2016-17 Survey of 2005-2010 Undergraduate Alumni: Full Report

April 2017

Study Overview

Survey Description

This survey was conducted by the Social and Economic Sciences Research Center (SESRC) in collaboration with the Office of Institutional Research. The goal of this mixed-mode (telephone, mail, and web) survey was to collect information and opinions from students who graduated from WSU between the fiscal years of 2005 and 2010 with an undergraduate degree. This survey assesses the achievement of student objectives, employment, attitudes about the undergraduate experience, and how well the university is meeting the goals of its strategic plan.

Methodology

The survey population and sampling frame were provided by the Office of Institutional Research. The survey population included all students who graduated with an undergraduate degree between the fiscal years of 2005 and 2010. Those who graduated with a professional degree from the College of Veterinary Medicine or the College of Pharmacy were not included. Stratified random sampling was used to obtain the sample, and the strata consisted of the WSU college where each respondent received their degree[1]. If a student who completed multiple degrees was selected more than once, that student was only included in the sample once. These respondents were asked to complete the survey based on the degree they considered to be primary. Sample weights based on this sampling technique were used to calculate all statistics in this analysis.

The total population consisted of 26,809 alumni, and the total survey sample was 6,265 alumni. This can be further broken down by college and year, which is shown by table 1.

Table 1: Population of 2005-2010 Undergraduate Alumni by College (Stratified Sample in Parentheses)

	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
CCB[2]	784	815	798	842	777	793	4,809 (940)
CAHNRS	426	451	443	426	456	432	2,634 (940)
CAS	1,890	1,968	2,285	2,022	1,921	1,896	11,982 (1,570)
VCEA	383	409	416	407	473	497	2,585 (1250)
Communication	N/A	N/A	N/A	204	183	312	699 (315)
Education	302	402	337	352	332	316	2,041 (625)
Nurse/Vet/Pharm	253	309	325	351	391	430	2,059 (625)

[1] The current college definitions were used, not the ones used in 2005-2010. For example, those in the College of Liberal Arts and the College of Sciences were grouped together into the College of Arts and Sciences stratum.

[2] CCB is the Carson College of Business, and VCEA is the Voiland College of Engineering and Archictecture.

Completed Sample Demographics

The completed sample was 1,402 respondents, or a response rate of about 23 percent. 12 responses were dropped from the analysis due to missing demographic information. Table 1.1 compares the completed sample with the total alumni population. As shown, men are slightly overrepresented compared to their representation in the population of 2005-2010 graduates. Most ethnicities are fairly represented compared to their representation in the population, but international alumni are underrepresented and white alumni are overrepresented. By campus, there is similar representation in respondents compared to the population.

Table 1.1: Demographics of Alumni Survey Respondents, 2005-2010*

Demographic	Subcategory	Survey Respondents		All Graduates from 2005-2010	
		#	%	#	%
Gender	Female	742	53.4	15,089	55.4
	Male	648	46.6	12,135	44.6
Ethnicity	American Indian/Alaska Native	17	1.2	314	1.1
	Asian	55	4	1,417	5.2
	Black or African American	29	2.1	590	2.2
	Hispanics of any race	51	3.7	1,146	4.2
	International	13	.9	977	3.6
	Native Hawaiian or Other Pacific	3	.2	57	.2
	Race and Ethnicity Unknown	97	7	2,407	8.9
	Two or More Races	5	.4	87	.3
	White	1,120	80.5	20,213	74.3
College	Ag., Human, Nat. Resource Sci. (CAHNRS)	196	14.1	2,634	9.8
	Carson College of Business (CCB)	190	13.7	4,809	17.9
	Communication	84	6	699	2.6
	Education	127	9.1	2,041	7.6
	Voiland College of Engineering and Architecture (VCEA)	306	22	2,585	9.7
	Arts and Sciences (CAS)	354	25.5	11,982	44.7
	Nursing/Veterinary Medicine/Pharmacy	133	9.6	2,059	7.7
Campus	Pullman	1,168	82.8	21,620	79.4
	Spokane	69	3.8	1,252	4.6
	Tri-Cities	31	2.3	946	3.5
	Vancouver	94	8	2,245	8.2
	Global	28	3.1	1,163	4.3

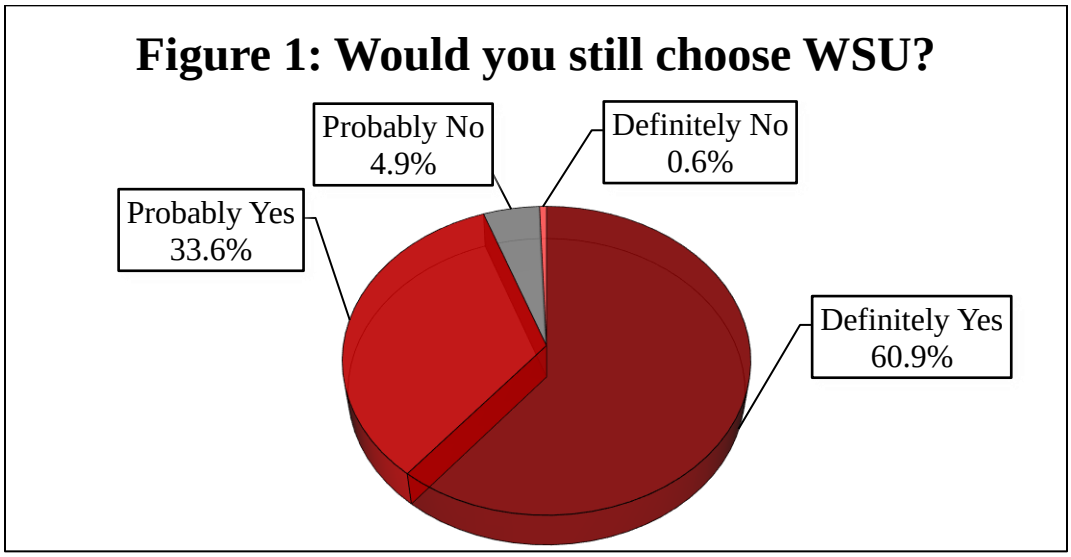
*Only B.S. Veterinary Science and Neuroscience students were included from the College of Veterinary Medicine

To reduce nonresponse bias, sampling weights were used to estimate the population proportions of all responses using the sample proportions, or $\hat{p}$. Sampling weights were calculated as follows:

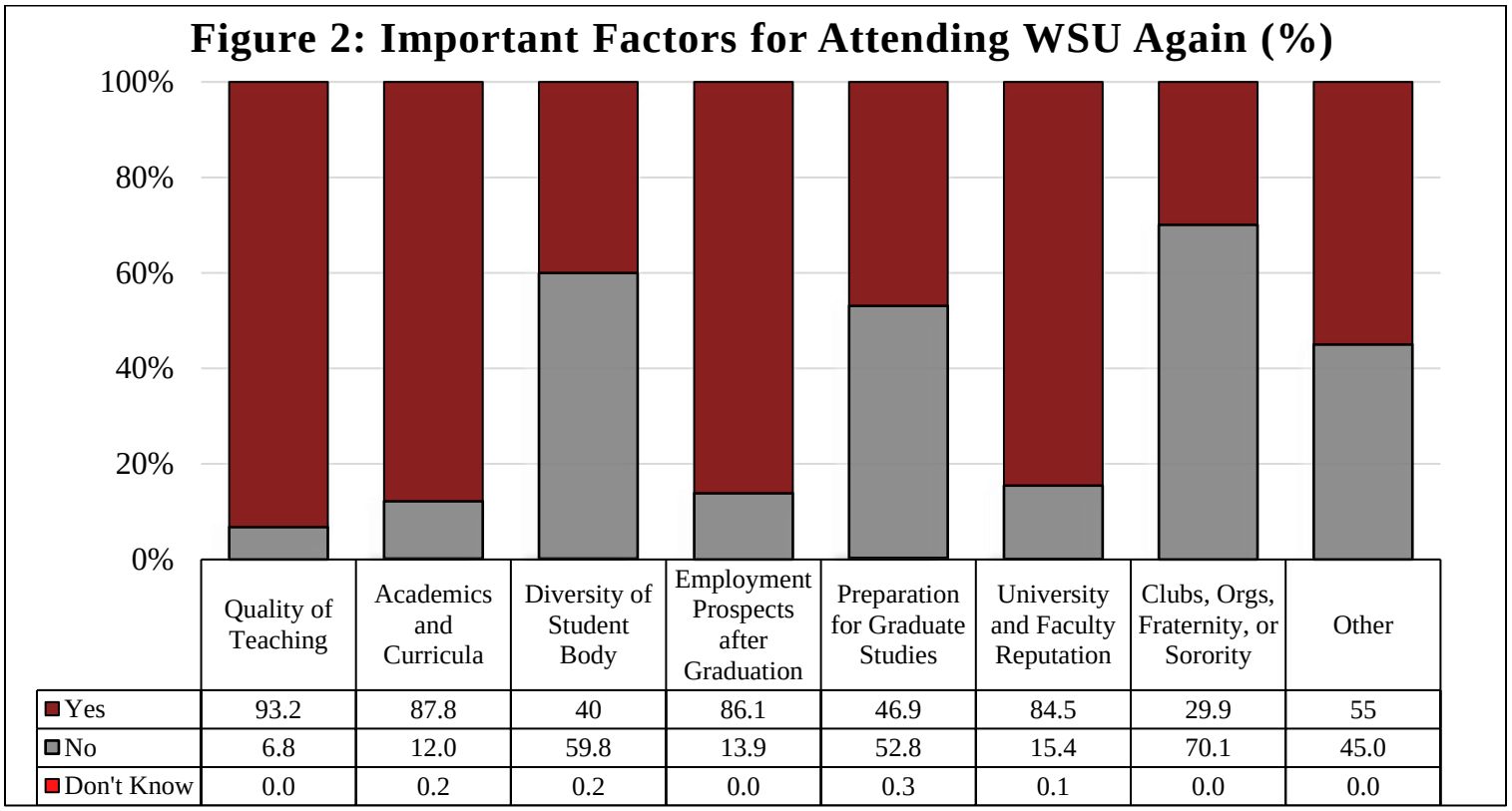
$$sampling\ weight = \frac{population\ of\ graduates\ from\ college}{completed\ responses\ from\ college}$$

Satisfaction

Respondents were first presented with the hypothetical scenario of choosing WSU again, and their responses were very positive; over 94% of respondents indicated they would definitely or probably still choose to attend WSU, with over 60% of respondents reporting "definitely yes" (figure 1).



Respondents also cited important factors that would influence their decisions to attend WSU if they were considering attending college today (figure 2). The top reasons include quality of teaching (93%), academics and curricula (88%) and employment prospects after graduation (86%). The least important factors for attending WSU again include clubs, organizations, fraternities, or sororities (30%), the diversity of the student body (40%) and preparation for graduate studies (47%).



	Quality of Teaching	Academics and Curricula	Diversity of Student Body	Employment Prospects after Graduation	Preparation for Graduate Studies	University and Faculty Reputation	Clubs, Orgs, Fraternity, or Sorority	Other
Yes	93.2	87.8	40	86.1	46.9	84.5	29.9	55
No	6.8	12.0	59.8	13.9	52.8	15.4	70.1	45.0
Don't Know	0.0	0.2	0.2	0.0	0.3	0.1	0.0	0.0

Table 2 shows the respondents' level of satisfaction with WSU's contribution to their personal growth in various skill areas. Respondents were the most satisfied with WSU's contribution to learning independently, working cooperatively in a group, and critically analyzing written information. Respondents were the least satisfied with WSU's contribution to understanding and appreciating the arts, readiness for a career, and recognizing their responsibilities, rights, and privileges as a citizen.

Table 2: Level of Satisfaction with WSU's Contribution to Growth in 15 Skill Areas (%)

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Don't Know
Writing Effectively	47.8	46.6	4.9	.7	0
Speaking Effectively	41.5	49.3	8.1	1	.1
Critically Analyzing Written Information	55.5	39.2	5	.3	0
Learning Independently	61.2	35	3.4	.4	0
Understanding and Applying Scientific Principles and Methods	43.9	45.6	8.7	1.2	.6
Understanding and Applying Quantitative Principles	36.9	52.4	8.3	1.7	.7
Defining and Solving Problems	54.9	40.9	3.9	.2	.1
Using Management or Leadership Skills	46.1	40.2	11.5	1.8	.4
Readiness for Advanced Education	40.9	46.4	10.5	1.9	.3
Readiness for a Career	43.2	39.4	13.4	4	0
Working Cooperatively in a Group	56.7	37.6	4.7	1	0
Understanding Differing Philosophies and Cultures and Their Interactions	46.6	41.5	10.2	1.5	.2
Understanding and Appreciating the Arts	31.7	51.7	13.7	2.3	.6
Understanding the Interaction of Society and the Environment	39.3	47.1	11.6	1.6	.4
Recognizing your responsibilities, rights and privileges as a citizen	37.2	44.9	14.6	2.8	.5

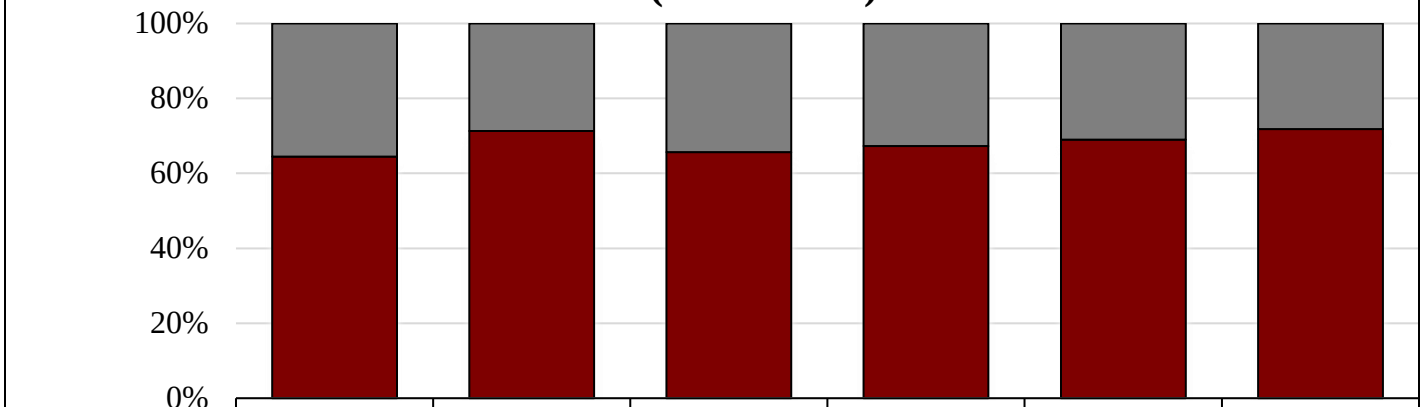
Employment

About 92 percent of the alumni are currently employed either full or part-time, and about 69 percent of these alumni are currently employed in Washington State. Figure 3 shows the breakdown of alumni employed in Washington State by graduating class.

Broken down by gender, women are less likely to be employed than men; about 89 percent of women are employed compared to 96 percent of men (figure 4). Broken down by ethnicity and gender, white men are the most likely to be employed at 97 percent, followed by race/ethnicity unknown and international women at 94 percent and minority women at 91 percent (figure 5).

By college, the Carson College of Business and Colleges of Nursing, Veterinary Medicine, and Pharmacy have the highest employment rates at about 97 percent, while the College of Arts and Sciences has the lowest employment rate at 89 percent (figure 6). By campus (figure 7), alumni from Spokane campus were the most likely to be employed (94%), while Vancouver alumni were the least likely to be employed (84%).

