The Good Old Days?: Comparing Satisfaction at Graduation and Beyond

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Where Did This Come From?
Growing Interest in Alumni

• At Tufts:
  • T10 Strategic Plan
  • Upcoming capital campaign
  • Recent requests from Advancement
  • Graduates of the Last Decade

• In the higher education community:
  • Post-graduation outcomes (e.g., Pike, 1993; Pike, 1994)
  • Assessment & accountability (e.g., Volkwein, 2009; Borden, 2005; Ewell, 2005)
  • Link between satisfaction and giving
  • Survey response bias (e.g., Cabrera, Weerts, & Zulick, 2005; Delaney, 2004; Bowman, 2011)
What is a “Halo Effect?”

Arbitrary increase in satisfaction responding more to feelings of nostalgia than to the objective evaluation of an institution’s impact on an alum’s post-graduation life.
Questions

• Do the data support the assumption?
  • The literature is divided on the issue (Pike, 1993; Pike, 1994; Cabrera, Weerts, & Zulick, 2005)

• Is there a systematic difference in ratings of satisfaction at graduation and afterwards? If so, is this difference statistically significant?

• Does the nature of this difference, if any, vary between undergraduate and graduate/professional students?

• Does the nature of this difference, if any, vary over time?

• If a difference exists, what are the implications for Tufts and for the IR community more broadly?
Some Things to Know About Tufts

- Undergraduate
  - Arts & Sciences
  - Engineering
- Graduate
  - Arts & Sciences
  - Engineering
  - The Fletcher School
- Professional
  - School of Medicine
  - School of Dental Medicine
  - Cummings School of Veterinary Medicine
  - Friedman School of Nutrition Science and Policy
  - Sackler School of Graduate Biomedical Sciences

Enrollment

- Undergrad, 5180, 48%
- Grad/Prof, 5692, 52%
Undergraduate
Survey Question

Overall, how satisfied are you with your undergraduate education?

4 = Very satisfied
3 = Generally satisfied
2 = Generally dissatisfied
1 = Very dissatisfied

*5-point scales converted to 4-point by treating midpoint as missing.*
General Alumni Surveys

2008 Young Alumni Survey

Please rate your overall experience as a Tufts student.

4 = Excellent
3 = Good
2 = Fair
1 = Poor

2014 Tufts Magazine Survey

In hindsight, how satisfied are you with your experience as a Tufts student?

4 = Very satisfied
3 = Somewhat satisfied
2 = Somewhat dissatisfied
1 = Very dissatisfied

*5-point scales converted to 4-point by treating midpoint as missing.
Analysis

- Aggregate analysis—Classes of 2000-2011
  - Senior Survey—Classes of 2000-2011
  - 2008 Young Alumni—Classes of 2000-2008
  - 2014 *Tufts Magazine*—Classes of 2000-2011

- Matched cases analysis
  - Senior vs. 2008 Young Alumni—Classes of 2000, 2002-2004
Undergrads: More Satisfied as Alumni

*5-point scales converted to 4-point by treating midpoint as missing.
Senior vs. 2008 Young Alumni

There was a large and significant difference in satisfaction at graduation and beyond for most cohorts.

^Difference is statistically significant, p < .05.
Looking at another survey further supports this finding.

^Difference is statistically significant, p < .05.
But, there is no evidence of a systematic trend in satisfaction by time out.

A Further Analysis of One Undergraduate Program
Surveys

- Senior Survey
- Alumni Surveys—2, 5, & 10 Years
  - Identifying info self-reported

Survey Question

How satisfied are you with the [program] education you received at Tufts?

4 = Very satisfied
3 = Generally satisfied
2 = Generally dissatisfied
1 = Very dissatisfied
Analysis

• Aggregate analysis
  • Senior Survey—Classes of 2000-2011
  • 2 Years Out—Classes of 2000, 2002-2011
  • 5 Years Out—Classes of 2001-2008
  • 10 Years Out—Classes of 2000-2003

• Matched cases analysis
  • Senior vs. 2 Years Out—Classes of 2008-2011
  • Senior vs. 5 Years Out:
    • Class of 2008; others with caution
  • Senior vs. 10 Years Out
    • Classes of 2002 & 2003; others with caution
Again, more satisfied as alumni
Close Up

Yearly data from 2000 to 2011, with trends marked by different colored lines:
- Senior Survey
- 2 Years Out
- 5 Years Out
- 10 Years Out

The data shows fluctuations over the years.
Senior Survey vs. 2 Years Later

There is minimal difference in satisfaction at graduation and two years out.

