The Comprehensive Report on the 2011 Student Activity Fee-Funded Services Consumption Patterns Survey
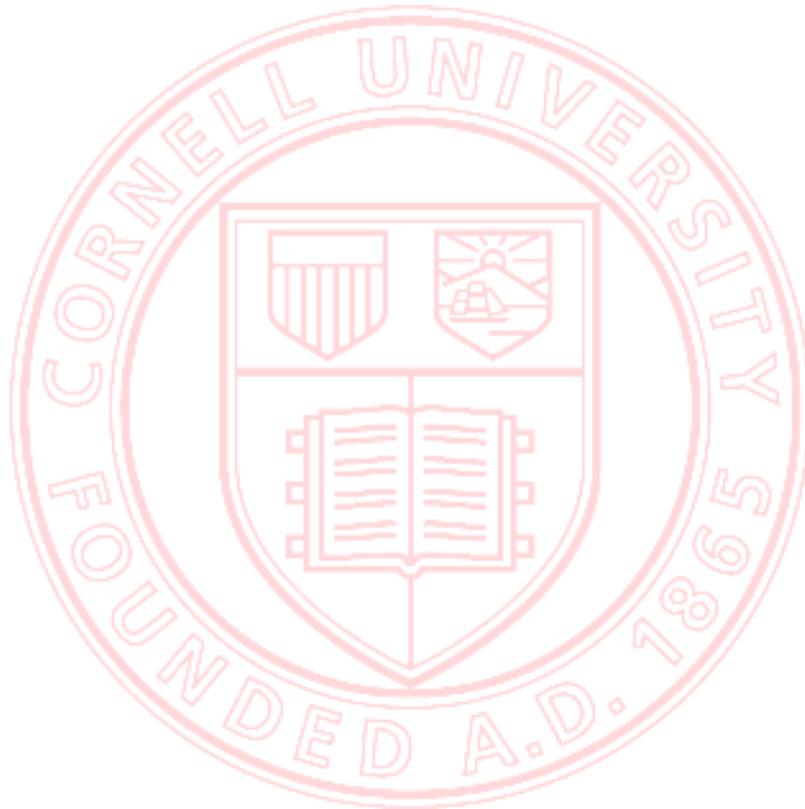
The 2010-2011 GPSA Ad-Hoc Survey Committee

Michael Genkin – Committee Chair – *Department of Sociology PhD Candidate* (mg324@cornell.edu)

Steven An – *Department of Computer Science PhD Candidate* (ssa38@cornell.edu)

Christopher E. Clarke – *Department of Communication PhD Candidate* (cec54@cornell.edu)

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I) INTRODUCTION AND BACKGROUND

Dear GPSA Members:

The 2010-2011 GPSA Ad-Hoc Survey Committee is pleased to announce the availability of final results of the *2011 Student Activity Fee-Funded Services Consumption Patterns Survey*.

The Survey Committee, created by Resolution 2 passed in the fall of 2010, sought to provide the GPSA with data on graduate and professional student consumption of services and activities funded through the Student Activity Fee (SAF) paid by all Cornell University graduate and professional students. These survey data aim to help inform the process through which the GPSA solicits student input on – and ultimately recommends – the fee amount: a process that will occur during the fall 2011 semester. **Specifically, such data can help the GPSA fulfill its "ethical responsibility" to ensure that SAF funds are "well spent" (GPSA Bylaws 3.05(h)) in accordance with student wishes. Prior to this survey, the GPSA has never had systematic data on graduate and professional student use of SAF-funded services.**

During the spring of 2011, the Committee worked to identify feasible sampling options, develop questions, execute the survey, analyze the results, prepare summary reports, and develop procedures for institutionalizing its work so that the GPSA can implement future surveys when necessary. The survey, which ran from late March to mid-April of Spring 2011, involved a randomly selected sample of 1,000 graduate and professional students, and achieved a very impressive response rate of 65%. The Committee came in under budget, spending $2,996 of the $3,000 allocated.

These data describe student use of services funded by the SAF. Additional data is also provided on student funding preferences, demographic information, and the impact of consumption of services on various metrics of student well-being such as graduate community building, inter-mixing between departments, and student overall happiness.

Please do not hesitate to contact any of the Committee members with questions.

Sincerely,

The 2010-2011 GPSA Ad-Hoc Survey Committee

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II) CHARACTERISTICS OF RESPONDERS

A. Demographic Characteristics

1) Gender

Survey Sample	*Graduate/Professional Population (Fall 2010)*
45% 55% Female Male	43% 57% Female Male

2) Race and Ethnicity

| *Survey Sample*	*Graduate/Professional Population (Fall 2010)*
13% 4% 9% 17% 1% 56% Asian — Black; Hispanic — N/A; Other — White	18% 3% 5% 22% 1% 51% Asian — Black; Hispanic — N/A; Other — White

Note: We believe the small difference in the "White" category has to do with the decision of some persons in this category to refuse to answer the race question, indicated as N/A. The small difference in the "Hispanic" category had to do with coding differences.

3) International Status

Survey Sample	*Graduate/Professional Population (Fall 2010)*

4) Age

| Variable	Obs	Mean	Std. Dev.	Min	Max
age2	685	27.94745	4.77844	21	52

Overall, the sample had an average age of nearly 28 years old, with a range of 21 to 52 years old.

B. *Academic Characteristics*

1) Academic Career

Survey Sample	*Graduate/Professional Population (Fall 2010)*

Note: Students in professional schools (Law, Vet, JSM) pursuing an academic degree such as a PhD or PhD equivalent are counted as Graduate Students not as Professional Students.
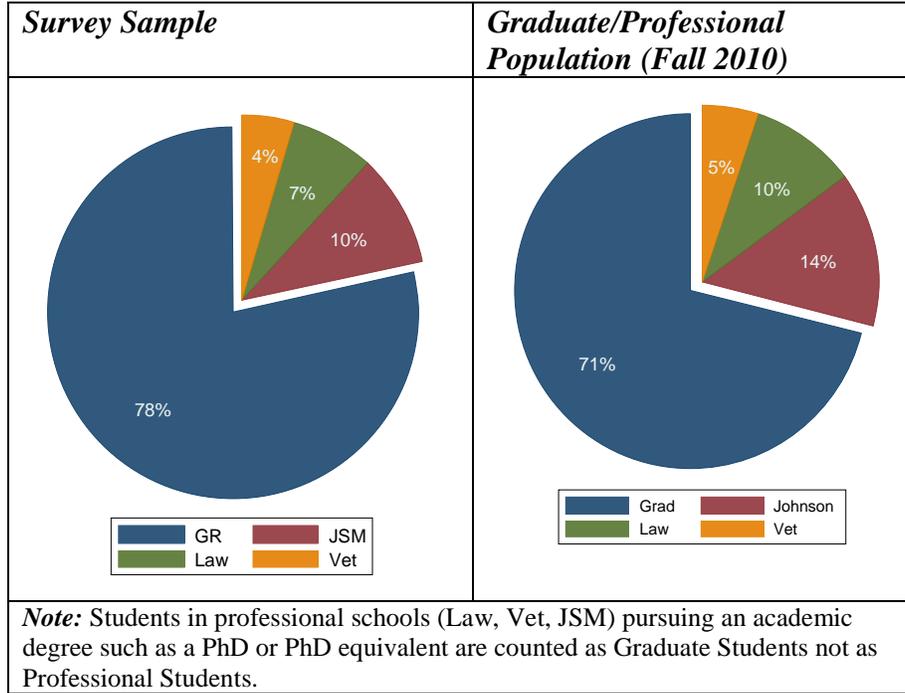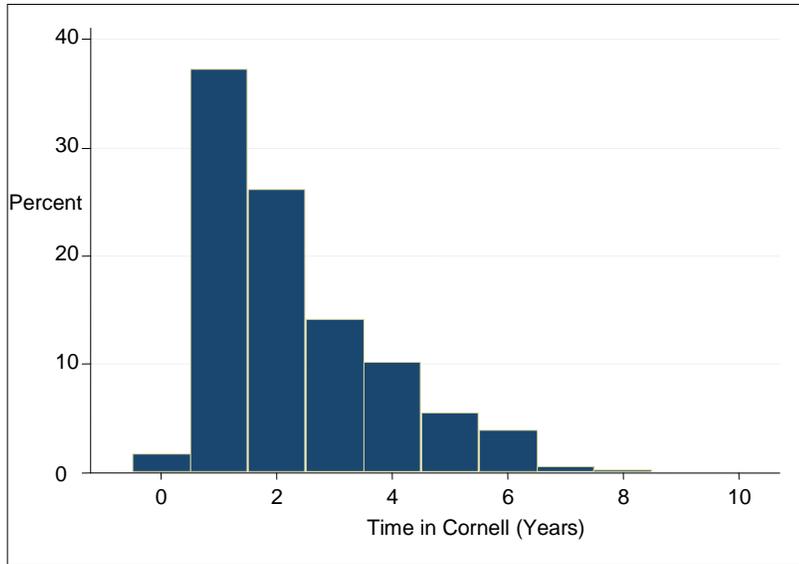
2) Time in Cornell

| Variable	Obs	Mean	Std. Dev.	Min	Max
TimeinCorn~2	685	2.321168	1.538655	0	10

Overall, respondents had been in their current degree program at Cornell for a little over 2 years.

C. Other Characteristics

1) Living Status

Legend: Single · Cohabiting with partner · Married

18% · 13% · 69%

2) Children

Legend: No · Yes

8% · 92%

3) *Commuting to Campus*

■ Walking	■ Cycling
■ Personal Vehicle	■ Public transportation

4) **Proximity to Campus**
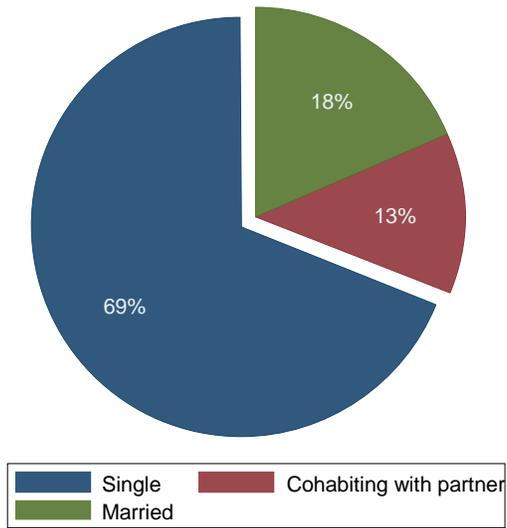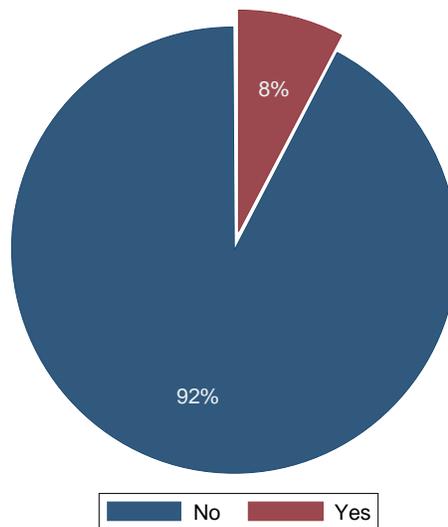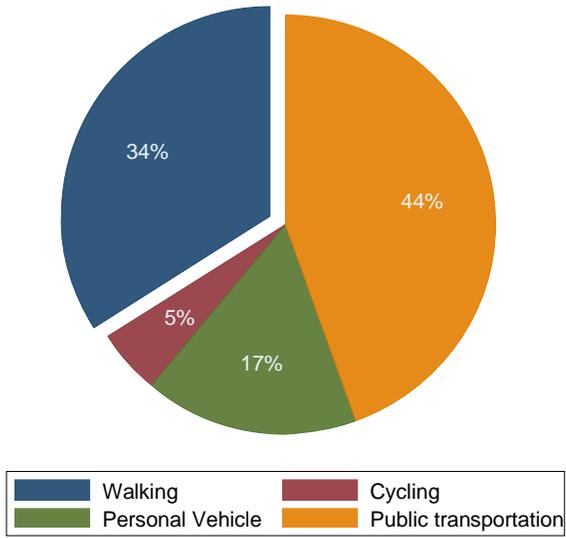
|	
■ On campus	■ Less than a mile
■ 1-5 miles from campus	■ >5 miles from campus
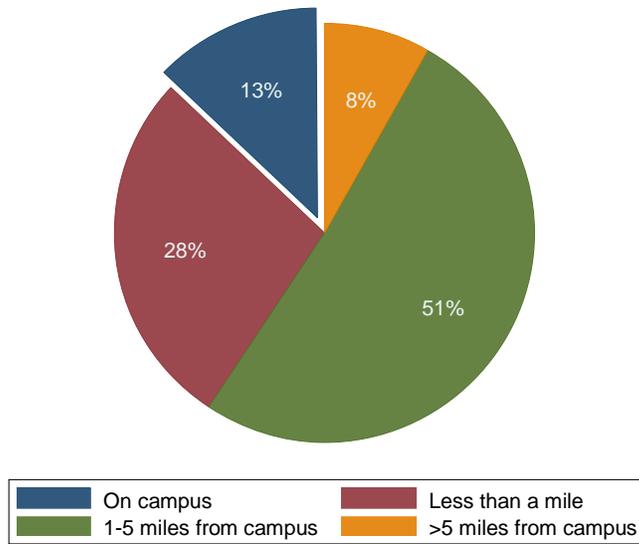
III) METRICS

A. Event Attendance

1) Activity Level (Sum of attendance of any of the 13 group categories)
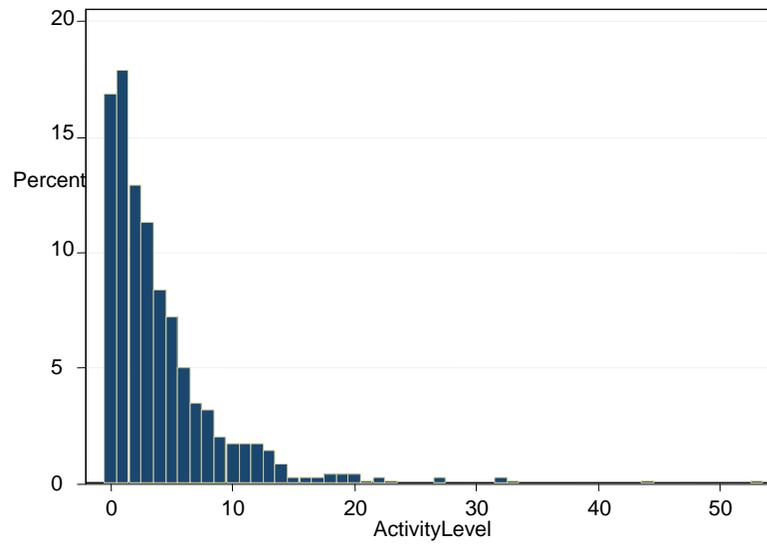
Variable	Obs	Mean	Std. Dev.	Min	Max
ActivityLe~l	680	4.248529	5.330187	0	53

Overall, respondents attended about 4 events that were funded, at least in part, by the Activity Fee

2) Attendance Rank Table

Rank	Group	Attendance	Number of Students*	Per Student Contribution	Total Contribution*
1	Orientation **	51%	3572	$0.70	$4,902.80
2	Big Red Barn	36%	2521	$7.00	$49,028.00
3	Athletics ***	29%	2022	$7.00	$49,028.00
4	Slope Day	27%	1891	$3.07	$21,502.28
5	GPSA Events Committee	27%	1891		
6	Cornell Cinema	24%	1681	$11.05	$77,394.20
7	Cornell Concert Commission	13%	911	$5.75	$40,273.00
8	International Programming Board	13%	911	$1.46	$10,225.84
9	Cornell University Program Board	9%	630	$3.55	$24,864.20
10	Latin Dance	9%	630		
11	Filthy Gorgeous	5%	350		
12	Spring Into Motion	1%	70		
13	Reflections Illuminations	1%	70		

* Based on 7,004 students enrolled in Fall 2010 (http://www.cornell.edu/about/facts/stats.cfm)
**Attendance to this event may be quasi-mandatory for incoming graduate and professional students.
*** Reflects total number of respondents who attended any athletic event, irrespective of Big Red Sports Pass usage.

