

# EOAS Alumni Survey 2015

## ***Executive Summary***

Summaries will focus primarily on data as a function of degree and year, please see individual graphs for detail related to specific majors. Bookmark links should be available in pdf.

Many conclusions could be drawn from these results. While I offer a few speculations, I leave most interpretations to the EOAS faculty and your knowledge of present and historical context.

In the following informal summary, Likert rankings of Satisfied (4) and Very Satisfied (5) will often be combined and referenced in shorthand as 4+5.

### **Writing Skills**

- sum of 4+5 similar across all degrees, slight increase from BSc to PhD
- However 15% of BSc were unsatisfied.
- 80% 4+5 for the period 2010-, whereas other years are only 63% – 70%

### **Oral Presentation Skills**

- Improvement as a function of degree stronger than for written
- 4+5 = 50%, 72%, and 83% for Bsc, MSc, and PhD, respectively
- Very Satisfied (5) increases from 15% to 30% to ~50% from BSc to MSc to PhD
- ~23% of BSc Unsatisfied
- 80% 4+5 for the period 2010-, whereas other years are only 30% – 60%

### **Poster Presentation Skills**

- Distribution similar as a function of degree
- 4+5 similar for all degrees, 38%, 45%, and 45%
- 5 increase with graduate degrees, ~5% BSc, ~20% for both MSc and PhD
- ~40% neutral for all degrees, perhaps never had the opportunity
- Strong improvement as a function of year, demonstrating both the increasing prevalence of posters, but also that our graduates are learning the skill!

### **Research Skills**

- 4+5 very high across all degrees: 78%, 91%, 95% for BSc, MSc, PhD
- 5 increases strongly from 22% to 43% to 63% for BSc, MSc, PhD

### **Field Skills**

- Results similar as a function of degree
- 4+5 is similar from 1950 – 1999 (70 – 80%), then decreases to 62% in 2000 – 2009, and then to ~45% in 2010 – present.

### **Lab Skills**

- 4+5 similar for all degrees, but Very Satisfied is similar for MSc and PhD and higher than BSc
- Some variation as a function of year, may just be noise

### **Computer Programming**

- 4+5 increases from 20% to 37% to 56% from BSc to MSc to PhD
- Geophysics by far the strongest
- Percentage of Unsatisfied and Very Unsatisfied actually increases in 2000 – 2009 and 2010 – present. Could represent a greater awareness of the need for computer programming skills and therefore perhaps a harsher assessment (?)

### **Computer Modelling**

- 4+5 increases from 18% to 37% to 43% from BSc to MSc to PhD
- Geophysics the strongest
- Percentage of Unsatisfied and Very Unsatisfied actually increases in 2000 – 2009 and 2010 – present, similar to results for Computer Programming

### **Data Interpretation**

- Good across all degrees, slight improvement for MSc and PhD

### **Problem Solving Skills**

- 4+5 ~85% across all degrees
- 5 increases from ~22% for BSc to 40% and 36% for MSc and PhD

### **Calculus**

- Difficult to interpret
- 4+5 is ~50% for BSc, only ~25% for MSc and PhD
- Large percentage of responses are Neutral, perhaps many respondents simply did not think that they used calculus during their EOAS degree

### **Differential Equations**

- Somewhat similar to results of calculus (large amount of Neutral responses)
- 4+5 is 42% for BSc, only ~30% for MSc and PhD
- Strong shift toward greater percentage of 4+5 in 1990 – present compared to 1970 – 1989

### **Teamwork Skills**

- Very high for BSc, 83% 4+5
- MSc and PhD still high at 4+5 percentages of 52% and 62%, respectively
- As a function of year, 4+5 around ~ 60% from 1950 – 1999, then ~80% from 2000 – present

**Leadership Skills**

- 4+5 decreases from 60% to 51% to 38% from BSc to MSc to PhD
- ENVR and GEO are higher, could relate to involvement in student organizations
- 4+5 increases from 40 – 45% in 1950 – 1999, to ~55% in 2000 – 2009, to 70% in 2010 – present

**Time Management Skills**

- Very similar across all degrees
- 4+5 is 40 – 50% prior to 2009 (although only 30% in 1980s) and then increases to 73% in 2010 – present

**Project Management Skills**

- Very similar across all degrees
- 4+5 is 40 – 50% prior to 2009 and then increases to nearly 70% in 2010 – present

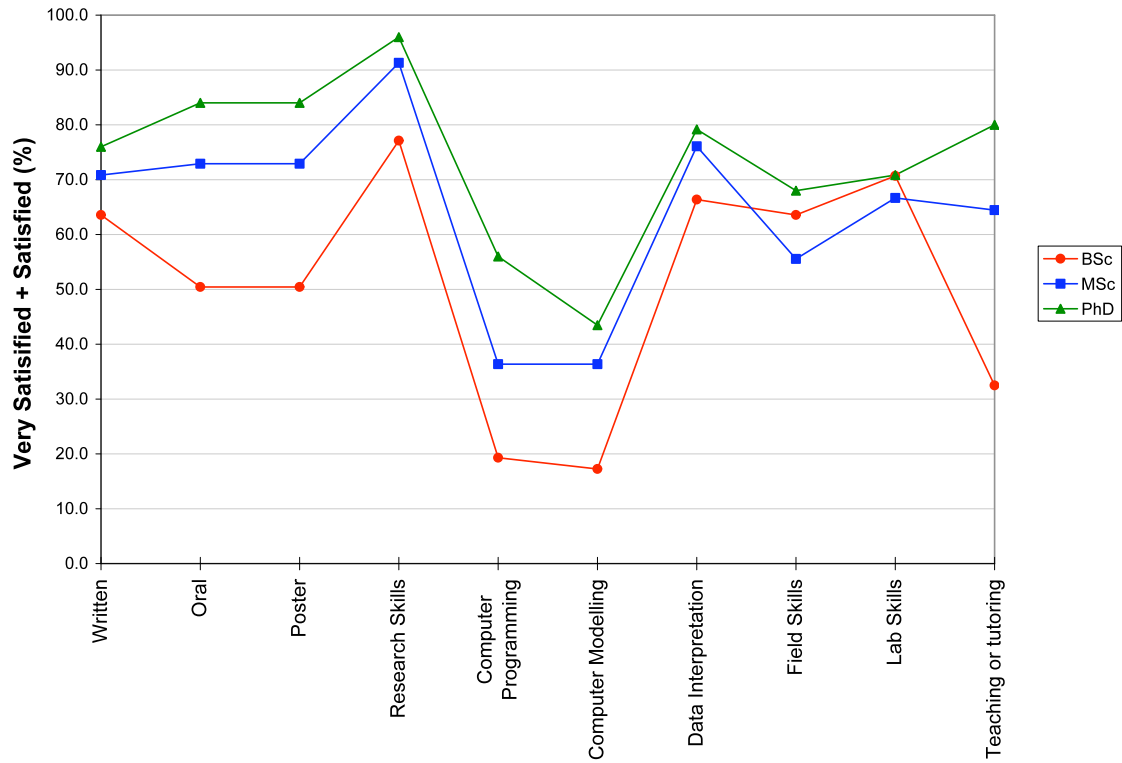
**Teaching and Tutoring Skills**

- 4+5 increases 33% to 63% to 80% for BSc, MSc, PhD
- PhD had no responses of Unsatisfied or Very Unsatisfied
- As a function of year, Unsatisfied and Very Unsatisfied actually increase in the 2000s, perhaps demonstrating a recognition of the need for these skills and thus an unsatisfied response if they did not feel they gained these skills (similar to computer programming and modelling)

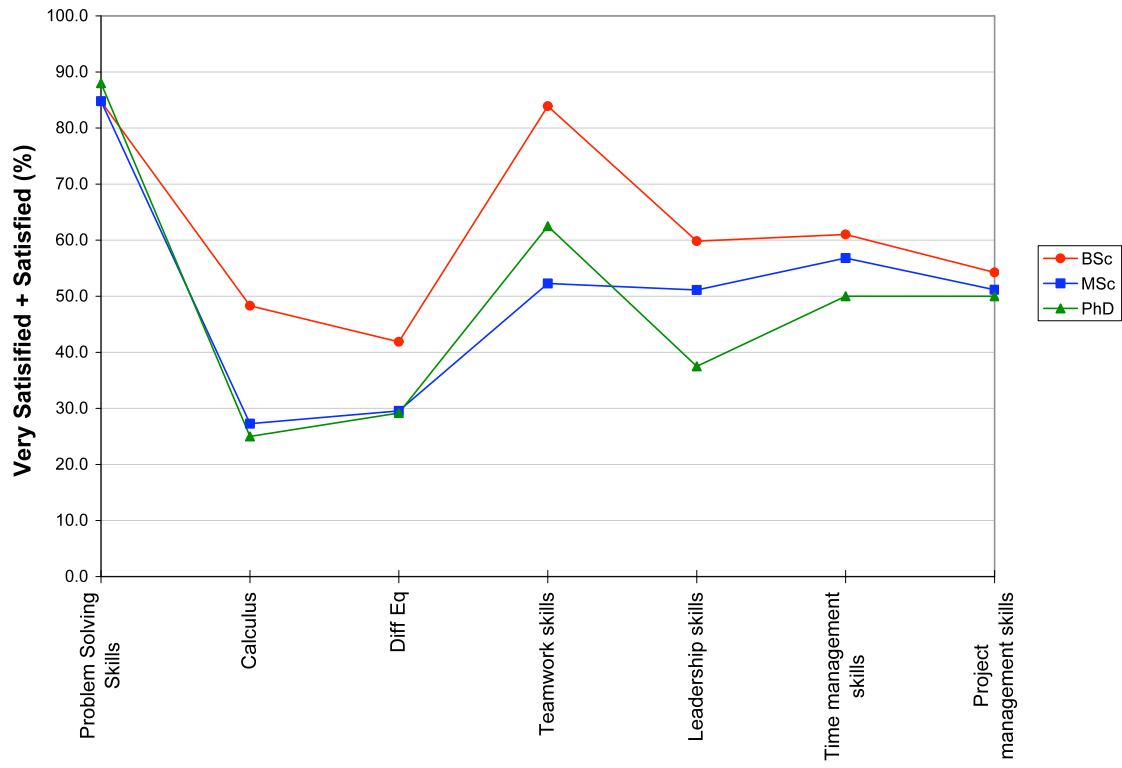
# Summary plots: $f(\text{major}), f(\text{year})$

