

Nice writeup on an interesting project.

Let me know if the results are useful to the career center.

have a great summer,

-BJ

An Analysis of the Post-Graduation Plans of Carnegie Mellon University's Undergraduate Class of 2010

Brianna Agyemang
Nia Austin
Jaimie Lee
Kristine McPherson

Carnegie Mellon University
36-303: Sampling, Survey, and Society
Spring 2010

Section 1: Introduction

Not surprisingly the members of the graduating class of 2010 will begin some impressive careers after graduation. But what exactly do these graduates plan to do? And how did they decide? The post-graduation plans of seniors are important to study, because we can reveal trends in the direction(s) that today's students are heading immediately following graduation, and how their area of study comes into play. Furthermore, by studying how seniors come to a conclusion about their plans, we can better understand who or what has the greatest influence on the decision making process. We used a questionnaire to analyze the plans of graduating seniors as well as the motives behind their decisions. The Career and Professional Development Center is a likely client for this survey, since they can use the findings to better tailor their programming and advising techniques. ✓

Background Information

Previous research has been conducted on the post-graduation plans of American college graduates. Kromhout (2005) reported on a survey-based study conducted by AfterCollege, Inc. of upcoming college graduates on their plan after finishing school. Survey results included that (a) the majority of the students plan to work full-time or attend graduate school, (b) more than half will stay at their school hometown or move to bigger cities, (c) a bit more than a half are worried that they would not be able to get a job that satisfies their expectations and (d) online research, networking with faculty and students, and referrals from friends and family are the most helpful way to find a job. ✓

Joy (2005) researched the gender differences in occupation choice by college graduates. Although gender differences in occupational preferences are less pronounced for college graduates than college graduates, the study did show that females and males graduating college were seeking different kinds of jobs. However, this finding was attributed to the fact that some majors had a disproportionate number of males or females. Thus, gender differences in college major explain a significant amount of the gender differences in occupations in engineering/computer, medical, teaching and service occupations. ✓

Nawoj (2010) reported CareerBuilder's prediction of a highly competitive job market for 2010. After surveying 2,778 U.S. Hiring Managers and HR officials, they found that 44 percent of employers plan to hire recent college graduates this year, similar to the rate of 43 percent last year, but still much lower than the 79 percent reported in 2007. However, sixteen percent report that they will offer higher salaries for entry-level positions than they did in 2009, which is up from 11 percent last year. The current state of the job market is important to note when discussing post-graduation plans since many graduating seniors are pursuing full-time jobs. ✓

The Career and Professional Development Center at Carnegie Mellon currently sends out surveys each year to Carnegie Mellon students who recently graduated to determine the following information: students' employer, job title, salary and geographic location or graduate school and program title and stipend. The data is sorted by college and department and analyzed. Significant differences in trends exist between the different majors. For example, students graduating with a degree in Music are much more likely to attend graduate school than students graduating with a degree in Computer Science (Career and Professional Development Center, 2009). For this reason, we decided to take into account the primary college of students (CFA, CIT, MCS, H&SS, SCS or Tepper) in our survey. Our survey differs from that of the Career and ✓

Professional Development Center because it is much more in-depth. Our questionnaire incorporates the motivating factors behind seniors' decisions, obstacles faced during the process, and additional ideas that deal with how and why the decisions were made.

Main Research Questions and Results Overview

Our main research questions are: What are post-undergraduate plans of the graduating seniors of the Class of 2010? How did they make their decisions about their plans? We found that about one half of the respondents plan to work full-time after graduation while about one third of the respondents plan to attend graduate school. Bad economy, though, was the most commonly faced obstacle while students were pursuing their plans. Also, family tended to be influential in the decision-making process. However, post-graduate plans and their motivating factors tended to be related to school of primary major and gender.

Section 2: Method

Target Population

The target population is all undergraduate seniors, which there are a total of 1323. To conduct the survey, we needed to contact a sample of undergraduate seniors. ✓

Sampling Frame

The sampling frame was all CMU undergraduate seniors who had a valid email and was listed in the C-Book. ✓

Sampling Design

They were chosen by randomly picking a start number by having an excel cell randomly generate a number between one and 10 to determine where to start. We then continued to go through the book in increments of 20. We chose 20 because according to our model, with a sample size of 360, we added extra to account for the graduates that may be listed. We then divided the total students, approximately 10,000 listed in the C-Book, by 500. If the next name we landed on was not a senior, we went down to the next listed senior. ✓

Sample Size

From 1323 undergraduate seniors, we assumed a 95% confidence interval with a margin of error to 10%. With this calculation, our sample size was 90. Since we assumed a response rate of approximately 25%, we needed to send the email out to 4 times the sample size to receive the expected number of responses. Therefore, we sent the email to a random sample of 360 undergraduate seniors. ✓

Non-response

Eight days after sending out the survey, we had a total of 106 complete the entire survey and 146 who started the survey but did not finish. At that point, of the 355 possible participants, we had a response rate of 30%. This was better than our expected response rate of 25%. We do not have to account for non-response because we met our goal of 90 respondents and those that did not complete the survey need not be accounted for.

Once the survey was closed, we had a response rate of 153/355, or 43.1 percent, in terms of those who started the survey. However, 40 students only filled out the demographics, so they were excluded from analysis. Thus, we had a 31.8 percent response rate in terms of those who completed most of the survey (N=113 responses). Three of these respondents did not complete the last section of the survey, but we decided not to impute their responses because we already had enough data for analysis, and imputation would not make much of a difference in results.

Post-survey Processing

We did not use imputation nor post-stratification. We originally planned to do post stratification but the responses we received came from a variety of respondents in different schools were a good representation of the population (See Table 1, Figure 1). Similarly we did not need to post-stratify based on gender (See Table 2, Figure 2).

Sample Questions

Some of the questions that were asked in the survey included:

- Which of the following do you plan to pursue immediately after graduation? (Full-time, employment, Graduate school, Time off from school, Don't know, Other)
- Which of the following obstacles have you faced while pursuing your post-graduation plans? Please select all that apply. (Respondents had to choose from a list of options including Bad economy, lack of experience, and more.)
- With regard to my post-graduation plans, I am more concerned with being happy than making a lot of money (Likert scale was used to answer this question, 5 choices: Strongly Disagree, Disagree, Neither, Agree, and Strongly Agree)
- I feel pressured to pursue opportunities that are typical for CMU students with my major (Likert scale with the same choices as above).

With three graduating seniors in our research group, it was easier to think about the questions we could ask other seniors. In addition, we went to Career Services for guidance and how to ask the questions and to find out what responses we should include in the multiple choice that would be most representative of the population. For the full version of our questionnaire please see Appendix A.

Conducting the Survey

The survey was conducted using surveymonkey.com which is a very easy site for making and distributing surveys. We decided to purchase a Pro account so that we could have access to the additional features that would be needed when it was time to do analysis. The email was sent

once to the entire list of 360 students. Five of the emails bounced back so we counted these as error responses. The email addresses were listed in an excel spreadsheet and then copied to the gmail account from which the emails were sent, cmupostgraduationplans@gmail.com. The name attached to the email address appeared as Carnegie Mellon Graduate Questionnaire Committee. This way, we hoped it would seem more official and people would take the survey more seriously.

The first email was sent on March 30th at about 7pm, with the subject header: "Graduation: May 2010 Graduate Questionnaire." The email explained that the recipient had been selected to take part in a study developed by students in 36-303, Sampling Surveys, and Society. It also explained the purpose of the questionnaire, approximate amount of time it takes, and reasons for taking it. For the initial e-mail for recruitment, see Appendix B. A similar follow-up email was sent out six days later. Then a final follow-up email was sent three days after that. For the full length recruitment emails, please refer to Appendixes B, C, and D. The survey was closed on April 9th, at midnight, after being available for eleven days.

Section 3: Results

The goal of our study was to determine the post-graduation plans of graduating seniors at Carnegie Mellon University, as well as the motivating factors behind their decisions. The following results were obtained by administering our questionnaire.

Breakdown of Schools by Gender

It is important to note that schools differed according to gender makeup, $X^2(5, 113)=20.41, p<0.001$. CIT, SCS and Tepper respondents are predominately male while CFA, HSS and MCS respondents were predominately female (See Table 3). Although responses by gender and by school are related, we chose to show them separately (1) to be thorough and (2) to inform the Career Center about gender differences in addition to school differences.

What are the post-graduation plans of seniors at Carnegie Mellon University?

The large majority of students plan to work full-time (53.1%) or attend graduate school (31.9%) (See Figure 3). Thus, we can say with 95% confidence that between 52.9% and 53.3% of the graduating seniors plan to work full-time and between 31.7% and 32.1% plan to go to graduate school. Very few students reported that they did not yet have post-graduation plans.

Gender differences

Males and females were about equally likely to pursue full-time employment, but males tended to pursue graduate school (38.9%) more than females (30%). See Figure 4.

School differences

The difference in after-college plans based on school was significant, $F(5, 109) = 3.35, p<.008$. Students in CFA, SCS and Tepper were more likely to pursue full-time employment than graduate school (See Figure 5).

What is the current status of their plans?

Gender Differences

45.9% of males who took this survey have already accepted a full time job offer at a company and 27.9% of them have accepted an offer of admission to a graduate school program. 28.8% of females who took this survey have applied to either full time jobs or graduate school programs but have not received any offers yet. More women than men stated that they have not applied to either jobs or grad school programs but plan on doing so soon. This shows us that female students are generally unsure about their postgraduate plans than male students (See figure 6).