3) What was the main reason you have not attended more events?

Legend:
- Too busy with other obligations (49%)
- Didn't know they were happening (20%)
- Did not appeal to me (23%)
- Other Reason (8%)
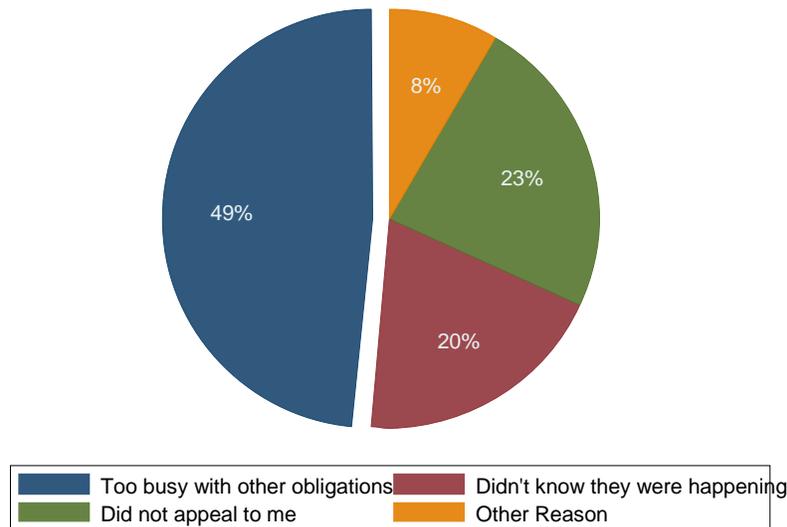
Note*: For people who have attended less than the mean number of events (4).*

4) ***What Matters for Attendance:*** (*To Inspect the Negative Binomial Regression Output see Appendix A for the full and reduced models; Coefficients are interpreted from the final reduced model*)

- *(i)* Having **children under 18** in one's household *decreases*[1] the expected number of events attended by 44%, compared to not having children under 18, controlling for other timeuse, demographic, and academic characteristics.
- *(ii)* **Living further from campus** *decreases* the expected number of events attended; living 1-5 miles from campus decreases the expected number of events attended by 32%, and living more than 5 miles from campus decreases the expected number of events attended by 29% compared to living on campus or within a mile, controlling for other timeuse, demographic, and academic characteristics.
- *(iii)* Increasing the frequency of **being on campus on weekends** (on a seven point scale from "never" to "very frequently") *increases* the expected number of events attended by 6%, controlling for other timeuse, demographic, and academic characteristics.
- *(iv)* ***Being Married*** *decreases* the expected number of events attended by 33% compared to being single, controlling for other timeuse, demographic, and academic characteristics.

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[1] Words such as "increase" or "decrease" are used for exposition purposes only and do not mean to posit a necessary causal relationship. It is more precise to think of effects as *being associated with* an increase or decrease. Please see point 1 of the Methodological Cautions section on page 41 for more details.

(v) ***Age:*** A one year increase in age *decreases* expected event attendance by 3%, controlling for other timeuse, demographic, and academic characteristics.

(vi) **Having completed the A-exam** *increases* the expected number of events attended by by 32%, controlling for other timeuse, demographic, and academic characteristics.

(vii) ***Being a Law*** **student** *decreases* the expected number of events attended by 43% and **being a Vet student** decreases it by 68%, as compared to Grad students, controlling for other timeuse, demographic, and academic characteristics.

(viii) ***Being Asian*** *decreases* the expected number of events attended by 29% as compared to Whites.

B. Happiness

    1) Question Wording

        Q: Overall, how satisfied are you with your life nowadays?

        1(Strongly Dissatisfied)----------------4 (Neither)-----------------7(Strongly Satisfied)

    2) Happiness Distribution
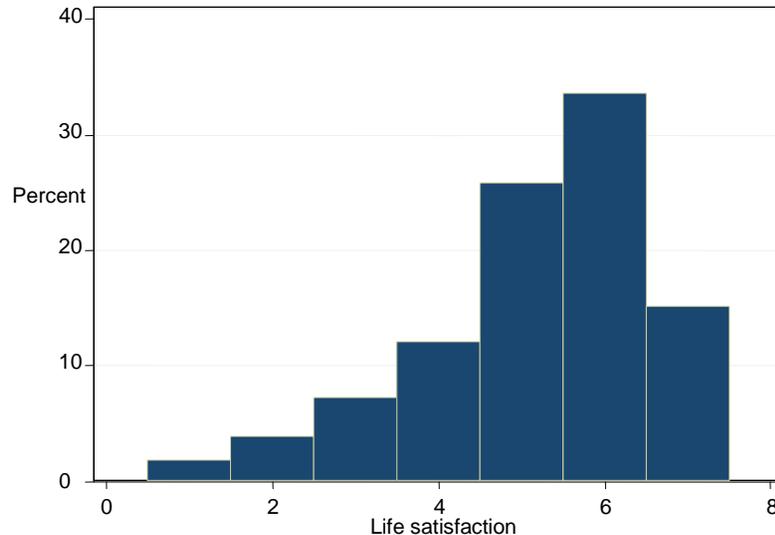
| Variable	Obs	Mean	Std. Dev.	Min	Max
s2q8	627	5.175439	1.41235	1	7

Overall, respondents felt moderately happy with their lives, with a mean value of 5.17 on the 7-point scale.

3) Group Regression Results – (*To Inspect the Ordered Logistic Regression Output see Appendix B for the full and reduced models; Coefficients are interpreted from the final reduced model*)

    (i) Most groups had no effect on happiness, controlling for other factors.

    (ii) However, the **Events Committee** had an effect on happiness. Attending an Events Committee event two or more times increased the odds of happiness by 63%, controlling for other factors. However, the result is not highly stable.

4) Overall Regression Results

    (i) Being married increases the odds of being happy by close to 3 times (278%) compared to being single. This is one of the largest effects in the survey and is consistent with the happiness literature. Similarly cohabiting with a partner but not being married, increases the odds of being happy by 68%

C. Graduate Community
    1) Cohesion (Composite Index of six questions based on the Perceived Cohesion Scale)
        1 (lowest) ------------------------------- 7 (highest)
    2) Distribution of Cohesion
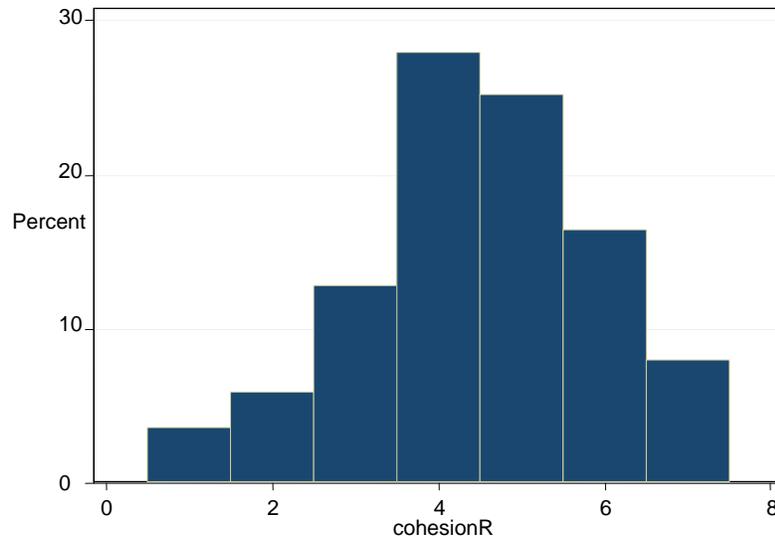
Variable	Obs	Mean	Std. Dev.	Min	Max
cohesionR	662	4.466767	1.451573	1	7

Overall, respondents felt moderately "cohesive" in terms of being members of a graduate/professional student community at Cornell University, with a mean of 4.46 on the 7-point scale.

3) Group Regression Results (*To Inspect the Ordered Logistic Regression Output see Appendix C for the full and reduced models; Coefficients are interpreted from the final reduced model)*
        (i) Attending **Orientation** increases the odds of feeling graduate student cohesion by 57%, all else being equal.
        (ii) Attending events of the **Concert Commission** increases the odds of feeling graduate student cohesion by 65%. However, there is no effect for attending two or more events.
4) Notes:
        (i) Because the dependent variable violated the normality of residuals assumption a simple OLS analysis could not be performed. However, an OLS estimation using a transformed DV has been performed as a robustness check. The results were in line with the ordered logit estimator.
        (ii) There are highly non-robust results for the BRB, Cinema, and the Events Committee, which disappear once the non-significant variables are removed.

D. Social Mixing

1) Question: Of the graduate or professional student friends you have made while attending Cornell who are from outside your department (but attend Cornell), about how many did you meet at events you selected earlier?
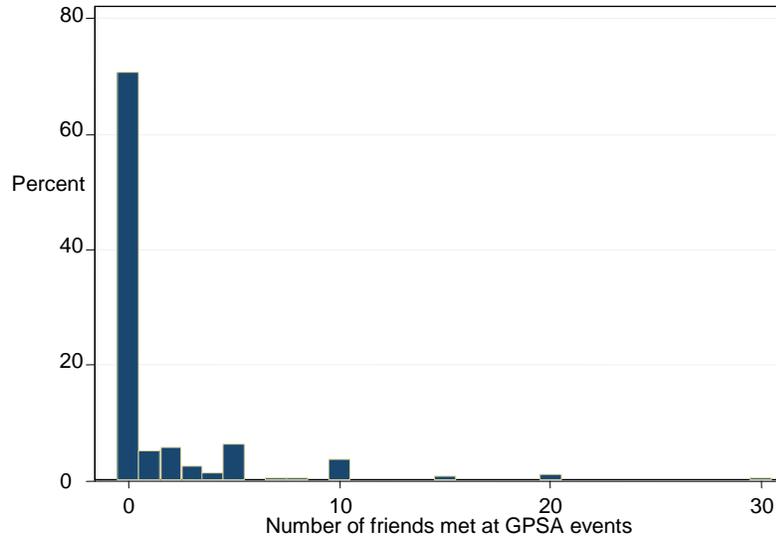

This data excludes 5 individuals that put highly unlikely numbers ranging from 35 to 50. Including those individuals shifts the mean to 2 and the SD to 5.7

Variable	Obs	Mean	Std. Dev.	Min	Max
s2q4	523	1.590822	3.815786	0	30

Overall, respondents met an average of 1.59 friends at events they attended who were from outside their department (but attend Cornell).

2) Are the friends you made through these events predominantly acquaintances or close friends? For the purposes of this survey, a close friend is defined as a person with whom you can discuss personal matters and includes significant others. Out of the number you gave to the previous question, how many are close friends?
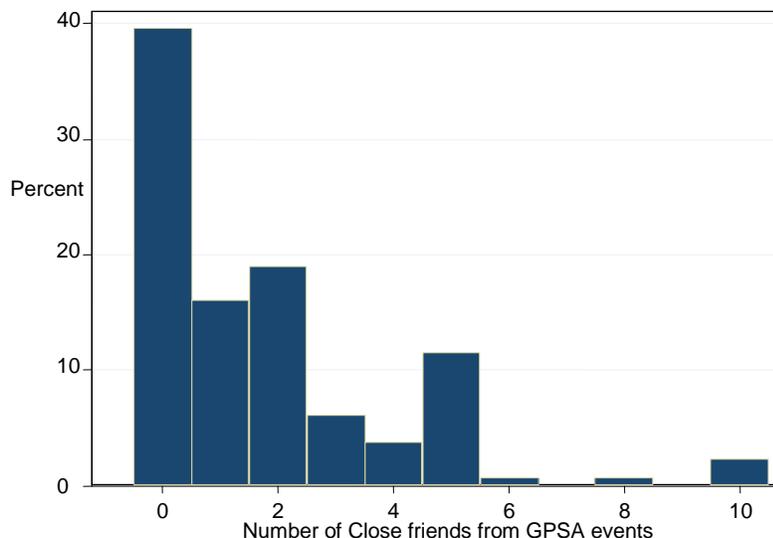
*This data excludes 2 individuals that put the highly unlikely numbers of 15 and 20. Including those individuals shifts the mean to 2 and the SD to 2.9

Variable	Obs	Mean	Std. Dev.	Min	Max
s2q6	131	1.78626	2.201425	0	10

Overall, respondents met an average of 1.78 close friends at events they attended who were from outside their department (but attend Cornell).