Figure 3: Percentage in State of Washington by Graduating Class (Fiscal Year)



	2005	2006	2007	2008	2009	2010
Employed Elsewhere	35.5	28.7	34.3	32.7	31	28.2
Employed in WA	64.5	71.3	65.7	67.3	69	71.8

Figure 4: Employment by Gender

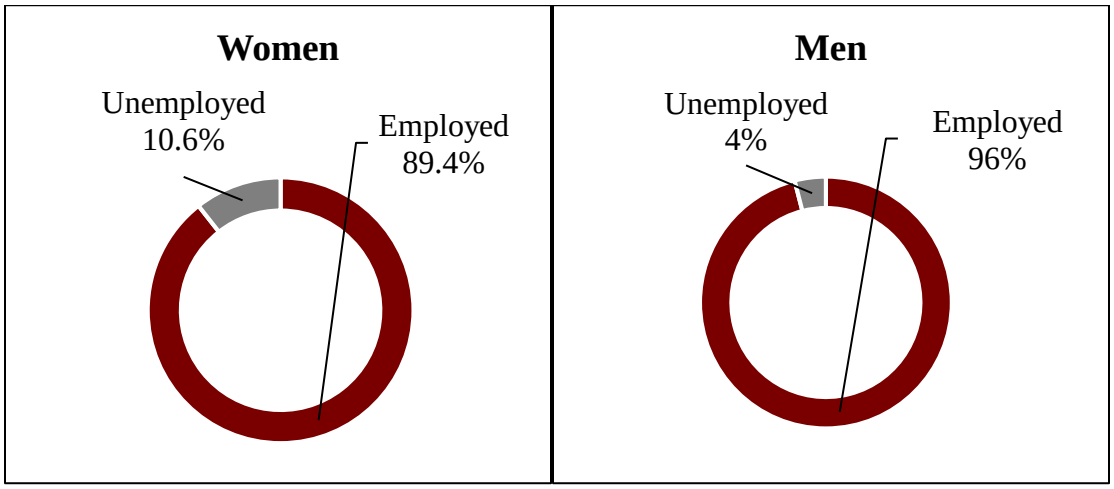
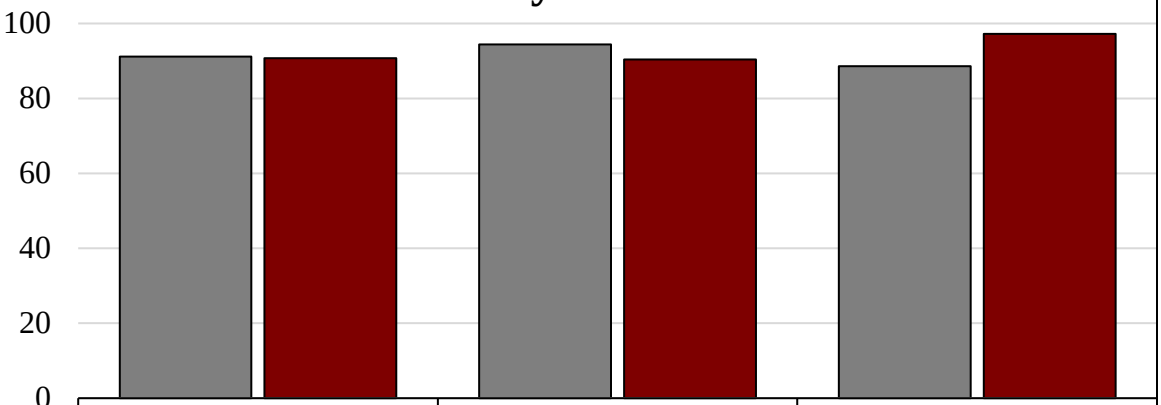
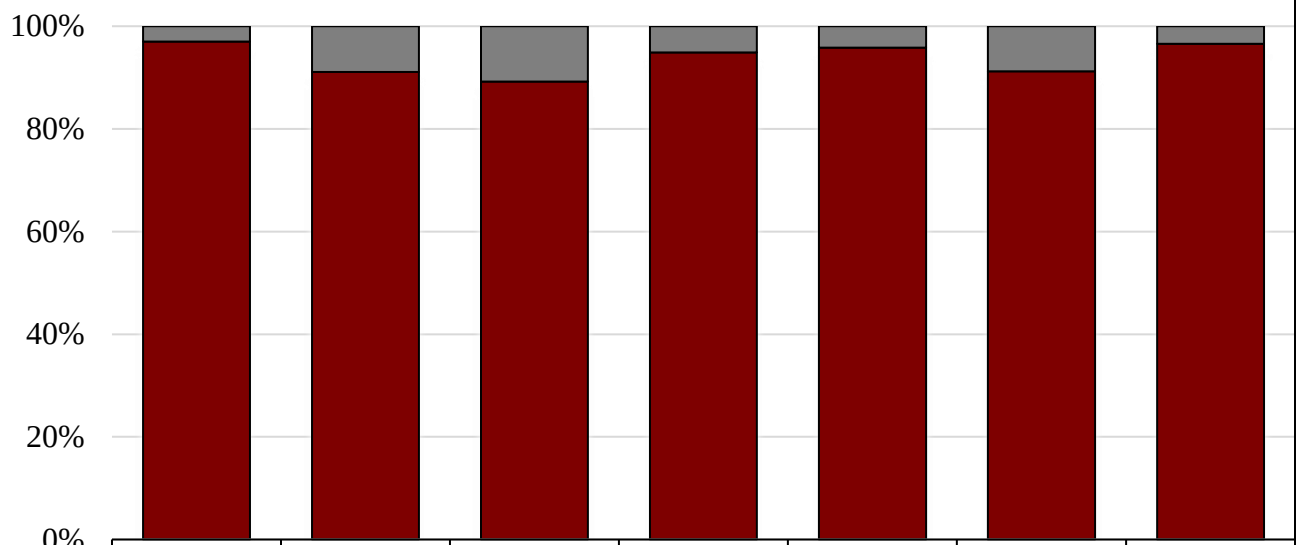


Figure 5: Percentage Employed by Race/Ethnicity and Gender

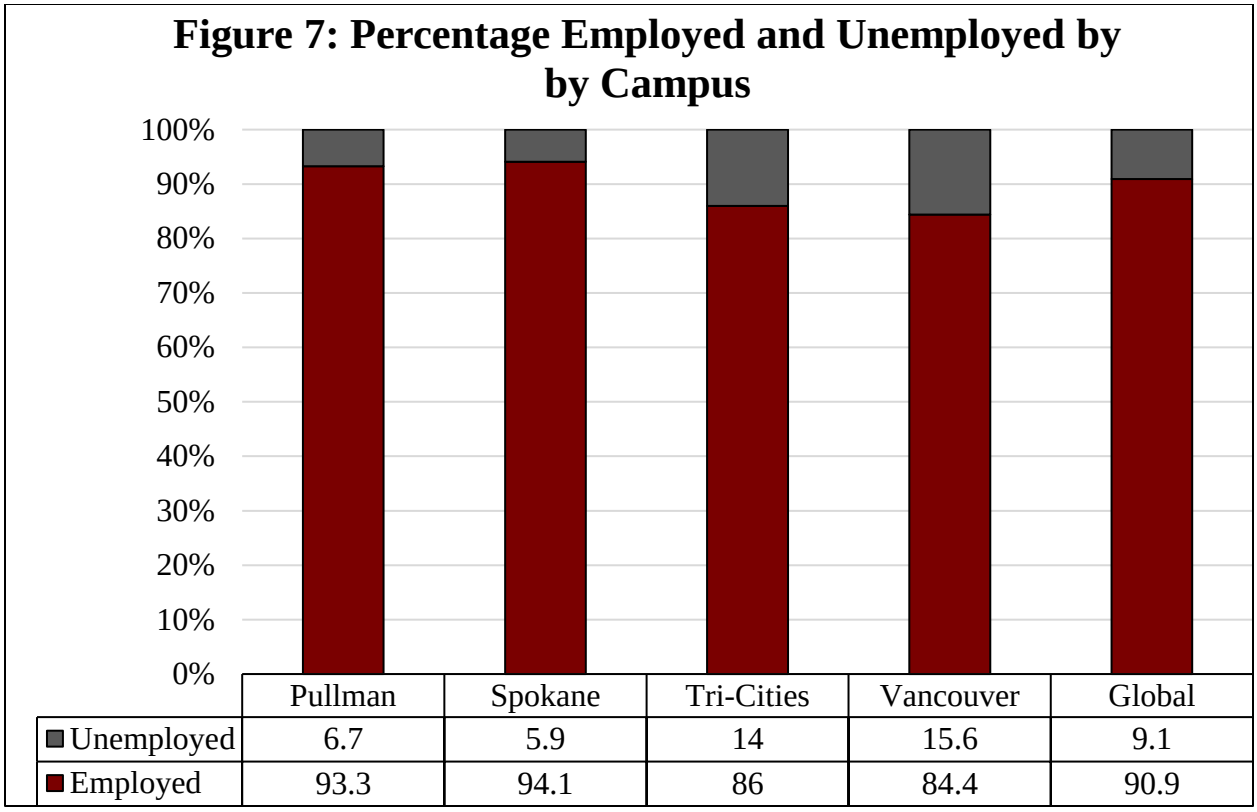


	Minority (n=141)	International/Unknown (n=94)	White (n=1013)
Women	91.2	94.4	88.6
Men	90.7	90.4	97.2

Figure 6: Percentage Employed and Unemployed by College



	CCB	CAHNRS	CAS	VCEA	Comm	Education	Nurs/Vet/ Pharm
Unemployed	3	8.9	10.8	5.1	4.2	8.8	3.4
Employed	97	91.1	89.2	94.9	95.8	91.2	96.6



Salary

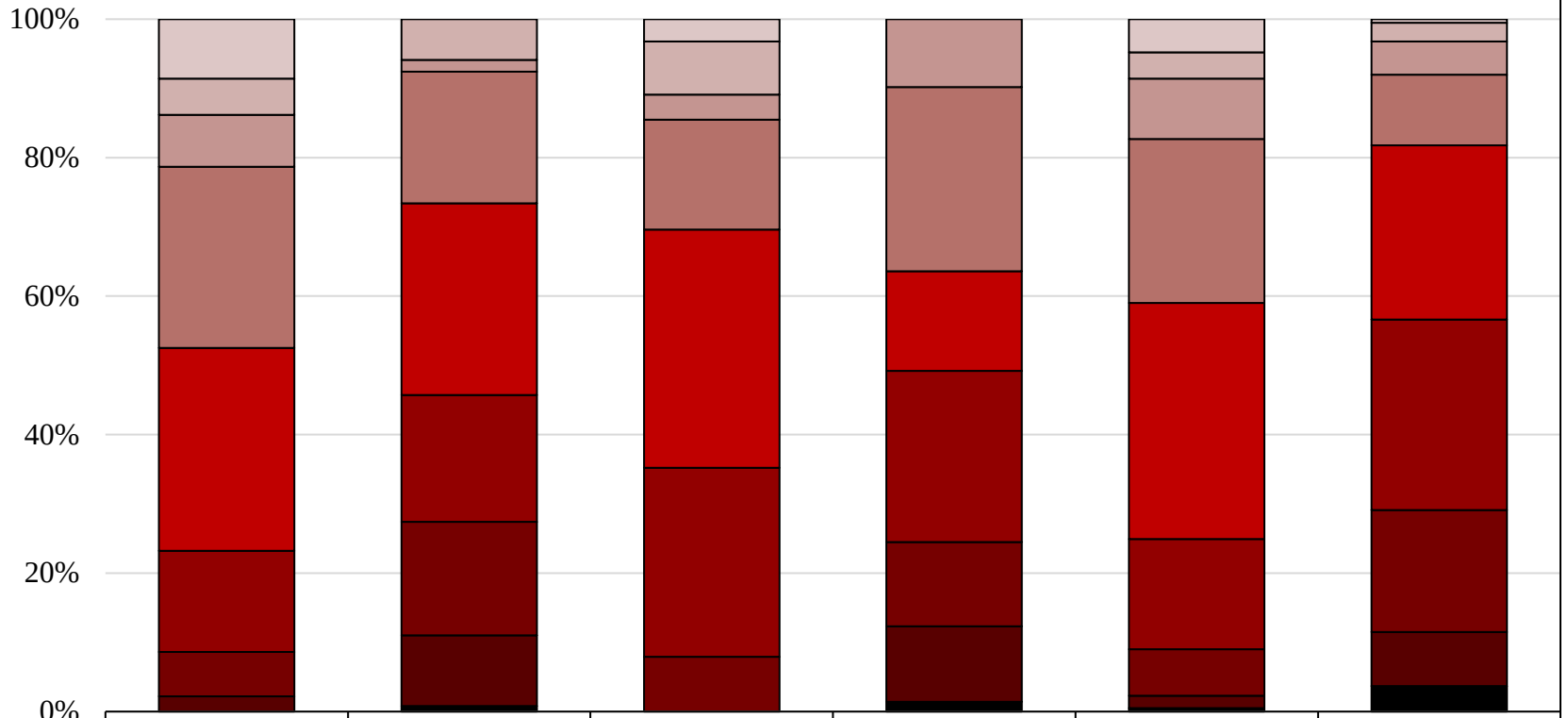
Annual salary varied across racial/ethnic and gender lines (figure 8)[3]. First, women across all racial and ethnic groups tended to have lower salaries than men; a higher percentage of women make $35K or less than men, and a lower percentage of women make over $100K than men. White men have the highest percentage of respondents making over $200K, followed by unknown/international men and minority men. White women are the only group of women to have any respondents making over $200K, but minority and white women have about an equal proportion of respondents making over $100K-$200K.

Salary also varied by college (figure 9). Alumni in the Carson College of Business and the Voiland College of Engineering and Architecture reported the highest proportion of salaries over $150K, while alumni in the College of Education and College of Nursing/Veterinary Medicine/Pharmacy had the lowest percentage of respondents making those salaries. The College of Arts and Sciences and CAHNRS had the highest representation of alumni making $15K or less, but had about the average representation of those making over $150K.

Finally, salary varied by campus (figure 10). Alumni at Vancouver and Tri-Cities reported the highest proportion of salaries in the three lowest income brackets (21-24%), while Spokane alumni had the lowest proportion (10%). The Global campus had the highest proportion of respondents making over $100K per year (37%), but did not have anyone making over $200K per year. Tri-Cities had the lowest proportion of respondents making over $100K per year (5%).

