each of these skills using the scale below.</i>	N	Mean	STD	Standard Error	IUPUI Mean	Effect Size
Speaking clearly and effectively	72	3.44	0.65	0.08	3.47	-0.04
Writing clearly and effectively	72	3.60	0.57	0.07	3.57	0.04
Quantitative reasoning	72	3.44	0.63	0.07	3.47	-0.04
Identify sources of information that are most appropriate for a project*	72	3.71	0.46	0.05	3.59	0.20
Thinking critically and analytically	72	3.61	0.57	0.07	3.64	-0.05
Applying what I learned in college to issues and problems I face every day	72	3.31	0.76	0.09	3.30	0.01
In-depth understanding of my major field of study	72	3.17	0.80	0.09	3.27	-0.14
See the relationships among local, national, and global issues	72	3.22	0.77	0.09	3.27	-0.06
Work effectively with people of different races, ethnicities, and religions	71	3.59	0.75	0.09	3.64	-0.08
Exercise my responsibilities as a citizen (e.g., voting, actively participating in community and political issues)*	72	3.00	0.95	0.11	3.24	-0.28
Develop a personal sense of values and ethics	72	3.56	0.73	0.09	3.60	-0.07
Use the knowledge I gained in college to address social issues or problems	72	3.00	0.92	0.11	3.12	-0.13
Understand contemporary social issues	72	3.19	0.80	0.09	3.29	-0.13

^a 4-point scale in which "Very Effective" = 4, "Effective" = 3, "Somewhat effective" = 2, and "Not at all effective" = 1.

* Effect size greater than 0.2 or less than -0.2

Figure 10
If you could start over again, would you go to IUPUI? ^a



^a Bachelor N = 474, Mean = 3.20, Std. Dev. = 0.75
 Science N = 72 Mean = 3.07, Std. Dev. = 0.76, effect size = 0.17

Table 5
General Satisfaction ^a

<i>Please indicate how satisfied you are with each of the following aspects of your IUPUI experience</i>	N	Mean	STD	Standard Error	IUPUI Mean	Effect Size
Overall quality of the education you received at IUPUI	72	3.25	0.55	0.06	3.36	-0.19
Quality of teaching by faculty in your major area	72	3.38	0.59	0.07	3.39	-0.02
Academic advising in your major department	72	2.63	0.93	0.11	2.97	-0.04
Quality of courses in your major area	72	3.29	0.57	0.07	3.25	0.07
Personal attention from those in your major department	72	3.08	0.98	0.11	3.24	-0.20
Opportunities to engage in community service*	72	3.08	0.78	0.09	3.08	0.00
Opportunities to participate in faculty members' research	72	2.86	0.869	0.10	2.65	0.25

^a 4-point scale in which "Very Satisfied" = 4, "Satisfied" = 3, "Dissatisfied" = 2, and "Very dissatisfied" = 1.

* Effect size greater than 0.2 or less than -0.2

SECTION 3: EXPERIENCE AT IUPUI

Table 6
Participation in Experiences at IUPUI

<i>Which of the following did you do before you graduated from IUPUI?</i>	N	Done	IUPUI % Done	Effect Size
		<i>Percentages</i>		
Practicum, internship, field experience, co-op experience, or clinical assignment*	72	45.8	56.3	-0.21
Work on a research project with a faculty member outside of course or program requirements*	72	48.6	21.0	0.68
Study abroad	72	5.6	8.9	-0.12
Freelance or consulting work*	72	5.6	16.3	-0.29
On-campus employment*	72	45.8	36.1	0.20
Federal Work-Study program*	72	23.6	16.1	0.20
Community service or volunteer work as part of a course*	72	62.5	48.8	0.27

* Effect size greater than 0.2 or less than -0.2

Table 7
Career Explorations Opportunities ^a

<i>Please indicate how satisfied you are with each of the following aspects of your IUPUI experience</i>	N	Mean	STD	Standard Error	IUPUI Mean	Effect Size
Career Services	71	2.59	0.73	0.09	2.71	-0.16
Career fairs	71	2.61	0.64	0.08	2.70	-0.14

^a 4-point scale in which "Very Satisfied" = 4, "Satisfied" = 3, "Dissatisfied" = 2, and "Very dissatisfied" = 1.