3) Making Friends Through Specific Groups Table
   (asked of respondents who indicated they attended events from that particular group; sorted by "Yes")
   At which event(s) did you meet? Please select up to three.

	Yes	No
BRB	78%	22%
Latin Dancing	47%	53%
Orientation	46%	54%
Events Com	44%	56%
Int Programming Board	26%	74%
Athletics	22%	78%
Slope Day	22%	78%
Cinema	21%	79%
Filthy Gorgeous	8%	92%
Concert Commission	5%	95%

CU Programming Board	0%	100%
Spring into Motion	0%	100%
Reflections Illuminations	0%	100%

4) Group Regression Results (To Inspect the Zero-Inflated Negative Binomial Regression Model see Appendix D *for the full and reduced models; Coefficients are interpreted from the final reduced model)*

   (i) Attending one event at the **Big Red Barn** increases the odds of having made at least one friend (compared to no friends) by 149%, all else being equal. [Note that the coefficient for log odds of the inflator, is negative in the regression table; that is because it is predicting zero inflation or having made zero friends and it is predicting a decrease in making no friends. The results presented here are converted into the odds of making at least one friend.] Attending two or more events at the BRB increases the odds of having made at least one friend (compared to no friends) by 167%, all else being equal.

   (ii) Attending one event of the **Events Committee** increases the odds of having made at least one friend (compared to no friends) by 85%. Attending two or more events at the Events Committee increases the odds of having made at least one friend (compared to no friends) by 10 times, all else being equal.

   (iii) Attending one **Sports** event increases the predicted number of friends by 74% (compared to not attending), all else being equal.

   (iv) Attending one **International Programming Board** event increases the predicted number of friends by 67% (compared to not attending), all else being equal. Attending two or more IPB events increases the predicted number of friends by almost 4x (384%) (compared to not attending), all else being equal.

5) Overall Regression Results

   (i) Being an **International Student** increases the odds of having made at least one friend (compared to no friends) by 162%, all else being equal.

   (ii) **Time in Cornell** is also associated with mixing. Each additional year in Cornell increases the predicted number of friends by 32%, all else being equal.

   (iii) Being a Business **(JSM) student** decreases the predicted number of friends, made at GPSA events, by 71% when compared with Graduate students, all else being equal. Being a **Law student** decreases the predicted number of friends, made at GPSA events, by 78% when compared with Graduate students, all else being equal.

6) Notes

   (i) Seventy percent of the observations are 0s. Therefore a Negative Binomial Model was not used and a Zero-Inflated Negative Binominal model was used in its stead.

(ii) A similar analysis with close friends was not reported because the number of observations falls to 70.

IV) SUMMARY OVERVIEW OF 2011 SURVEY COMMITTEE FINDINGS

| Participation Rank	Group	Percent of Student Participation	Number of Students*	Per Student Contribution	Total Allocation*	Personal Happiness Outcome	Community Cohesion Outcome	Social Mixing Outcome	Total Outcomes
1	Orientation	51%	3572	$0.70	$4,902.80	*No Effect*	**INCREASES**	*No Effect*	**1/3**
2	BRB	36%	2521	$7.00	$49,028.00	*No Effect*	*No Effect*	**INCREASES**	**1/3**
3	Sports	29%	2022	$7.00	$49,028.00	*No Effect*	*No Effect*	**INCREASES**	**1/3**
4	Slope Day	27%	1891	$3.07	$21,502.28	*No Effect*	*No Effect*	*No Effect*	0/3
5	Events Committee	27%	1891	**	**	**INCREASES**	*No Effect*	**INCREASES**	**2/3**
6	Cinema	24%	1681	$11.05	$77,394.20	*No Effect*	*No Effect*	*No Effect*	0/3
7	Concert Commiss.	13%	911	$5.75	$40,273.00	*No Effect*	**INCREASES**	*No Effect*	**1/3**
8	Int. Progr. Board	13%	911	$1.46	$10,225.84	*No Effect*	*No Effect*	**INCREASES**	**1/3**
9	CU Program Board	9%	630	$3.55	$24,864.20	*No Effect*	*No Effect*	*No Effect*	0/3
10	Latin Dance	9%	630	**	**	*No Effect*	*No Effect*	*No Effect*	0/3
11	Filthy Gorgeous	5%	350	**	**	*No Effect*	*No Effect*	*No Effect*	0/3
12	Spring Into Motion	1%	70	**	**	***	***	***	
13	Reflect. Illumin.	1%	70	**	**	***	***	***	

Notes: * Based on 7004 students enrolled in Fall 2010. ** Data not available. ***Participation is too small to model.

V) GROUP ATTENDANCE

A. Sporting Events

1) Attendance

(i) From the start of the fall 2010 semester (August 2010) to the present, did you attend any collegiate Cornell University sporting events?
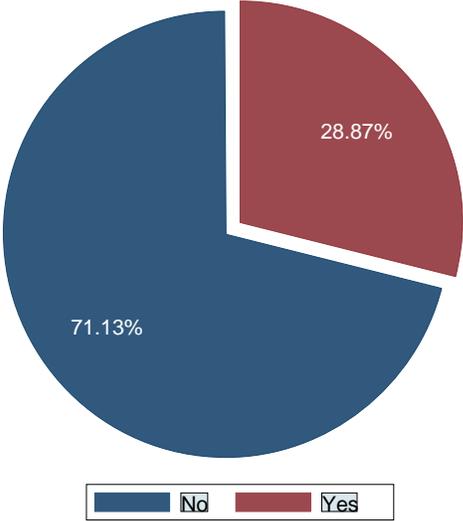
(ii) Approximately how many events did you attend during this time?
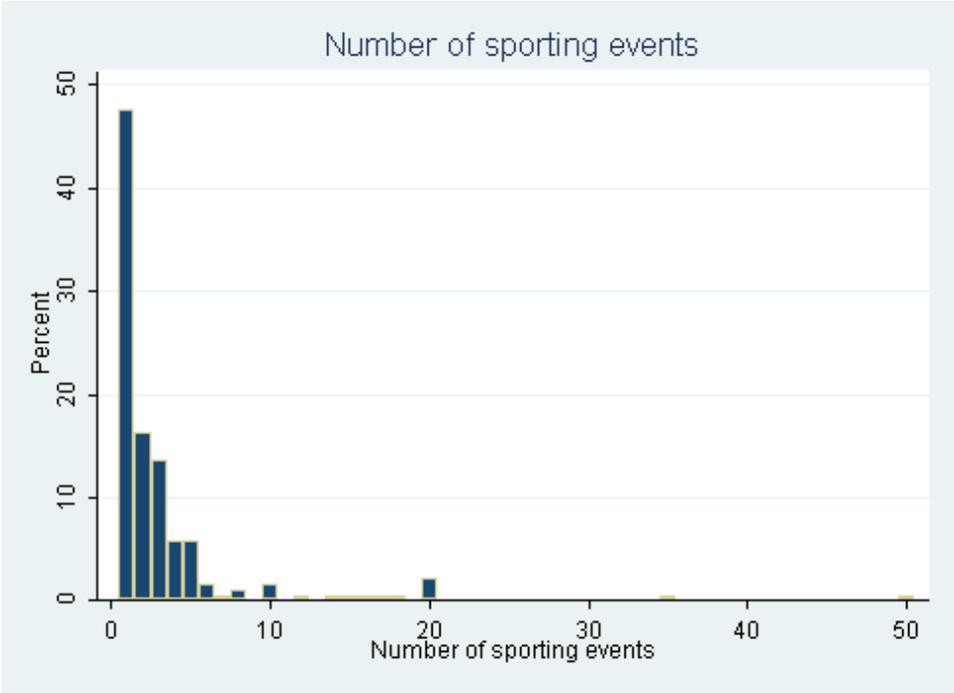
(iii) Did you use the Big Red Sports Pass to gain admission to any of these events?


Used Big Red Sports Pass
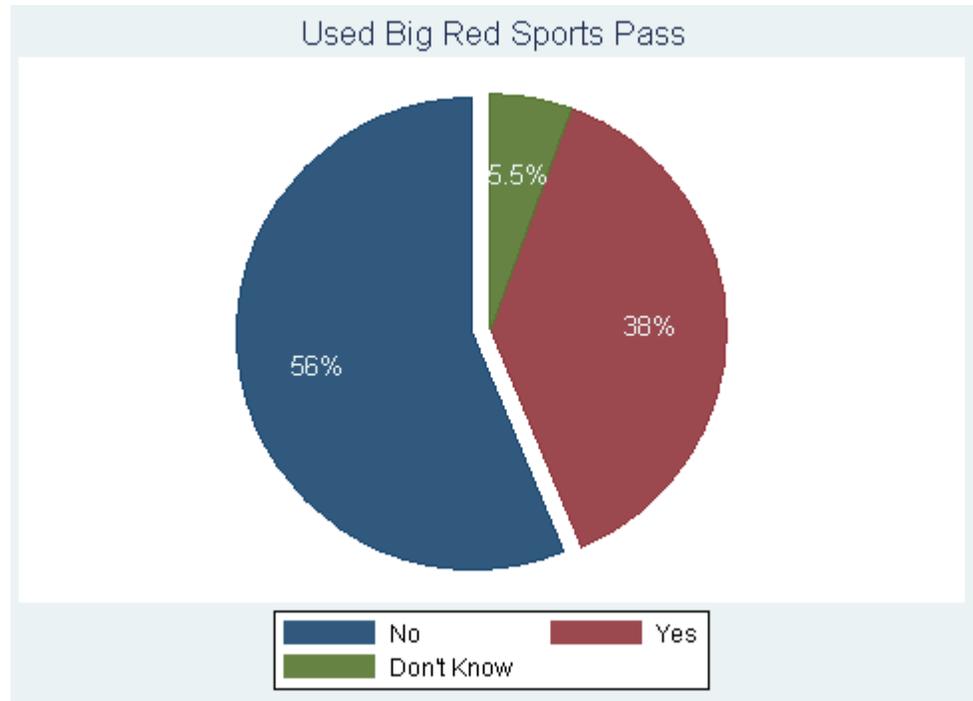
2) **Big Red Barn**

a.   In the last month, did you visit the Big Red Barn?
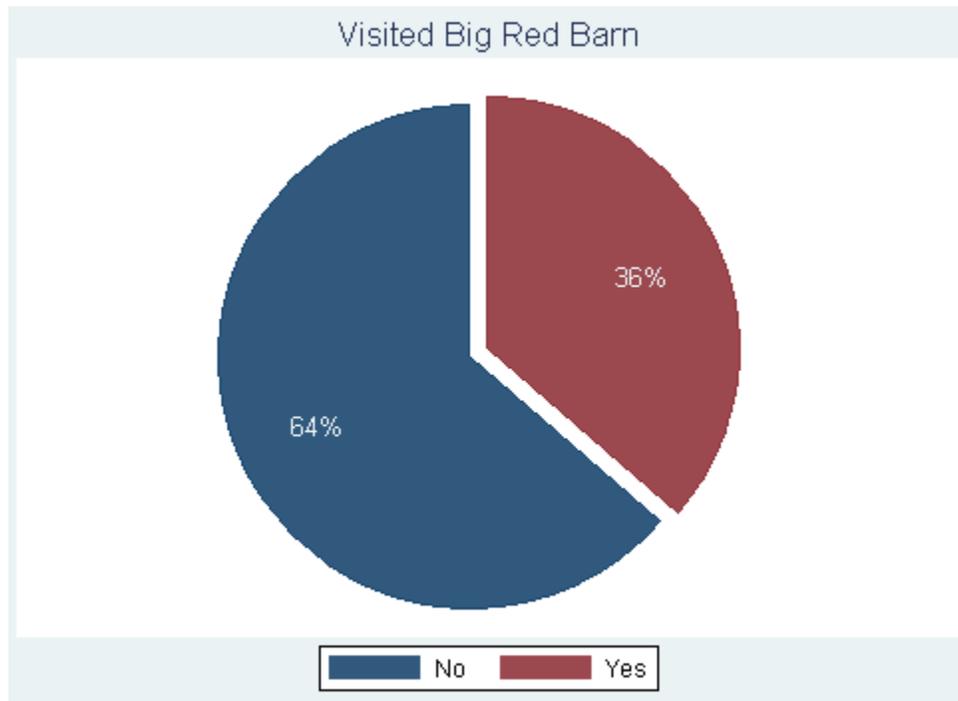
b.   Approximately how many times did you visit the Big Red Barn in the past month?
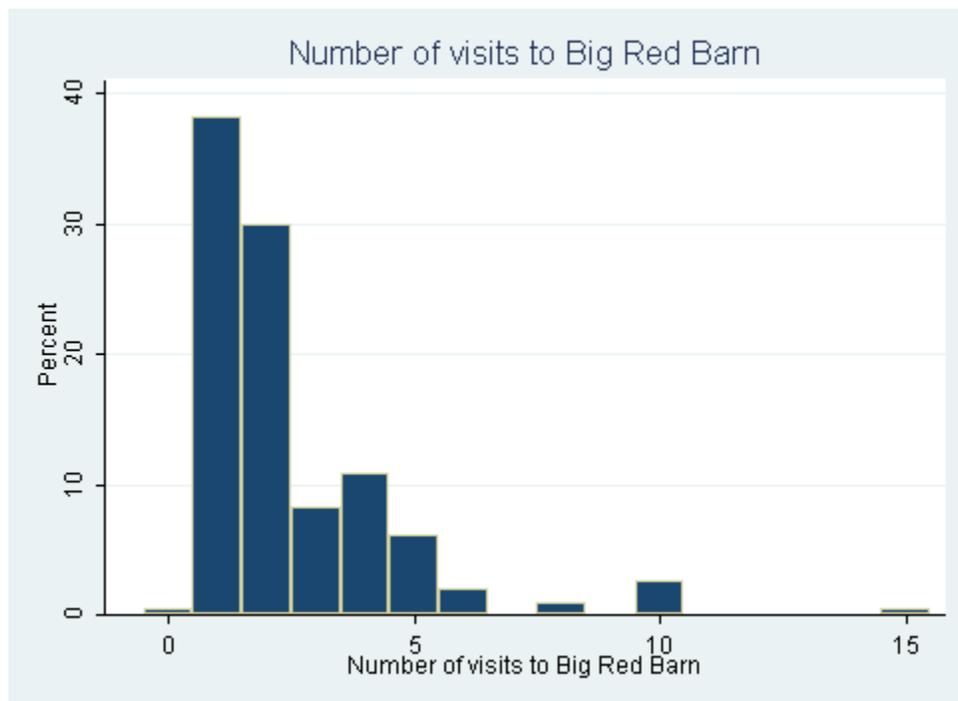
c.   Out of the following five options, which one do you do most?