School Differences

We see the highest rates of full time employment acceptances with Tepper (37.2%), H&SS (35%) and SCS (85.7%) seniors. CIT has the highest rate of graduate school program acceptances with 39.4%, and CFA has the highest rate of students who have not yet applied for either graduate school programs or full time employment opportunities (See table 4).

What are the common obstacles students that face while pursuing their plans?

When we look at the question “Which of the following obstacles have you faced while pursuing your post-graduation plans? Please select all that apply,” we learned that many of the students said that an obstacle was a bad economy. We are well aware that it is possible that some students may have been rejected and associated the rejection with the current state of the economy and to account for that we added an option, Rejection from a potential employer or school. Although this option was available, users may have still felt that the underlying reason was the economy and went with that option.

School Differences

The percentages in figure 7 show that the majority of students who chose bad-economy were among the students from SCS, H&SS, Tepper and CFA. The next highest chosen was lack of experience followed by rejection from a potential employer or school.

Who believes what

If we look at the results from the table 5, we can see that 57.1% of students who chose to take time off from school are doing so because of a lack of experience but still 85.7% are taking time off due to the bad economy. We also see that 35.9% of those going to graduate school also believe there is a bad economy. Tied with 85.7%, are students who don't know what they are doing after graduation and also have faced the obstacle of having a lack of experience and facing complicated application processes. Still 51.7% of students who have a full time position, have still faced the obstacle of a bad economy. We are 95% confident that of all CMU undergraduate seniors who have accepted full time positions, (51.33, 52.07) percent will say they have faced a bad economy.

It is good to see a confidence interval in the report, but this is a kind of strange place to put (the only?) one.

Correlation

To determine whether there is any correlation between what the students are doing after graduation at the time of the survey and what obstacles they have faced, we can look at the table 6. Not surprisingly, it turns out that 84.2% of the students who say that they have applied and not yet received any admission or job offers also say that they are facing the obstacle of a bad economy. What is surprising is that 75% of the students who have not yet applied but plan to do so say they have been faced with a bad economy. Since the question asked respondents to select all that apply, we have no way of determining which they would have placed 1st, 2nd, 3rd, etc. when it came to obstacles they have faced. All we can determine is that more students haven't received offers and they attribute it to a bad economy. ✓

Gender Differences

When we consider these results by gender, we learn that more females than males have said that the economy is bad, 55.8% to 42.6% as seen below. We are 95% confident that 55.43124, 56.16876 percent of undergraduate females at CMU will say that have faced a bad economy. As shown in figure 8, we also know that we have more males in technical or engineering majors than females, in CIT the ratio is 41.0% to 15.4% and for the School of Computer Science, 18.0% to 5.8%. When we look at who has secured positions, we see that by school SCS has a much higher percentage than any other. CIT comes in second for accepting a full time offer, but not much ahead of HSS and CIT has more students attending graduate school than any of the other colleges. ✓

What are the influential factors in choosing their plans?

We also wanted to figure out what factors played a role in these students making the decision of what to do after graduation. We listed possible options and again asked them to select all. We used a Likert scale to determine how much of a factor each of the presented options was in making their decisions. Since the responses were on a Likert scale, the responses range from 1 to 5, Strongly Disagree to Strongly Agree correspondingly. ✓

In general

Gender differences

By looking at the figure 10 , we can see that there were also gender differences in regarding the importance of factors that influenced them the most. Again, family was highly valued factor for both males (67.2%) and females (76.0%). Males (51.6%) tend to be affected by friends more than females (32.7%) while females (43.1%) were more affected by their academic advisors than males (39.3%). .

School differences

From looking at the results by different schools (Figure 9) , we could find different perspectives on the factors that helped in deciding post-undergraduate plans. Overall, Family was chosen by majority as one very important factor from students from all schools in common. ✓

Some of Tepper students (30.8%) and great part of H&SS students (44.4%) disagreed that boyfriend/girlfriend was an influential factor in their decisions with average ratings of 2.92 and 2.50 while comparing to other schools, MCS students were more relied upon their dating partner with average ratings of 3.15. Significant percentage (35.3%) of CIT (24.3%) also disagreed that friend was an important factor and H&SS students had least amount of interest (35.3%) in accounting their friend's influence with average ratings of 2.94. Many of MC S students (61.1%) disagreed that career consultant/career fairs and TartanTrak had an effect on their plans with average ratings of 2.44

Pursuing full –time job

It was interesting to look at what factors influenced the people who had already made decisions because this provided a lot of information. Table 7 gives us an idea of what people considered most important. It is interesting to see figure 11 because students who had already chosen to go to grad school and take time off had the highest responses and with further research, it shows a correlation between the variables. Most students who decided to take time off would strongly agree that salary is important. They would also strongly agree that location is important. The students who chose to go to grad school are between agree and strongly agree when it comes to opportunity for promotion. Further research would be able to determine whether these students felt that graduate school would allow them a better chance for promotion but we can see that there is a correlation.

Pursuing graduate school

Gender differences

According to figure 12, males and females had common and different attitudes toward the factors which influenced them while pursuing graduate school. Both males and females cared about location, ranking and reputation, fellowship, field of study and career attainment equally. The differences were when males showed that field of study and locations were very important for them with higher agreement percentages of 71.8% and 57.5%. Females tend to focus more on fellowship and career attainment with 44.8% and 63.3% agreements which are higher than those of males.

School differences

Figure 13 shows that among the people who plan to pursue graduate school, there were still different opinions on the importance of the several factors which could affect their decisions in pursuing graduate school. First of all, students from all schools agreed ~~on~~ that location, ranking and reputation, fellowship, field of study and career attainment were important factors in making their choices. None of the Tepper and SCS students chose that having unclear career goals were their reason for pursuing graduate school while some of CIT students (23.8%) agreed to it. MCS students tend to care less on location of graduate school with 16.9% of disagreements with average ratings of 3.64 and Tepper school students showed importance in career attainment with average ratings of 4.80. For MCS students, field of study was the most agreed influential factor with the average ratings of 4.82.

How they feel about their post-undergraduate plans

Gender differences

As seen in figure 14, males were more satisfied with their post undergraduate plans with 89.7% of agreements. Both males and females were concerned with being happy than making a lot of money with 74.2% and 71.2% agreements. Females felt that students are competing to have the most impressive post-graduation plans more than males with 69.2% of agreements. It was interesting to find out that males' post-graduation plans are highly similar to childhood and high school aspirations with 29.3% and 44.8% of agreements which are higher than those of females' (26.9% and 25.0%). Lastly, majority of females (48.1%) felt pressured to pursue opportunities that are typical for CMU students with their major while majority of males (50.0%) disagreed to it.

School differences (Figure 15)

Comparing to the other schools, CFA and MCS students were excited about post-graduation plans than the other schools. CIT and Pepper students disagreed that they felt pressured to pursue opportunities that are typical for CMU students with their major while MCS and SCS students agreed on it. 100% of Pepper school students agreed that students are competing to have the most impressive post-graduation plan while $\frac{1}{4}$ of students in other schools disagreed to it. Most of the student's post-graduation plans were different from their childhood aspirations. CIT students' post-graduation plans were highly similar to their high school aspirations when comparing to the student's in other schools.

Part 3: Discussion

Our survey was intended to help us give the Career Center more insight into how seniors decide their post graduate plans, what obstacles seniors face when making post graduate decisions, what types of students are having trouble solidifying post graduate plans and how the Career Center can help. The survey did a great job at helping us understand what options are weighed when it comes to accepting a job or graduate school offer; it also helped us to understand the sentiments many seniors have when it comes to their post-graduate plans.

The survey showed that seniors who plan on pursuing a full time job after graduation they valued the salary they will make, the location of the job and the reputation and rank of the company, mission of the organization, opportunity for promotion, and relation to their area of study, all generally the same; there was also not that big of a difference in what aspects they valued most when comparing males and females either. Seniors who plan on attending graduate school after college ranked the location of the school, a fellowship, and them not knowing what to do with their career as the lowest as factors influencing their decision to go to graduate school.

In regards to the feelings of seniors at Carnegie Mellon there were a couple of interesting results. 52.7% of the surveyed people feel that students are competing to have the most impressive post-graduate plans, but at the same time 72.7% of the people who took the survey said that they are more concerned with being happy with their postgraduate plans that they are with making money, which doesn't seem very consistent, because one would assume that people

take into consideration the amount of money being made when trying to rank “impressive” post graduate plans.

With the exceptions of H&SS and SCS the amount of students who have met with their career consultants was pretty much even with the amount of students who have not met with their consultants to discuss postgraduate plans. The majority of students in H&SS (63.2%) and SCS (75%) have not met with their career consultant to discuss their postgraduate plans. Suggestions for improving the Career Center included hiring ex-human resource employees to give the students first hand information about what employers look for, and offering more connections outside of Pittsburgh students. A CFA student suggested that CMU have spaces reserved at different artist residencies to provide artists with more opportunities. A CIT student stated that the reason why he/she and their friends did not see the career consultant was because they were going to grad school and found the career center unnecessary. An H&SS student stated the only reason he/she went to the career center was to receive the free binder they supplied as an incentive for more students to speak with their consultants. These are some of the comments and suggestions seniors made for how they currently feel about the career center and what are some ways they can improve their service.

Our survey looked at the post graduate plans of some seniors at CMU, how they made their decisions on what to pursue, how they felt about their decisions made and how useful the Career Center at Carnegie Mellon was when they were making their decision.