## $f(\text{major})$

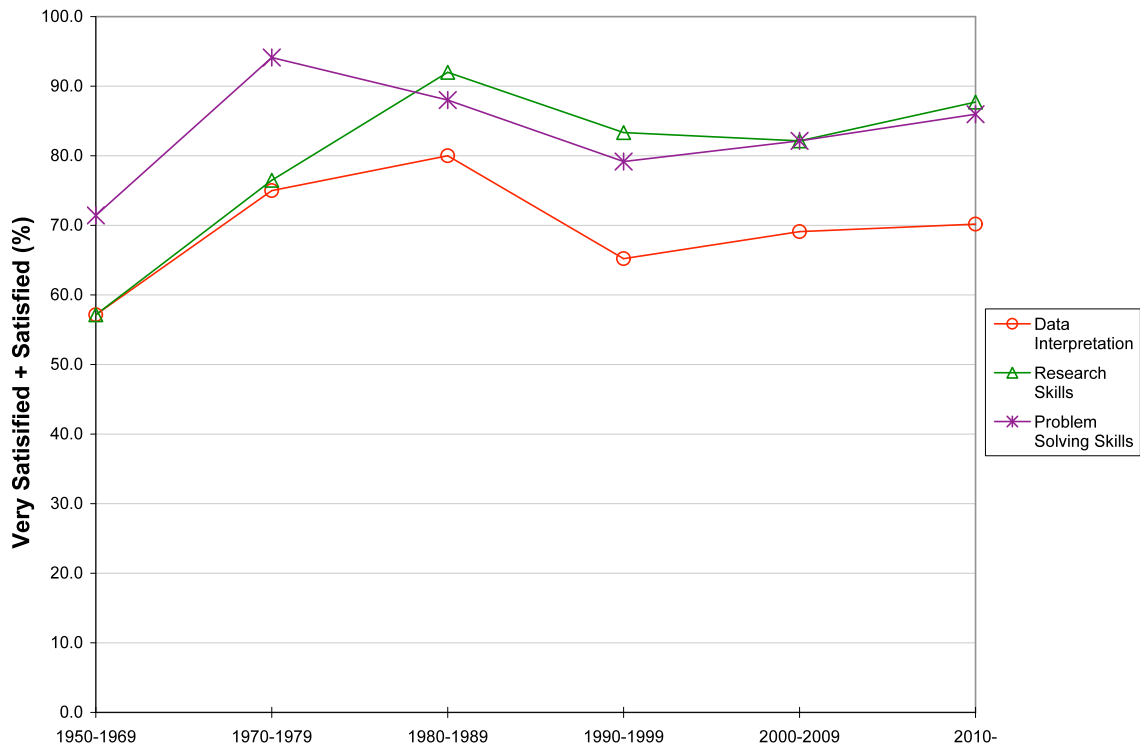
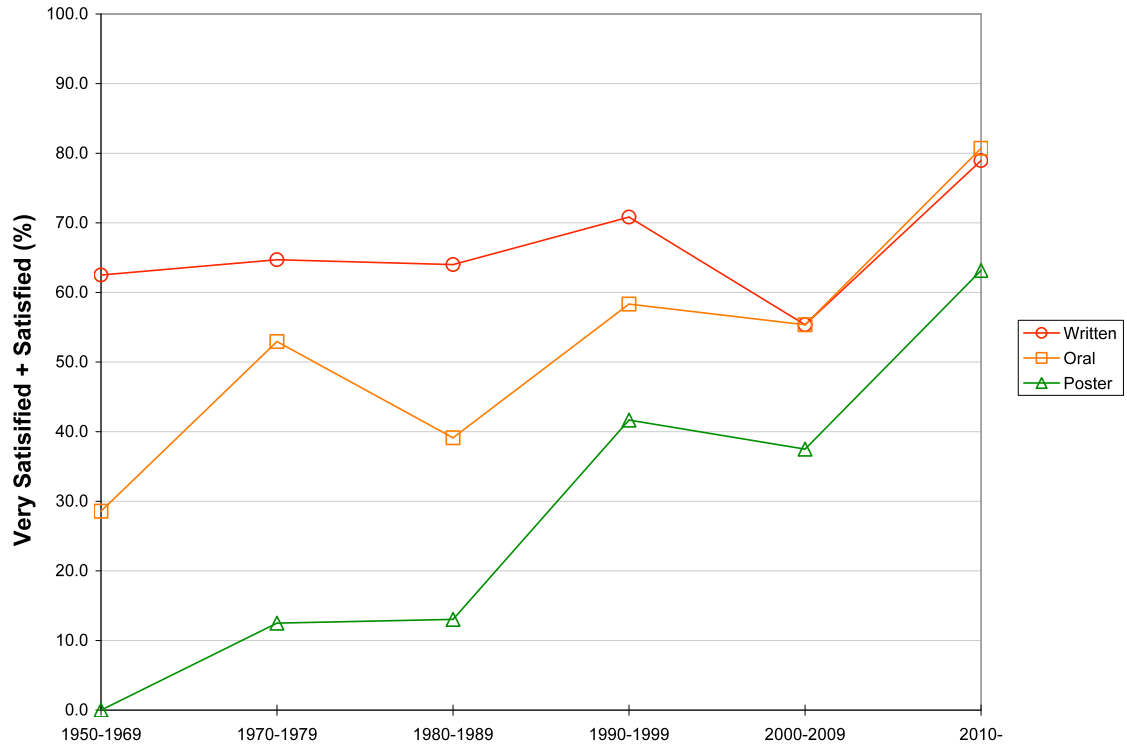
As may be expected, rankings increase for many skills from BSc to MSc, to PhD.

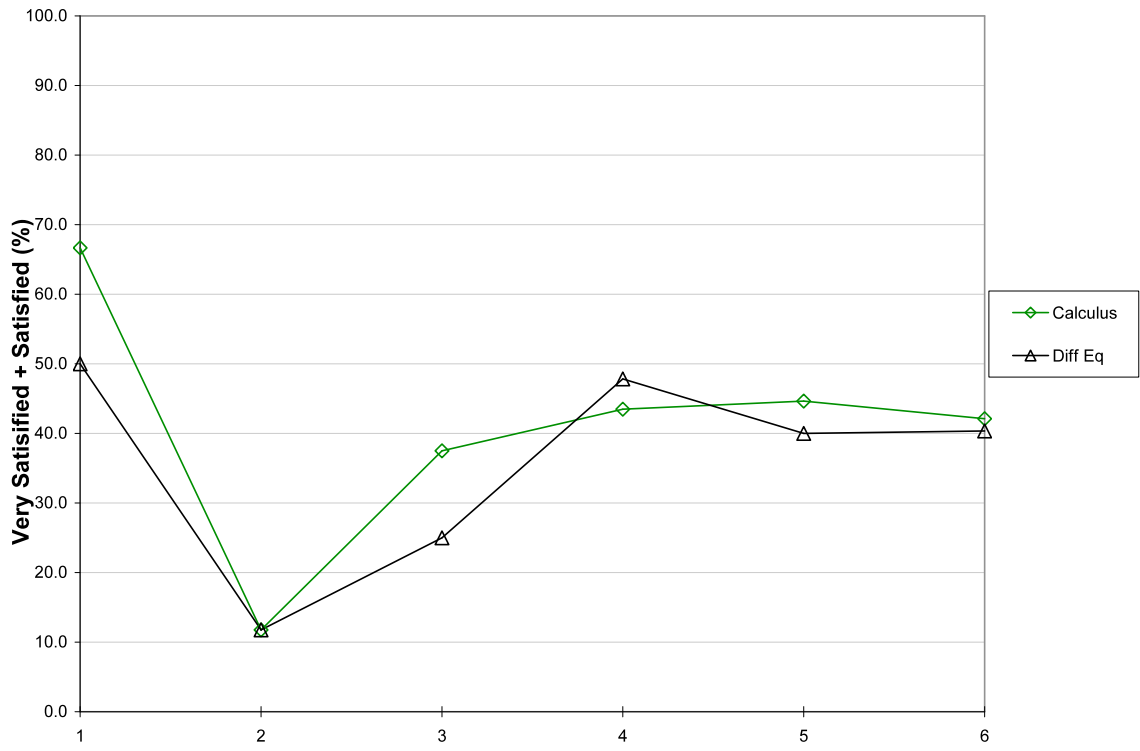


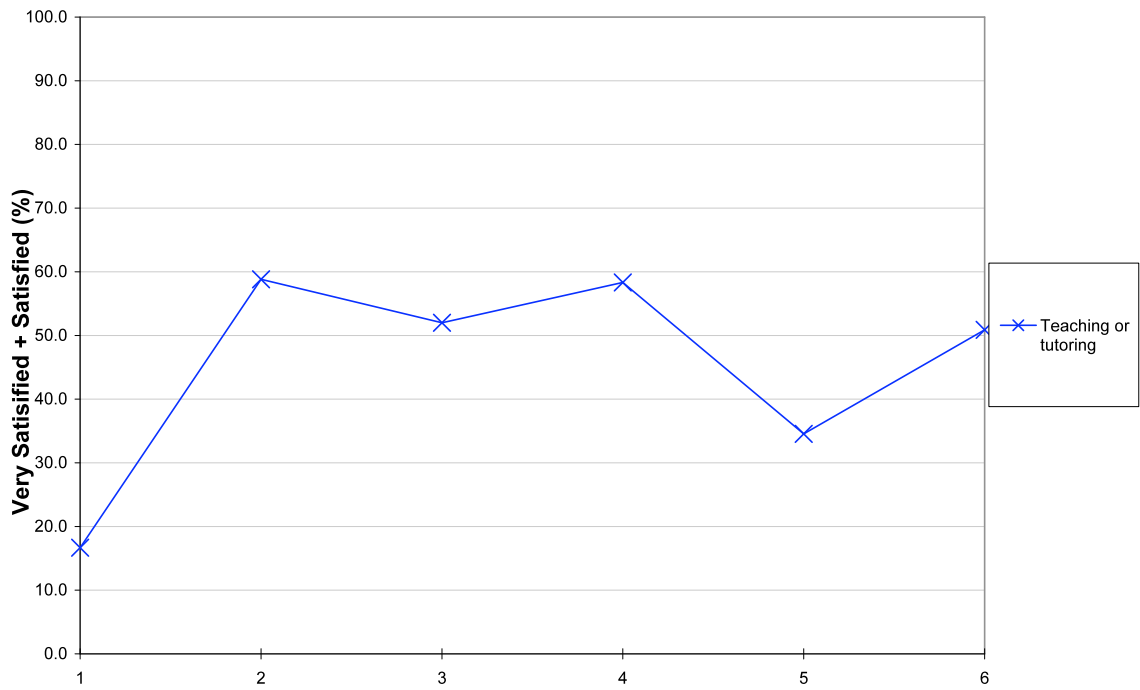
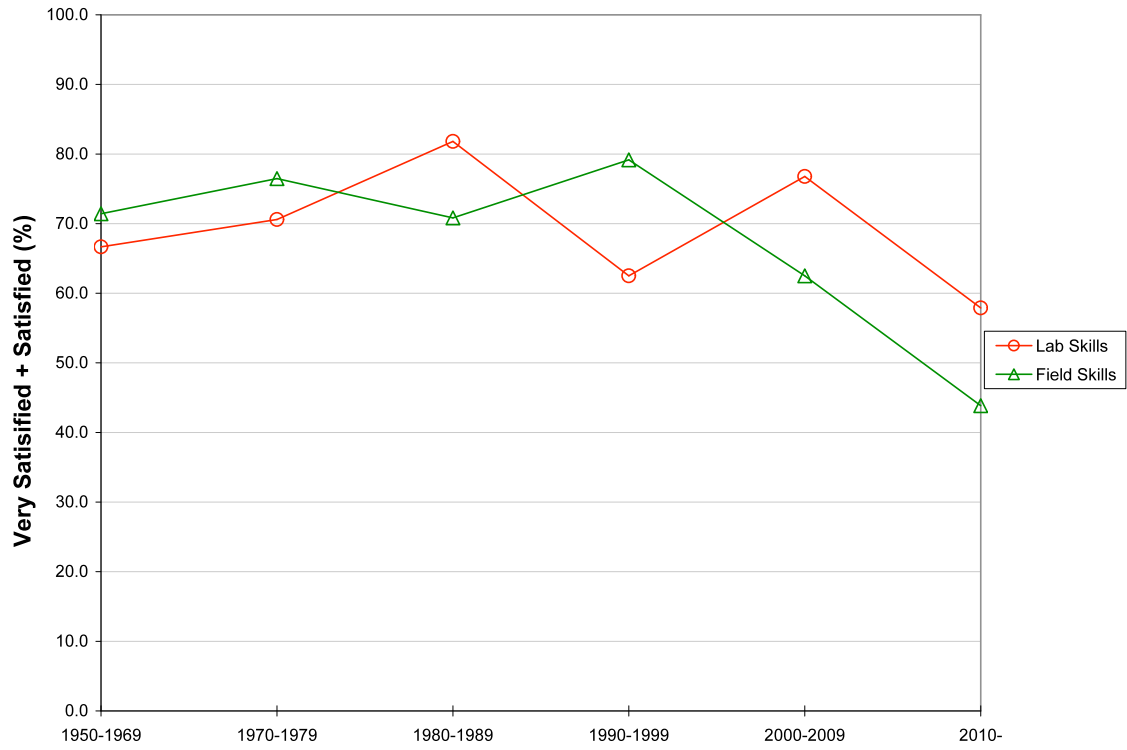
However, other skills are ranked highest among BSc