Activity at Big Red Barn

21%   3.2% 8.5%

7.7%

59%

Eat/Drink   Study
Participate in TGIF   Participate in other events
Other
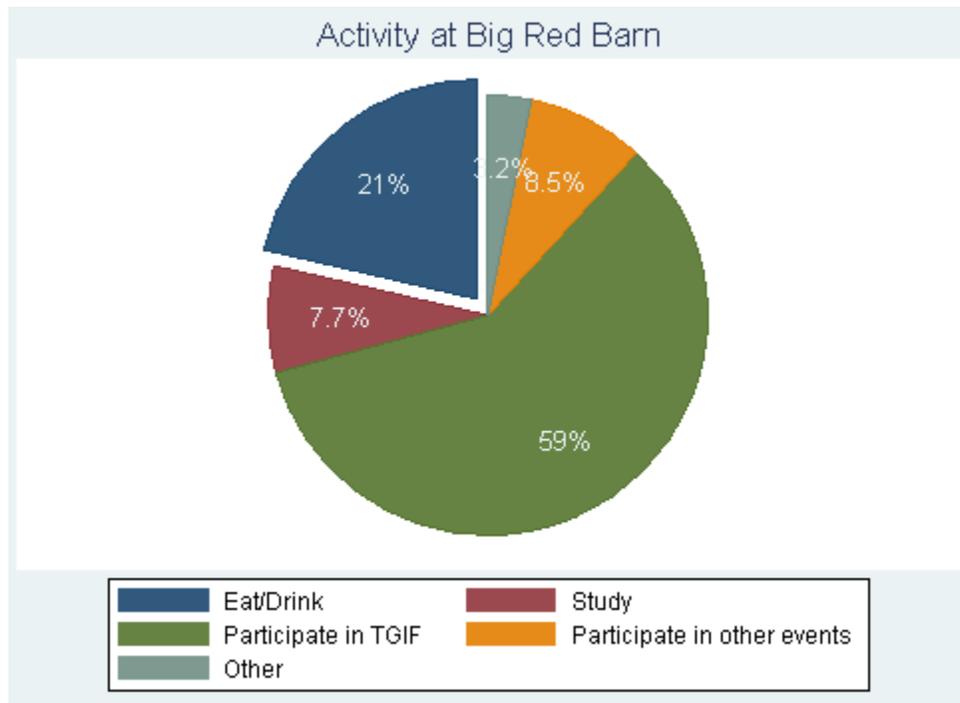
3)   Cornell Cinema

a.   During the fall 2010 semester, did you attend Cornell Cinema?

Visited Cornell Cinema

24%

76%

No   Yes
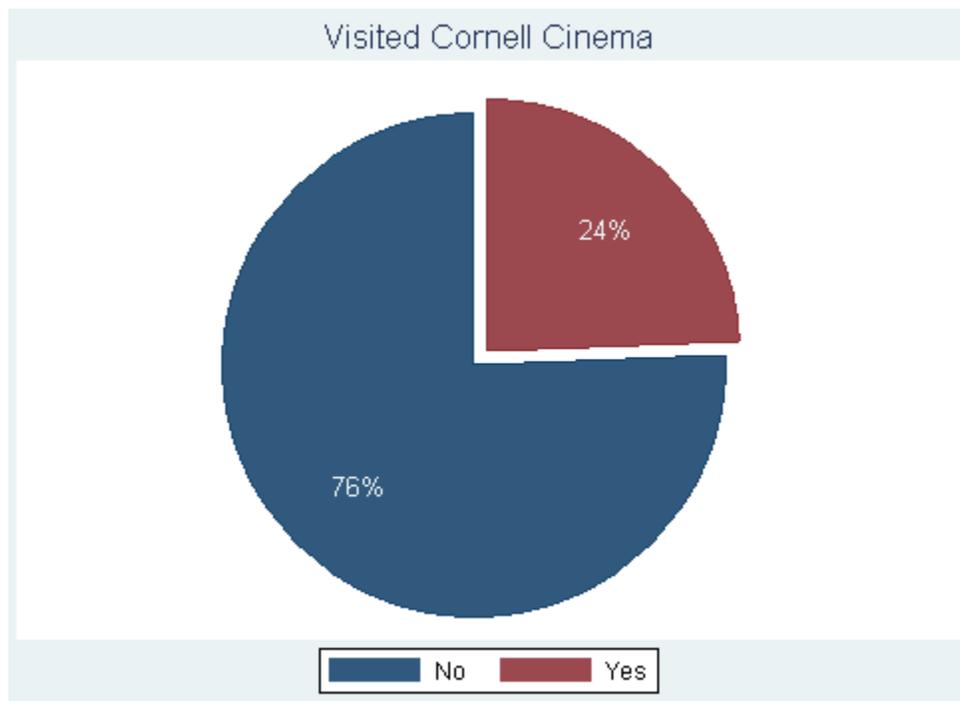
b.   Approximately how many times did you attend the Cinema during this time?


Number of visits to Cornell Cinema
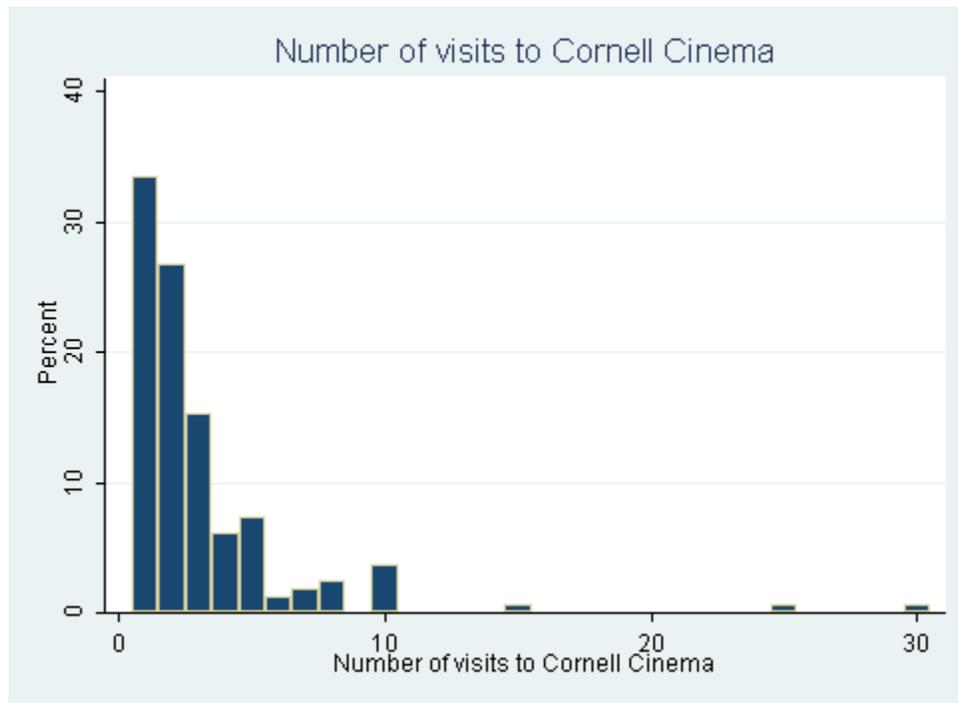
**4)   Programming Boards**

a.   Below is a list of events organized by the Cornell Concert Commission in the fall of 2010.

• Supermash Brothers/Shy Child (Arts Quad, August 2010)
• M.I.A./Rye Rye (Barton Hall, October 2010)
• Phoenix/ Jenny and Johny (Barton Hall, October 2010)
• KiD CuDi/Cee Lo Green (Barton Hall, November 2010)

Out of the events listed above, how many did you attend?
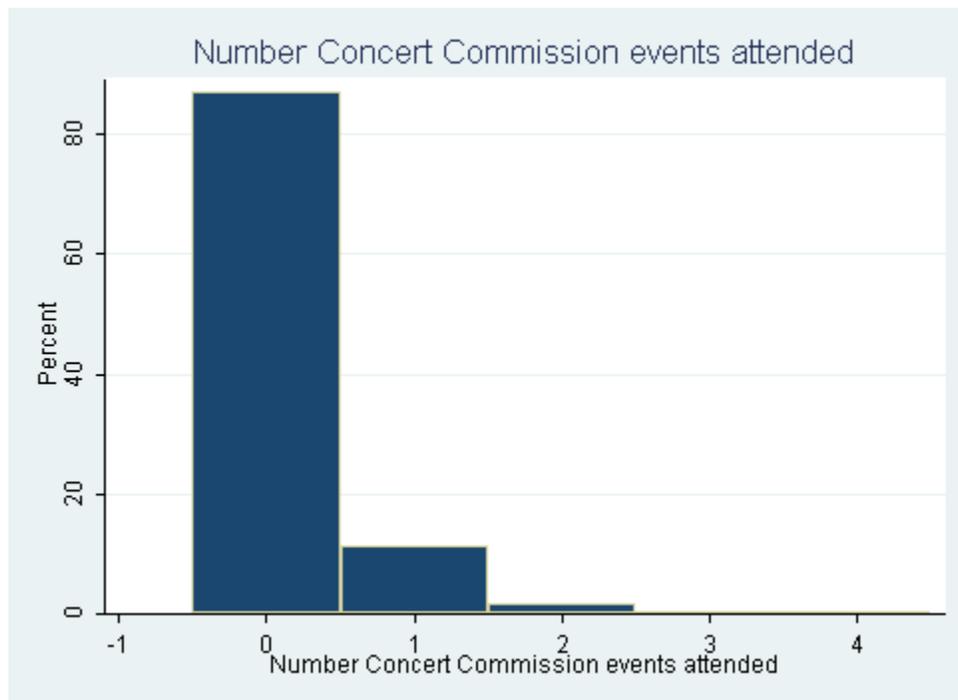
b.   Below is a list of events organized by the Cornell University Programming Board in the fall of 2010 and spring of 2011.

• Donald Glover (Statler Auditorium, September 25, 2010)
• Frank Warren (Bailey Hall, October 19, 2010)
• Louis C.K. (Bailey Hall, October 24, 2010)
• Aziz Ansari (Bailey Hall, February 5, 2011)

Out of the events listed above, how many did you attend?
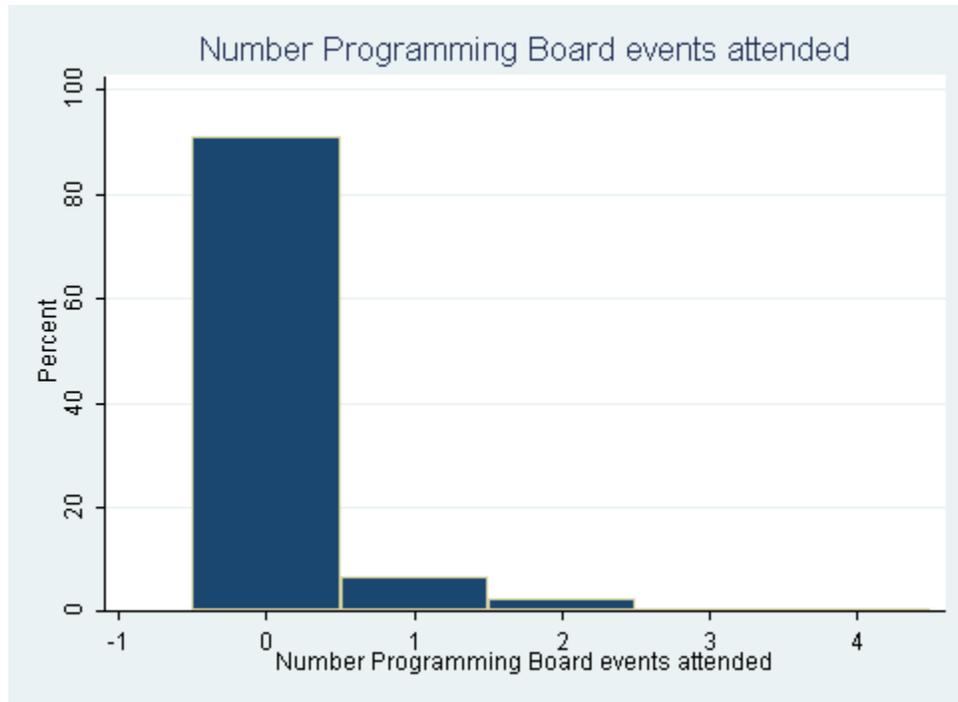
c.   Below is a list of events organized by the International Student Programming Board in the spring of 2010 and fall of 2010.

• International Flag Painting (Big Red Barn, March 2010)
• Taste of Culture (Indonesian food fest, March 2010)
• International Festival (Willard Straight Hall, April 2010)
• Mini World Cup (Bartels Hall, May 2010)
• ISSO Thanksgiving Feast (Nov 2010)

Out of the events listed above, how many did you attend?