Strengths of our survey:

- We gave the respondents many choices when it came to the answers they chose.
- We allowed respondents to write in answers when they felt the options listed did not apply to them.
- We set up the survey to ensure that people finished the previous question before going on to the next, giving us completed questionnaires to work with
- By using the email address CMUpostgraduateplans@gmail.com which showed up as Carnegie Mellon Graduate Questionnaire Committee in the inboxes of the students, our survey seemed more official which allowed us to get a response rate greater than what we expected.

Some areas on which we can improve in the future:

- Because this survey was being used to help the Career Center, we should have devoted a section to the seniors who did not have post-graduate plans because they are the demographic that the Career Center needs to try to help the most.
- We should have analyzed our results by race/ethnicity/country of origin in addition to gender and school, because often the issues in solidifying post graduate plans differ based on race, ethnicity and whether the student is a US citizen or not.

really good point!

Future research in this area is recommended because much analysis can be done to improve the career guidance services as well as help the campus community understand how to best help college students, especially graduating seniors, develop and begin to achieve their career goals straight out of college.

References

- Career and Professional Development Center (2009). Post-Graduation Survey Results. Retrieved from: Career and Professional Development Center website: <http://www.studentaffairs.cmu.edu/career/>
- Joy, L. (2005). Occupational differences between recent male and female college graduates. *Economics of Education Review*, 25(2), 221-231.
- Kromhout, Janine. AfterCollege, Inc. (2005, May 16) After college survey of upcoming graduates reveals a focus on benefits and work culture, not salary. Retrieved from: AfterCollege website, www.aftercollege.com/
- Nawoj, Allison. (2010). College graduates to face a highly competitive job market, but one that may pay better than last year, finds CareerBuilder's annual forecast. Retrieved from: Boston Business Journal website: <http://boston.bizjournals.com>

Tables

Table 1: Our Respondents v. Population by College

Column1	CFA	CIT	H&SS	MCS	SCS	Tepper
Our Respondents	12%	28%	20%	16%	12%	12%
Population	13%	28%	22%	15%	12%	10%

Table 2: Our Respondents v. Population by Gender

Column1	Female	Male
Our Respondents	58%	43%
Population	59%	42%

Table 3: Participants - School by Gender

Column1	Male	Female
CFA	21.30%	76.90%
CIT	75.80%	24.20%
HSS	31.60%	68.40%
MCS	33.30%	66.70%

Table 4: Current situations by schools

Column 1	I have accepted a full-time job offer	I have accepted an admission offer from a graduate program	I have received job or admission offer(s) but I have not made a final decision yet	I have applied but have not yet received any job or admission offers	I have not yet applied but I plan to do so soon	I have willingly decided to take time off
CFA	7.70%	15.40%	15.40%	23.10%	38.50%	0.00%
CIT	36.40%	39.40%	9.10%	6.10%	6.10%	3.00%
H&SS	35.00%	25.00%	10%	25%	5%	0%
MCS	11.10%	22.20%	27.80%	33.30%	0%	5.60%
SCS	85.70%	7.10%	7.10%	0.00%	0.00%	0.00%
Tepper	53.30%	20%	6.70%	20%	0%	0%

Table 5: Obstacles Faced While Pursuing Post-Undergraduate Plans by Schools

Post-graduation Plans for May 2010 Graduates

Which of the following obstacles have you faced while pursuing your post-graduation plans? Please select all that apply.						
Answer Options	Which of the following do you plan to pursue immediately following graduation?				Response Percent	Response Count
	Full-time employment	Graduate School	Time off from school	I don't know		
Lack of experience for potential opportunities	18	11	4	6	34.5%	39
Complicated application processes	11	14	3	6	30.1%	34
Disqualification for opportunities based on nationality	3	4	0	0	6.2%	7
Potential discrimination from employers/schools	3	1	1	0	4.4%	5
Rejection from a potential employer or school	21	13	3	1	33.6%	38
Bad economy (i.e, rough job market)	31	14	6	4	48.7%	55
Long-term illness	0	4	1	0	4.4%	5
General financial difficulties	6	10	4	2	19.5%	22
Conflicts with family and/or friends	6	4	1	2	11.5%	13
None of the above	11	7	0	0	15.9%	18
Other (please specify)						12

:

Table 6: Obstacles faced while pursuing post-graduation plans.

Which of the following obstacles have you faced while pursuing your post-graduation plans? Please select all that apply.

Answer Options	Which of the following statements apply to you?						Response Totals
	I have accepted a full-time job offer.	I have accepted an admission offer from a graduate program.	I have received job or admission offer(s) but I have not made a final decision yet.	I have applied but have not yet received any job or admission offers.	I have not yet applied but I plan to do so soon.	I have willingly decided to take time off.	
Lack of experience for potential opportunities	23.8% (10)	32.1% (9)	35.7% (5)	63.2% (12)	37.5% (3)	0	35.1% (39)
Complicated application processes	16.7% (7)	35.7% (10)	57.1% (8)	36.8% (7)	12.5% (1)	1	29.7% (33)
Disqualification for opportunities based on nationality	2.4% (1)	7.1% (2)	21.4% (3)	5.3% (1)	0.0% (0)	0	6.3% (7)
Potential discrimination from employers/schools	7.1% (3)	3.6% (1)	0.0% (0)	0.0% (0)	12.5% (1)	0	4.5% (5)
Rejection from a potential employer or school	40.5% (17)	32.1% (9)	35.7% (5)	26.3% (5)	26.0% (2)	0	34.2% (38)
Bad economy (i.e, rough job market)	38.1% (16)	35.7% (10)	50.0% (7)	84.2% (16)	75.0% (6)	0	49.5% (55)
Long-term illness	0.0% (0)	10.7% (3)	0.0% (0)	5.3% (1)	12.5% (1)	0	4.5% (5)
General financial difficulties	9.5% (4)	28.6% (8)	21.4% (3)	15.8% (3)	37.5% (3)	1	18.9% (21)
Conflicts with family and/or friends	14.3% (6)	10.7% (3)	21.4% (3)	0.0% (0)	5.3% (1)	0	11.7% (13)
None of the above	21.4% (9)	14.3% (4)	7.1% (1)	5.3% (1)	25.0% (2)	1	15.3% (17)

I didn't understand this column

Table 7: Current Situations of Students by Different Schools

Which of the following statements apply to you?						
Answer Options	What is the college of your primary major?					
	CFA	CIT	H&SS	MCS	SCS	Tepper
I have accepted a full-time job offer.	1	12	7	2	12	8
I have accepted an admission offer from a graduate program.	2	13	5	4	1	3
I have received job or admission offer(s) but I have not made a final decision yet.	2	3	2	5	1	1
I have applied but have not yet received any job or admission offers.	3	2	5	6	0	3
I have not yet applied but I plan to do so soon.	5	2	1	0	0	0
I have willingly decided to take time off.	0	1	0	1	0	0