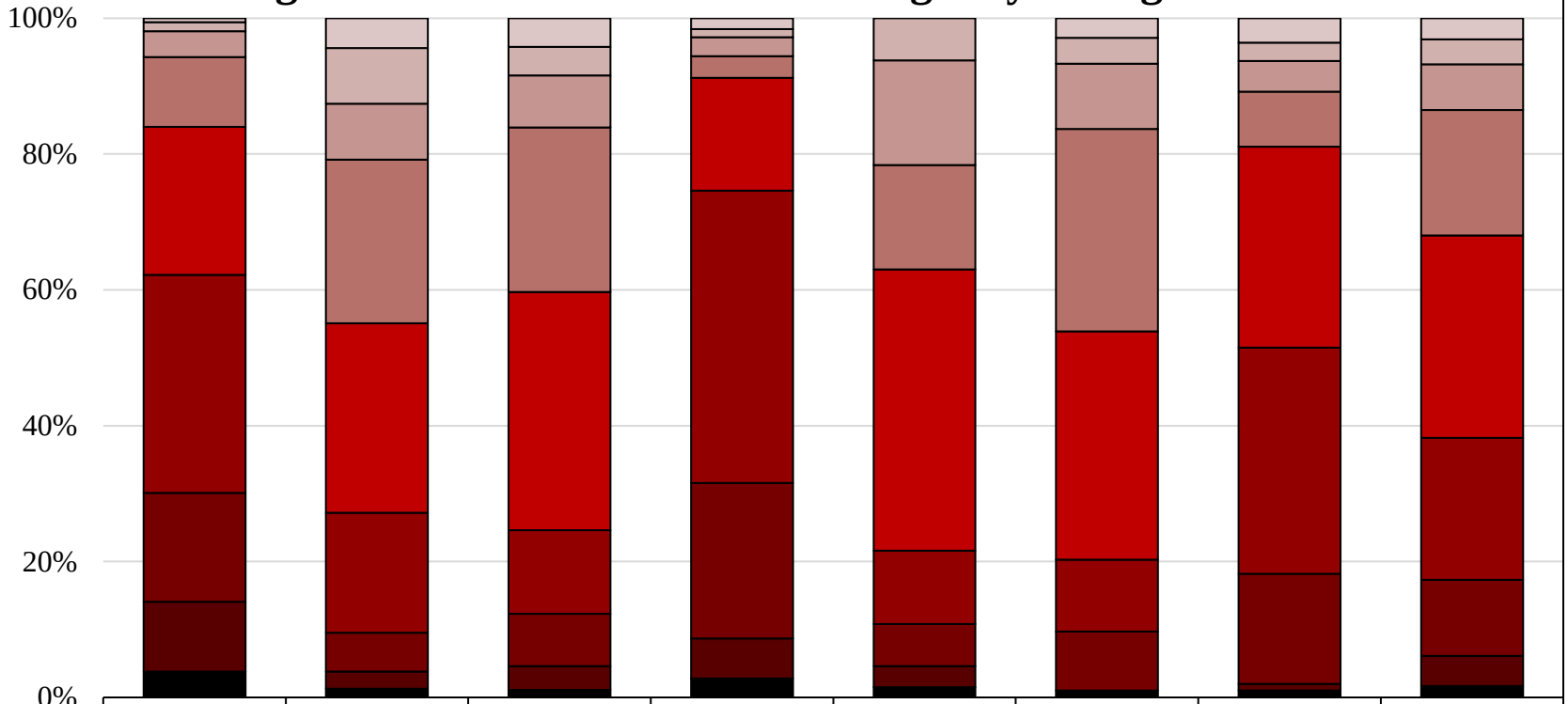
[3] Because of small cell counts for certain ethnicities, the ethnic categories were split into Minority, International and Unknown, and White. The Minority category contains those with the racial categories of American Indian/Alaska Native, Asian, Black or African American, Hispanics of any race, Native Hawaiian or other Pacific Islander, and two or more races.

Figure 8: Income Bracket Percentages by Race/Ethnicity and Gender



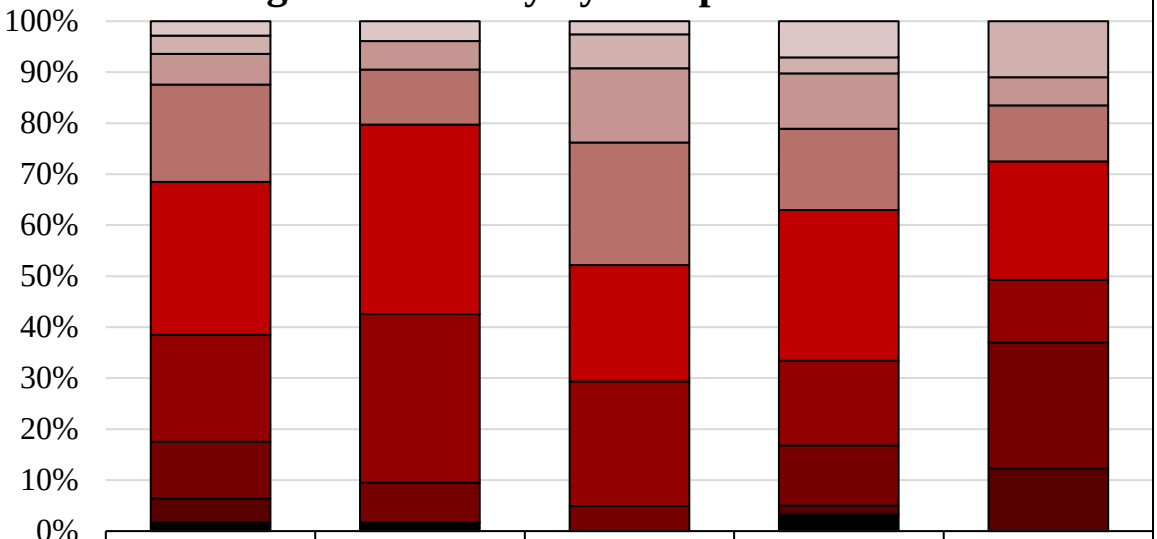
	Minority Women (n=76)	Minority Men (n=51)	International/ Unknown Women (n=48)	International/ Unknown Men (n=35)	White Women (n=465)	White Men (n=457)
$15K or Less	8.6	0.0	3.2	0.0	4.8	0.5
> $15K-$25K	5.2	5.9	7.7	0.0	3.8	2.7
> $25K-$35K	7.5	1.7	3.6	9.8	8.7	4.8
> $35K-$50K	26.2	19.0	15.9	26.6	23.7	10.2
> $50K-$75K	29.3	27.7	34.4	14.4	34.1	25.2
> $75K-$100K	14.6	18.3	27.3	24.7	15.9	27.5
> $100K- 150K	6.4	16.4	7.9	12.2	6.7	17.6
> $150K-$200K	2.2	10.2	0.0	10.9	1.8	7.8
> $200K	0.0	0.8	0.0	1.4	0.5	3.7

Figure 9: Income Bracket Percentages by College



	CCB	CAHNRS	CAS	VCEA	Comm	Education	Nurs/Vet/ Pharm	Total
$15K or Less	0.6	4.4	4.2	1.6	0.0	2.9	3.6	3.1
> $15K-$25K	1.3	8.2	4.2	1.2	6.2	3.8	2.7	3.7
> $25K-$35K	3.8	8.2	7.7	2.8	15.4	9.6	4.5	6.7
> $35K-$50K	10.3	24.1	24.2	3.2	15.4	29.8	8.1	18.5
> $50K-$75K	21.8	27.9	35.1	16.6	41.4	33.6	29.6	29.8
> $75K-$100K	32.1	17.7	12.3	43.1	10.8	10.6	33.3	20.9
> $100K- 150K	16.0	5.7	7.7	22.9	6.2	8.7	16.2	11.2
> $150K-$200K	10.3	2.5	3.5	5.9	3.1	0.0	1.0	4.4
> $200K	3.8	1.3	1.1	2.8	1.5	1.0	1.0	1.7

Figure 10: Salary by Campus



	Pullman (n=962)	Spokane (n=53)	Tri-Cities (n=27)	Vancouver (n=69)	Global (n=21)
$15K or Less	2.8	3.9	2.6	7.1	0.0
> $15K-$25K	3.6	0.0	6.6	3.1	11.0
> $25K-$35K	6.0	5.6	14.6	10.9	5.5
> $35K-$50K	19.1	10.8	24.0	15.9	11.0
> $50K-$75K	30.0	37.1	22.9	29.6	23.2
> $75K-$100K	21.0	33.1	24.4	16.6	12.3
> $100K- 150K	11.1	7.8	4.9	11.8	24.7
> $150K-$200K	4.7	0.0	0.0	1.7	12.3
> $200K	1.7	1.7	0.0	3.3	0.0

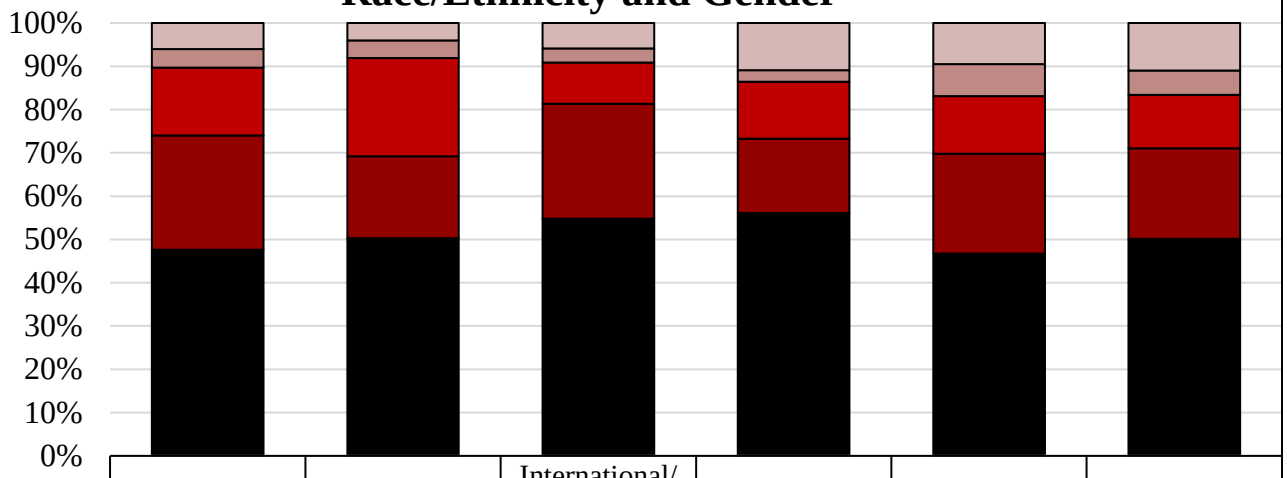
Jobs Since Graduation

By race/ethnicity and gender, there are differences between the proportion of jobs held since graduation related to the respondents' degrees (figure 11). With the exception of minority men, men were more likely to have none of their jobs related to their degrees than women. Unknown/international and minority women were the most likely to have all or over half of their jobs related to their degrees, followed by unknown/international men.

By college, those in the Colleges of Nursing, Veterinary Medicine, or Pharmacy had the highest proportion of jobs related to one's degree, followed by the Voiland College of Engineering and Architecture (figure 12). The College of Arts and Sciences and College of Communication had the lowest proportion of jobs related to one's degree. When these percentages are further broken down by college and gender (figure 13), women in the Colleges of Nursing, Veterinary Medicine, and Pharmacy have the highest proportion of jobs related to their degrees (87%), while men in the College of Education have the highest proportion of none of their jobs being related to their degrees (18%).

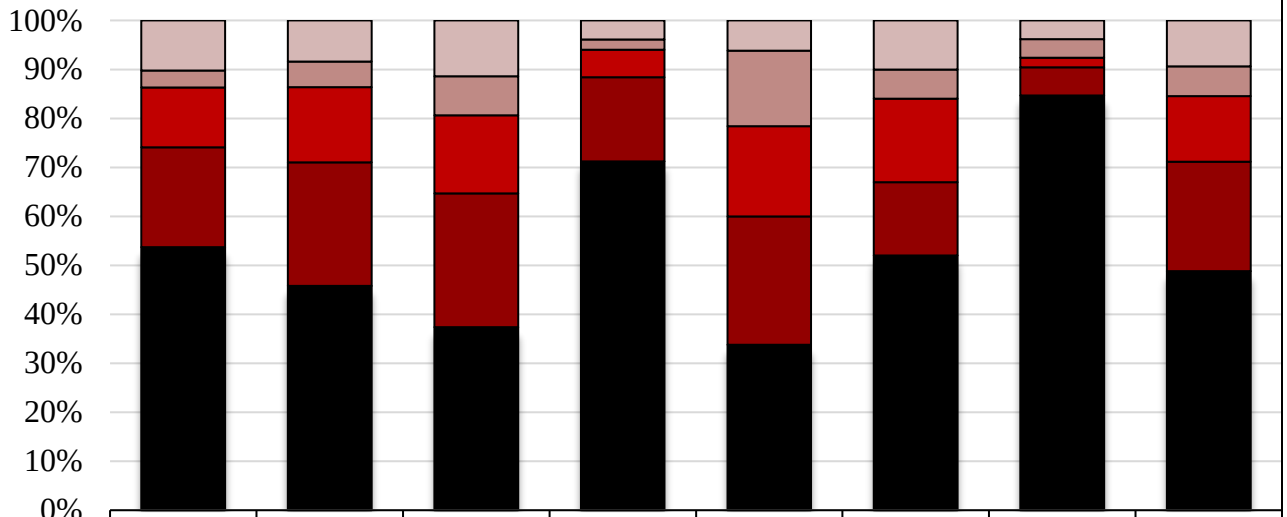
By campus, over 90 percent of Spokane alumni have had all or more than half of their jobs related to their degrees, while Pullman and Vancouver had about 70 percent in these categories (figure 14). Tri-Cities had the highest percentage of alumni with none of their jobs related to their degrees (11%), followed by Pullman (10%).

Figure 11: Percentage of Jobs Related to Degree by Race/Ethnicity and Gender



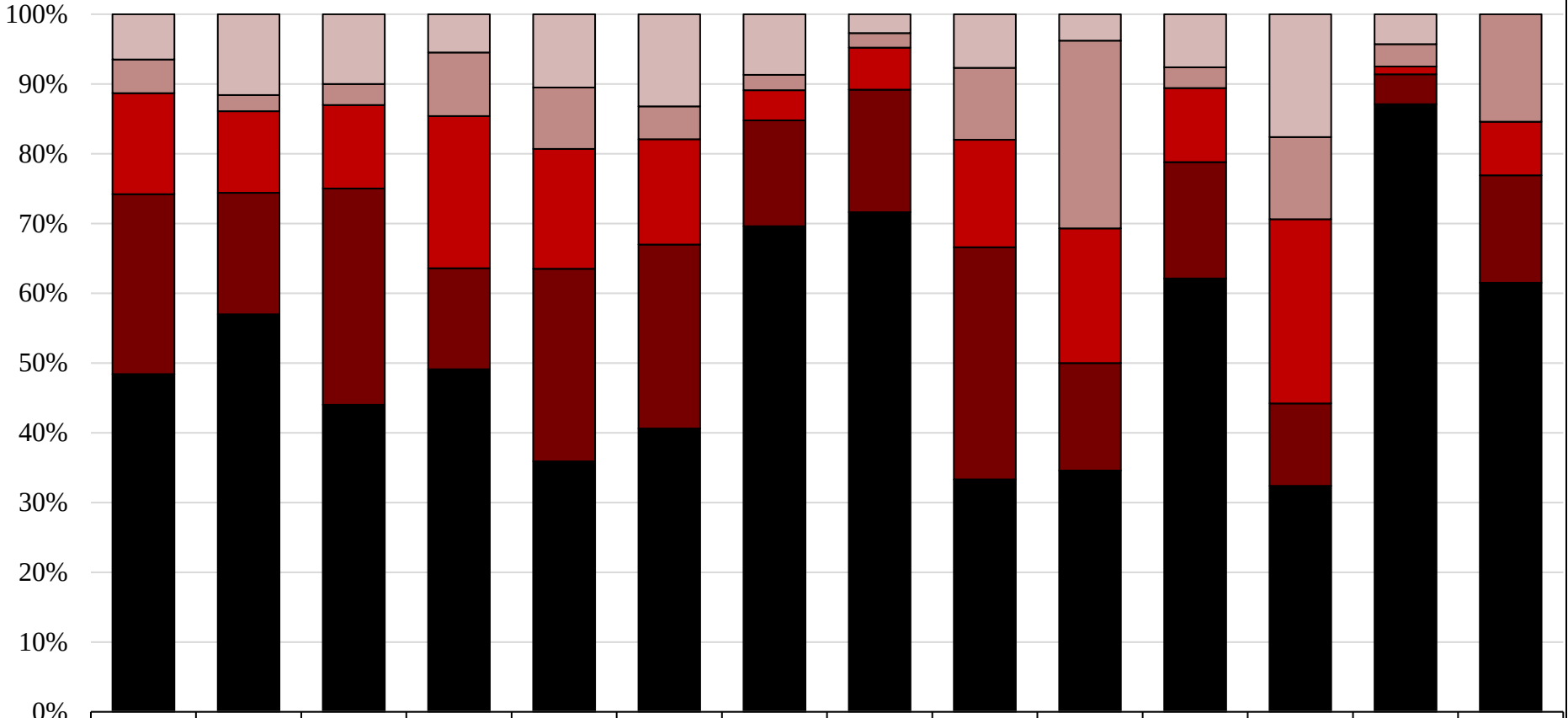
	Minority Women	Minority Men	International/ Unknown Women	International/ Unknown Men	White Women	White Men
None	6.0	4.0	5.9	10.9	9.5	11.0
Less than Half	4.3	4.1	3.2	2.7	7.4	5.6
About Half	15.7	22.7	9.6	13.1	13.3	12.3
More than Half	26.4	18.9	26.5	17.2	23.1	20.9
All	47.6	50.3	54.8	56.1	46.7	50.1