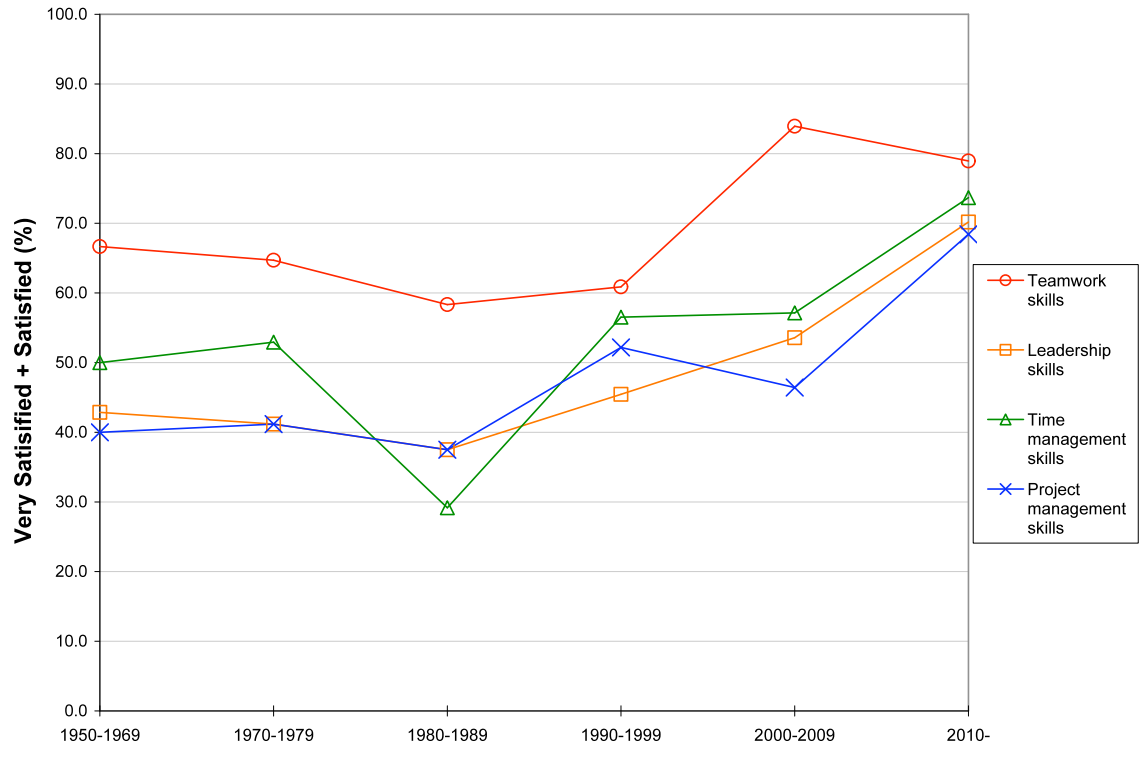
$f(\text{year})$







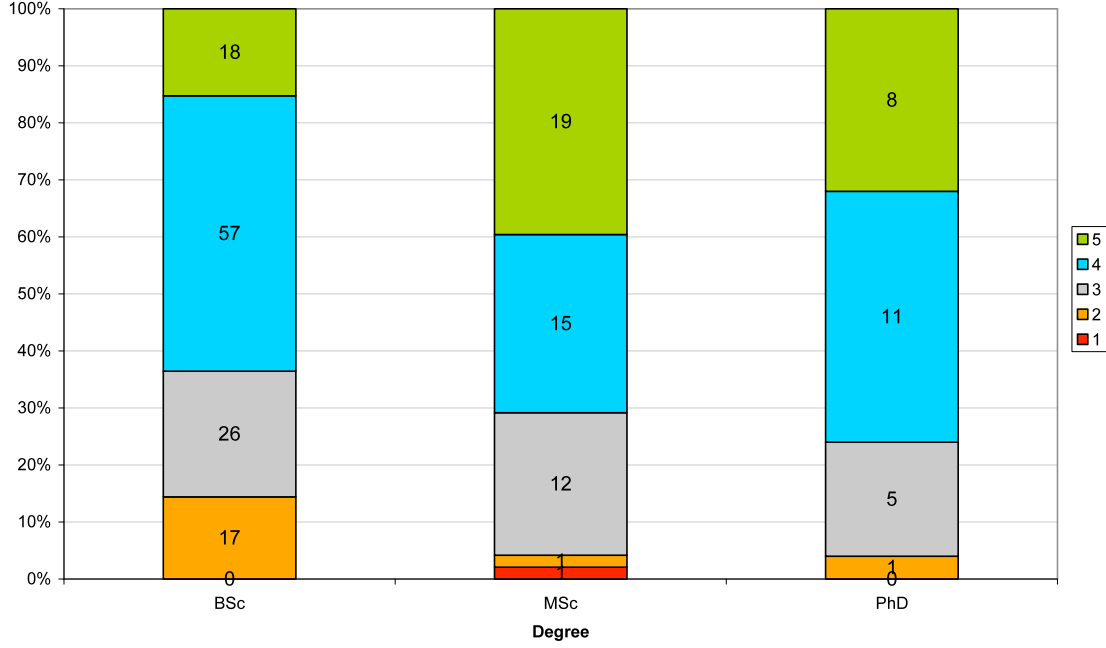




# Writing

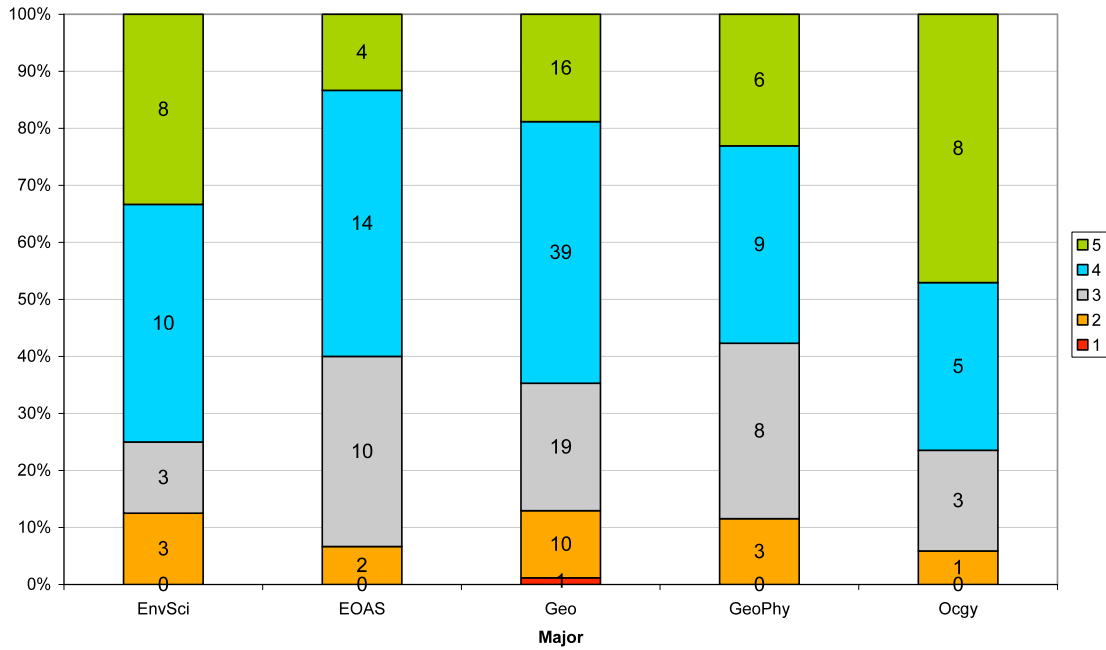
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Writing**

5: Very Satisfied 4: Satisfied 3: N/A 2: Unsatisfied 1: Very unsatisfied

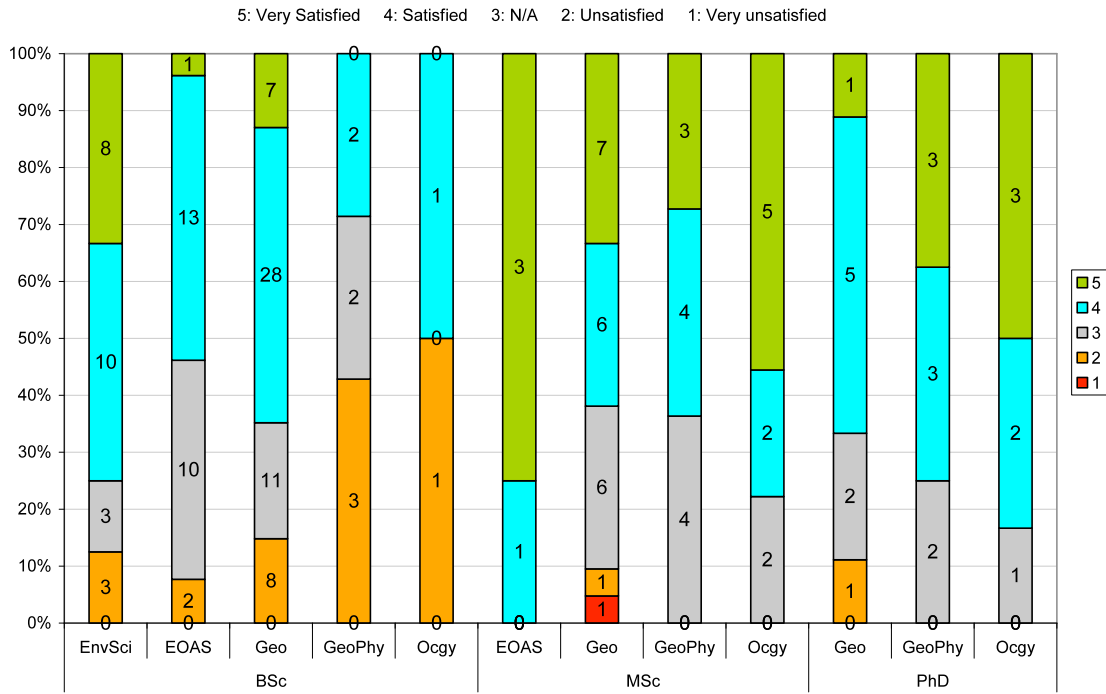


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**Writing**

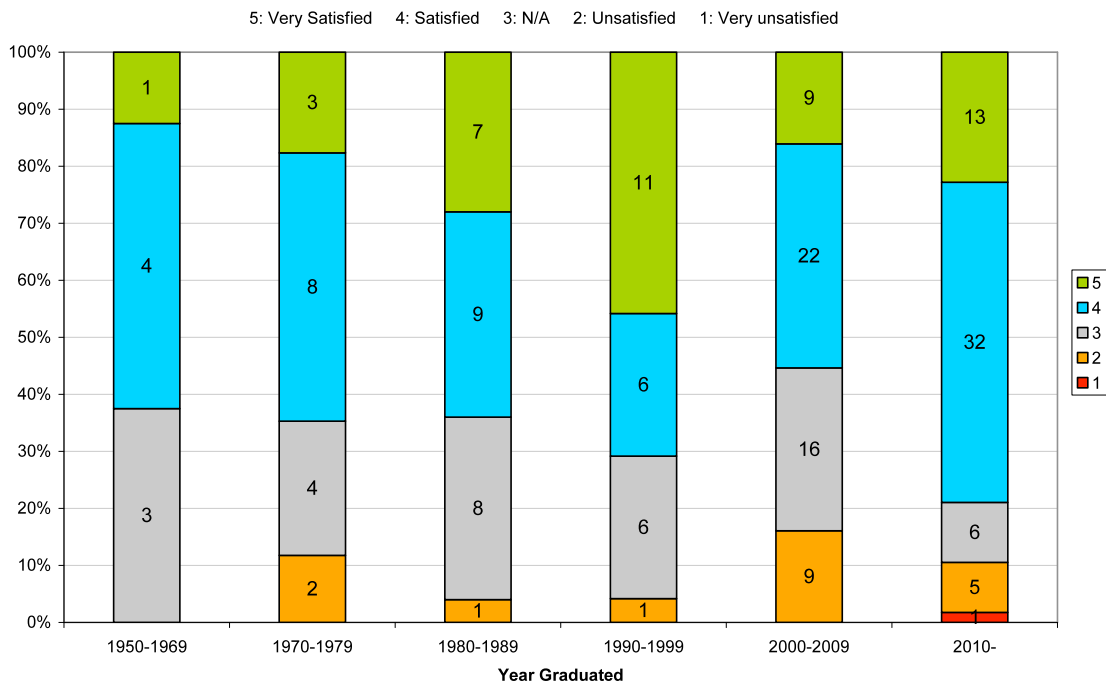
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**Writing**