Figures

Figure 1: Demographics: Primary College

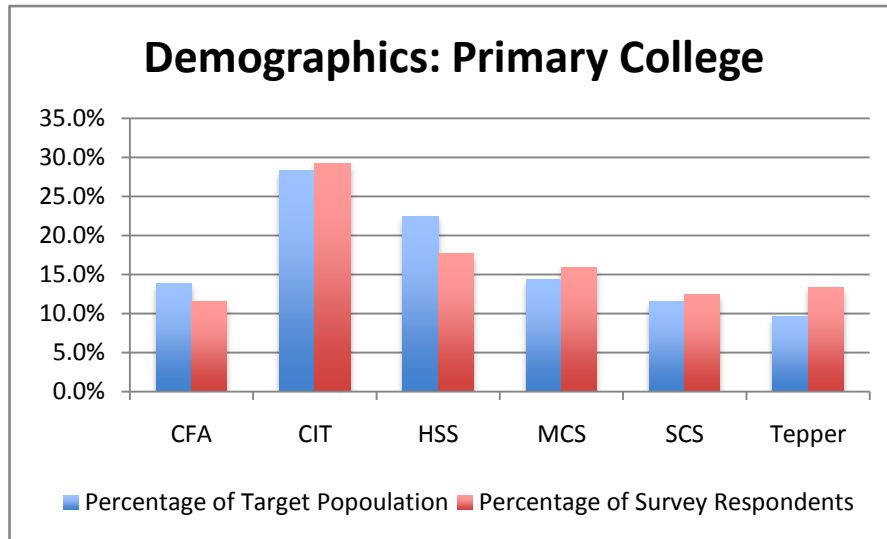


Figure 2: Demographics: Gender

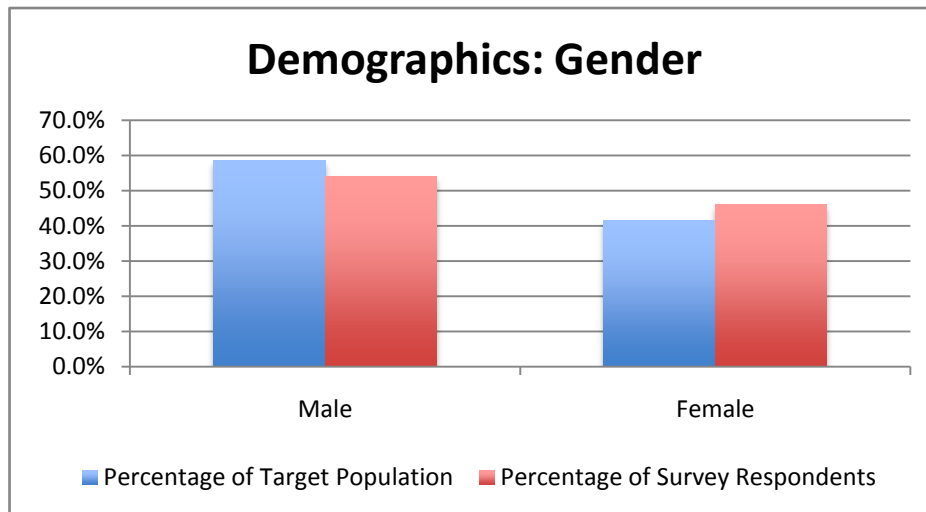


Figure 3: Post-Graduation Plans of Students Overall

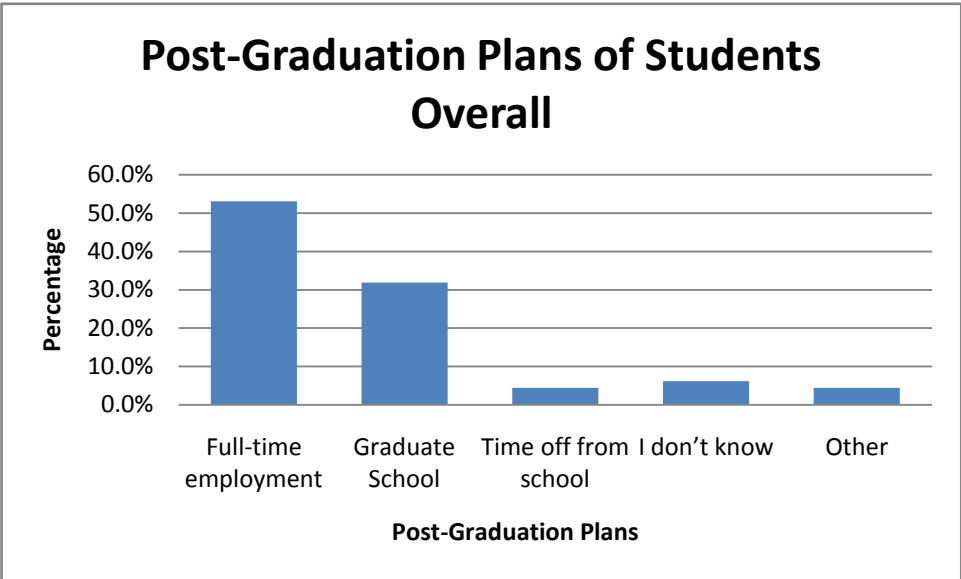


Figure 4: Post-Graduation Plans by Gender

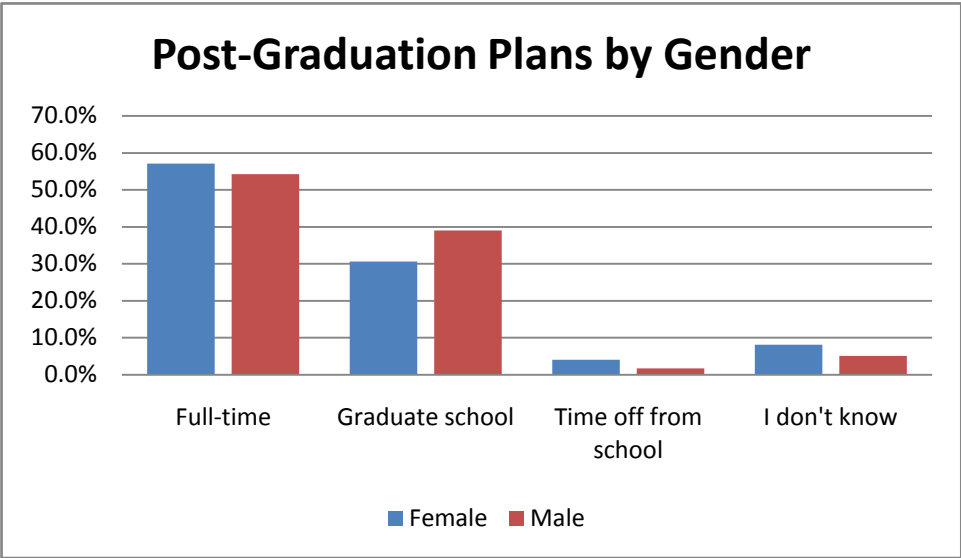


Figure 5: Post-Graduation Plans by School

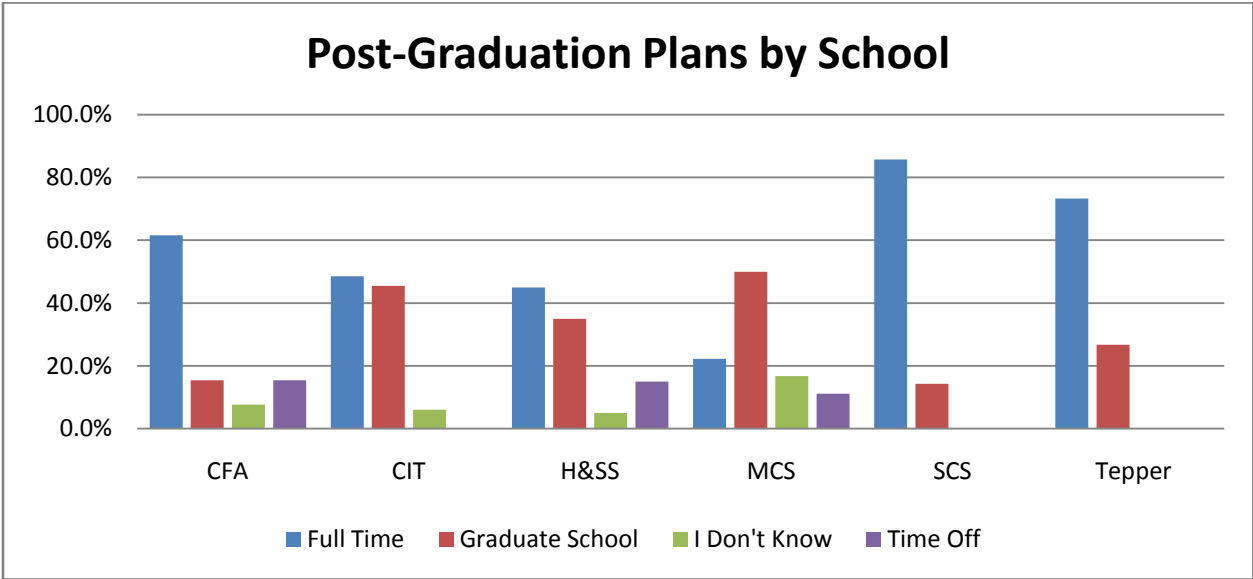


Figure 6: Current Situations by Gender