Figure 12: Percentage of Jobs Related to Degree by College



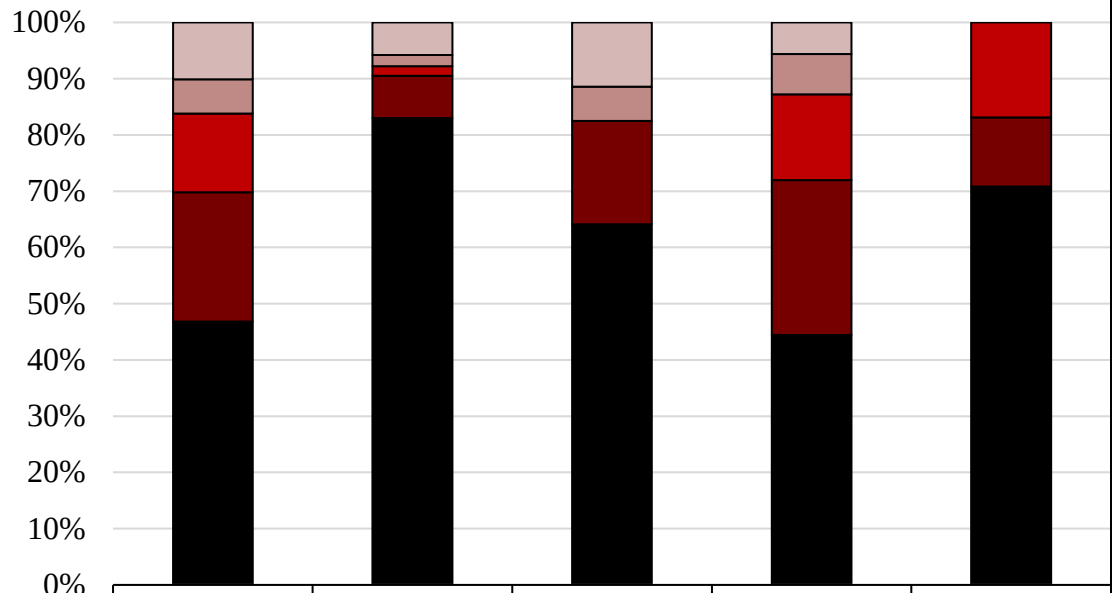
	Business	CAHNRS	CAS	CEA	Comm	Education	Nurse/Vet/ Pharm	Total
None	10.2	8.4	11.4	3.9	6.2	10.0	3.8	9.4
Less than Half	3.5	5.2	8.0	2.1	15.4	6.0	3.8	6.1
About Half	12.2	15.4	15.9	5.6	18.4	17.0	2.0	13.3
More than Half	20.4	25.2	27.3	17.2	26.2	15.0	5.7	22.4
All	53.7	45.8	37.4	71.2	33.8	52.0	84.7	48.8

Figure 13: Percentage of Jobs Related to Degree by College and Gender



	Business (Women)	Business (Men)	CAHNRS (Women)	CAHNRS (Men)	CAS (Women)	CAS (Men)	CEA (Women)	CEA (Men)	Comm (Women)	Comm (Men)	Education (Women)	Education (Men)	Nurse/Vet/ Pharm (Women)	Nurse/Vet/ Pharm (Men)
None	6.5	11.6	10.0	5.5	10.5	13.2	8.7	2.7	7.7	3.8	7.6	17.6	4.3	0.0
Less than Half	4.8	2.3	3.0	9.1	8.8	4.7	2.2	2.1	10.3	26.9	3.0	11.8	3.2	15.4
About Half	14.5	11.7	12.0	21.8	17.2	15.1	4.3	6.0	15.4	19.3	10.6	26.4	1.1	7.7
More than Half	25.8	17.4	31.0	14.5	27.6	26.4	15.2	17.6	33.3	15.4	16.7	11.8	4.3	15.4
All	48.4	57.0	44.0	49.1	35.9	40.6	69.6	71.6	33.3	34.6	62.1	32.4	87.1	61.5

Figure 14: Percentage of Jobs Related to Degree by Campus

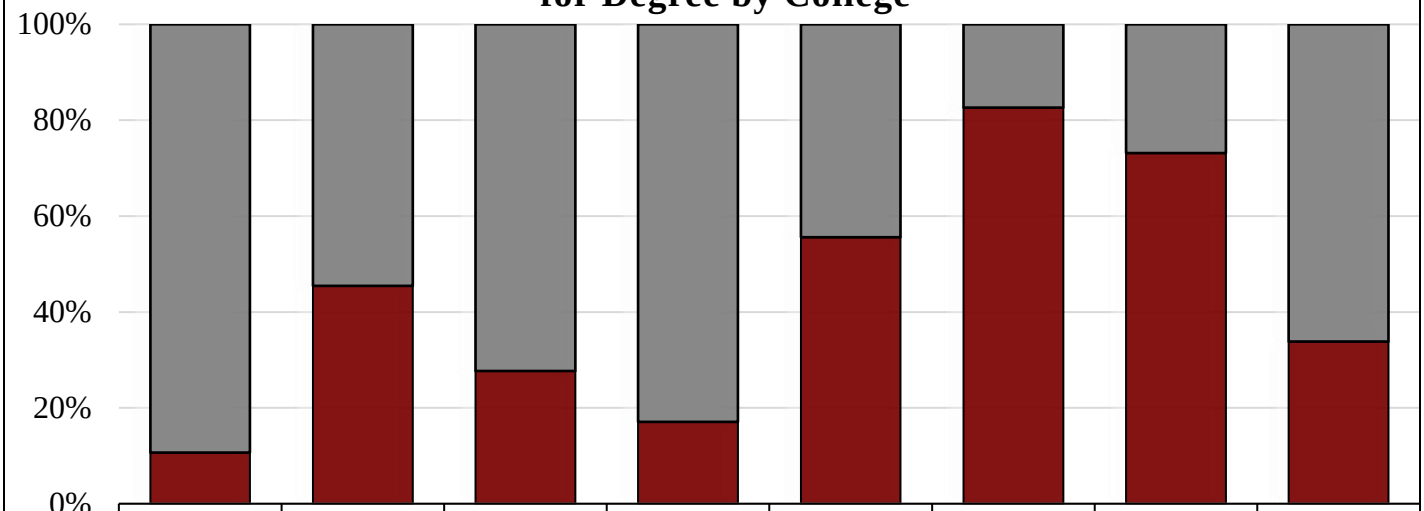


	Pullman (n=936)	Spokane (n=52)	Tri-Cities (n=22)	Vancouver (n=66)	Global (n=18)
None	10.1	5.8	11.4	5.6	0.0
Less than Half	6.1	2.0	6.1	7.2	0.0
About Half	14.0	1.7	0.0	15.2	16.9
More than Half	23.0	7.5	18.4	27.5	12.3
All	46.8	83.0	64.1	44.4	70.8

Internships

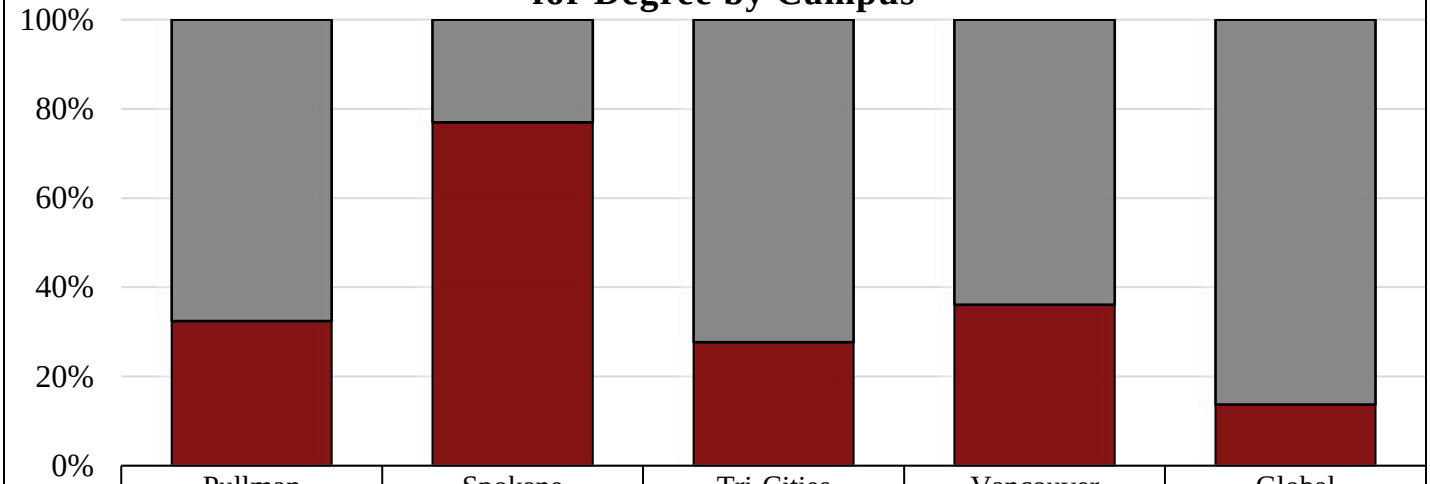
About one-third of the respondents indicated that they had an internship required for their degree (figure 15). By college, those in the College of Education had the highest proportion of alumni who had a required internship (83%), while the Carson College of Business had the lowest proportion (11%). About the same proportion of alumni who had a required internship are currently employed compared to those who did not have a required internship (93% versus 92%). Most of the respondents indicated that their internship was related to their degree of study (99%). By campus (figure 16), Spokane had the highest proportion of alumni having an internship required for their degree (77%), while the Global campus had the lowest (14%).

Figure 15: Percentage of Alumni Having an Internship Required for Degree by College



	CCB	CAHNRS	CAS	VCEA	Comm	Education	Nurse/Vet/ Pharm	Grand Total
No	89.4	54.6	72.3	82.9	44.4	17.4	26.8	66.2
Yes	10.7	45.4	27.7	17.1	55.6	82.6	73.2	33.8

Figure 16: Percentage of Alumni Having an Internship Required for Degree by Campus



	Pullman	Spokane	Tri-Cities	Vancouver	Global
No	67.6	23.0	72.3	63.9	86.3
Yes	32.4	77.0	27.7	36.1	13.7

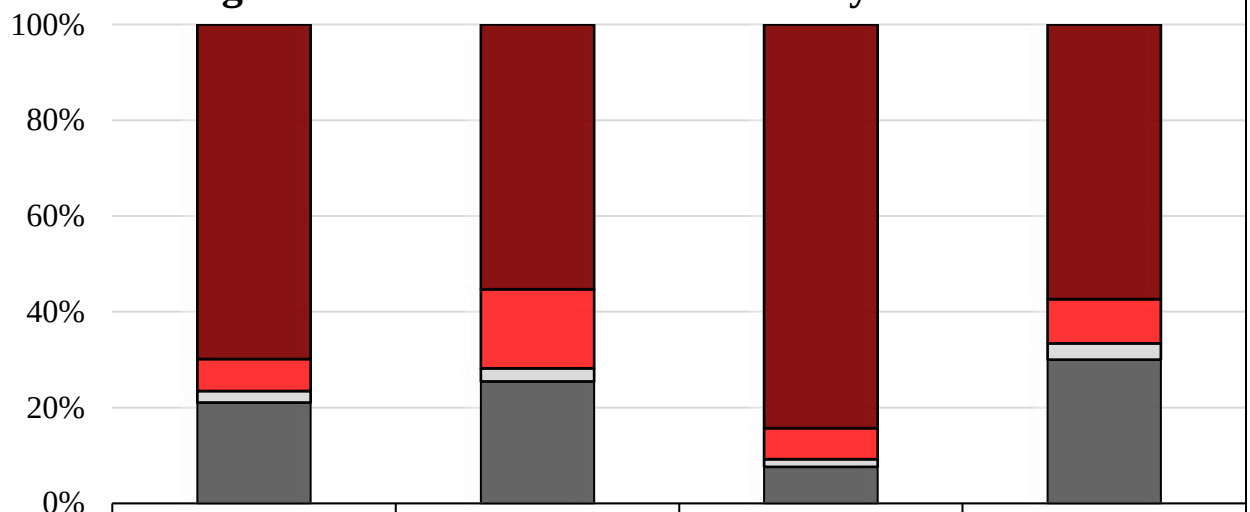
Further Academic Study

As shown by figure 17, the pursuit of education beyond the bachelor's degree at WSU is moderate. About one-fifth of the respondents completed additional undergraduate education, about one-fourth of respondents completed a Master's degree, and about 30 percent of respondents completed a professional certification, endorsement, or licensure program. Those who plan to attend additional education are mostly choosing to pursue a Master's degree (16.5%), and a very small percentage of alumni are currently attending additional education.

There were college level differences in the completion of additional education (figure 18). College of Education alumni were the most likely to complete a Master's degree (43%) and additional undergraduate education (28.6%), while those from the Colleges of Nursing, Veterinary Medicine, and Pharmacy were the most likely to complete doctoral education and professional certification.