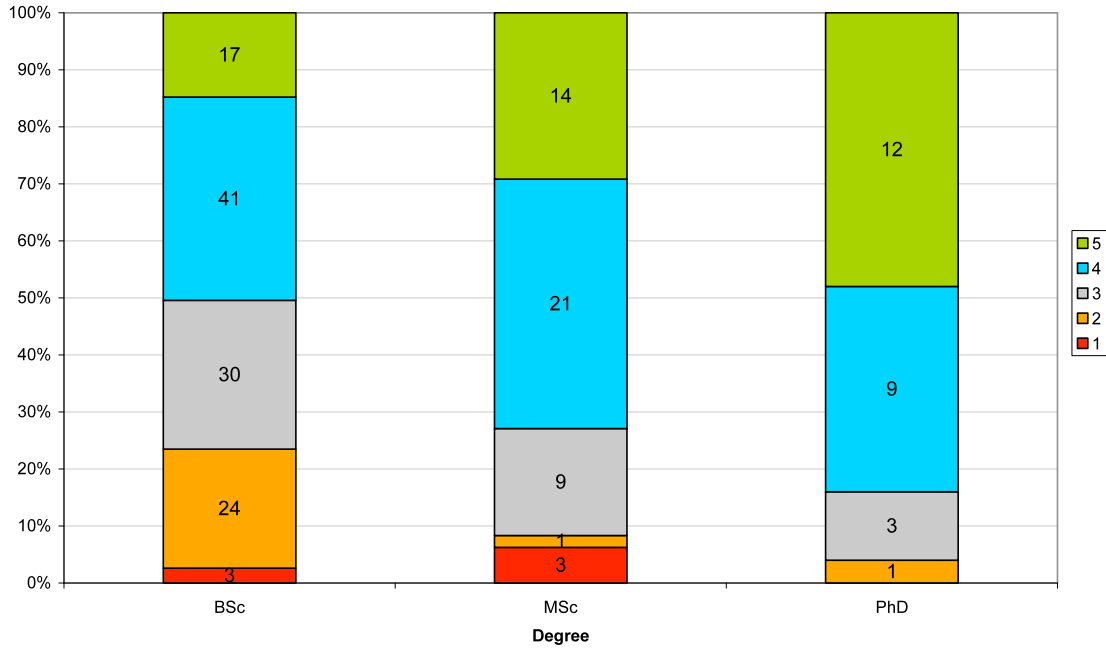
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Writing**



# Oral Presentations

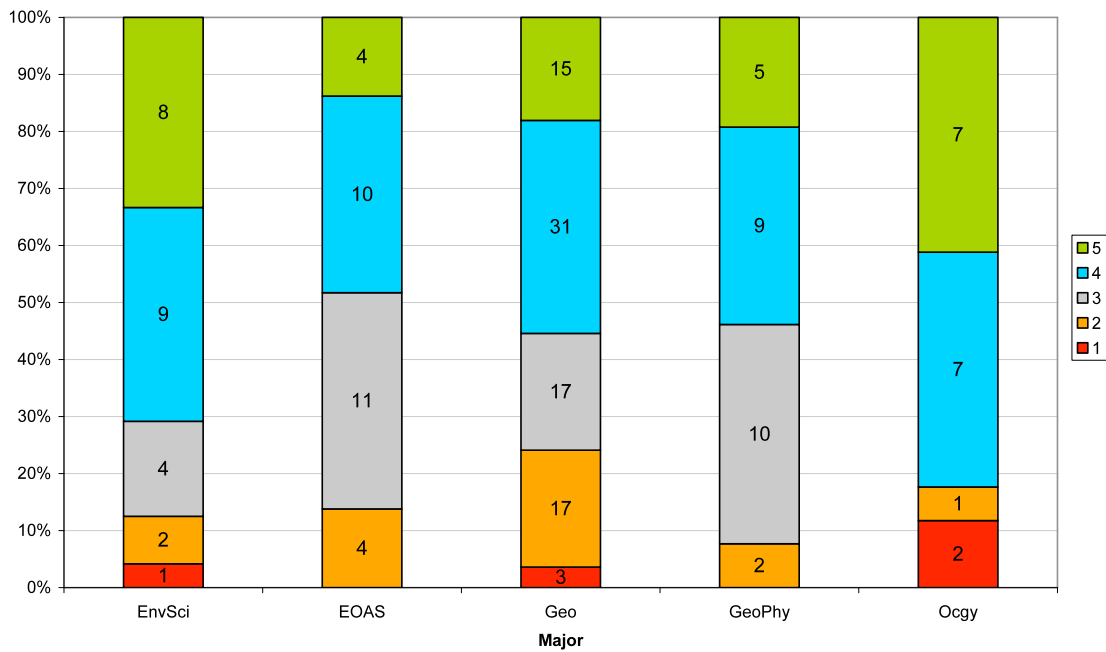
How Satisfied were you acquiring the following skill during your EOAS degree?  
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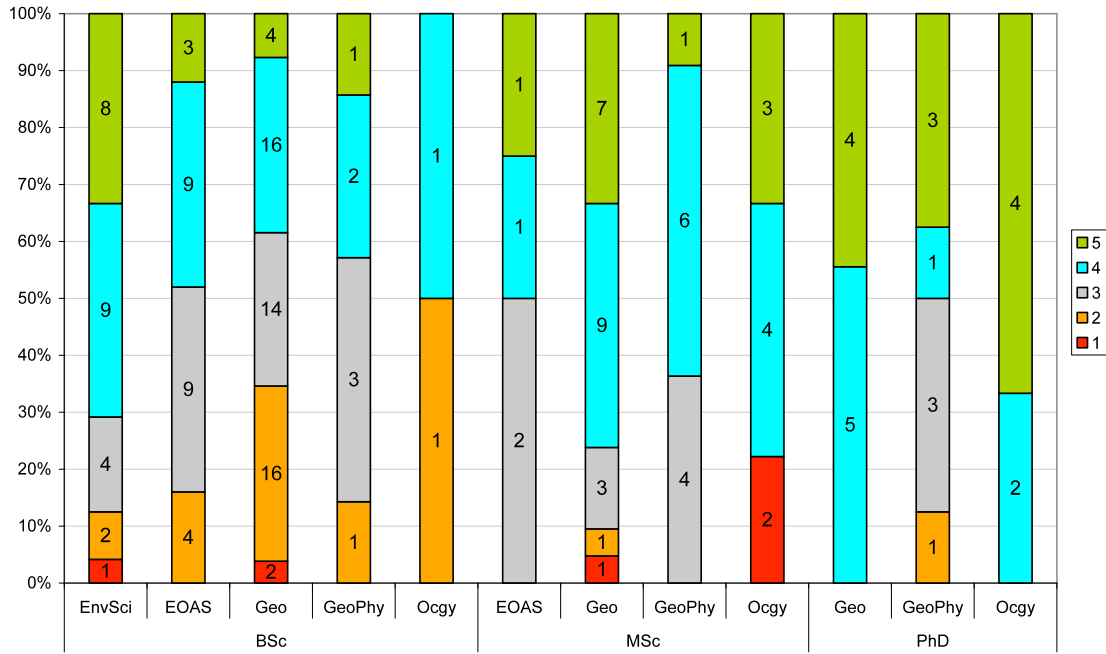
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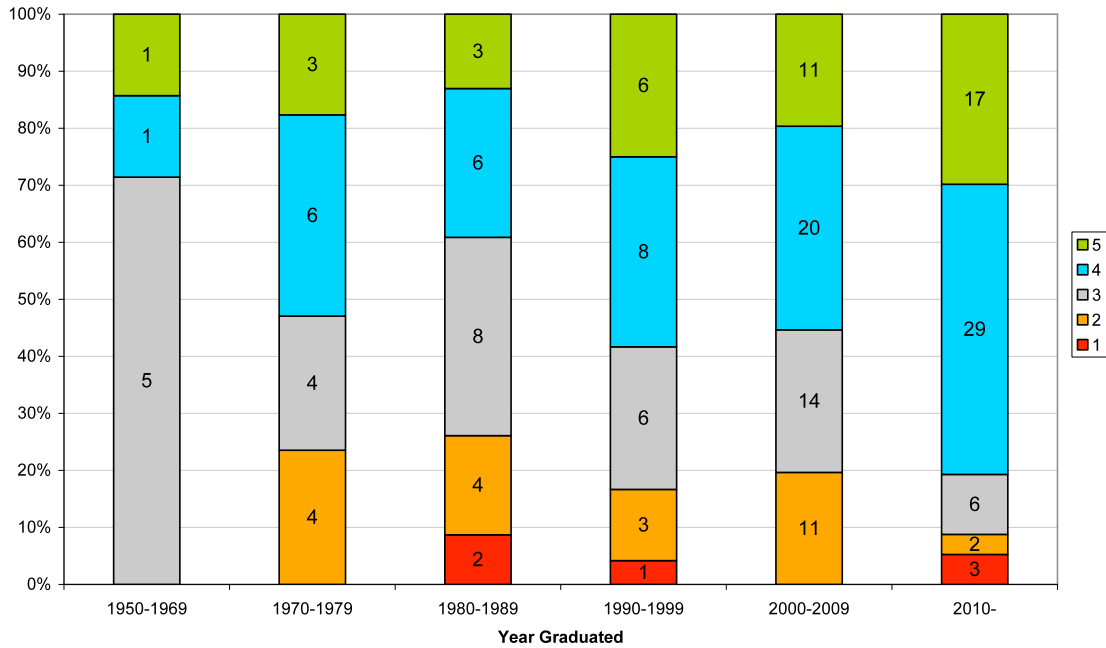
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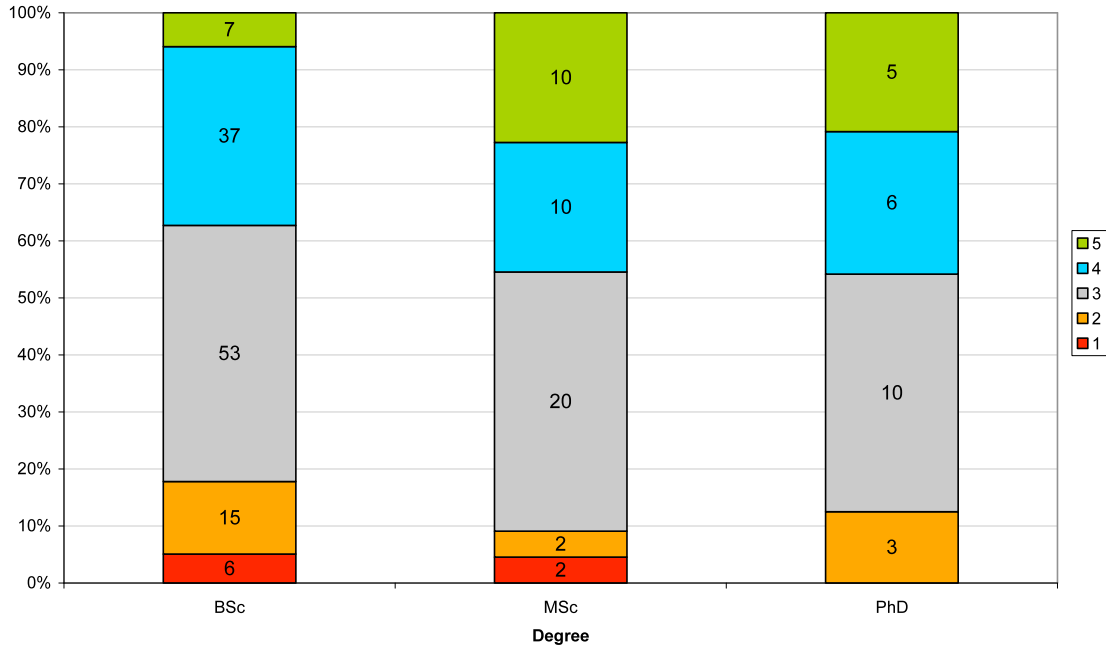
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# Poster Presentations