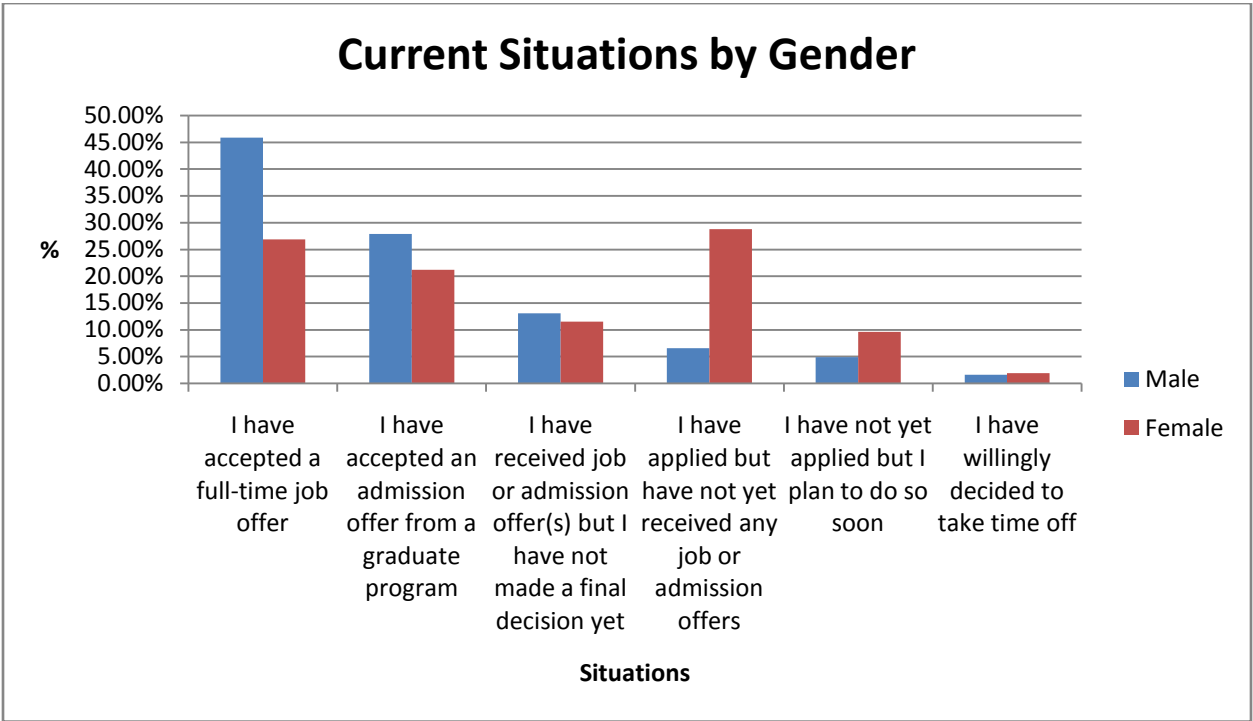


Figure 7: Obstacles Faced While Pursuing Post-Undergraduate Plans by Schools

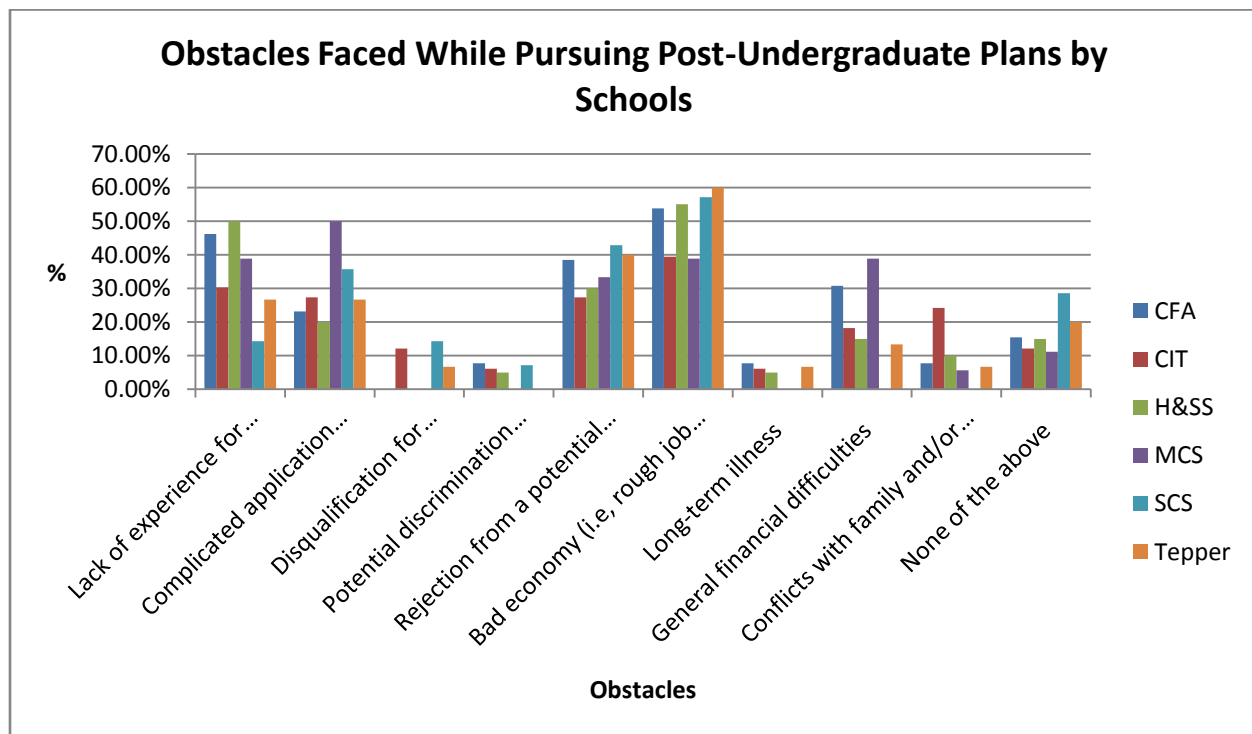


Figure 8: Relationship Between Job Offer and Gender Ratio in Each School

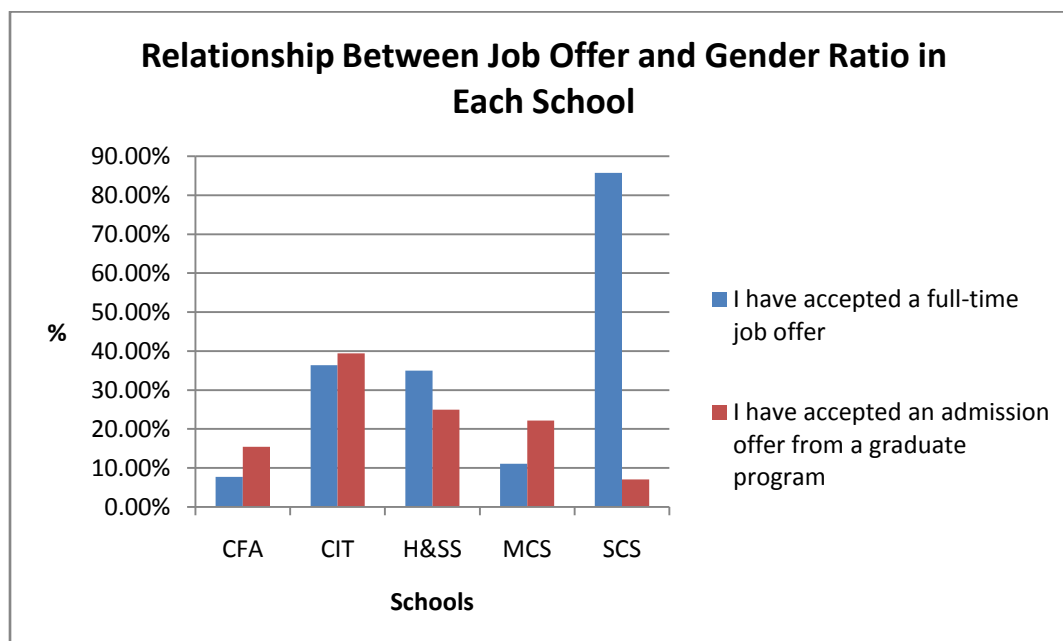


Figure 9: Average Ratings of Influential Factors in when Pursuing Graduate School by Schools

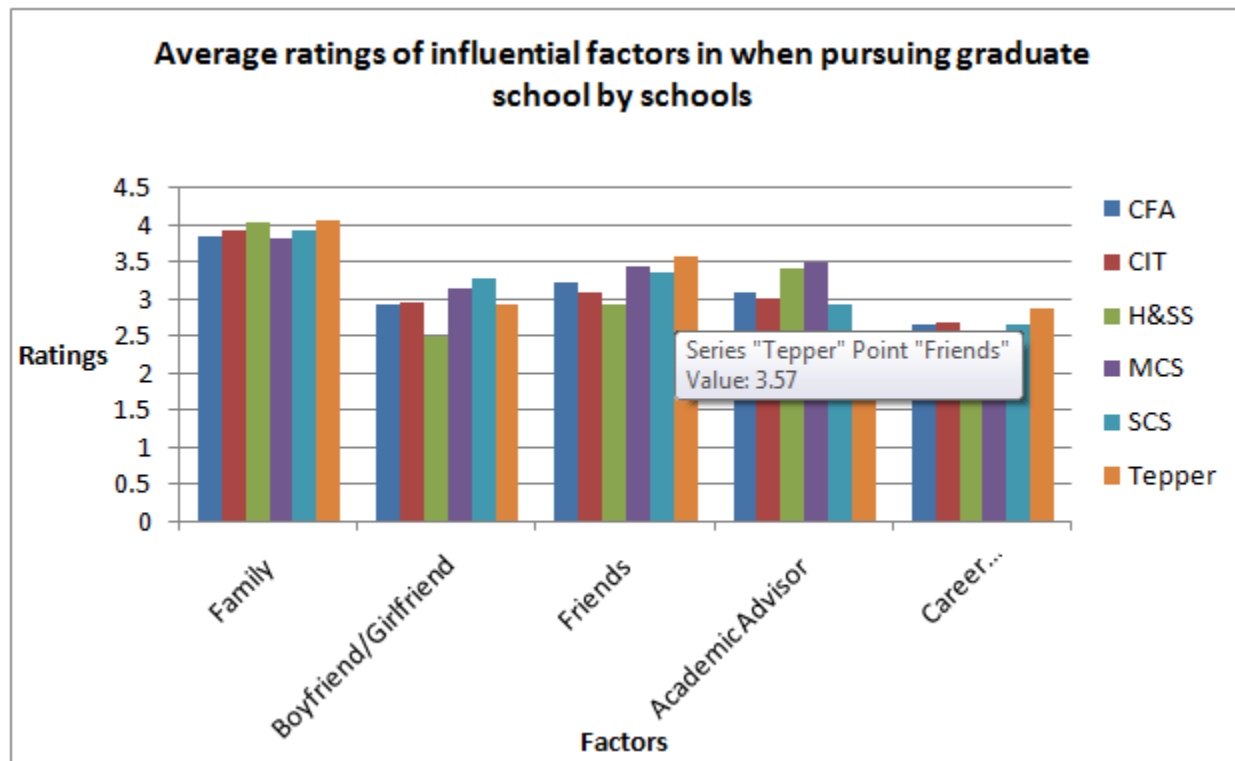


Figure 10: Average Ratings of Influential Factors in Deciding Post-Undergraduate Plans by Gender