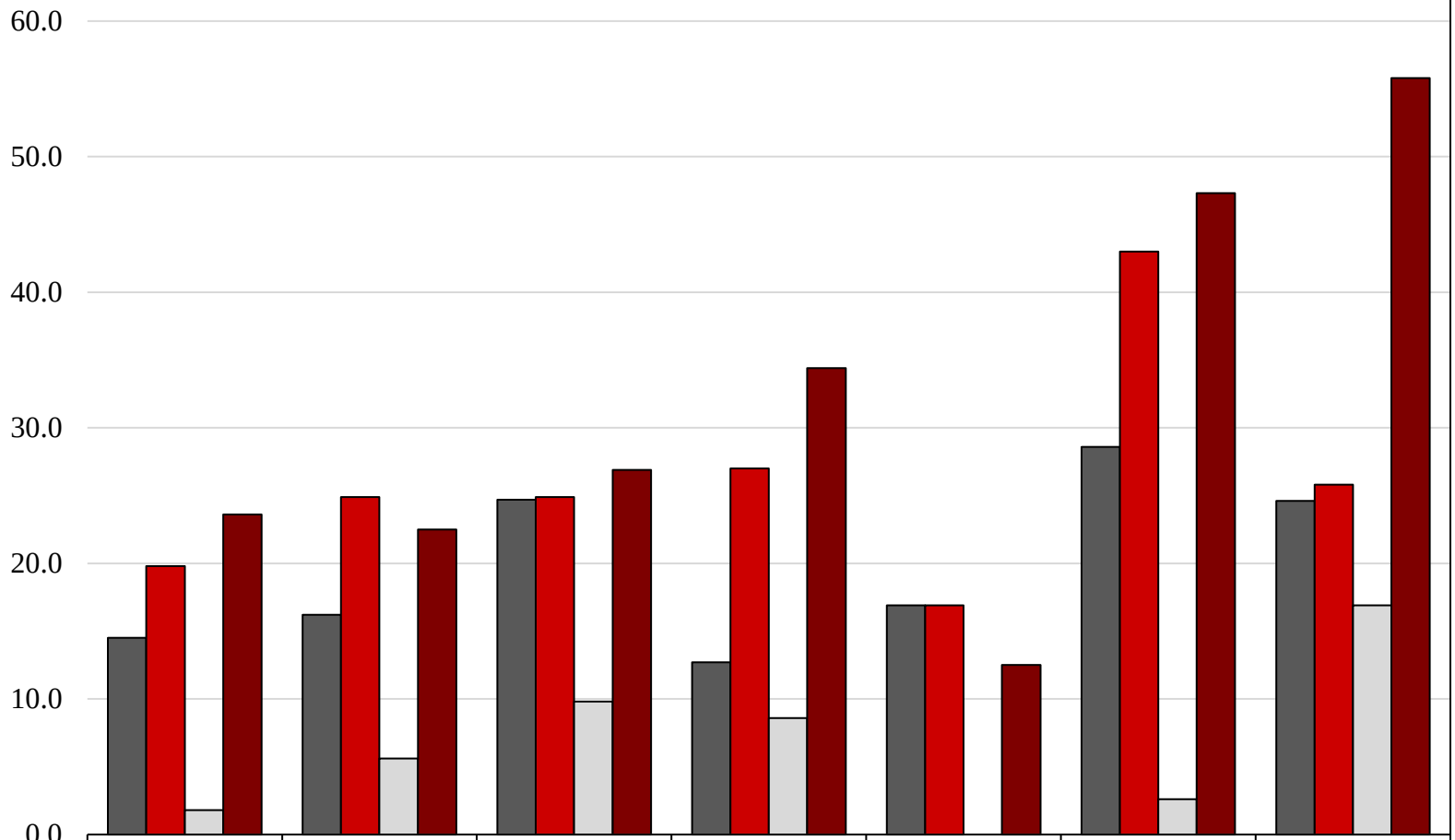
By campus (figure 19), Spokane had the highest percentage of alumni completing professional certification (48%), and the Global Campus had the highest percentage of alumni completing Master's degrees (39%). Pullman had the highest percentage of alumni completing both additional undergraduate education and doctoral degrees.

Figure 17: Further Academic Study



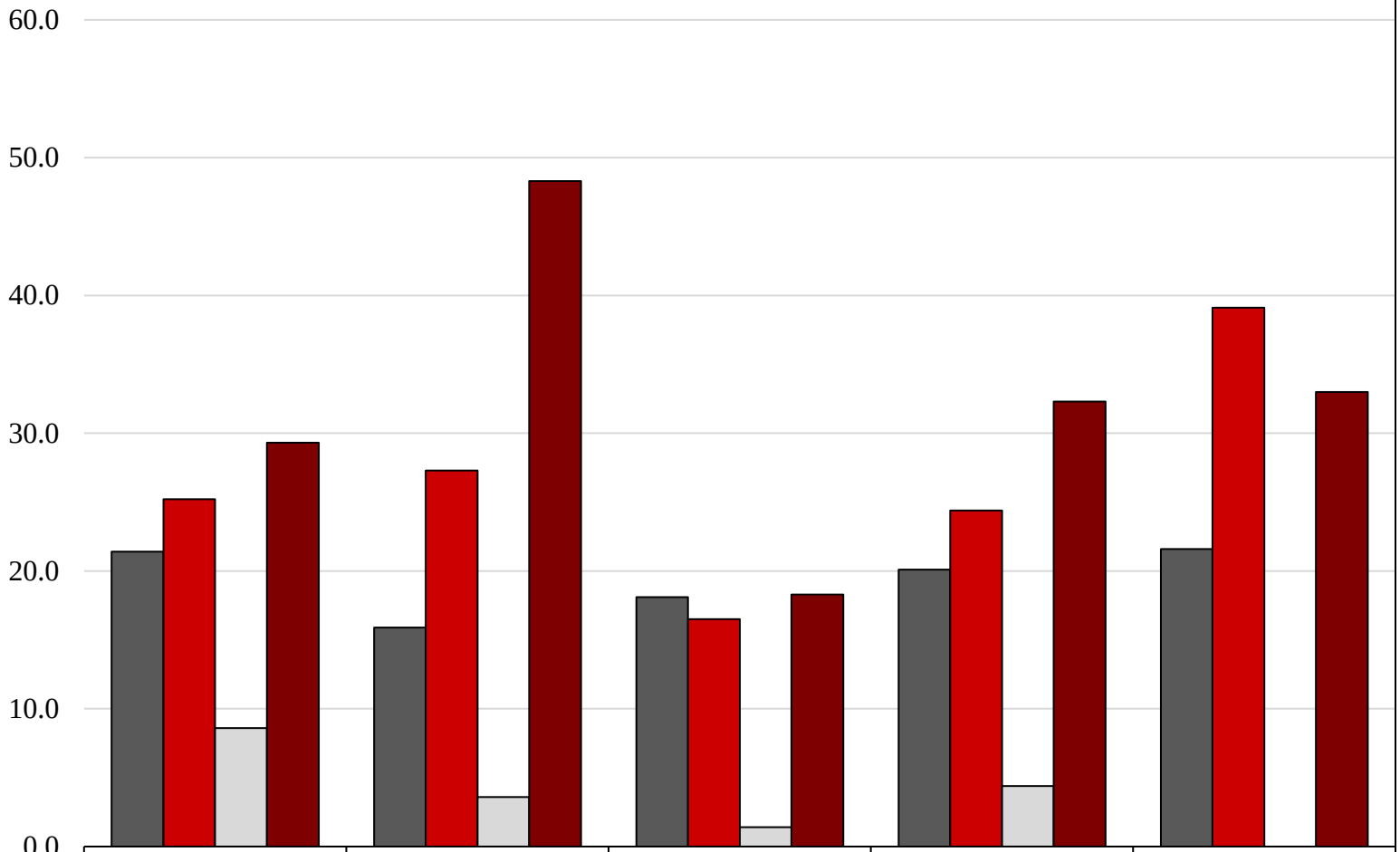
	Additional Undergrad	Masters	Doctoral	Professional Certification, Endorsement, or Licensure Program
No Plans to Attend	69.8	55.3	84.2	57.4
Plan to Attend	6.7	16.5	6.5	9.2
Currently Attending	2.4	2.7	1.6	3.4
Have Completed	21.0	25.5	7.6	30.0

Figure 18: Percentage Completing Additional Education by College



	CCB	CAHNRS	CAS	VCEA	Comm	Education	Nurse/Vet/ Pharm
Additional Undergrad	14.5	16.2	24.7	12.7	16.9	28.6	24.6
Masters	19.8	24.9	24.9	27.0	16.9	43.0	25.8
Doctoral	1.8	5.6	9.8	8.6	0.0	2.6	16.9
Professional Certification	23.6	22.5	26.9	34.4	12.5	47.3	55.8

Figure 19: Percentage Completing Additional Education by Campus



	Pullman	Spokane	Tri-Cities	Vancouver	Global
Additional Undergrad	21.4	15.9	18.1	20.1	21.6
Masters	25.2	27.3	16.5	24.4	39.1
Doctoral	8.6	3.6	1.4	4.4	0.0
Professional Certification	29.3	48.3	18.3	32.3	33.0

Finances

Student Loan Debt

The median student loan debt from these alumni is about $13,000, with about $5,400 of that debt remaining. It is important to note that there were discrepancies between the debt respondents reported and the debt recorded for them in Institutional Research's database; both under and over reporting of debt took place. There are several possible explanations for this, such as respondents misunderstanding the survey item and reporting debt outside of a WSU Bachelor's degree and respondents having private loans or other debts that IR's system does not take into account.

Median student debt: $13,018 95% CI[4]: $11,265 – $14,771
Median student debt remaining: $5,399 95% CI: $3,738 - $7,060

There are both gender and racial disparities in median debt (table 3 and figure 20). By gender, ethnicity, and college (table 3), minority men and women have the highest median debts in the Colleges of Agriculture, Human, and Natural Resource Sciences and Arts and Sciences, while minority women and international/unknown men have the highest debts in the Voiland College of Engineering and Architecture. Minority women also have substantially higher median debt than other gender and ethnic groups in the College of Communication. In the College of Education, minority and white men have the highest median debts. Figure 20 shows similar results; minority women have the highest percentage of alumni with over $50,000 in debt, and minority men have the lowest percentage of alumni with over $50,000 or $0 in debt. White men have the highest percentage of alumni with $0 in debt.

By campus (figure 21), those graduating from WSU Spokane had the highest median student loan debt following graduation, while those graduating from WSU Tri-Cities had the least. By college (figure 22), the College of Agriculture, Human, and Natural Resource Sciences had the highest median debt, while the Voiland College of Engineering and Architecture had the lowest median debt. By income level (figure 23), those making over $150K or less than $15K have the lowest median debt remaining.

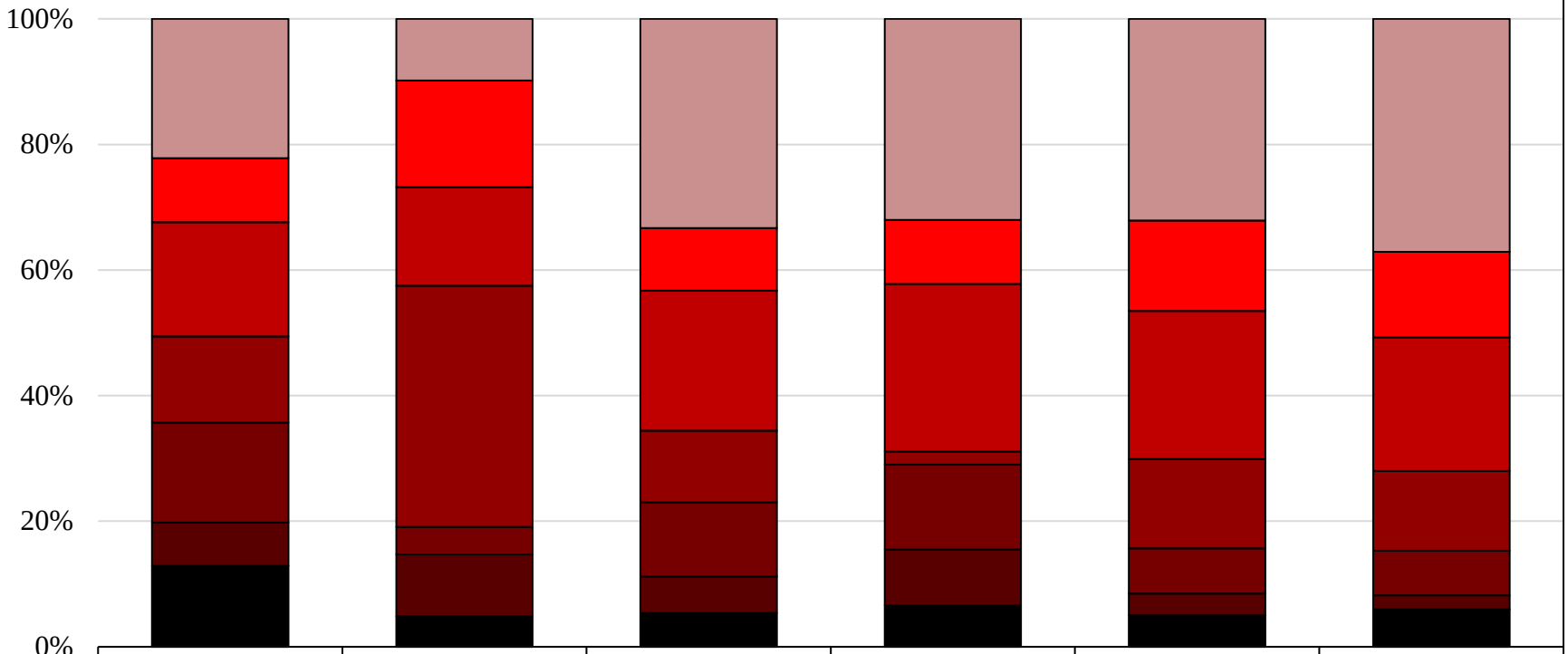
Table 3: Median Debt by Gender, Ethnicity, and College[5]

	Minority Women	Minority Men	Unknown/ International Women	Unknown/ International Men	White Women	White Men	Overall Median Total
CCB	$11,250	$10,000	$7,500	$6,000	$9,400	$8,500	$9,875
CAHNRS	$25,000	$25,000	$0	$0	$17,000	$15,000	$18,067
CAS	$20,500	$23,000	$15,000	$13,000	$14,444	$9,250	$14,625
VCEA	$17,750	$4,500	$0	$15,200	$4,500	$5,813	$6,500
Communication	$16,667	$7,500	$0	$0	$7,500	$7,500	$7,750
Education	$14,500	$27,500	$6,000	$0*	$11,500	$24,000	$18,000
Nurse/Vet/Pharm	$15,000	$9,000	$18,500	$0*	$11,000	$3,500	$11,667

*Insufficient sample size

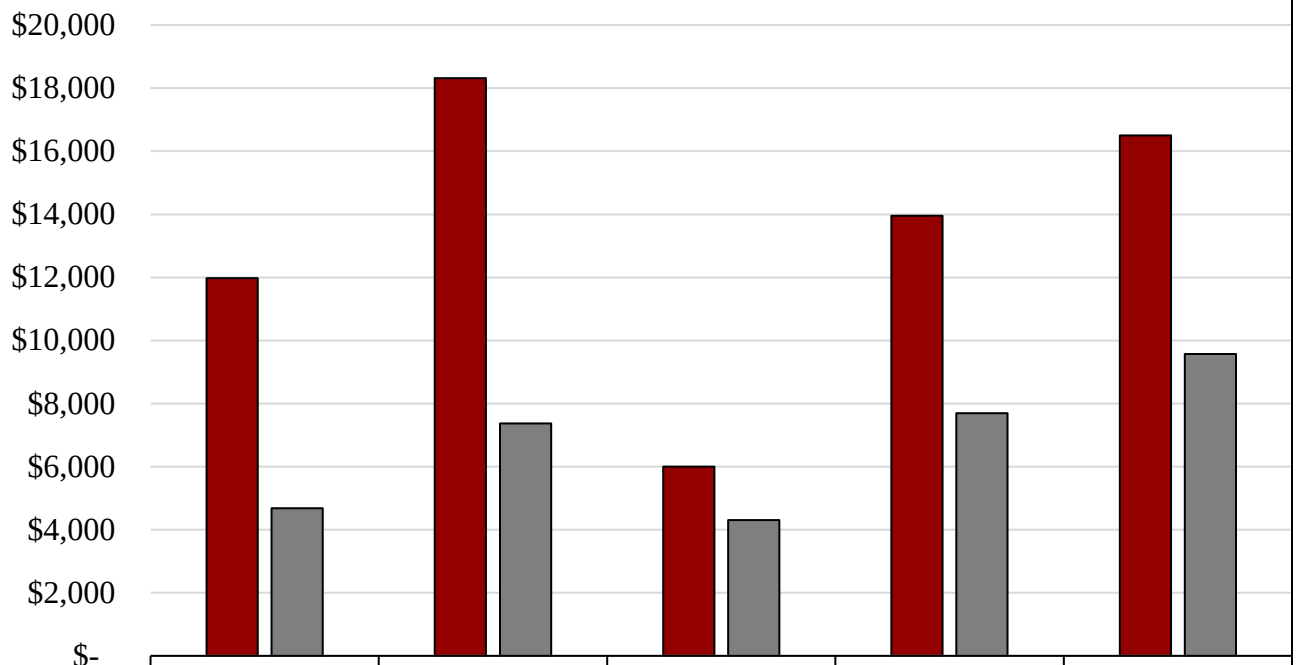
[4] The CI's are the 95% confidence intervals of median debt.
[5] Two observations were dropped due to a difference of over $100,000 between the reported debt and debt in IR's database.