<table>
<thead>
<tr>
<th>Year</th>
<th>Exit</th>
<th>2 Years Out</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3.31</td>
<td>3.31</td>
<td>0.00</td>
</tr>
<tr>
<td>2009</td>
<td>3.56</td>
<td>3.47</td>
<td>-0.08</td>
</tr>
<tr>
<td>2010</td>
<td>3.10</td>
<td>3.12</td>
<td>0.02</td>
</tr>
<tr>
<td>2011</td>
<td>3.36</td>
<td>3.38</td>
<td>0.02</td>
</tr>
</tbody>
</table>
What About 5 Years Out?

Although the difference in mean satisfaction five years out compared to mean satisfaction at graduation is greater than two years out compared to graduation, it is still generally less than 0.10.

*<30 cases.
And 10 Years?
Still no substantial difference . . . But we’re getting there.

<table>
<thead>
<tr>
<th>Year</th>
<th>Exit</th>
<th>10 Years Out</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000*</td>
<td>3.22</td>
<td>3.33</td>
<td>0.11</td>
</tr>
<tr>
<td>2001*</td>
<td>3.63</td>
<td>3.50</td>
<td>-0.13</td>
</tr>
<tr>
<td>2002*</td>
<td>3.31</td>
<td>3.35</td>
<td>0.04</td>
</tr>
<tr>
<td>2003*</td>
<td>3.15</td>
<td>3.37</td>
<td>0.22</td>
</tr>
</tbody>
</table>

*<30 cases.
Surveys

- Exit Survey
  - Identifying info self-reported
- Advancement Survey in 2013

**Survey Question**

**Overall, how satisfied are you with your [graduate school] education?**

- 5 = Very satisfied
- 4 = Satisfied
- 3 = Neither/Neutral
- 2 = Dissatisfied
- 1 = Very dissatisfied
Analysis

- Aggregate analysis
  - Classes of 2005-2012

- Limited matched cases analysis
  - All <20 cases

<table>
<thead>
<tr>
<th>Survey</th>
<th>Mean N</th>
<th>Min N</th>
<th>Max N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exit</td>
<td>100</td>
<td>86</td>
<td>121</td>
</tr>
<tr>
<td>Advancement</td>
<td>20</td>
<td>9</td>
<td>28</td>
</tr>
</tbody>
</table>
Graduate students: Slightly more satisfied as alumni
Graduate students: Slightly more satisfied as alumni
Matched cases analysis also found only small differences.

*<20 cases.
^Difference is statistically significant, p < .05.
Professional School
Surveys

- Exit Survey
- Alumni Survey ~5 years out

**Survey Question**

If you had to do it over again, would you enroll at [this Tufts professional school]?

- 4 = Definitely would
- 3 = Probably would
- 2 = Probably would not
- 1 = Definitely would not
Analysis

- Both surveys anonymous
- Aggregate analysis only
- Classes of 1998 through 2007

<table>
<thead>
<tr>
<th>Survey</th>
<th>Mean N</th>
<th>Min N</th>
<th>Max N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exit</td>
<td>65</td>
<td>58</td>
<td>75</td>
</tr>
<tr>
<td>Alumni</td>
<td>24</td>
<td>19</td>
<td>30</td>
</tr>
</tbody>
</table>
Satisfaction ~5 years out: Sometimes greater, sometimes not

![Graph showing satisfaction levels over time for Exit and Alumni (~5 years out).]
Satisfaction ~5 years out: Sometimes greater, sometimes not

- Exit
- Alumni (~5 years out)
So, is there a halo effect?

Maybe.
Evidence

• For a halo effect:
  • Overall undergraduate
    • Statistically significant differences for most matched pairs
  • Graduate school analysis (in the aggregate)
  • Some professional school cohorts (in the aggregate)

• Against a halo effect:
  • Undergraduate program—no clear aggregate trends or statistically significant differences
    • Best data quality
  • Graduate school—no statistically significant differences
    • Purpose of survey
  • Some professional school cohorts (in the aggregate)
Is there evidence that time out influences satisfaction?

No.
Implications

• For Tufts:
  • The “halo effect” might not be as pronounced as assumed
  • Not much change in satisfaction over time
  • Undergraduate, graduate, and professional alumni behave similarly

• For IR:
  • Work with what you have (*Cautiously!*)
  • Satisfaction metric in the outcomes conversation
  • Consider potential longitudinal implications of a survey
Challenges

- Student ID numbers

- Working within the constraints of available data:
  - Inconsistent scales
  - Varying questions
  - Data not available for every school
  - Relatively recent alumni
  - Sometimes only aggregate data available

- Survey attrition

- Only able to look at young alumni (approx. 2000-2011)
Questions, Comments?

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