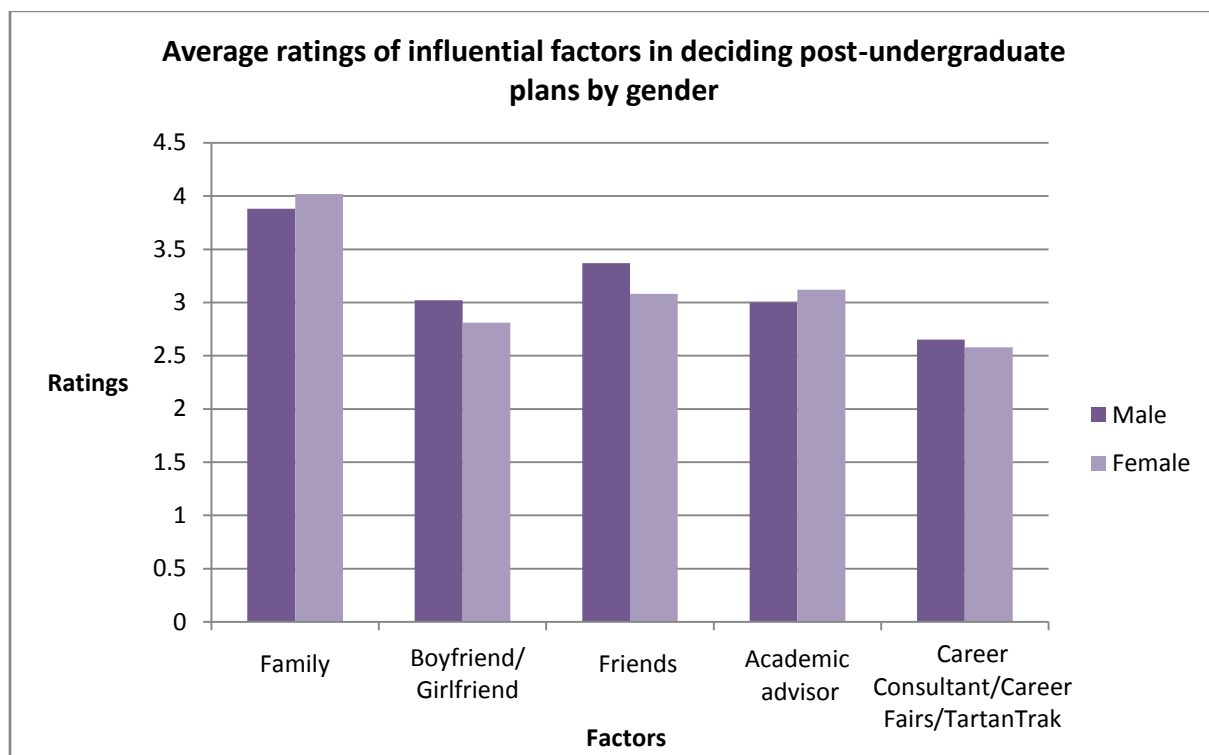


Figure 11: Average Ratings of Influential Factors in When Pursuing Full-time Job by students with different situations

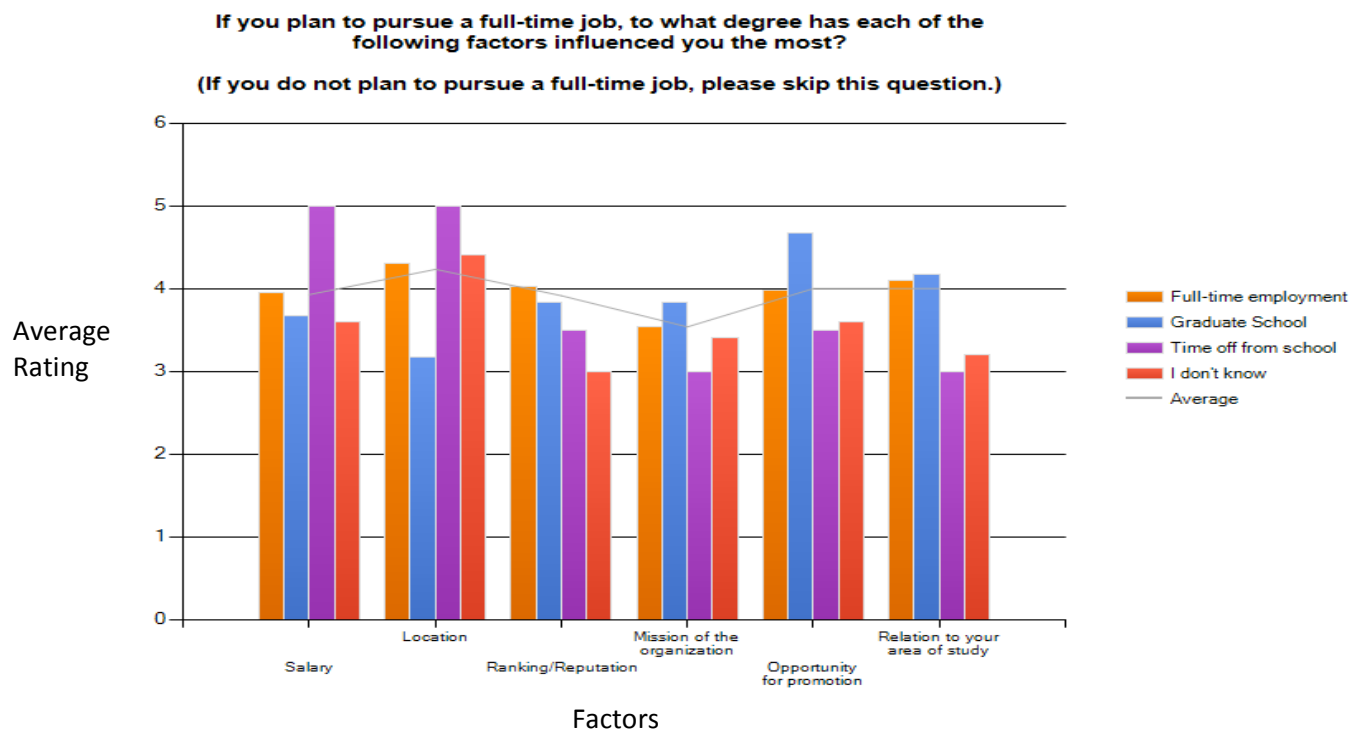


Figure 12: Average Ratings of Influential Factors in When Pursuing Graduate School by gender

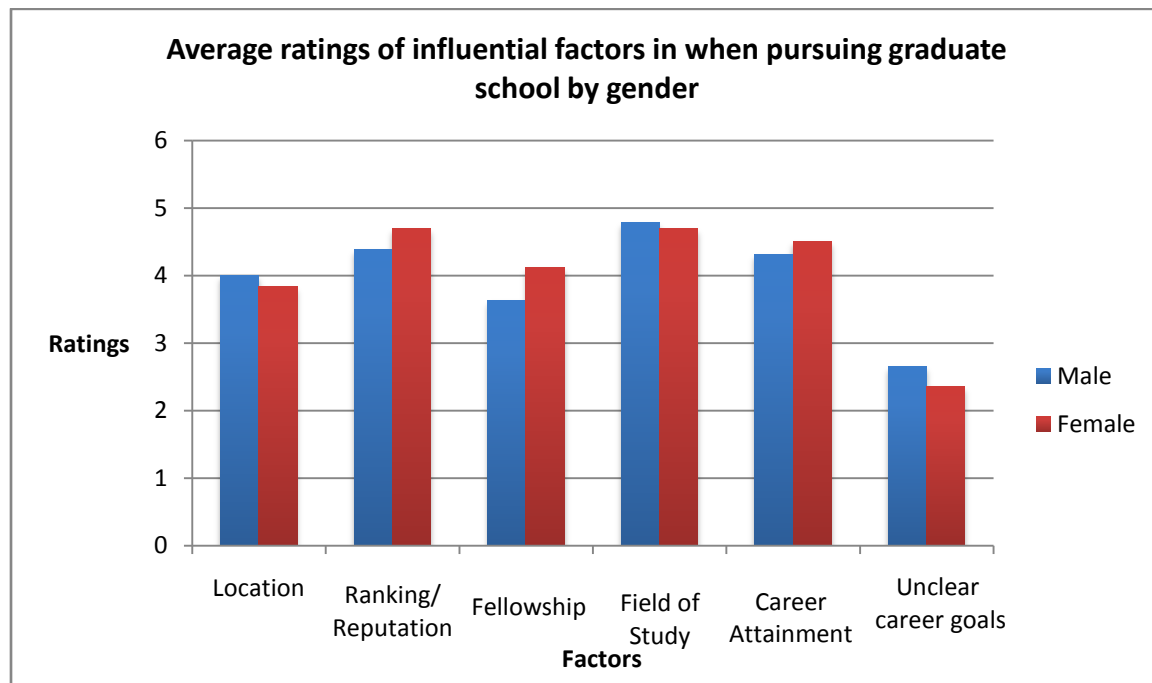


Figure 13: Average Ratings of Influential Factors in Deciding Post-Undergraduate Plans by Schools