Figure 20: Debt Bracket Percentages by Race/Ethnicity and Gender



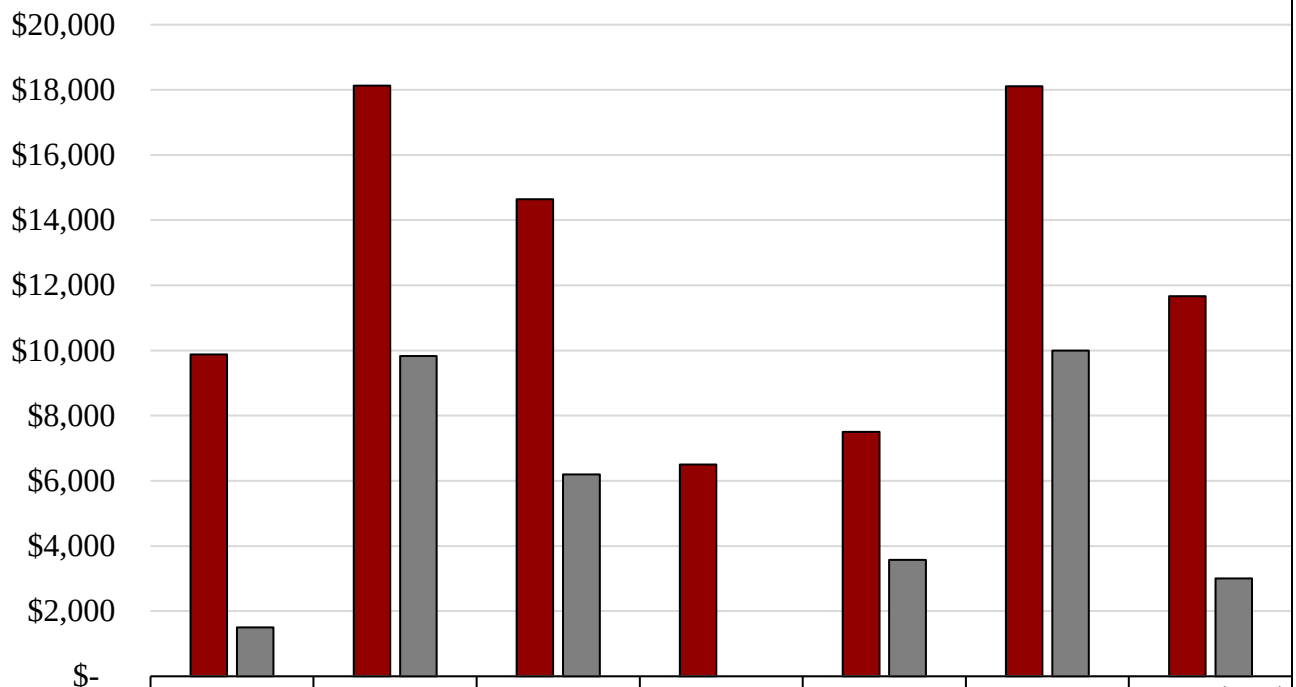
	Minority Women (n=82)	Minority Men (n=50)	International/ Unknown Women (n=58)	International/ Unknown Men (n=37)	White Women (n=512)	White Men (n=469)
$0	22.2	9.8	33.3	32.0	32.1	37.1
>$0 to $10K	10.2	17.0	10.0	10.2	14.4	13.6
>$10K to $20K	18.2	15.7	22.3	26.7	23.6	21.3
>$20K to $30K	13.7	38.4	11.4	2.1	14.2	12.7
>$30K to $40K	15.9	4.4	11.8	13.5	7.2	7.1
>$40K to $50K	6.9	9.8	5.8	8.9	3.5	2.2
Over $50K	12.9	4.9	5.4	6.6	5.0	6.0

Figure 21: Median Student Debt and Debt Remaining by Campus



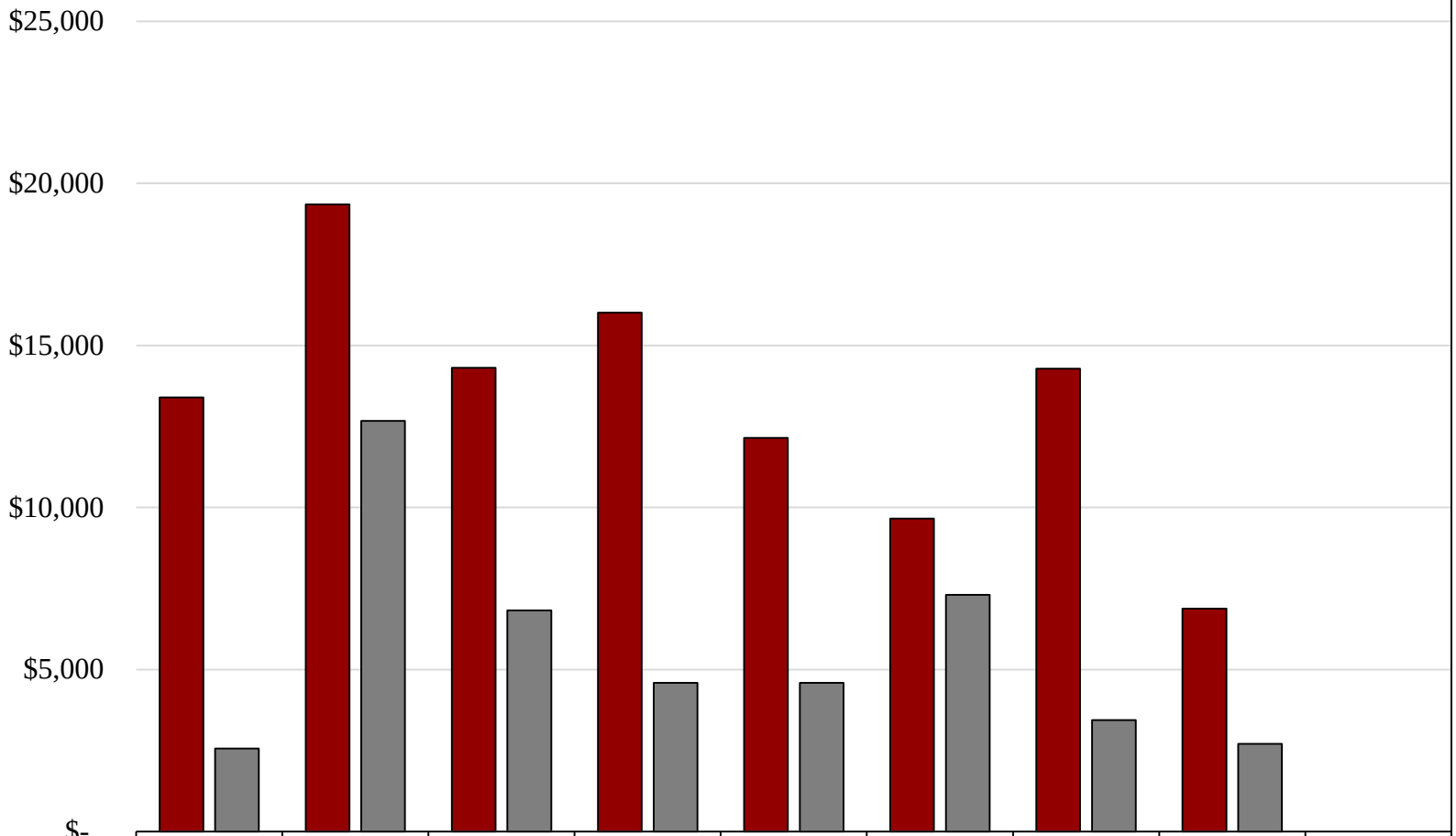
	Pullman	Spokane	Tri-Cities	Vancouver	Global
Debt	$11,975	$18,314	$5,998	$13,951	$16,500
Debt Remaining	$4,679	$7,373	$4,305	$7,690	$9,570

Figure 22: Median Student Debt and Debt Remaining by College



	CCB	CAHNRS	CAS	VCEA	Comm	Education	Nurse/Vet/ Pharm
Debt	$9,875	$18,133	$14,646	$6,500	$7,500	$18,111	$11,667
Debt Remaining	$1,500	$9,830	$6,200	$0	$3,575	$10,000	$3,000

Figure 23: Median Student Debt and Debt Remaining by Income



	$15K or Less	> $15K-$25K	> $25K-$35K	> $35K-$50K	> $50K-$75K	> $75K-$100K	> $100K-150K	> $150K-$200K	> $200K
Debt	$13,397	$19,352	$14,313	$16,011	$12,149	$9,654	$14,283	$6,876	$0
Debt Remaining	$2,563	$12,671	$6,821	$4,592	$4,592	$7,300	$3,435	$2,703	$0

Perceptions of Educational Investment

Regardless of student loan debt, about 91% of the alumni considered their educational investment somewhat or very worthwhile, with about two-thirds of the alumni considering it to be very worthwhile (figure 24).

By college, those in the Voiland College of Engineering and Architecture and the Colleges of Nursing, Veterinary Medicine, and Pharmacy reported their educational investment to be the most worthwhile; over 80 percent of these alumni indicated their educational investment was very worthwhile (figure 25). By contrast, about 60 percent of alumni answered very worthwhile in the Colleges of Agriculture, Human, and Natural Resource Sciences and Education.

By employment (figure 26), those who are currently employed were more likely to respond that their educational investment was very worthwhile than those who are unemployed (69% versus 52%). However, about 37% of the unemployed indicated that their educational investment was somewhat worthwhile, showing that the majority of this group was at least somewhat satisfied with their WSU educational investment despite their current unemployment.

By campus (figure 27), those graduating from the global campus found their educational investment to be the most worthwhile; all of these respondents answered their educational investment was either very or somewhat worthwhile. Vancouver had the lowest proportion of respondents reporting their educational investment was very or somewhat worthwhile (89%) and the highest proportion of respondents reporting their educational investment was not at all worthwhile (7%).

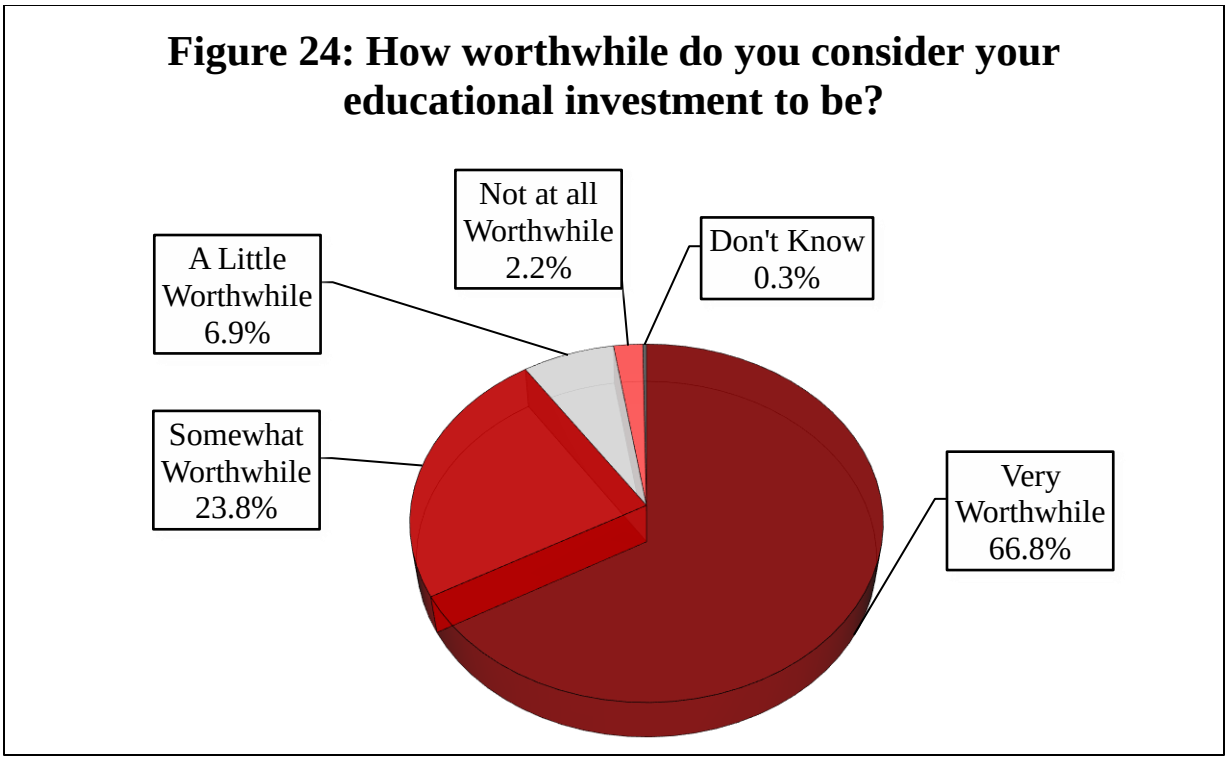
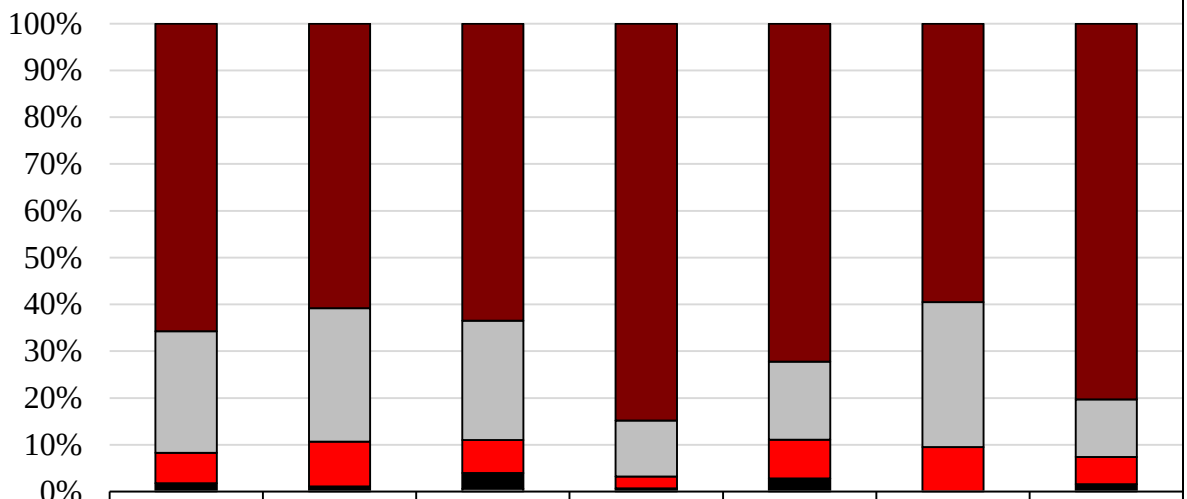
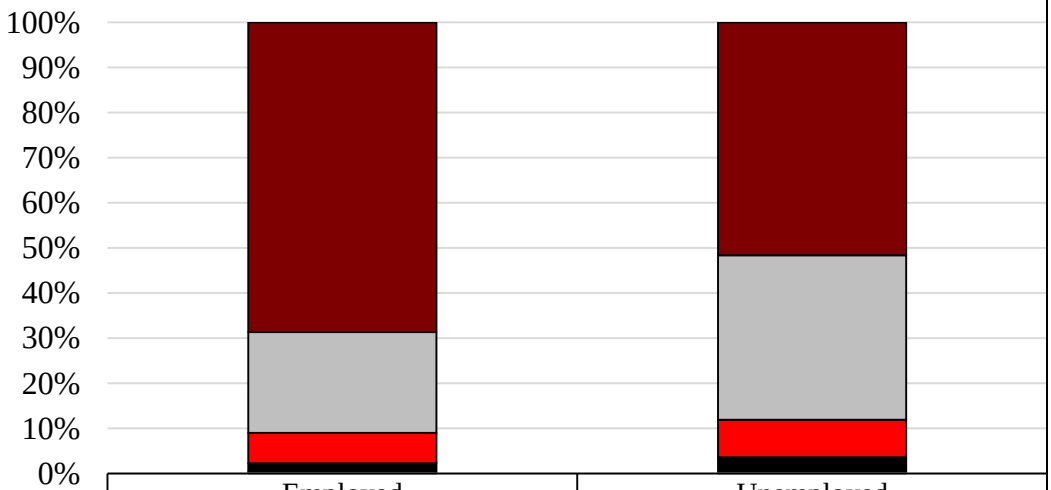