Number Intl Programming Board events attended
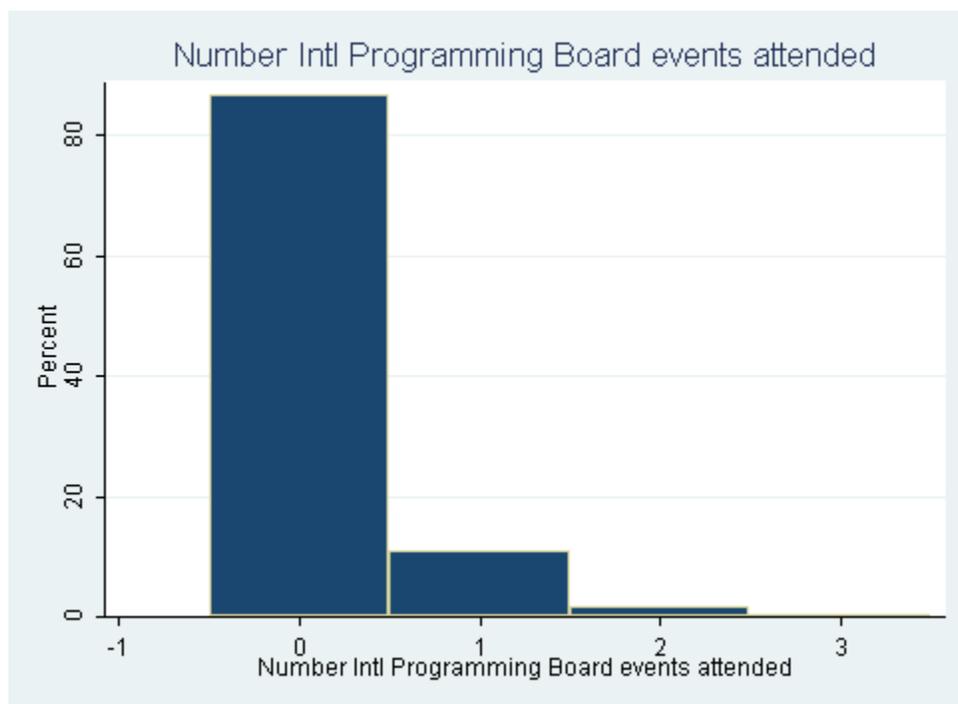
5)   **GPSA Funded Events**

Below is a list of events organized by Cornell student organizations in the spring of 2010 and on other dates. Please indicate whether you attended each event (yes/no):

a.   Graduate School Orientation (during your first year as an enrolled graduate student, if applicable)

Graduate School Orientation - attended

49%   51%

No   Yes
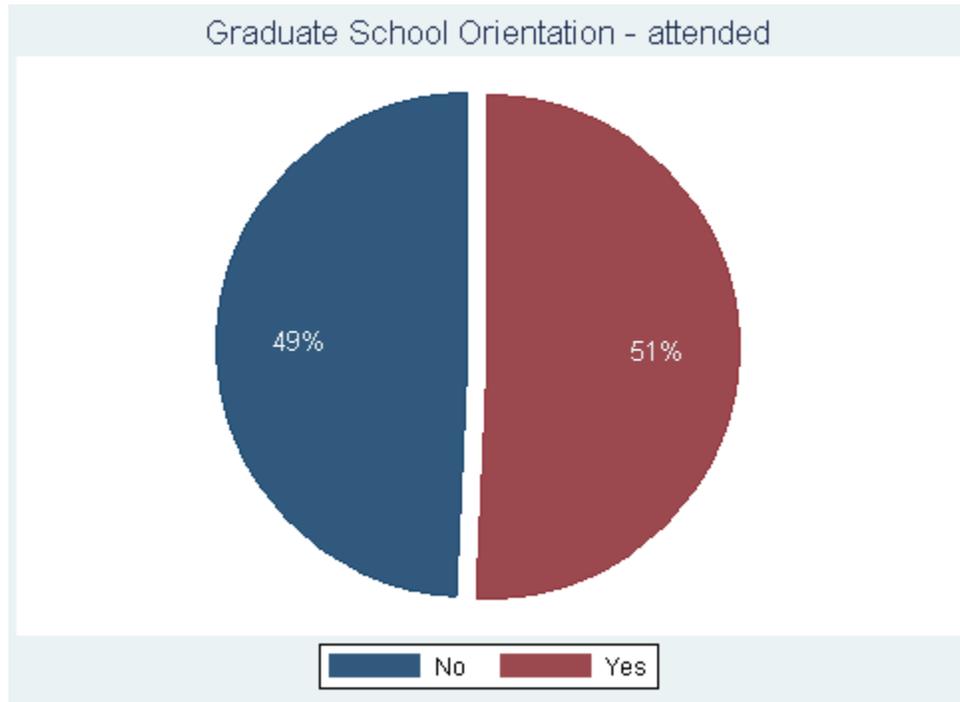
b.   Filthy Gorgeous (Willard Straight Hall, February, 26th 2011)

Filthy Gorgeous - attended

5%

95%

No   Yes
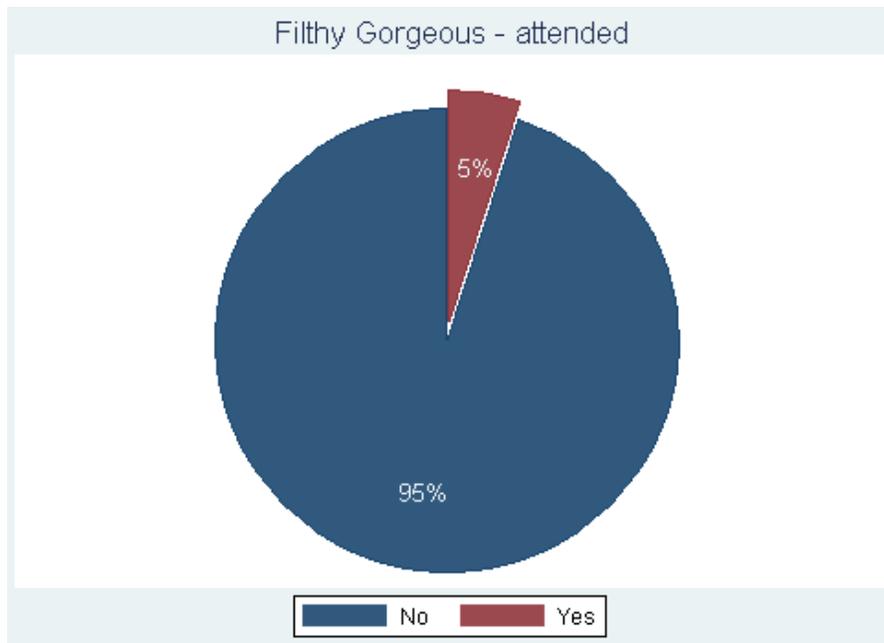
c.   Latin dancing events ("socials") at the Big Red Barn (hosted by Proyecto Palante)

Latin dancing events - attended

8.9%

91%

No   Yes
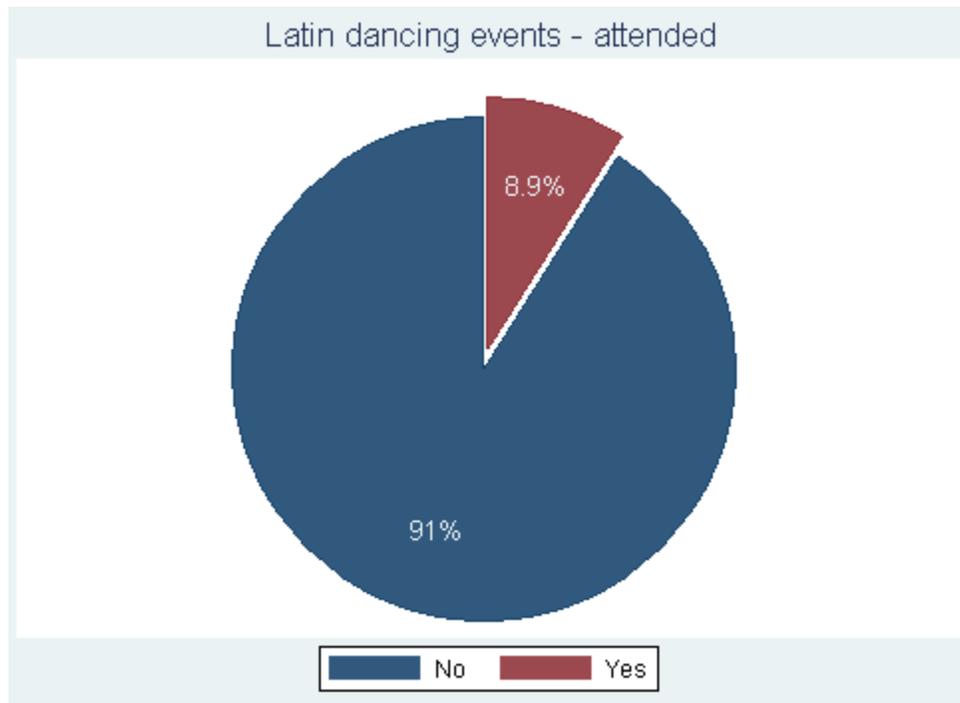
d.   Spring into Motion Pandora Spring Showcase (April 9th, 2010)

Spring into motion - attended

.76%

99%

No   Yes

28
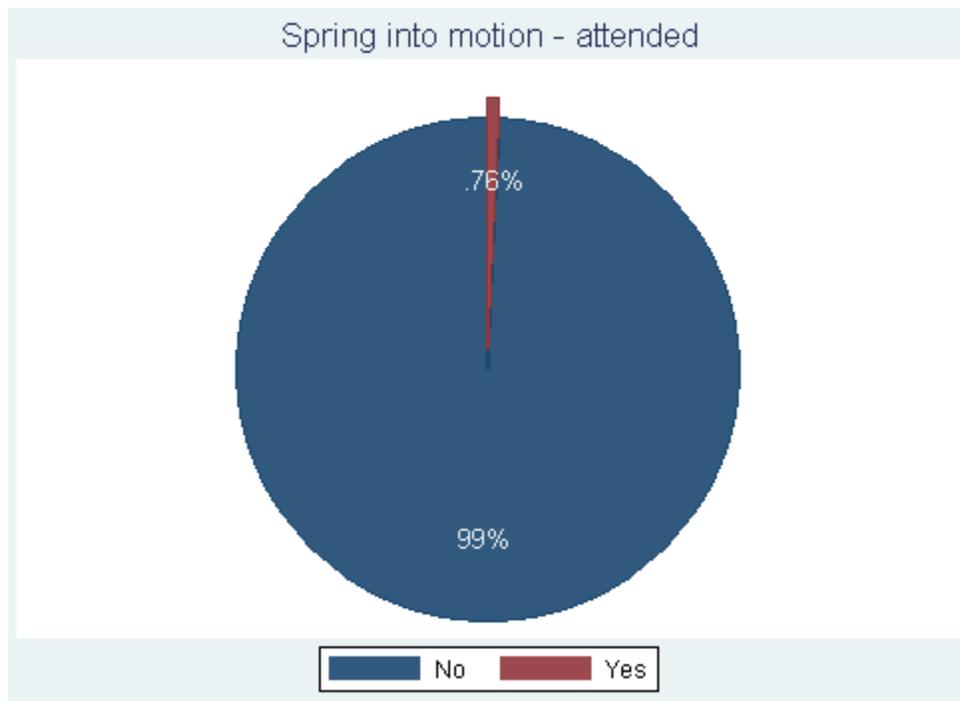
e.   Reflections Illuminations Showcase 2010 (Anabel Taylor Hall, April 17th, 2010)

Reflections Illuminations Showcase - attended

1.4%

99%

No   Yes

6)   Slope Day

a.   Did you attend Slope Day 2010?

Attended Slope Day

27%

73%

No   Yes

b.   How long did you stay?

Slope Day - length of stay

17%   15%
24%
19%
25%

<=30 Minutes   31-60 Minutes
61-90 Minutes   91-120 Minutes
>120 Minutes
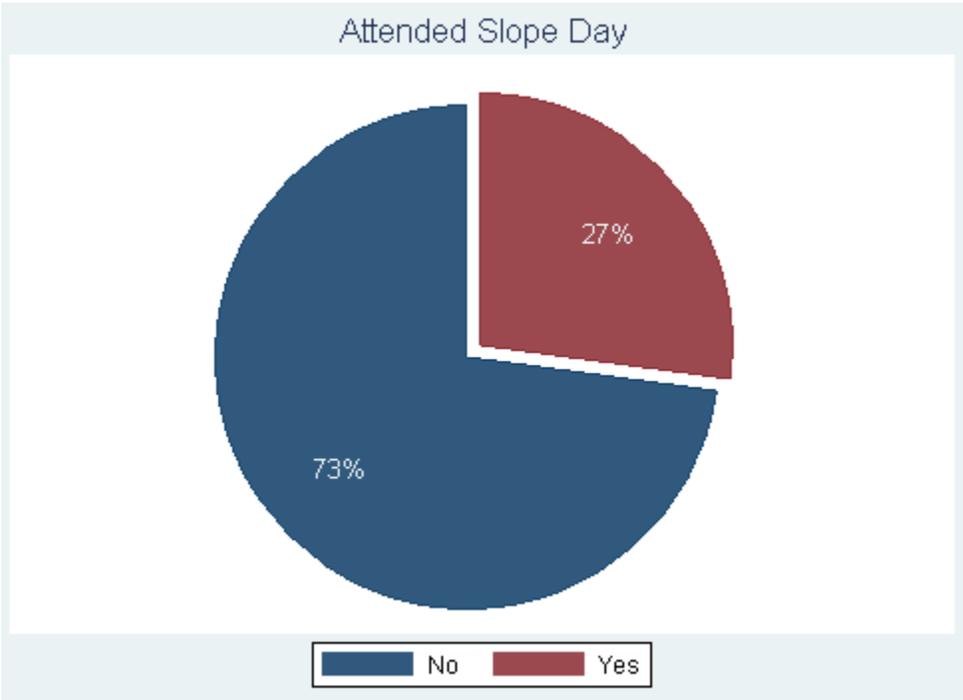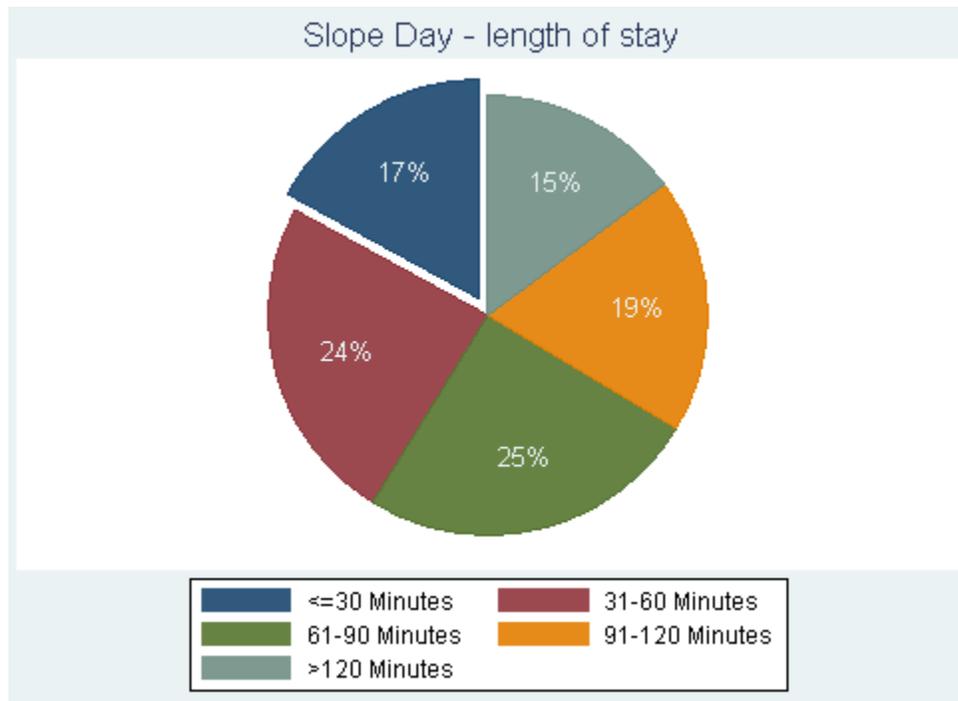
c.   Overall, how would you rate your level of satisfaction with Slope Day 2010? (1 = Very dissatisfied, 4 = Neither satisfied nor dissatisfied, 7 = Very satisfied)


Slope Day - Satisfaction

```
. sum  s1q15

    Variable |      Obs       Mean    Std. Dev.      Min       Max
-------------+--------------------------------------------------------
       s1q15 |      182    4.247253   1.497463        1         7
```

On a scale of 1 to 7, the mean answer was 4 – "Neither satisfied nor dissatisfied."