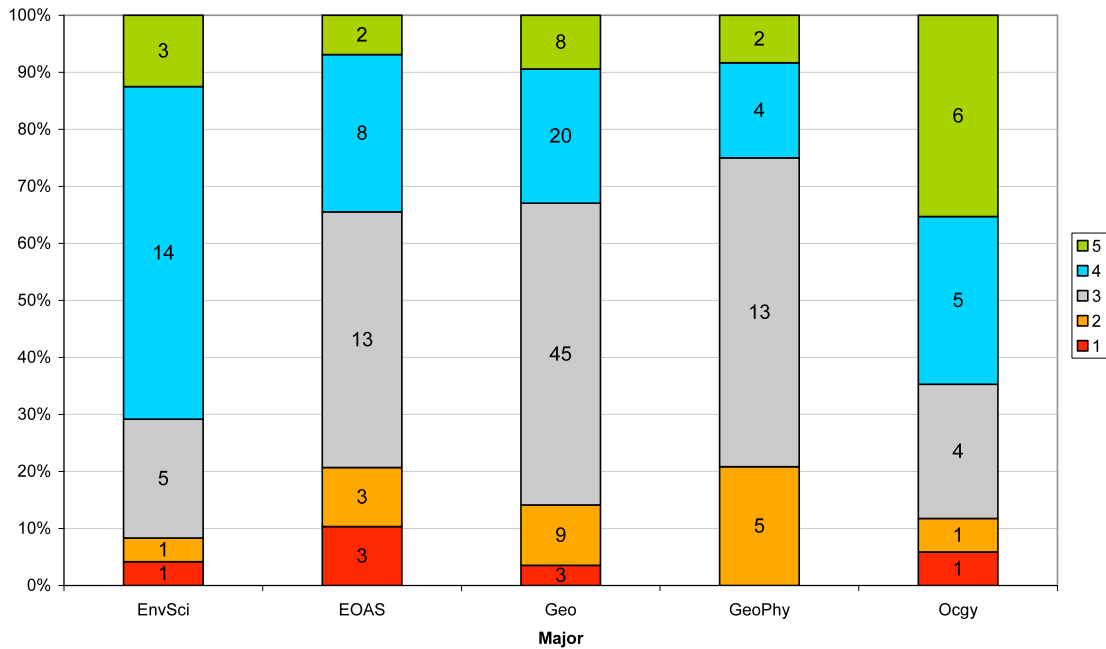
How Satisfied were you acquiring the following skill during your EOAS degree?  
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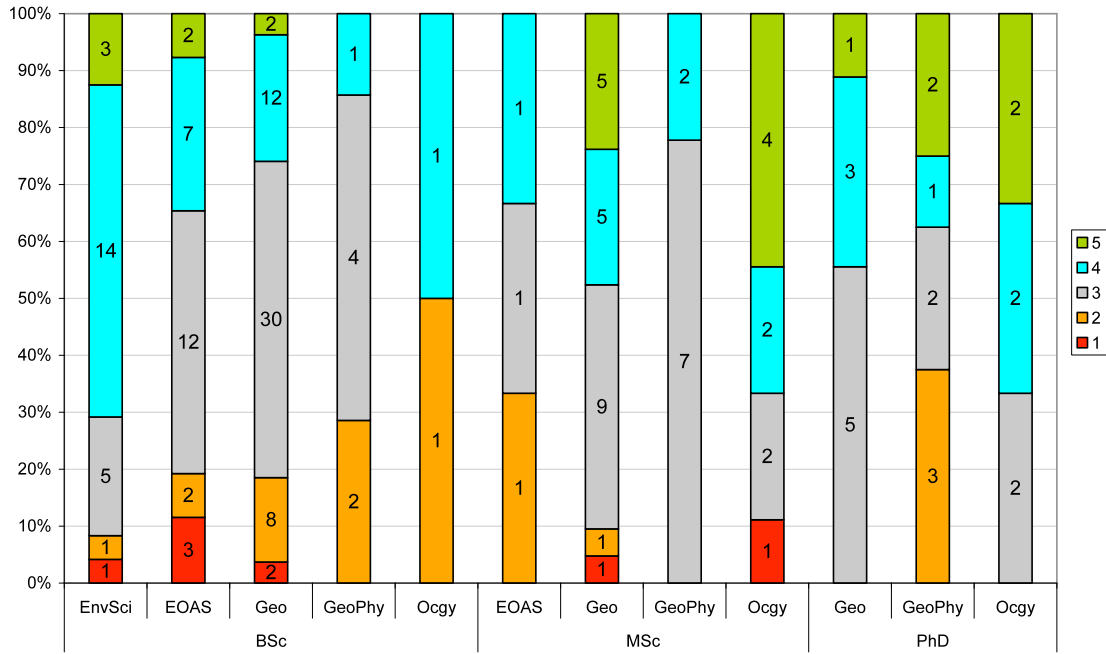
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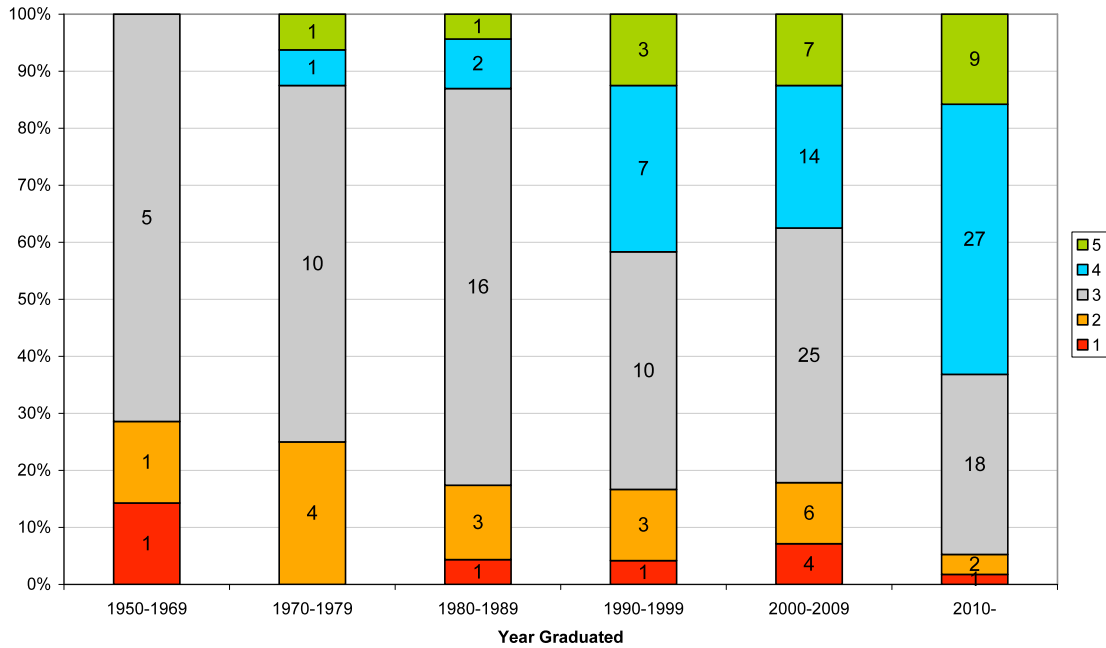
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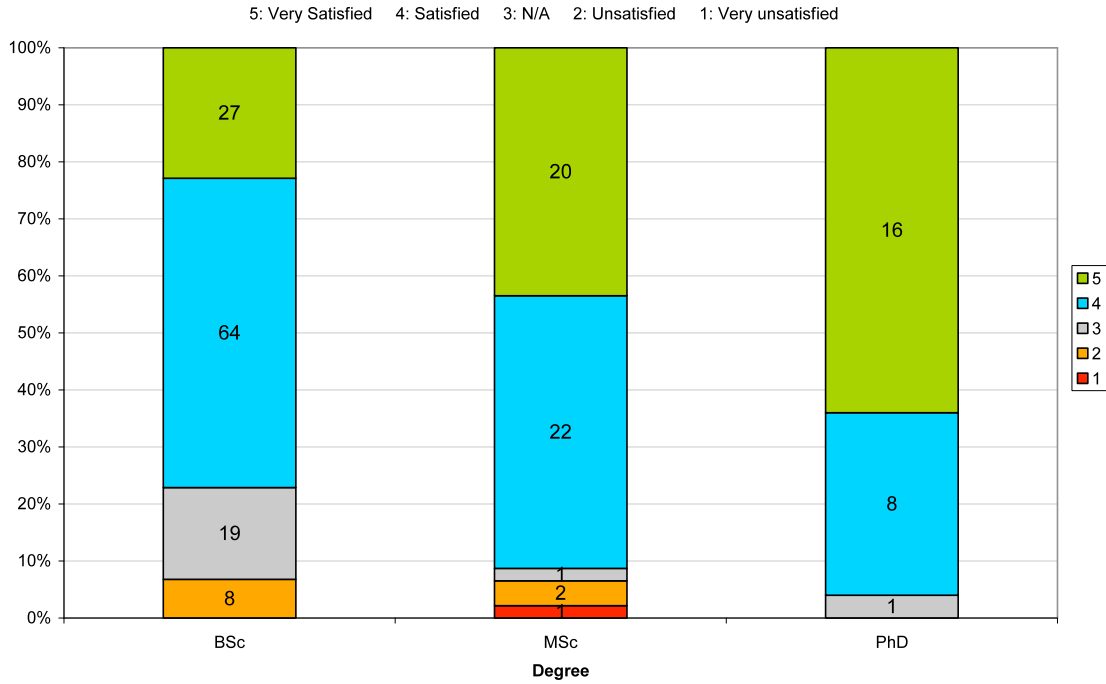
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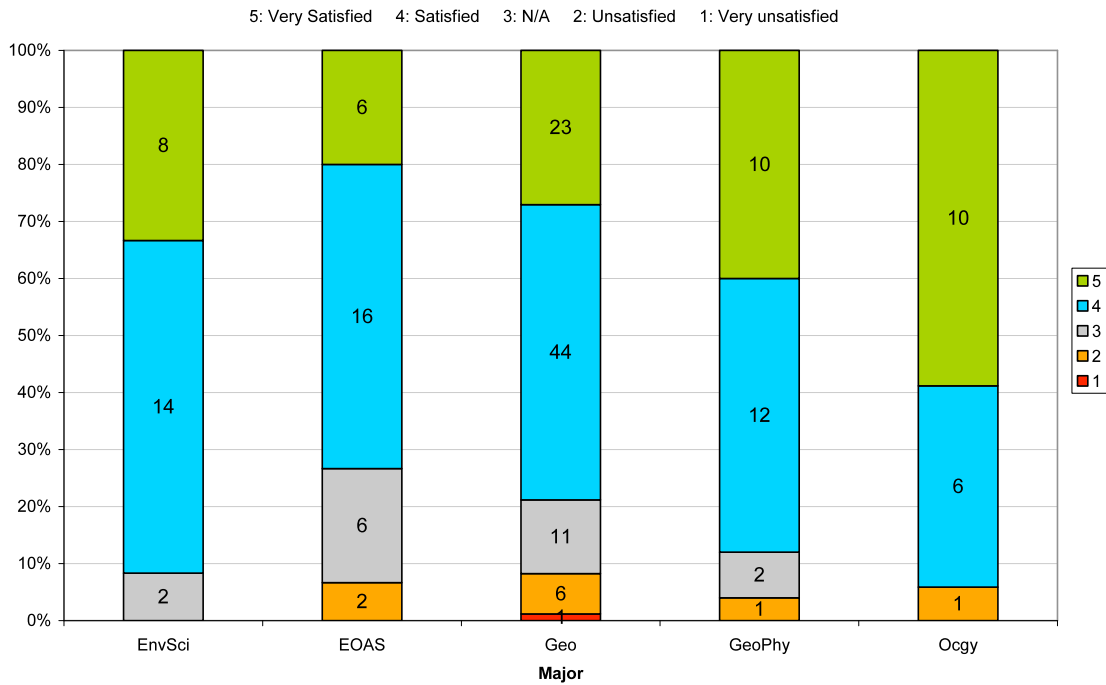