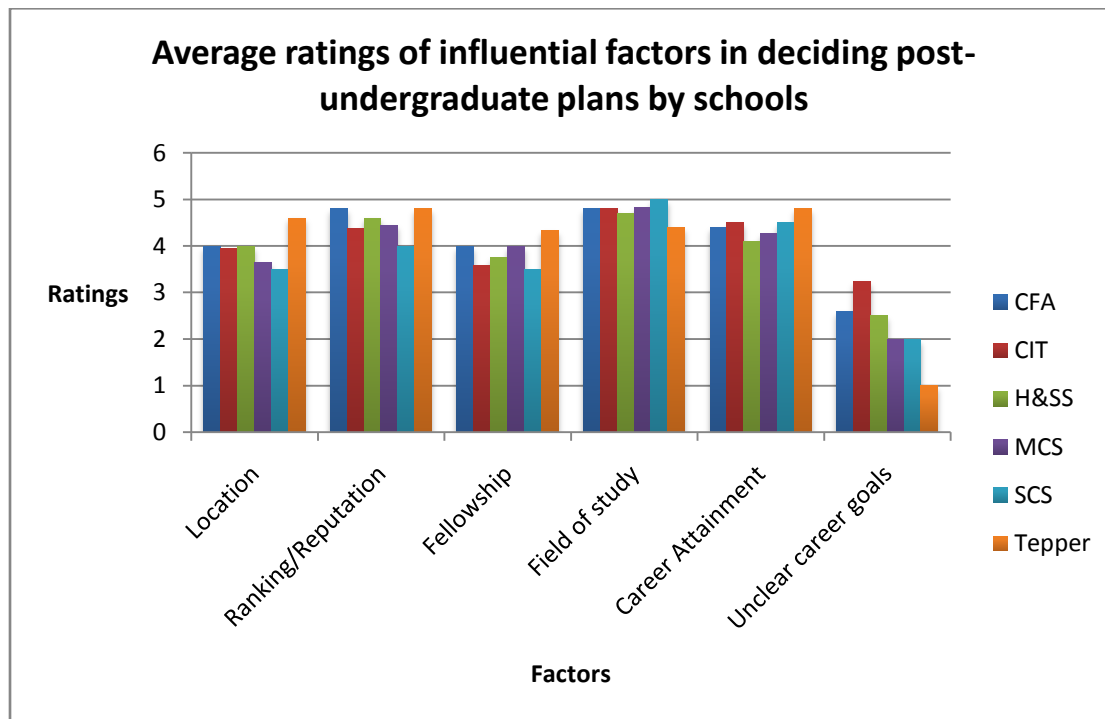


Figure 14: Excitement of Post-Graduation Plans by Gender

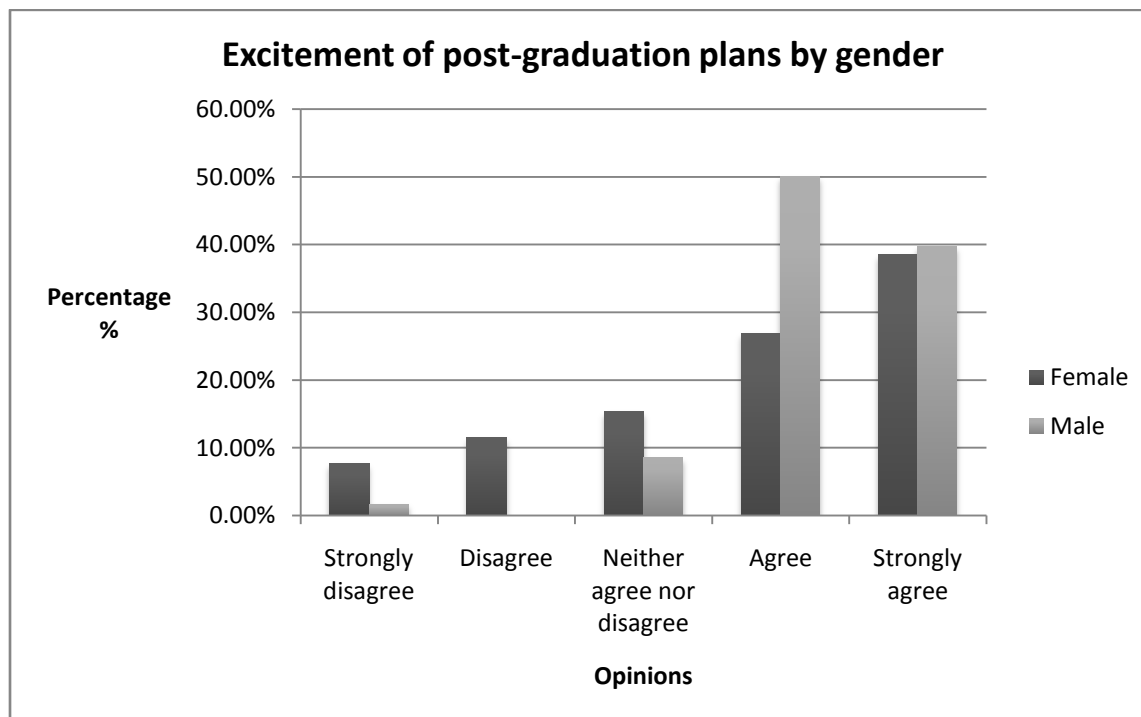
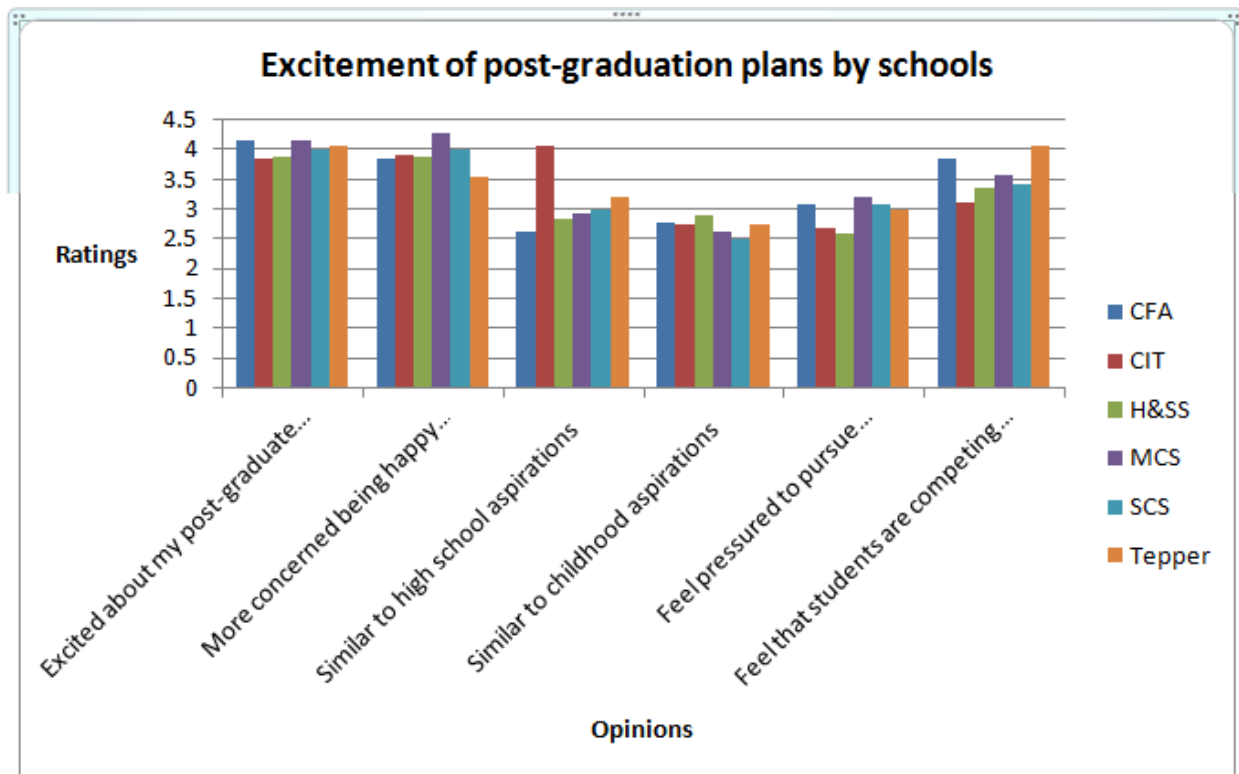


Figure 15: Excitement of Post-graduation Plans by Schools



Appendixes

Appendix A: Questionnaire

great to include these counts
and percents with the
questions

1. I am age 18 or older.		
Answer Options	Response Percent	Response Count
Yes	100.0%	113
No	0.0%	0

2. I have read and understood the information above.		
Answer Options	Response Percent	Response Count
Yes	100.0%	113
No	0.0%	0

3. Do you plan to receive a Bachelors degree from Carnegie Mellon in May 2010?		
Answer Options	Response Percent	Response Count
Yes	100.0%	113
No	0.0%	0

4. What is your gender?		
Answer Options	Response Percent	Response Count
Male	54.0%	61
Female	46.0%	52

5. What is your age?		
Answer Options	Response Percent	Response Count
20	2.7%	3
21	42.5%	48
22	44.2%	50
23	6.2%	7
24	1.8%	2
25	0.9%	1
26	0.9%	1
27	0.9%	1

6. What is your race? Check all that apply.

Answer Options	Response Percent	Response Count
American Indian	0.0%	0
Alaska Native	0.0%	0
Asian	26.5%	30
Black or African American	7.1%	8
Hispanic or Latino	7.1%	8
Native Hawaiian or Other Pacific Islander	0.0%	0
White or Caucasian	66.4%	75

7. What is your nationality? Check all that apply.

Answer Options	Response Percent	Response Count
American	85.0%	96
Indian	3.5%	4
Korean	4.4%	5
Chinese	5.3%	6
Singaporean	1.8%	2
Other	9.7%	11

Other responses

Cuban (2)
 Lebanese
 Japanese
 Taiwanese
 Thai (2)
 Russian (2)
 Turkish (not American)

8. If you live in America, where is your home state located?

Answer Options	Response Percent	Response Count
New England	28.3%	32
The Mid-Atlantic	42.5%	48
The Midwest	8.0%	9
The South	9.7%	11
The Southwest	4.4%	5
The West	7.1%	8

9. How many siblings do you have?

Answer Options	Response Percent	Response Count
0	11.5%	13
1	54.0%	61
2	28.3%	32
3	1.8%	2
4 or more	4.4%	5

10. What is the highest level of education your mother has completed?

Answer Options	Response Percent	Response Count
Some high school	1.8%	2
High school diploma	9.7%	11
Some college	3.5%	4
Associate degree	8.8%	10
Bachelors degree	43.4%	49
Advanced degree	32.7%	37

11. What is the highest level of education that your father has completed?

Answer Options	Response Percent	Response Count
Some high school	1.8%	2
High school diploma	7.1%	8
Some college	5.3%	6
Associate degree	5.3%	6
Bachelors degree	33.6%	38
Advanced degree	46.9%	53

12. What is the college of your primary major?

Answer Options	Response Percent	Response Count
CFA	12.7%	16
CIT	31.0%	39
H&SS	16.7%	21
MCS	14.3%	18
SCS	13.5%	17
Tepper	11.9%	15

13. Which one of the following categories best describes your primary major?

Answer Options	Response Percent	Response Count
Business or Economics	16.8%	19
Computer Science or Information Systems	15.0%	17
Design or Architecture	5.3%	6
Engineering	30.1%	34
Natural Sciences	15.0%	17
Performing Arts	4.4%	5
Social Sciences	9.7%	11
Self-Defined or Interdisciplinary	3.5%	4

14. How would others best describe your personality?

Answer Options	Response Percent	Response Count
Introverted	46.0%	52
Extroverted	54.0%	61

15. What was your average GPA at the end of Fall 2009 semester?

Answer Options	Response Percent	Response Count
below 2.0	0.0%	0
2.0-2.49	2.7%	3
2.5-2.99	11.5%	13
3.0-3.49	38.1%	43
3.5-4.0	47.8%	54

Which of the following do you plan to pursue immediately following graduation?