7) GPSA Events Committee

a.   Below is a list of events organized by the Graduate and Professional Student Assembly Events Committee in the fall of 2010.

• Grad Ball (Willard Straight Hall, April 23rd, 2010)
• Grad's Night Out - Pixel (August 24th, 2010)
• Grad's Night Out - The Westy (October 14th, 2010)
• GPSA Zombie Bar Crawl (October 28th, 2010)
• Grad Bowl (November 4th, 2010)
• Grad's Night Out - The Palms (November 11th, 2010)
• Interschool Mixer - Engineering & Biological Sciences (November 17th, 2010)
• Grad Students: Explore the Ithaca Sciencenter (December 5th, 2010)
• GPSA Spa Day (December 5th, 2010)

Out of the events listed above, how many did you attend?
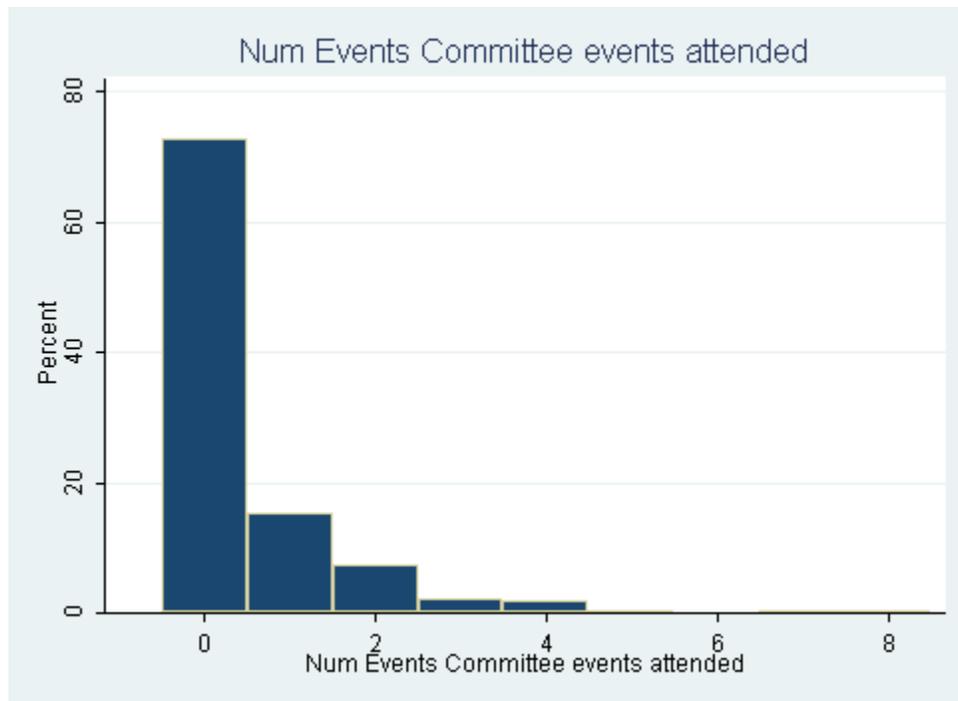
8) Rationale

a.   What was the main reason you have not attended more events? (only appears if "no" or "0" given to any of the questions above)

Reason more events not attended

48% — Too busy with other obligations
26% — Did not appeal to R
20% — Didn't know they were happening
6.7% — Other Reason

Legend:
- Too busy with other obligations
- Did not appeal to R
- Didn't know they were happening
- Other Reason
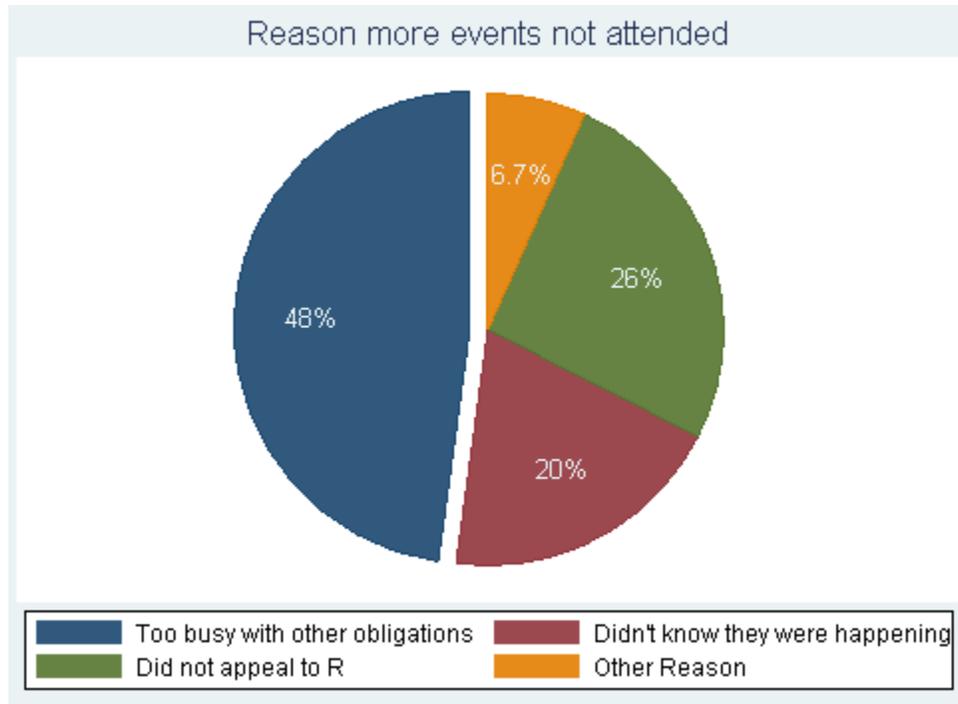
II. USAGE DATA PRESENTED IN TABLES

1a

Attended any sporting events?	Freq.	Percent	Cumulated
No	483	71.13	71.13
Yes	196	28.87	100
Total	**679**	**100**	

1b

Number of sporting events	Freq.	Percent	Cumulated
1	91	47.64	47.64
2	31	16.23	63.87
3	26	13.61	77.49
4	11	5.76	83.25
5	11	5.76	89.01
6	3	1.57	90.58
7	1	0.52	91.1
8	2	1.05	92.15
10	3	1.57	93.72
12	1	0.52	94.24
14	1	0.52	94.76
15	1	0.52	95.29
16	1	0.52	95.81
17	1	0.52	96.34
18	1	0.52	96.86
20	4	2.09	98.95
35	1	0.52	99.48
50	1	0.52	100
Total	**191**	**100**	

1c

Used Big Red Sports Pass?	Freq.	Percent	Cumulated
No	112	56.28	56.28
Yes	76	38.19	94.47
Don't Know	11	5.53	100
Total	**199**	**100**	

2a

Visited Big Red Barn?	Freq.	Percent	Cumulated
No	431	63.66	63.66
Yes	246	36.34	100
Total	*677*	*100*	

2b

Number of visits to BRB	Freq.	Percent	Cumulated
0	1	0.52	0.52
1	74	38.14	38.66
2	58	29.9	68.56
3	16	8.25	76.8
4	21	10.82	87.63
5	12	6.19	93.81
6	4	2.06	95.88
8	2	1.03	96.91
10	5	2.58	99.48
15	1	0.52	100
Total	*194*	*100*	

2c

Activity at BRB	Freq.	Percent	Cumulated
Eat/Drink	53	21.46	21.46
Study	19	7.69	29.15
Participate in TGIF	146	59.11	88.26
Participate in other events	21	8.5	96.76
Other	8	3.24	100
Total	*247*	*100*	

3a

Visited Cornell Cinema	Freq.	Percent	Cumulated
No	512	75.63	75.63
Yes	165	24.37	100
Total	*677*	*100*	

3b

# of visits to Cornell Cinema	Freq.	Percent	Cumulated
1	55	33.54	33.54
2	44	26.83	60.37
3	25	15.24	75.61
4	10	6.1	81.71
5	12	7.32	89.02
6	2	1.22	90.24
7	3	1.83	92.07
8	4	2.44	94.51
10	6	3.66	98.17
15	1	0.61	98.78
25	1	0.61	99.39
30	1	0.61	100
Total	**164**	**100**	

4a

# of Concert Commission events attended	Freq.	Percent	Cumulated
0	580	86.83	86.83
1	75	11.23	98.05
2	11	1.65	99.7
3	1	0.15	99.85
4	1	0.15	100
Total	**668**	**100**	

4b

# of Programming Board events attended	Freq.	Percent	Cumulated
0	603	90.81	90.81
1	44	6.63	97.44
2	15	2.26	99.7
3	1	0.15	99.85
4	1	0.15	100
Total	**664**	**100**	

4c

# Of Int'l Programming Board events attended	Freq.	Percent	Cumulated
0	580	86.57	86.57
1	74	11.04	97.61
2	12	1.79	99.4
3	4	0.6	100
Total	670	100	

5a

Attended Graduate School Orientation?	Freq.	Percent	Cumulated
No	325	49.24	49.24
Yes	335	50.76	100
Total	660	100	

5b

Attended Filthy Gorgeous?	Freq.	Percent	Cumulated
No	623	94.97	94.97
Yes	33	5.03	100
Total	656	100	

5c

Attended Latin dancing events?	Freq.	Percent	Cumulated
No	602	91.07	91.07
Yes	59	8.93	100
Total	661	100	

5d

Attended Spring into Motion?	Freq.	Percent	Cumulated
No	651	99.24	99.24
Yes	5	0.76	100
Total	656	100	

5e

Attended Reflections Illuminations Showcase?	Freq.	Percent	Cumulated
No	648	98.63	98.63
Yes	9	1.37	100
Total	657	100	

6a

Attended Slope Day?	Freq.	Percent	Cumulated
No	488	72.84	72.84
Yes	182	27.16	100
Total	**670**	**100**	

6b

Length of Slope Day stay? (minutes)	Freq.	Percent	Cumulated
<=30	31	17.03	17.03
31-60	44	24.18	41.21
61-90	46	25.27	66.48
91-120	34	18.68	85.16
>120	27	14.84	100
Total	**182**	**100**	

6c

Slope Day Satisfaction?	Freq.	Percent	Cumulated
1	14	7.69	7.69
2	13	7.14	14.84
3	17	9.34	24.18
4	45	24.73	48.9
5	65	35.71	84.62
6	19	10.44	95.05
7	9	4.95	100
Total	**182**	**100**	

7a

# of Events Committee events attended?	Freq.	Percent	Cumulated
0	485	72.82	72.82
1	102	15.32	88.14
2	49	7.36	95.5
3	15	2.25	97.75
4	12	1.8	99.55
5	1	0.15	99.7
7	1	0.15	99.85
8	1	0.15	100
Total	**666**	**100**	

8a

Reason more events not attended?	Freq.	Percent	Cumulated
Too busy with other obligations	320	47.83	47.83
Didn't know they were happening	132	19.73	67.56
Did not appeal to me	172	25.71	93.27
Other	45	6.73	100
Total	*669*	*100*	

VI) ANALYSIS OF OPEN ENDED RESPONSES TO THE SURVEY

The Activity Fee Survey allowed respondents to type open-ended comments to clarify responses to three questions:

- On what services among those listed previously respondents would like to see <u>less</u> Activity Fee funds spent;
- On what services respondents would like to see <u>more</u> Activity Fee funds spent (a list was provided);
- If the respondent would like to add anything else before finishing the survey.

These comments were analyzed by two members of the Activity Fee Survey Committee. They first collaboratively developed categories under which responses could be coded. These categories were refined as coding began and progressed. A full coding sheet is available upon request (please contact Chris Clarke; cec54@cornell.edu). In the interest of brevity and simplicity, a brief list of the most common codes and illustrative quotes (for the 4 most cited codes) is provided below.

** Overall, 248 out of the 685 respondents left at least one comment. There were 218 respondents who left a comment to the question that asked them to explain their funding choices. There were 97 respondents who left comments on the "any other comments" question. Respondents were allowed to leave more than one comment.

Many respondents mentioned multiple themes, ranging from 1 to 7 and averaging about 2 themes per commenter. Four thematic categories were mentioned most often.

- *Benefits (**n=46 responses**)*: Makes some mention of inadequacy of grad student health benefits (health, dental, eye); use Activity Fee funds to support enhanced benefits.