# Research Skills

How Satisfied were you acquiring the following skill during your EOAS degree?  
**Research Skills**



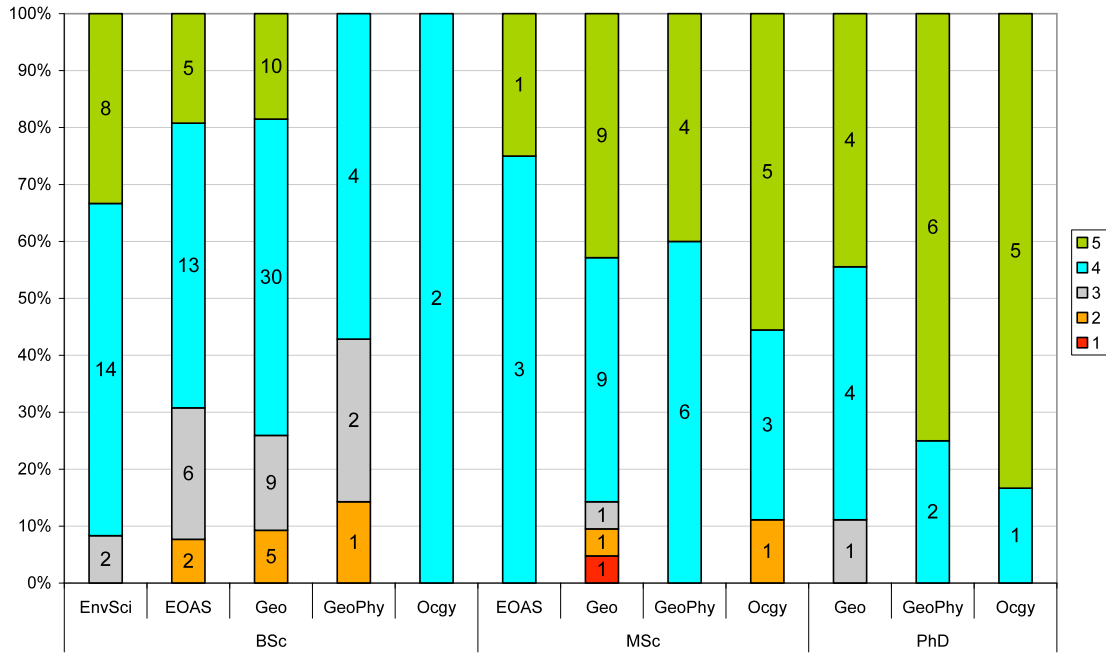
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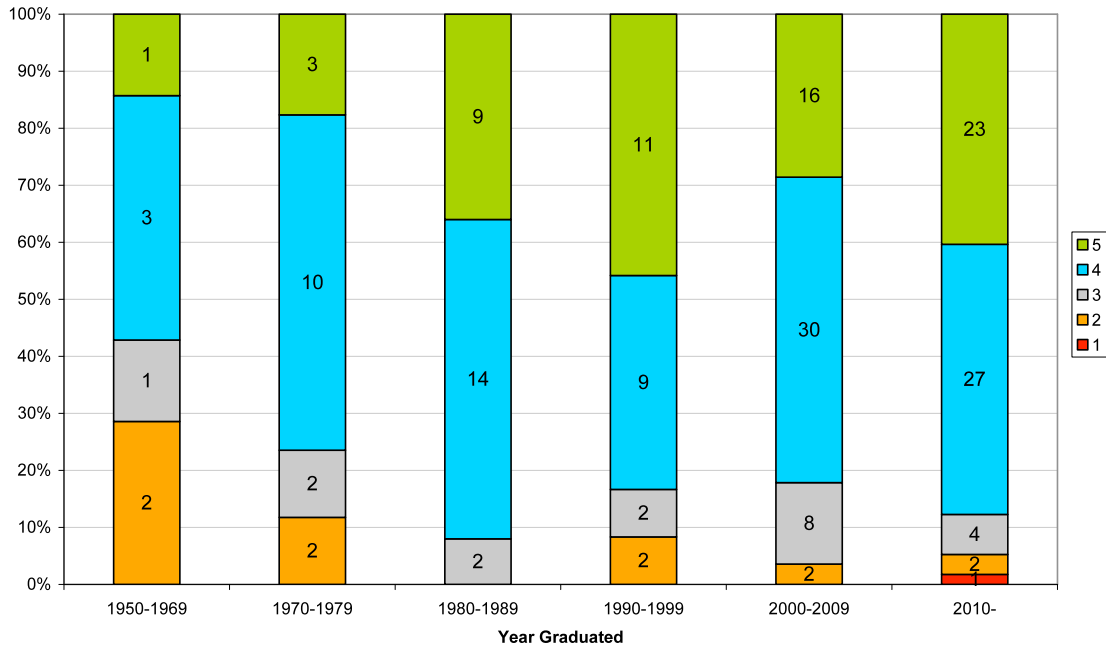
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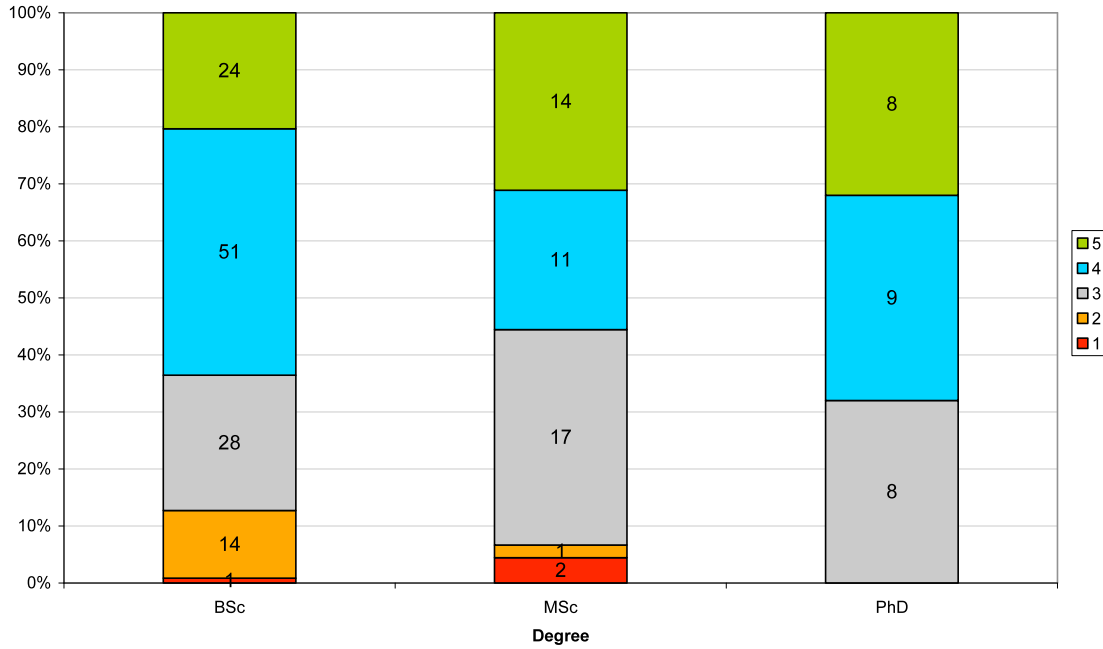
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# Field Skills