Figure 25: How Worthwhile Was Your Education by College



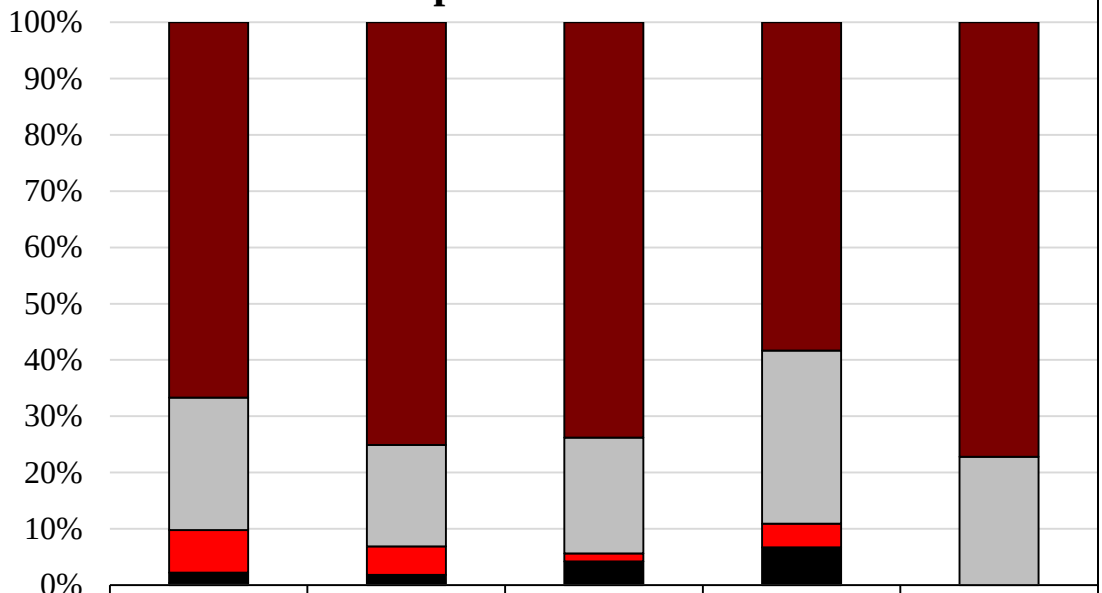
	CCB	CAHNRS	CAS	VCEA	Comm	Education	Nurse/Vet/ Pharm
Very Worthwhile	65.7	60.8	63.5	84.8	72.2	59.5	80.3
Somewhat Worthwhile	26.0	28.5	25.5	12.0	16.7	31.0	12.3
A Little Worthwhile	6.5	9.6	7.0	2.5	8.3	9.5	5.8
Not at All Worthwhile	1.8	1.1	3.4	0.7	2.8	0.0	1.6
Don't Know	0.0	0.0	0.6	0.0	0.0	0.0	0.0

Figure 26: How Worthwhile Was Your Education by Employment



	Employed	Unemployed
Very Worthwhile	68.6	51.6
Somewhat Worthwhile	22.4	36.5
A Little Worthwhile	6.7	8.3
Not at All Worthwhile	2.0	3.6
Don't Know	0.3	0.0

Figure 27: How Worthwhile Was Your Education by Campus



	Pullman (n=1078)	Spokane (n=59)	Tri-Cities (n=30)	Vancouver (n=84)	Global (n=26)
Very Worthwhile	66.7	75.1	73.8	58.3	77.2
Somewhat Worthwhile	23.5	18	20.6	30.8	22.8
A Little Worthwhile	7.6	5.1	1.4	4.2	0
Not at all Worthwhile	1.8	1.8	4.2	6.7	0
Don't Know	0.4	0	0	0	0

Time to Degree[6]

About half of the alumni took four years or less to complete their degrees (figure 28). 28 percent of alumni took over 4 to 5 years, and 14 percent took over 5 to 10 years. About 8 percent took over 10 years to complete their degrees.

By campus (figure 29), alumni at Pullman campus were the most likely to graduate in four years or less (53%), while only 11 percent of alumni finished in four years or less at the Tri-Cities campus. By contrast, alumni graduating from the Global campus were the most likely to take 15 or more years to complete their degrees (28%), while those at Pullman and Spokane were the least likely (3%).

Respondents were also asked to select their main reason for taking longer than four years to finish their undergraduate degrees (figure 30). Most alumni reported taking longer than four years because of changing majors (18%), needing to work while attending school (12%) and other non-financial reasons (11%). The reasons that delayed graduating in four years the least were taking a religious mission (1%), medical reasons (2%) and not getting into courses needed to graduate (2%).

[6] There was a discrepancy between IR's database and the survey responses because the survey item asked "From the time that you enrolled in college how long did it take for you to complete your undergraduate degree?" IR's system does not take large gaps between degrees into account, which is why there are a substantial amount of respondents who reported taking over 15 years to graduate.

Figure 28: Time to Degree in Years

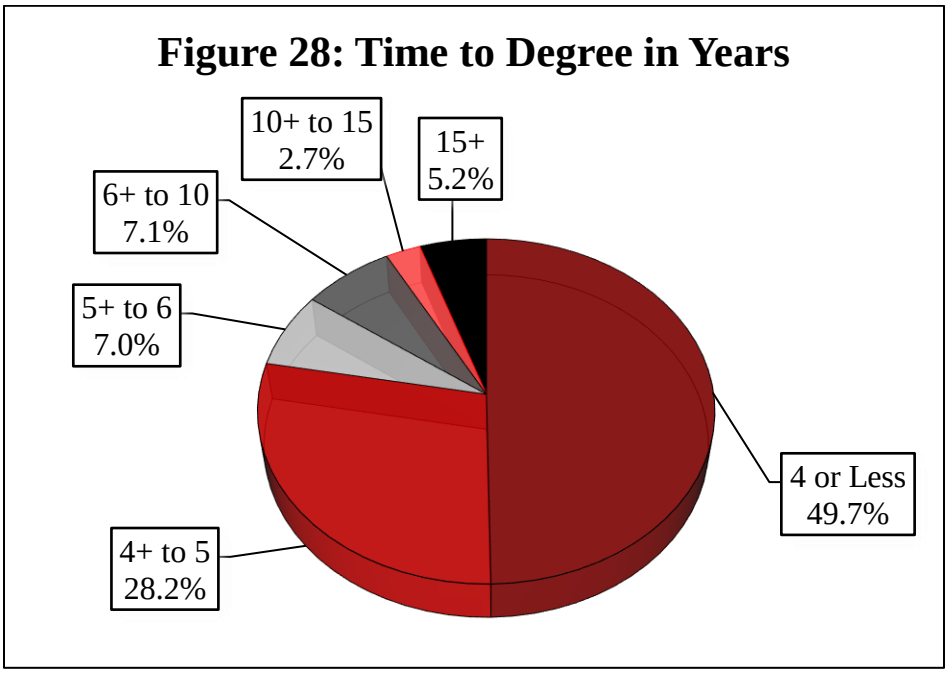
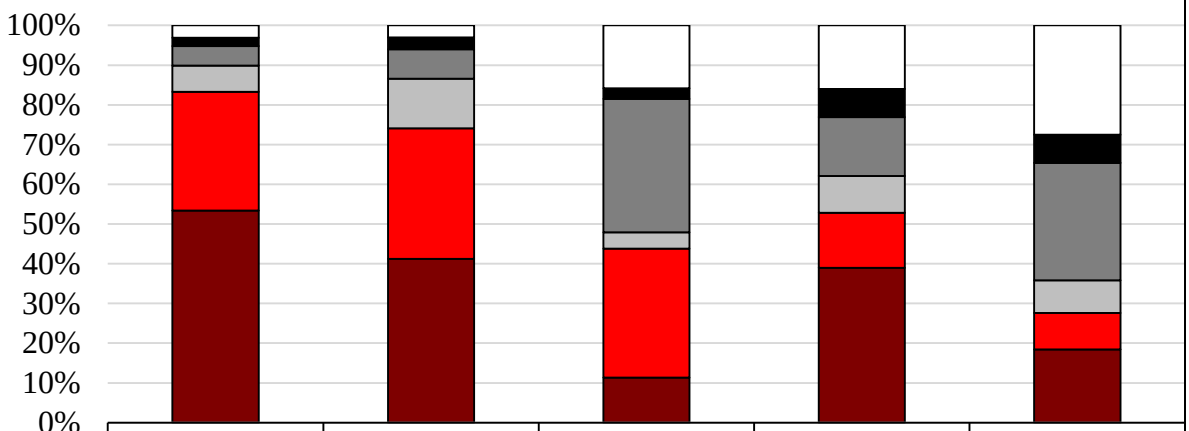
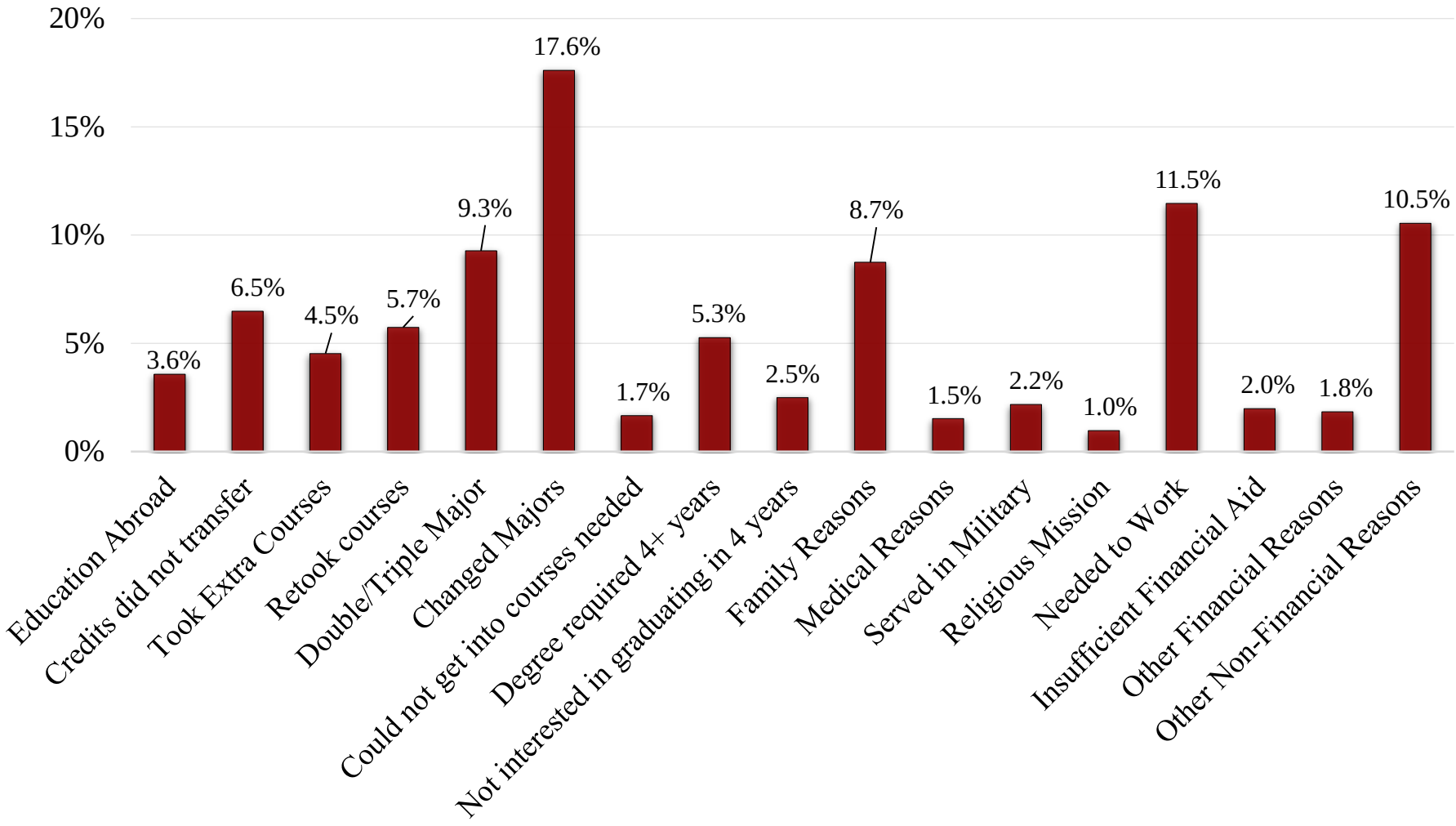