Answer Options	Response Percent	Response Count
Full-time employment	53.1%	60
Graduate School	31.9%	36
Time off from school	4.4%	5
I don't know	6.2%	7
Other	4.4%	5
answered question		113
skipped question		0

Other responses

Teaching abroad
 Summer internship followed by grad school
 Volunteering Abroad
 Year off and then law school (have deferred enrollment)
 CMU 5th year masters (IMB)

16. Which of the following do you plan to pursue immediately following graduation?

Answer Options	Response Percent	Response Count
Full-time employment	53.1%	60
Graduate School	31.9%	36
Time off from school	4.4%	5
I don't know	6.2%	7
Other (please specify)	4.4%	5

Other responses

Teaching abroad

Summer internship followed by grad school

Volunteering Abroad

Year off and then law school (have deferred enrollment)

CMU 5th year masters (IMB)

17. Which of the following statements apply to you?

Answer Options	Response Percent	Response Count
I have accepted a full-time job offer.	36.3%	41
I have accepted an admission offer from a graduate program.	23.0%	26
I have received job or admission offer(s) but I have not made a final decision yet.	12.4%	14
I have applied but have not yet received any job or admission offers.	16.8%	19
I have not yet applied but I plan to do so soon.	7.1%	8
I have willingly decided to take time off.	1.8%	2
Other (please specify)	2.7%	3

Other responses

I have accepted a volunteer position with a volunteer program

I am enrolled in an accelerated masters program at CMU

CMU IMB Program

18. Which of the following obstacles have you faced while pursuing your post-graduation plans? Please select all that apply.

Answer Options	Response Percent	Response Count
Lack of experience for potential opportunities	34.5%	39
Complicated application processes	30.1%	34
Disqualification for opportunities based on nationality	6.2%	7
Potential discrimination from employers/schools	4.4%	5
Rejection from a potential employer or school	33.6%	38
Bad economy (i.e, rough job market)	48.7%	55
Long-term illness	4.4%	5
General financial difficulties	19.5%	22
Conflicts with family and/or friends	11.5%	13
None of the above	20.4%	23

Other (please specify)	7
------------------------	---

Other responses

Trying to be in the same city as a significant other

lack of motivation

Being far away from where I want to work

Many large companies do not like how non-technical IS is.

Uncaring department staff

It's too early for new hires in the field that I plan on working in.

GPA

19. If you plan to pursue a full-time job, to what degree has each of the following factors influenced you the most? (If you do not plan to pursue a full-time job, please skip this question.)								
Answer Options	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree	N/A	Rating Average	Response Count
Salary	3	2	9	38	17	12	3.93	81
Location	2	3	6	24	34	12	4.23	81
Ranking/Reputation	2	4	12	31	20	12	3.91	81
Mission of the organization	4	7	20	24	14	12	3.54	81
Opportunity for promotion	2	2	10	34	20	13	4.00	81
Relation to your area of study	3	4	8	28	25	12	4.00	80
Other (please specify)								2

Other responses

Interest in Field

just getting employment, period.

20. If you plan to pursue graduate school, to what degree has each of the following factors influenced you the most? (If you do not plan to pursue graduate school, please skip this question.)								
Answer Options	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree	N/A	Rating Average	Response Count
Location	2	2	9	19	16	21	3.94	69
Ranking/Reputation	1	0	2	16	30	21	4.51	70
Fellowship	2	3	8	15	13	26	3.83	67
Field of Study	0	0	0	12	36	21	4.75	69
Career Attainment	2	0	3	16	28	21	4.39	70
Unclear career goals (Not sure what else to do)	10	12	4	7	4	26	2.54	63
Other (please specify)								0

21. To which degree have each of the following helped you in deciding your post-undergraduate plans?								
Answer Options	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree	N/A	Rating Average	Response Count
Family	0	10	21	44	35	1	3.95	111
Boyfriend/Girlfriend	20	14	17	23	12	24	2.92	110
Friends	7	20	33	36	12	1	3.24	109
Academic advisor	15	23	26	29	15	2	3.06	110
Career Consultant/Career Fairs/TartanTrak	21	26	33	22	3	4	2.62	109
Other (please specify)								2
Other responses								
Internship								
talking with a professor helped								

22. I am excited about my post-graduation plans.		
Answer Options	Response Percent	Response Count
Strongly disagree	4.5%	5
Disagree	5.5%	6
Neither agree nor disagree	11.8%	13
Agree	39.1%	43
Strongly Agree	39.1%	43

23. With regard to my post-graduation plans, I am more concerned with being happy than making a lot of money.		
Answer Options	Response Percent	Response Count
Strongly disagree	1.8%	2
Disagree	9.1%	10
Neither agree nor disagree	16.4%	18
Agree	40.9%	45
Strongly Agree	31.8%	35

24. My post-graduation plans are highly similar to my high school aspirations.		
Answer Options	Response Percent	Response Count
Strongly disagree	10.9%	12
Disagree	29.1%	32
Neither agree nor disagree	24.5%	27
Agree	27.3%	30
Strongly Agree	8.2%	9

25. My post-graduation plans are highly similar to my childhood aspirations.

Answer Options	Response Percent	Response Count
Strongly disagree	17.3%	19
Disagree	27.3%	30
Neither agree nor disagree	27.3%	30
Agree	22.7%	25
Strongly Agree	5.5%	6

26. I know what typical post-graduation plans are for a CMU graduate with my major.

Answer Options	Response Percent	Response Count
Strongly disagree	2.7%	3
Disagree	10.9%	12
Neither agree nor disagree	14.5%	16
Agree	50.0%	55
Strongly Agree	21.8%	24

27. I feel pressured to pursue opportunities that are typical for CMU students with my major.

Answer Options	Response Percent	Response Count
Strongly disagree	13.6%	15
Disagree	28.2%	31
Neither agree nor disagree	22.7%	25
Agree	27.3%	30
Strongly Agree	8.2%	9

28. I feel that students are competing to have the most impressive post-graduation plans.

Answer Options	Response Percent	Response Count
Strongly disagree	4.5%	5
Disagree	20.0%	22
Neither agree nor disagree	18.2%	20
Agree	42.7%	47
Strongly Agree	14.5%	16

29. Have you ever met with a Career Consultant in the Career Center to discuss your post-graduation plans? (Or plan to do so in the near future?)

Answer Options	Response Percent	Response Count
Yes	42.7%	47
No	57.3%	63

30. Do you have any suggestions for how the Career Consultants in the Career Center could better help students with making post-graduation plans? (optional)

great to include these open-ended responses.

Answer Options	Response Count
	12
<ol style="list-style-type: none"> 1. Don't just assume we're going to pursue something relevant to our degree. By the time we graduate, many of us actually hate our field. We also have concerns other than salary. 2. Strengthen guidance/support for students pursuing things other than jobs in big companies or graduate school. Bring in more information/support/guidance about teaching or working abroad programs and opportunities (the Study Abroad office only has very minimal resources like this). I've felt a bit lost because I know that I want to go to graduate school eventually, but I also want to take time off from school while still doing something somewhat relevant and meaningful. 3. Hire ex-HR representatives, career consultants give generally bad advice and are not helpful in obtaining internships. 4. Give more concrete help and have more connections outside of Pittsburgh 5. I really met just to get a free binder. This should be continued, Ray is awesome to chat with and very helpful when creating a resume. 6. More "face to face" discussion with students 7. As a student pursuing a career goal that is not typical for my major (Psychology major, pursuing career in early childhood non-profit, accepted position with Teach For America), I did nearly all the work to find job opportunities by myself. NONE of the career fairs were helpful. Nothing on TartanTrak was helpful. The Career Consultant was helpful with specific questions and with polishing a resume, but the general resources offered by the Career Center were disappointing. 8. The Tepper career consultant (Jennifer Frick) is already doing a great job. 9. I did not use the Career Consultants. Lots of my friends without jobs [and who are therefore going to grad school] did use that resource. 10. cmu should have spaces reserved at various artist residencies like other schools to provide artists with more opportunities. 11. Make meeting with them mandatory. 12. More info on graduate scholarships/financial aid outside of the usual loans. 	