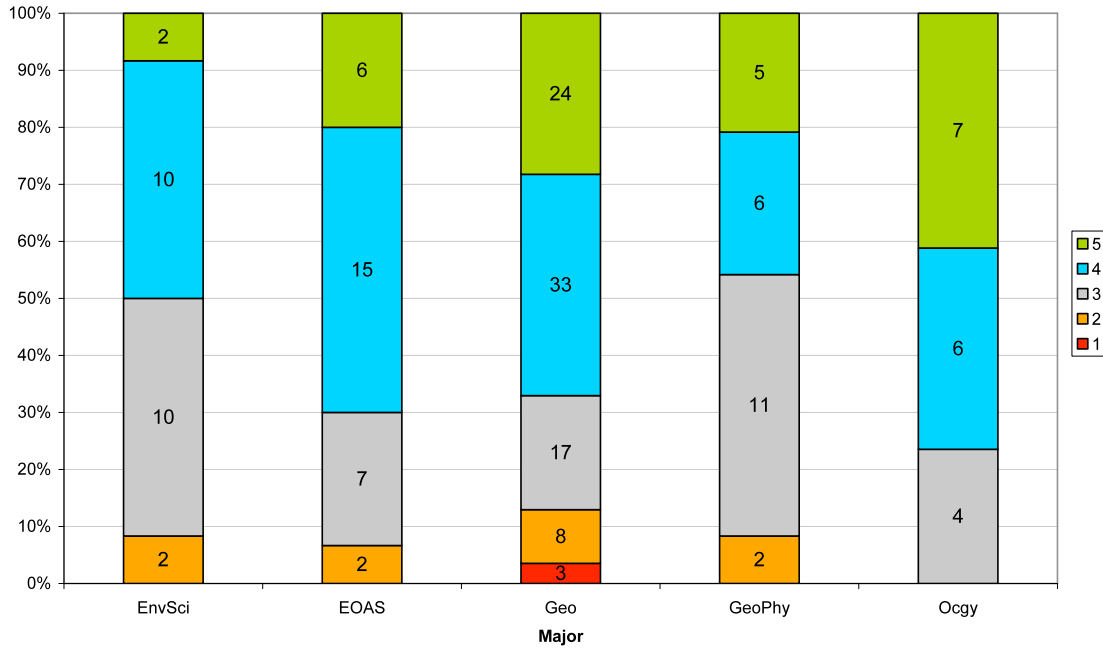
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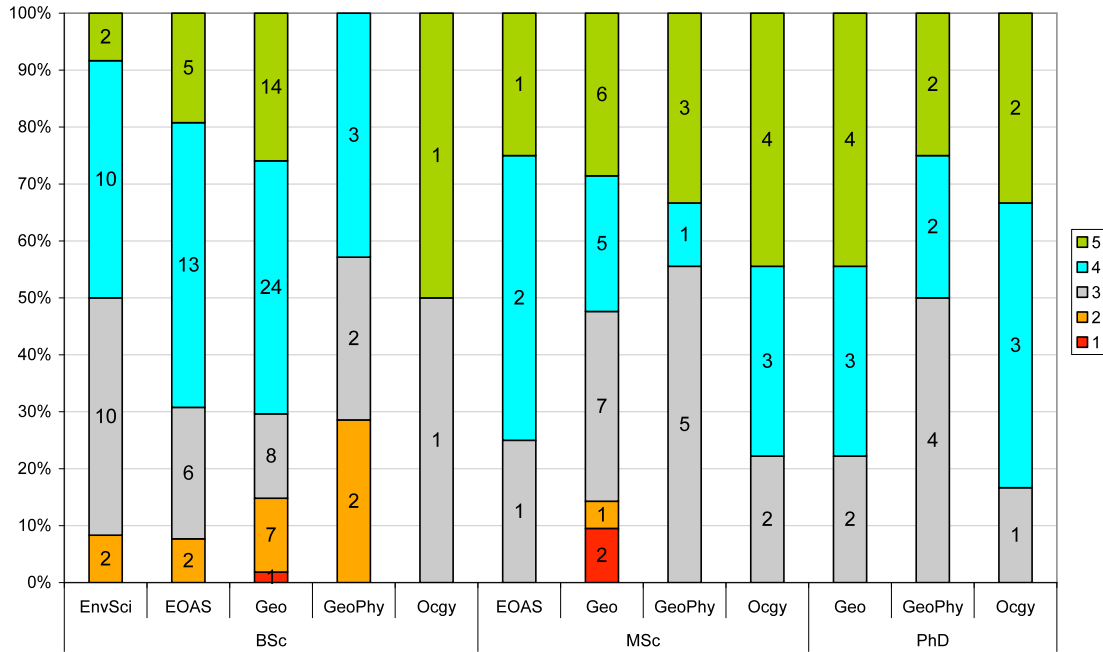
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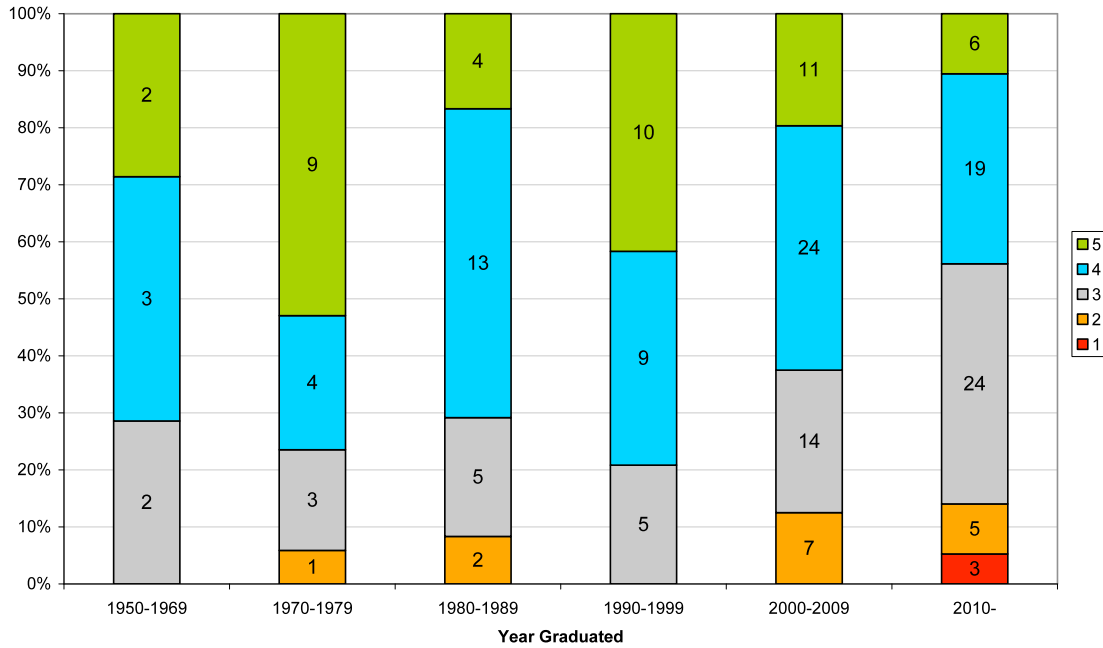
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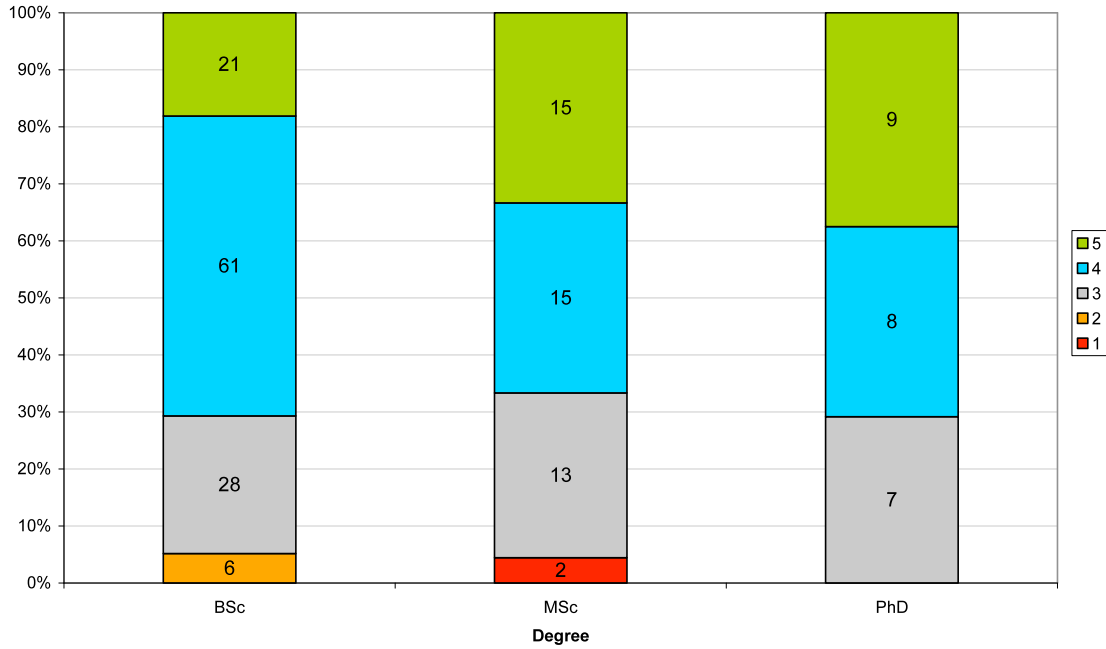
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# Lab Skills

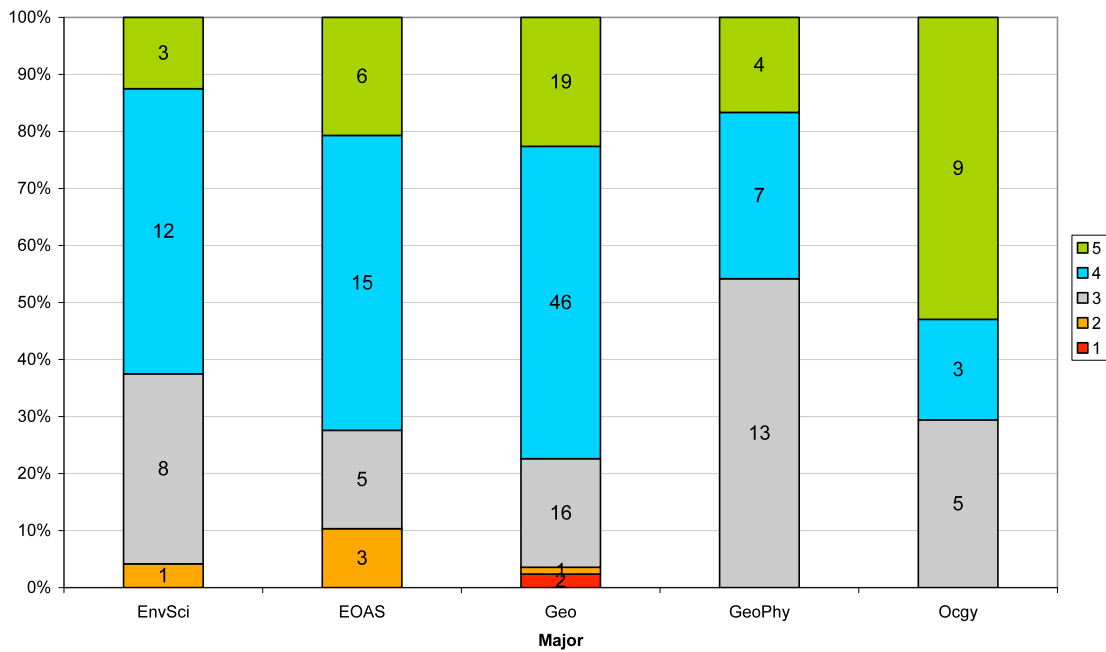
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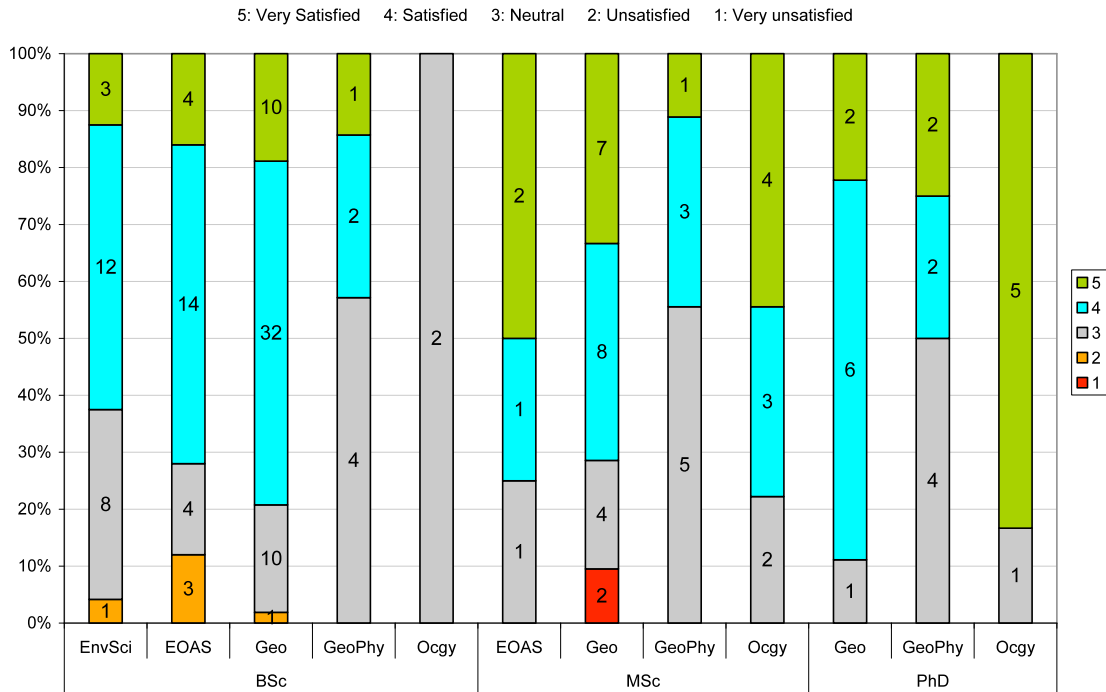