Figure 29: Proportion of Time to Degree by Campus



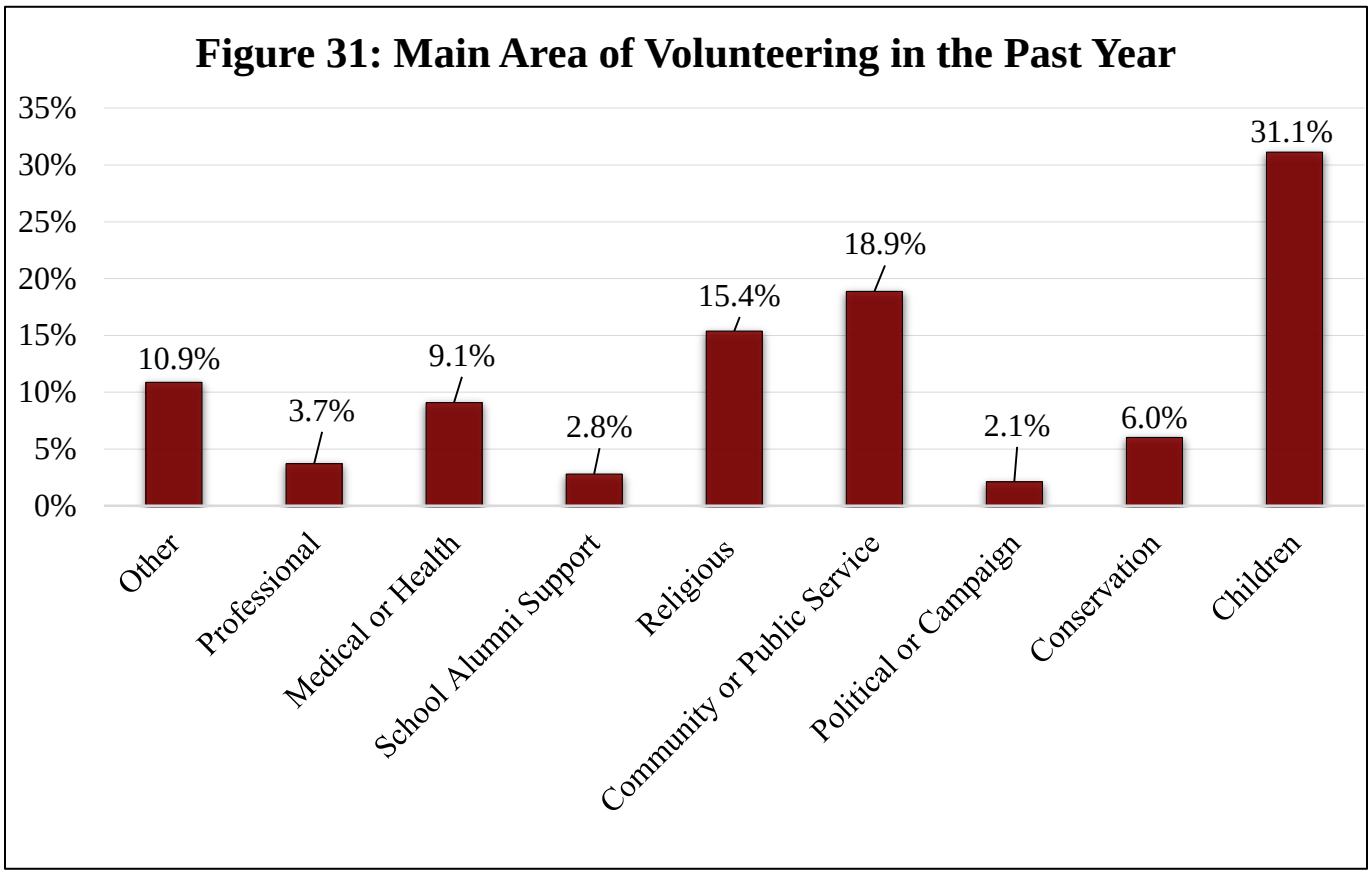
	Pullman (n=1168)	Spokane (n=69)	Tri-Cities (n=31)	Vancouver (n=94)	Global (n=28)
15+	3.1	3	15.8	16	27.5
10+ to 15	2.1	3	2.7	7.1	7.1
6+ to 10	4.9	7.4	33.6	14.8	29.6
5+ to 6	6.6	12.5	4.1	9.3	8.2
4+ to 5	29.9	32.9	32.5	13.8	9.2
4 or less	53.4	41.2	11.3	39	18.4

Figure 30: Main Reason for Taking Longer than 4 Years to Complete Degree



Volunteer Service

About 56 percent of the sample reported being involved in service, charity, or volunteer work outside of their regular employment in the past year. Those volunteering in the past year reported devoting an average of about 17 hours each month to all service, charity, or volunteer work. Figure 31 shows that the main area of volunteering was working with children (31%), followed by community or public service (19%) and religious activities (15%).



Open-Ended Responses

Methodology

The open-ended responses were analyzed using text mining techniques. It is important to note that this analysis was used as an aid to find themes and structure in the text data, not to make statistical inference. First, the text data were transformed from a data frame into a corpus, or structured set of texts. Next, the data were cleaned by removing punctuation, stripping whitespace, removing numbers, making the words lowercase, removing filler words (e.g., the, throughout, and also), and stemming the words into their root form (e.g., studied and studying were changed to their root form "study"). The cleaned corpus was transformed into a document term matrix consisting of each row of documents and columns of term frequencies, and it was weighted by term frequency. Finally, the weighted document term matrix was normalized using Euclidean distances.

K-means clustering was used to analyze the text data. K-means clustering is an unsupervised machine learning technique that attempts to partition each observation into a pre-specified amount of clusters, where each observation belongs to a cluster with the nearest mean. Specifying the number of clusters was an iterative process; the analyses were run several times and visualized with different numbers of clusters to see which number of clusters fit the data most accurately. Clusters were labeled into categories based on themes from responses in each cluster, as well as a list of the most frequent terms in each cluster. Besides analysis, the clusters were visualized by graphs of their principal components and word clouds containing the 75 most frequent words. These analyses were performed on the last four open-ended questions in the survey.

Valuable Experiences at WSU

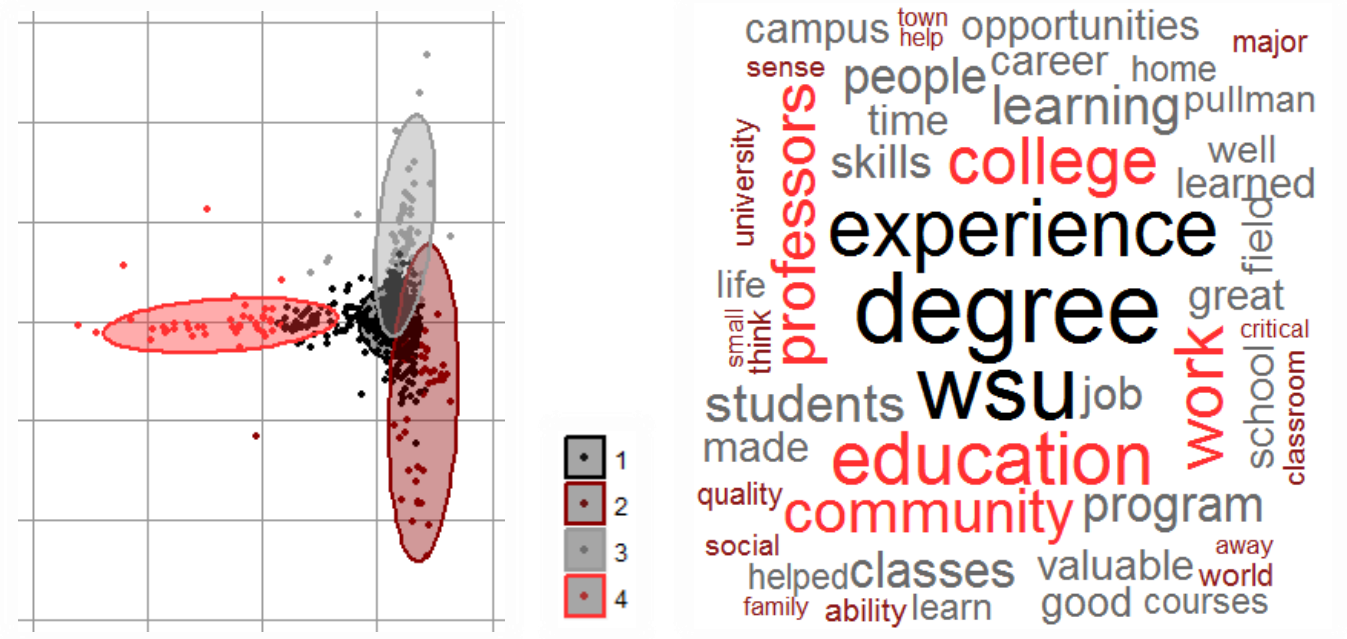
Question 48 asked respondents what they found to be most valuable about their WSU undergraduate education. After analyzing the data[7], the responses fit into 4 categories. First, respondents in category 1 had comments about topics relating to valuable work and class experiences, valuable skills in their education (e.g., leadership, critical thinking, and problem solving), and the flexible options they had to complete their degree. Category 2 respondents wrote about the value of the sense of community, friendships they made while at WSU, and quality of their education. Category 3 respondents wrote about the value of their learning experiences inside and outside of the classroom. Lastly, category 4 respondents discussed the value their WSU degree has had in the workplace. Figure 32 shows visualizations of the response categories, and table 4 shows example responses from each category.

[7] All text analysis and visualizations were completed in R, a programming language used for statistical computing.

Table 4: Response Categories and Example Responses for Q48

Category	Example Responses
1: Skills, experiences, flexibility of WSU degree, and other comments	"the education, preparation for the real world, accessibility to professors, varied opportunities (including studying abroad), practicum (paid internships) experience and professional development." "Learning to perform in-depth research and critical analysis."
2: Sense of Community and Quality of Education	"A strong sense of community and close interaction and access to outstanding professors." "I loved the experience and sense of community…I loved WSU because of the size of the campus, the quality of the instructors and the friends I made."
3: The college experience	"The experience at WSU allowed for broad sampling of different fields of study. I feel like I was able to try on many different hats while there, and that experience has been invaluable." "Interaction with people and the college experience. Becoming an "adult" on my own and building lasting relationships. Only these things can be done at college, but not taught by college."
4: Value of WSU degree	"My undergraduate degree helped pave the way to other great learning experiences and ultimately to my graduate degree, which has allowed me to have the most satisfying career I could ever imagine: teaching." "Earning a degree from a respected university."

Figure 32: Visualizations of Q48 Responses



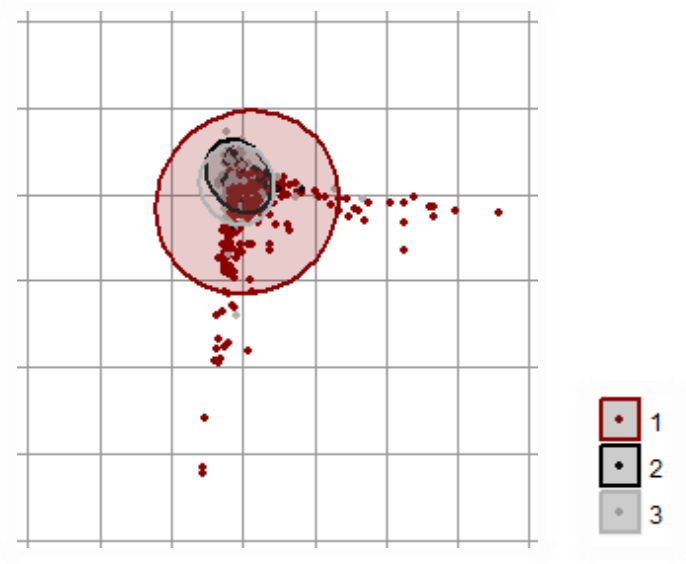
Most Beneficial Classes, Activities, and Experiences

Question 49 asked respondents to describe what one class, activity, or experience during their undergraduate studies most benefited them and why. Those in category 1 tended to identify specific courses and explain how hands-on experiences in these courses impacted their careers. Some category 2 respondents also identified course experiences, but they tended to focus on more general skills (e.g., teambuilding and management skills) and experiences outside of the classroom (e.g., fraternities, sororities, and other campus organizations). Category 3 respondents had a lot in common with category 1 respondents in that they identified specific courses as valuable, but they tended to focus on how their professors' teaching had a positive impact on them. Table 5 shows example responses, and figure 33 provides visualizations of the results.

Table 5: Response Categories and Example Responses for Q49

Category	Example Responses
1: Classroom experience- hands-on experience	"I was chosen to be an undergraduate research assistant with [professor redacted] in the [department redacted] department... Having this research experience, and also working with someone who had previously gone to law school, solidified my desire to become a lawyer."
2: Involvement in WSU organizations	"My involvement with my fraternity Sigma Phi Epsilon benefited me greatly professionally and interpersonally. I learned to lead in this organization, I learned better verbal communication, and networked with Alumni that helped me get job offers."
3: Classroom experience- teaching	"There were a few professors that made a profound difference in my life. They challenged my way of thinking, they were motivating and inspiring, and I still think about their class from time to time."

Figure 33: Visualizations of Q49 Responses



Suggestions for Improving WSU's Undergraduate Education

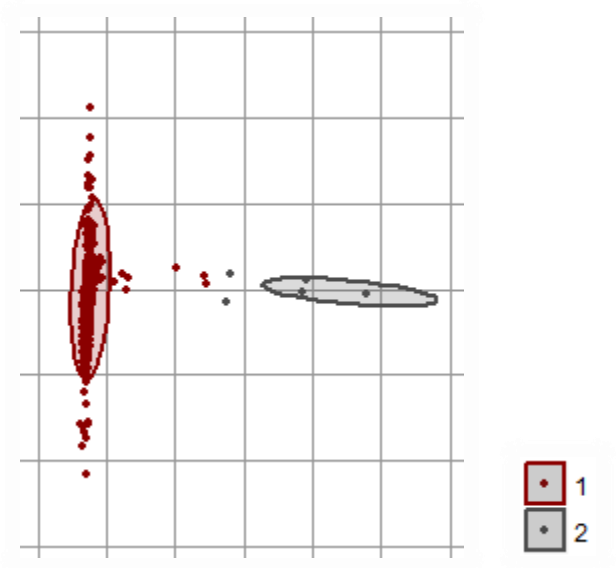
Question 50 of the survey asked respondents to provide suggestions to help WSU improve the value of its undergraduate education (figure 34). The responses fit into two clusters: those who provided advice, and those who did not have any advice. The advice category (category 1) had a large variety of responses. First, respondents expressed concerns with their classes. These respondents advised WSU to have smaller class sizes, reduce classes taught by graduate students, raise classroom standards, and have professors that care more about teaching and have a higher level of English proficiency. Second, respondents commented on career preparation, advising WSU to take actions such as bringing in more industry professionals as guest lecturers and visitors, providing connections to WSU alumni professionals working in industry, and having better career advising and career placement tests. Respondents also advised to reduce tuition costs and provide more financial support to students, commenting on their concerns with their student loan debt. Finally, respondents provided advice about campus diversity. On the one hand, some respondents felt that WSU has a high liberal bias, advising to recruit more professors with different viewpoints. On the other hand, other respondents commented on the lack of racial and ethnic diversity at WSU, especially in prestigious leadership positions. These respondents advised WSU to improve diversity, especially in faculty and leadership (e.g., regents). Below are example responses:

> *Provide more financial support to students. Scholarship and financial aid is becoming more and more limited, making it even more difficult for students to reasonably attend our institution.*

> *"Have some diversity in your professional staff politically. I won't get into the political bias from the left on campus, who claim to be the most accepting until you disagree with them."*

> *"Look critically how policies affect equity for its staff and students- For example, is WSU engaged in anti-racist work? How many regents are people of color?"*

Figure 34: Visualizations of Q50 Responses



Additional Comments

In question 52, respondents were also asked to provide any additional comments (figure 35). Many of these comments dealt with finances. For example, some respondents commented that many departments are underfunded, such as agriculture, animal science, and engineering. Respondents were especially concerned with the quality of the buildings that house these departments and old equipment. Next, respondents expressed their concerns with being contacted regarding donations to WSU. Some of these alumni noted that they graduated close to the recession, are still underemployed, and/or still have a lot of student loan debt, making it difficult for them to consider donating to WSU at this time. Some respondents expressed interest in getting involved in the alumni association, but have difficulty finding local chapters in their area. Overall, respondents indicated having a good experience while attending WSU. School spirit was definitely present in these responses, as 142 out of the 300 respondents to this question commented "Go Cougs!" somewhere in their response.

Figure 35: Visualization of Q52

This report and past Alumni Survey reports are available online at https://ir.wsu.edu/alumni-survey/.

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