Illustrative Quote: *Put money towards including dental and vision insurance for grad students…Most grad students don't have time for the social events anyway, so I would rather the money go towards something I actually need for my health*

- *Social Events (**n=41 responses**)*: Using Activity Fee funds to support social events (especially as a way to meet other students)

Illustrative Quote: *It would be great if there were more small graduate get-togethers so that you could really get to know other students. Students interested in environmental issues hosted a bar tab this spring, and it was a great way to get to know people from a variety of departments but with similar interests.*

Illustrative Quote: *Social events are good ways for graduate students to meet new people. One thing that separates us from undergraduates is that during our social events, we can drink alcoholic beverages on campus which is fun. Community space for organization activities is important. It would be great if GPSA could reserve spaces for graduate organizations to use and let us know about it.*

- *Entertainment (__n=30 responses__)*: Using Activity Fee funds to support entertainment events (rock concerts, comedy shows, etc)

Illustrative Quote: *I think that more concerts would be in place, more grad-student only movie nights, and maybe even concerts aimed just for grad students*

Illustrative Quote: *We don't get very many opportunities to see popular artists and musicians considering the size if the campus. Bringing more entertainment might also allow more interdepartmental interactions.*

- *"Anti-fee" (__n=21 responses__)*: There should not be a mandatory activity fee; include an "opt-out" option

Illustrative Quote: *I think the student activity fee should not be charged to graduate students at all. It is ridiculous that I have to pay for events where others get drunk behave in a way that I don't find adequate for adults (slope day, various "mingling" events attended for the consumption of subsidized alcohol). All the graduate students I know have an active social life outside Cornell where they attend events and use resources, that are not subsidized by the Student Activity Fee*

- *Academics (__n=19 responses__)* : Using Activity Fee funds to support academics (excludes student travel funding)

- *Speaker (__n=18 responses__):* Using Activity Fee funds to support invited speakers on campus (academic, political, etc)

- *Arts (__n=16 responses__):* Using Activity Fee funds to support arts on campus

- *BRB (__n=16 responses__):* Using Activity Fee funds to support operating the Big Red Barn

- *Gym (__n=16 responses__):* Using Activity Fee funds to support subsidized/free gym memberships

- *Cinema (__n=10 responses__):*: Using Activity Fee funds to support Cornell Cinema

- *Travel (__n=10 responses__):*: Using Activity Fee funds to support funding for student academic travel

- *Parking/transportation (__n=9 responses__):* References to cheaper on-campus parking for graduate/professional students.

- *Athletics (__n=8 responses__):* Using Activity Fee funds to support athletic events (excludes gym membership subsidy)*Bus Passes (__n=6 responses__):* Using Activity Fee funds to support free/subsidized TCAT bus passes.

- *"Anti Slope Day" (__n=5 responses__):* Not supportive of using Activity Fee funds to subsidize Slope Day
- *Advocacy (__n=2 responses__)* : The GPSA should play a greater role in advocating student issues with the Cornell administration

- *Housing (**n=2 responses**):* The need for better/more on-campus housing for graduate and professional students.

- *Stipend " (**n=1 response**):* Respondents wanting a higher graduate student stipend

VII) CONCLUSION

A. Methodological Cautions

The following cautions need to be taken in interpreting the results of the survey.

1) **Correlation ≠ Causation:** Any language about effects should not be interpreted as causal. Words such as "increases" or "decreases" are more precisely stated as "is associated with an increase/decrease". The analysis should be deemed as identifying associations, controlling for other variables. If an association exists a causal relationship is possible. However if an association does not exist, a causal relationship is impossible. Therefore the analysis can be used as a minimalist device in determining the allocation of resources to the various groups.

2) **Model Fit:** Most of the models had a fairly low pseudo-R-squared. Therefore the results should be interpreted with some caution. There is some debate in the literature regarding the utility of evaluating models based on explaining overall variance. One counterargument is the fact that our models were able to detect any signals at all among so much noise, is remarkable.

3) **Robustness**: Only the most robust coefficients were presented. Variables that were significant in some models but not others were not presented.

4) **Qualitative comments** should be interpreted with caution. The themes identified were not directly asked of respondents. It is conceivable that if we asked respondents about a particular theme the overall response would have been different.

5) **Alternative Analysis:** One possibility is to adjust the attendance variables in terms of return per dollar spent rather than per event attended. Here is a possible formula that would accomplish this.

$$\frac{Total\ Contribution\ to\ GroupX}{\sum Attendance\ of\ GroupX} * Each\ person's\ attendance$$

6) **Nonlinearities**: Because there was a strong non-linear effect we broke the group variables into categories: Never Attended, Attended Once, and Attended two or more times. Had we treated those variables in a linear way it would have obscured a number of important threshold effects.

7) **Weighted Data:** We have also experimented with weighting the data to adjust for differences among non-responders. The results were in-line with the non-weighted data. We therefore presented the non-weighted data.

8) **Two Excluded Events:** Two events were excluded from the analysis – Spring into Motion and Reflection Illuminations Showcase because they had 5 and 9 attendees respectively. In other words, 99% of the G&P student body did not attend those events. Moreover, including them created difficulties for the maximum likelihood estimation models to converge.

B. Concrete Recommendations

1) One lesson from the survey is that the GPSA needs to ask for more publicity from groups, geared toward G&P students. One insightful fact was that one fifth of the graduate student body simply did not know the events were even happening.

2) The survey recommends that the GPSA develop concrete metrics for evaluating the performance of groups. Metrics such as cohesion, happiness, and mixing are just some of many possible evaluation criteria. It would be instructive to reflect on other possible metrics by which to judge group performance in provisioning their services to the student body.

3) Thinking about objective criteria in allocating funding is highly encouraged. Some potential questions that the GPSA may reflect on are as follows: What is the adequate return as far as those metrics that would warrant an increase, decrease, or stasis in funding? For example what is an acceptable level of graduate participation for a group to receive X amount of dollars. Setting such goals may motivate groups to appeal and engage the graduate and professional student community more vigorously. Groups that perform well should be rewarded and groups that underperform should be made aware of that fact.

4) To the extent possible, the process of setting the activity fee and distributed funds should be data-driven. *The data should be collected in an accurate manner and by a body independent of the groups that*

receive the funding. It is of paramount importance that the fee setting process be fair, as objective as possible, and transparent. We believe that a survey aids strongly in accomplishing these goals.

5) We recommend convening the Survey Committee at least once every four years to administer a survey similar to the one informing this document.

VIII) APPENDICES

A. Activity Level

Full Model

```
Negative binomial regression                    Number of obs   =          494
                                                 LR chi2(20)     =       103.67
Dispersion     = mean                            Prob > chi2     =       0.0000
Log likelihood = -1247.8108                      Pseudo R2       =       0.0399
```

ActivityLevel	IRR	Std. Err.	z	P>|z|	[95% Conf. Interval]	
s3q2	.9989843	.0026443	-0.38	0.701	.993815	1.00418
s3q4	.5842476	.1443067	-2.18	0.030	.3600425	.9480694
s3q5	.9940162	.0190415	-0.31	0.754	.9573875	1.032046
s3q9	1.068335	.0261617	2.70	0.007	1.01827	1.120861
s3q3						
2	.8834936	.1228057	-0.89	0.373	.6728004	1.160167
3	.6932828	.1145229	-2.22	0.027	.5015347	.9583405
s3q6N						
3	.6586213	.0648217	-4.24	0.000	.5430756	.7987508
4	.7409072	.1447108	-1.54	0.125	.5052552	1.086468
2.genderN	.9519983	.0897361	-0.52	0.602	.7914094	1.145173
raceShort4						
2	.7584609	.1008217	-2.08	0.038	.5844987	.9841988
7	1.054096	.1695239	0.33	0.743	.7691063	1.444687
8	.6816885	.1072343	-2.44	0.015	.5008251	.9278671
age2	.9723971	.0124902	-2.18	0.029	.9482223	.9971882
2.interntlstud~N	.9047311	.1144664	-0.79	0.429	.7060341	1.159347
TimeinCornell2	.9921045	.0399322	-0.20	0.844	.9168464	1.07354
gpa	1.041405	.0703644	0.60	0.548	.9122347	1.188865
acad_careerN						
2	.8229211	.1573899	-1.02	0.308	.5656653	1.197173
3	.5188863	.0974385	-3.49	0.000	.3591123	.749746
4	.3445508	.0900787	-4.08	0.000	.2064034	.5751613
2.aexamcompleteN	1.334122	.1694341	2.27	0.023	1.040142	1.711191
_cons	11.23316	5.091723	5.34	0.000	4.620325	27.3106
/lnalpha	-.3445636	.0871538			-.5153819	-.1737453
alpha	.7085295	.061751			.5972725	.8405109

```
Likelihood-ratio test of alpha=0:  chibar2(01) =  934.23 Prob>=chibar2 = 0.000
```

Reduced Model

```
Negative binomial regression                    Number of obs   =         549
                                                LR chi2(14)     =      109.30
Dispersion    = mean                            Prob > chi2     =      0.0000
Log likelihood = -1370.3452                     Pseudo R2       =      0.0384
```

ActivityLevel	IRR	Std. Err.	z	P>|z|	[95% Conf. Interval]	
s3q4	.5599606	.1301815	-2.49	0.013	.3550319	.8831767
s3q9	1.059286	.0234158	2.61	0.009	1.014372	1.106189
s3q3						
2	.9047338	.123363	-0.73	0.463	.6925595	1.18191
3	.6677962	.097738	-2.76	0.006	.5012599	.8896619
s3q6N						
3	.6847026	.0633539	-4.09	0.000	.5711397	.820846
4	.7153601	.1323753	-1.81	0.070	.4977512	1.028104
age2	.9726332	.0114246	-2.36	0.018	.9504972	.9952848
aexamcompleteN	1.316327	.1359541	2.66	0.008	1.075101	1.611678
raceShort4						
2	.7099273	.0863938	-2.82	0.005	.5592782	.9011558
7	1.055154	.1650988	0.34	0.732	.7764779	1.433845
8	.6946126	.0837114	-3.02	0.002	.548479	.8796813
acad_careerN						
2	.8436117	.1433067	-1.00	0.317	.6047092	1.176897
3	.5733	.1033177	-3.09	0.002	.4027004	.8161723
4	.3253981	.080048	-4.56	0.000	.2009181	.5270003
_cons	8.434767	3.10626	5.79	0.000	4.098286	17.35977
/lnalpha	-.3136104	.0831322			-.4765464	-.1506743
alpha	.7308037	.0607533			.6209241	.8601278

```
Likelihood-ratio test of alpha=0:  chibar2(01) = 1020.56 Prob>=chibar2 = 0.000
```

B. Happiness — Full Model

```
Ordered logistic regression                  Number of obs   =        425
                                             LR chi2(38)     =      81.28
                                             Prob > chi2     =     0.0001
Log likelihood = -647.99042                  Pseudo R2       =     0.0590
```

s2q8	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Sports_N						
1	.0161171	.2639163	0.06	0.951	-.5011494	.5333836
2	-.0992994	.2596487	-0.38	0.702	-.6082016	.4096028
BRB_N						
1	.2979194	.2871347	1.04	0.299	-.2648542	.8606929
2	.404565	.2610417	1.55	0.121	-.1070674	.9161974
Cinema_N						
1	.1596374	.3379746	0.47	0.637	-.5027805	.8220554
2	.4082714	.2864439	1.43	0.154	-.1531482	.9696911
Concert_N						
1	.3384046	.3242302	1.04	0.297	-.2970749	.973884
2	.6284214	.7955472	0.79	0.430	-.9308226	2.187665
ProgB_N						
1	-.3778455	.3682807	-1.03	0.305	-1.099662	.3439714
2	.2576631	.6468564	0.40	0.690	-1.010152	1.525478
IntProgB_N						
1	-.329294	.3426235	-0.96	0.337	-1.000824	.3422358
2	-.6782518	.5927795	-1.14	0.253	-1.840078	.4835746
EventsCom_N						
1	.1454289	.2627822	0.55	0.580	-.3696147	.6604725
2	.6580636	.361675	1.82	0.069	-.0508063	1.366933
Orientation	.2608616	.2025896	1.29	0.198	-.1362067	.65793
FilthyGorg	.2853105	.4433655	0.64	0.520	-.5836699	1.154291
LatinDance	.1675223	.3781996	0.44	0.658	-.5737353	.90878
SlopeDay	.0709128	.2333972	0.30	0.761	-.3865374	.528363
s3q2	-.009209	.0053732	-1.71	0.087	-.0197402	.0013223
s3q4	.0651335	.4782201	0.14	0.892	-.8721607	1.002428
s3q5	.0323844	.0372074	0.87	0.384	-.0405407	.1053095
s3q9	-.0305519	.050049	-0.61	0.542	-.1286462	.0675424
s3q3						
2	.9108417	.2839747	3.21	0.001	.3542615	1.467422
3	1.777783	.3388987	5.25	0.000	1.113554	2.442013
s3q6N						
3	-.0197899	.207547	-0.10	0.924	-.4265746	.3869948
4	.0070979	.4076341	0.02	0.986	-.7918503	.8060461
2.genderN	.0571999	.192499	0.30	0.766	-.3200911	.434491
raceShort4						
2	-.2308689	.2895203	-0.80	0.425	-.7983183	.3365805
7	.2366736	.339337	0.70	0.486	-.4284146	.9017619
8	-.8666782	.3157361	-2.74	0.006	-1.48551	-.2478467
age2	-.0482824	.0279777	-1.73	0.084	-.1031177	.0065529
2.interntlstud~N	.7025088	.2784771	2.52	0.012	.1567037	1.248314
TimeinCornell2	.0035	.0843564	0.04	0.967	-.1618356	.1688355
gpa	.1716333	.1360441	1.26	0.207	-.0950082	.4382748
acad_careerN						
2	.9252762	.3711926	2.49	0.013	.197752	1.6528
3	.6855746	.3864824	1.77	0.076	-.071917	1.443066
4	.6328085	.4778869	1.32	0.185	-.3038327	1.56945
2.aexamcompleteN	.1468188	.260099	0.56	0.572	-.3629658	.6566035
/cut1	-4.05895	1.003032			-6.024856	-2.093043
/cut2	-2.950646	.9695534			-4.850936	-1.050356
/cut3	-2.210205	.9588005			-4.089419	-.3309903
/cut4	-1.430869	.9553183			-3.303258	.4415205
/cut5	.024237	.9555556			-1.848618	1.897092
/cut6	2.049054	.9592897			.1688804	3.929227

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(Final) Reduced Model

```
Ordered logistic regression                    Number of obs   =        620
                                               LR chi2(4)      =      44.86
                                               Prob > chi2     =     0.0000
Log likelihood = -1003.1701                    Pseudo R2       =     0.0219
```

s2q8	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
EventsCom_N						
1	1.255692	.2530863	1.13	0.259	.8459065	1.863991
2	1.629028	.377017	2.11	0.035	1.034973	2.564058
s3q3						
2	1.682563	.3670981	2.38	0.017	1.09713	2.580386
3	3.774607	.7765274	6.46	0.000	2.522082	5.649167
/cut1	-3.622256	.2978038			-4.205941	-3.038571
/cut2	-2.449948	.1803529			-2.803434	-2.096463
/cut3	-1.550372	.1336826			-1.812385	-1.288358
/cut4	-.7442259	.1139502			-.9675643	-.5208875
/cut5	.4297878	.1111415			.2119545	.6476212
/cut6	2.210808	.1463641			1.923939	2.497676

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C. Cohesion – Full Model

```
Ordered logistic regression                    Number of obs    =        430
                                               LR chi2(38)      =      96.12
                                               Prob > chi2      =     0.0000
Log likelihood = -701.63904                    Pseudo R2        =     0.0641
```

cohesionR	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Sports_N						
1	.3098818	.2655631	1.17	0.243	-.2106123	.8303759
2	.4650647	.2598904	1.79	0.074	-.0443112	.9744405
BRB_N						
1	.431114	.2821312	1.53	0.126	-.121853	.984081
2	.6917617	.2569114	2.69	0.007	.1882245	1.195299
Cinema_N						
1	.3141177	.3260734	0.96	0.335	-.3249745	.9532099
2	.6525081	.2882216	2.26	0.024	.0876042	1.217412
Concert_N						
1	.644834	.3125271	2.06	0.039	.0322922	1.257376
2	.0608332	.9050708	0.07	0.946	-1.713073	1.834739
ProgB_N						
1	.2233566	.3671986	0.61	0.543	-.4963395	.9430527
2	.2694907	.7003074	0.38	0.700	-1.103087	1.642068
IntProgB_N						
1	-.2470816	.33115	-0.75	0.456	-.8961237	.4019606
2	.9593347	.6262371	1.53	0.126	-.2680675	2.186737
EventsCom_N						
1	.4307673	.2573325	1.67	0.094	-.0735952	.9351298
2	.6920991	.3460835	2.00	0.046	.013788	1.37041
Orientation	.685529	.198806	3.45	0.001	.2958763	1.075182
FilthyGorg	-.3556741	.4249108	-0.84	0.403	-1.188484	.4771359
LatinDance	.0596156	.3839768	0.16	0.877	-.6929652	.8121964
SlopeDay	-.1197323	.2307262	-0.52	0.604	-.5719473	.3324827
s3q2	-.0137381	.0054171	-2.54	0.011	-.0243555	-.0031207
s3q4	.6340049	.4518719	1.40	0.161	-.2516478	1.519658
s3q5	.0264005	.0366599	0.72	0.471	-.0454516	.0982525
s3q9	-.0163125	.0493913	-0.33	0.741	-.1131177	.0804928
s3q3						
2	.2526936	.2767565	0.91	0.361	-.2897392	.7951264
3	.5077988	.3191933	1.59	0.112	-.1178086	1.133406
s3q6N						
3	-.1629387	.202277	-0.81	0.421	-.5593944	.233517
4	-.090033	.3873365	-0.23	0.816	-.8491986	.6691326
2.genderN	-.2068033	.190808	-1.08	0.278	-.58078	.1671735
raceShort4						
2	.2846739	.2888917	0.99	0.324	-.2815434	.8508913
7	.4522343	.3196501	1.41	0.157	-.1742684	1.078737
8	-.2285731	.3082427	-0.74	0.458	-.8327178	.3755716
age2	.0145254	.026809	0.54	0.588	-.0380194	.0670701
2.interntlstud~N	.6312394	.2801096	2.25	0.024	.0822347	1.180244
TimeinCornell2	.0059585	.0790904	0.08	0.940	-.149056	.1609729
gpa	-.0469797	.1268136	-0.37	0.711	-.2955298	.2015705
acad_careerN						
2	.4646953	.3808016	1.22	0.222	-.2816621	1.211053
3	.078199	.3610388	0.22	0.829	-.6294239	.785822
4	.6872086	.4779189	1.44	0.150	-.2494953	1.623913
2.aexamcompleteN	.3108568	.2614585	1.19	0.234	-.2015923	.823306
/cut1	-2.53172	.9482815			-4.390317	-.6731221
/cut2	-1.523604	.9288552			-3.344127	.2969189
/cut3	-.4522998	.9189924			-2.253492	1.348892
/cut4	.9333209	.9186239			-.867149	2.733791
/cut5	2.271385	.9257666			.4569156	4.085854
/cut6	4.068779	.9463101			2.214045	5.923512

Reduced Model

```
Ordered logistic regression                    Number of obs   =        529
                                               LR chi2(10)     =      44.37
                                               Prob > chi2     =     0.0000
Log likelihood = -900.59294                    Pseudo R2       =     0.0240
```

cohesionR	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
BRB_N						
1	1.234809	.3032944	0.86	0.391	.7630048	1.998353
2	1.451453	.3180921	1.70	0.089	.9446228	2.230218
Cinema_N						
1	1.336191	.3665412	1.06	0.291	.7804923	2.287539
2	1.360501	.3222636	1.30	0.194	.8552116	2.164333
Concert_N						
1	1.966493	.5040135	2.64	0.008	1.189951	3.249795
2	1.747085	1.107117	0.88	0.379	.5045599	6.049441
EventsCom_N	1.228682	.1543761	1.64	0.101	.9604873	1.571765
Orientation	1.612406	.2574959	2.99	0.003	1.179072	2.204999
s3q2	.9906419	.0040939	-2.28	0.023	.9826504	.9986985
interntlstudentN	1.238307	.2067472	1.28	0.200	.8927135	1.717689
/cut1	-2.982332	.3830792			-3.733154	-2.231511
/cut2	-1.961048	.3374007			-2.622341	-1.299755
/cut3	-.9496962	.3173609			-1.571712	-.3276802
/cut4	.3642802	.3121831			-.2475873	.9761478
/cut5	1.522685	.3214982			.8925597	2.15281
/cut6	3.115057	.3551739			2.418929	3.811185

(Final) Reduced Model

```
Ordered logistic regression                    Number of obs   =        644
                                               LR chi2(3)      =      16.01
                                               Prob > chi2     =     0.0011
Log likelihood = -1116.9759                    Pseudo R2       =     0.0071
```

cohesionR	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Concert_N						
1	1.649318	.3666837	2.25	0.024	1.066747	2.550042
2	1.240332	.6767097	0.39	0.693	.4257284	3.613624
Orientation	1.567835	.220876	3.19	0.001	1.189552	2.066414
/cut1	-3.000787	.2176654			-3.427403	-2.57417
/cut2	-2.00414	.1494647			-2.297086	-1.711195
/cut3	-1.002042	.1166292			-1.230631	-.7734533
/cut4	.2828002	.1084523			.0702375	.4953629
/cut5	1.439823	.1231051			1.198542	1.681105
/cut6	2.842982	.1735419			2.502846	3.183117

D. Social Mixing – **Full Model**

```
Zero-inflated negative binomial regression        Number of obs   =        359
                                                  Nonzero obs     =        101
                                                  Zero obs        =        258

Inflation model = logit                           LR chi2(38)     =      79.71
Log likelihood  = -412.8586                       Prob > chi2     =     0.0001
```

s2q4	IRR	Std. Err.	z	P>|z|	[95% Conf. Interval]	
s2q4						
Sports_N						
1	1.891156	.6060445	1.99	0.047	1.009135	3.544097
2	1.075891	.3465983	0.23	0.820	.5722075	2.022939
BRB_N						
1	1.184306	.4535827	0.44	0.659	.5590598	2.50882
2	1.805322	.5538439	1.93	0.054	.9895085	3.293742
Cinema_N						
1	1.268715	.4174078	0.72	0.469	.6657611	2.417741
2	.6868417	.1962953	-1.31	0.189	.3922729	1.202611
Concert_N						
1	1.068974	.2857156	0.25	0.803	.6330792	1.804997
2	2.659466	1.849874	1.41	0.160	.6803226	10.39619
ProgB_N						
1	.7205035	.2688109	-0.88	0.380	.3467875	1.496955
2	.722565	.648722	-0.36	0.717	.1243554	4.198453
IntProgB_N						
1	.9216435	.284881	-0.26	0.792	.50287	1.689158
2	3.713303	1.615838	3.01	0.003	1.582565	8.712832
EventsCom_N						
1	1.317043	.3415842	1.06	0.288	.7922001	2.189601
2	.9582493	.372479	-0.11	0.913	.4473112	2.052803
Orientation	.8356932	.2073732	-0.72	0.469	.5138369	1.359153
FilthyGorg	1.170872	.445638	0.41	0.679	.5553149	2.468765
LatinDance	1.183879	.3509071	0.57	0.569	.6622281	2.116447
SlopeDay	1.163132	.3081691	0.57	0.568	.691998	1.955027
s3q2	.9984297	.0074302	-0.21	0.833	.9839724	1.013099
s3q4	.2023563	.2342606	-1.38	0.168	.0209272	1.956689
s3q5	.9860037	.0511174	-0.27	0.786	.8907375	1.091459
s3q9	1.048498	.0706775	0.70	0.482	.9187331	1.196591
s3q3						
2	.6925515	.3117998	-0.82	0.415	.2865662	1.673706
3	2.468438	1.468012	1.52	0.129	.7694877	7.918496
s3q6N						
3	.8173008	.2779537	-0.59	0.553	.4196614	1.591713
4	1.167209	.5256478	0.34	0.731	.4828511	2.821524
2.genderN	.7934986	.2203363	-0.83	0.405	.4604549	1.36743
raceShort4						
2	.9343439	.3552093	-0.18	0.858	.4435123	1.968375
7	.865771	.288643	-0.43	0.666	.4504197	1.664136
8	1.805954	.7159478	1.49	0.136	.8303447	3.92785
age2	.9521553	.0427849	-1.09	0.275	.871885	1.039816
2.interntlstud~N	1.210522	.3690462	0.63	0.531	.6659946	2.200262
TimeinCornell2	1.489584	.1700207	3.49	0.000	1.190993	1.863035
gpa	.5539896	.2114878	-1.55	0.122	.2621513	1.170715
acad_careerN						
2	.311289	.1493775	-2.43	0.015	.1215345	.7973111
3	.0929132	.0744242	-2.97	0.003	.0193312	.4465771
4	.2186873	.2072337	-1.60	0.109	.0341352	1.401019
2.aexamcompleteN	1.311153	.4450653	0.80	0.425	.6740878	2.550293
_cons	36.28147	67.32175	1.94	0.053	.9555333	1377.603
inflate						
BRB_N						
1	-.7713342	.4476834	-1.72	0.085	-1.648777	.1061091
2	-1.129364	.3728638	-3.03	0.002	-1.860164	-.3985645
EventsCom_N						
1	-.9040955	.3658729	-2.47	0.013	-1.621193	-.1869977
2	-2.603279	.8827898	-2.95	0.003	-4.333515	-.8730432
1.Orientation	-.6212625	.3345897	-1.86	0.063	-1.277046	.0345212
interntlstudentN	-1.145579	.3275661	-3.50	0.000	-1.787597	-.5035611
_cons	3.467489	.5986793	5.79	0.000	2.294099	4.640879
/lnalpha	-.9255619	.3361218	-2.75	0.006	-1.584349	-.2667752
alpha	.3963087	.133208			.2050813	.7658452

```
Likelihood-ratio test of alpha=0: chibar2(01) =    56.60 Pr>=chibar2 =  0.0000
```

.

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Final Reduced Model

```
Zero-inflated negative binomial regression        Number of obs    =         477
                                                  Nonzero obs      =         135
                                                  Zero obs         =         342

Inflation model = logit                           LR chi2(8)       =       58.06
Log likelihood  = -590.1444                       Prob > chi2      =      0.0000
```

s2q4	IRR	Std. Err.	z	P>|z|	[95% Conf. Interval]	
s2q4						
Sports_N						
1	1.743861	.4369176	2.22	0.026	1.067202	2.849555
2	1.496178	.3256381	1.85	0.064	.9766124	2.292158
IntProgB_N						
1	1.673007	.4191359	2.05	0.040	1.023876	2.733682
2	4.843499	1.892588	4.04	0.000	2.251924	10.41753
acad_careerN						
2	.289421	.1156466	-3.10	0.002	.1322536	.6333626
3	.2159458	.1213504	-2.73	0.006	.0717816	.6496451
4	.9827359	.6231659	-0.03	0.978	.283582	3.405611
TimeinCornell2	1.321387	.0757698	4.86	0.000	1.180922	1.47856
_cons	1.762958	.3614931	2.77	0.006	1.179516	2.634997
inflate						
BRB_N						
1	-.9115186	.3751044	-2.43	0.015	-1.64671	-.1763275
2	-.9807328	.313403	-3.13	0.002	-1.594991	-.3664742
EventsCom_N						
1	-.617803	.3138895	-1.97	0.049	-1.233015	-.0025909
2	-2.398324	.5521376	-4.34	0.000	-3.480493	-1.316154
interntlstudentN	-.9627044	.2694051	-3.57	0.000	-1.490729	-.43468
_cons	2.707972	.4497894	6.02	0.000	1.826401	3.589543
/lnalpha	-.1617565	.2332324	-0.69	0.488	-.6188836	.2953707
alpha	.8506484	.1983988			.5385453	1.343624

Likelihood-ratio test of alpha=0: chibar2(01) = 286.43 Pr>=chibar2 = 0.0000

E. **Variable Names**

s3q2   Number of hours per week on academic work

s3q4   Children under 18 in household (Yes or No)

s3q5   Household income

s3q9   On campus on weekends (ag

s3q3   Living status

```
1   Single
2   Cohabiting with partner
3   Married
```

s3q6N   Residence proximity to campus

```
1   On Campus or <1m
3   1-5 miles from campus
4   >5 miles from campus
```

Group Attendance (e.g. Sports_N, BRB_N) – recoded for non-linear effects

```
0   Never
1   Once
2   Two or More
```

Acad_CareerN   Academic Career

```
1   GR
2   JSM
3   Law
4   Vet
```

raceShort4   Race – recoded due to cell sparsity

```
1   White
2   Asian
7   Historically URM
8   N/A
```