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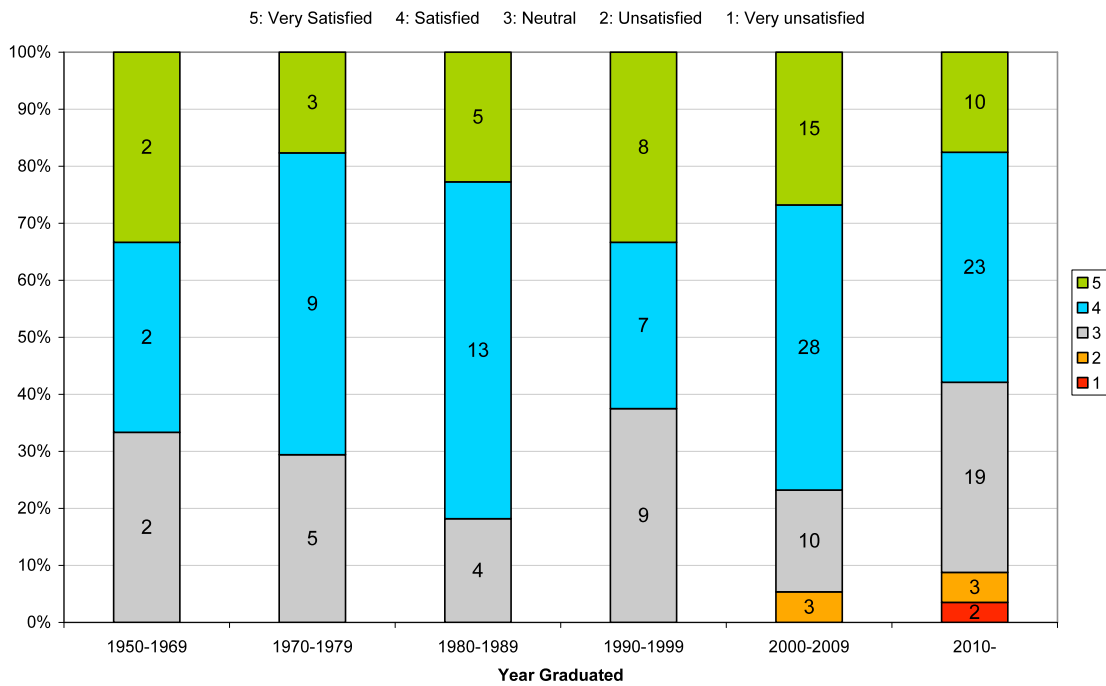
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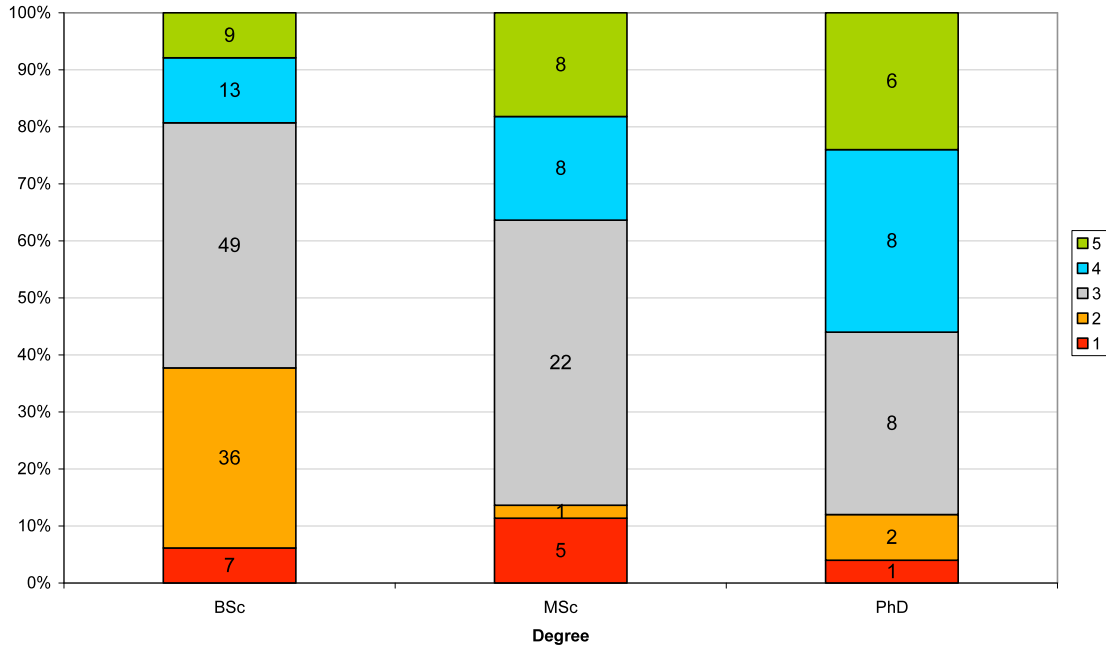
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**Lab Skills**



# Computer Programming

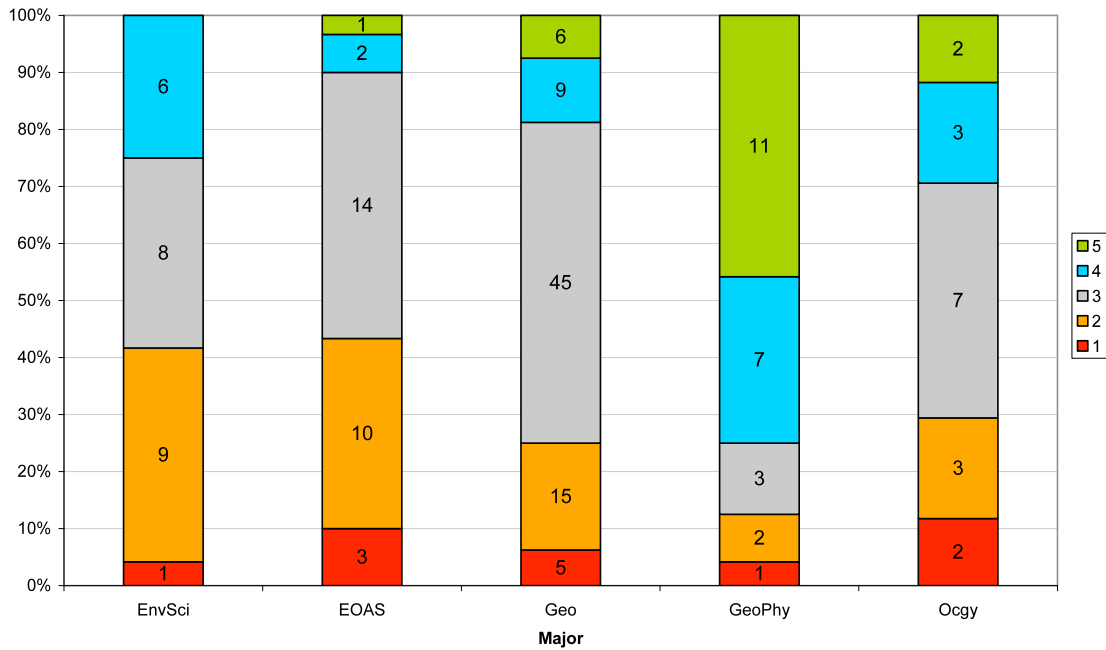
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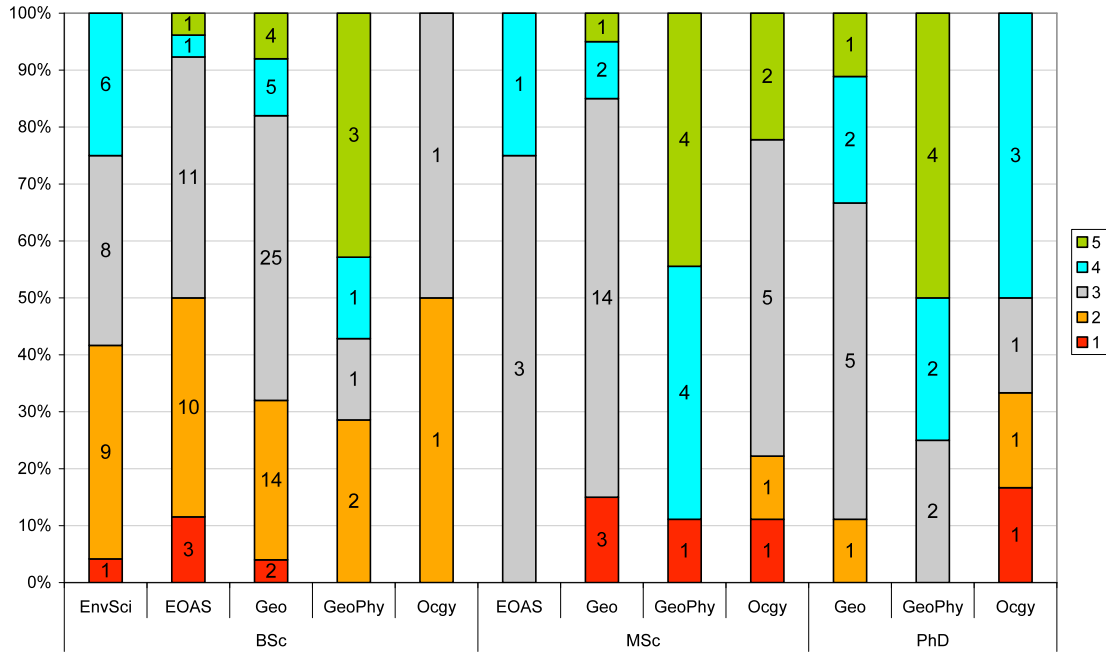
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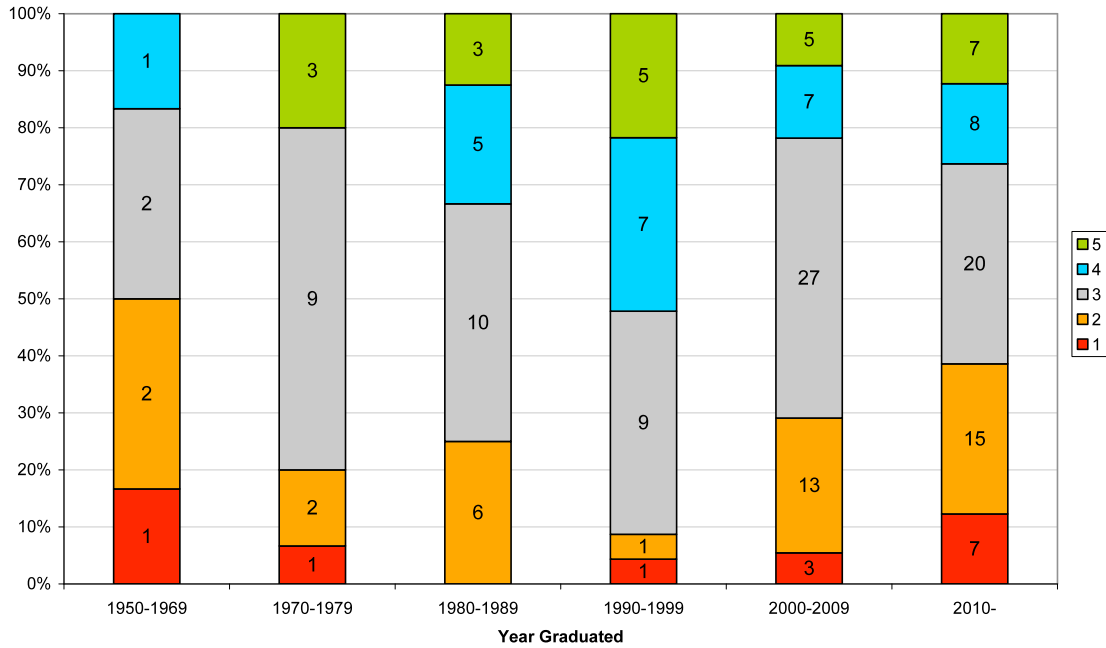
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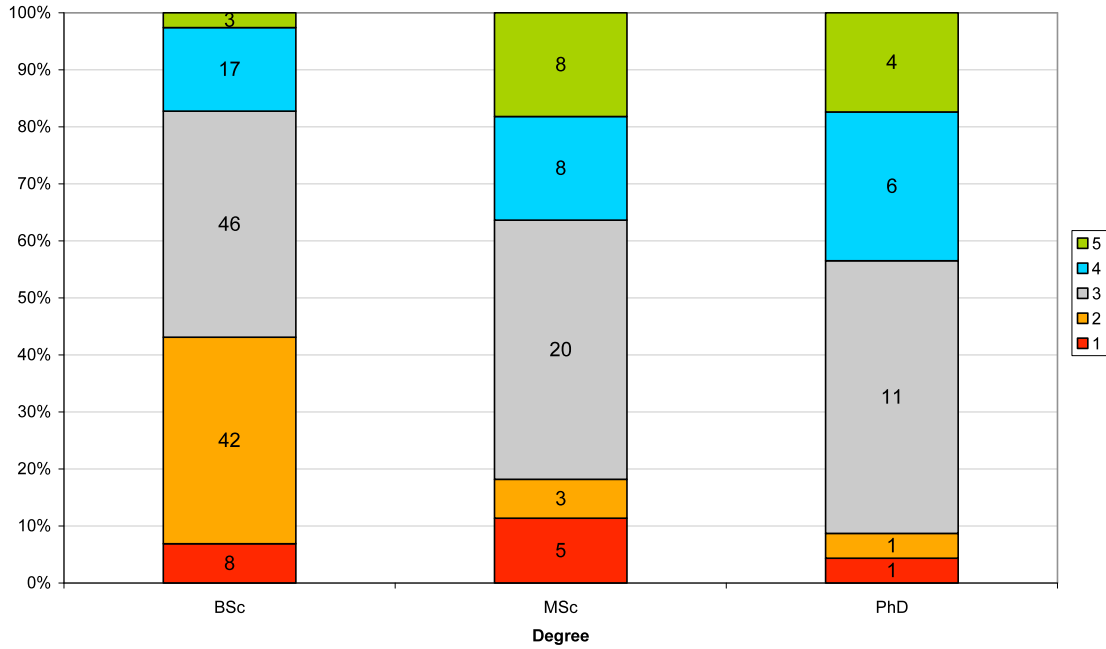
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# Computer Modelling

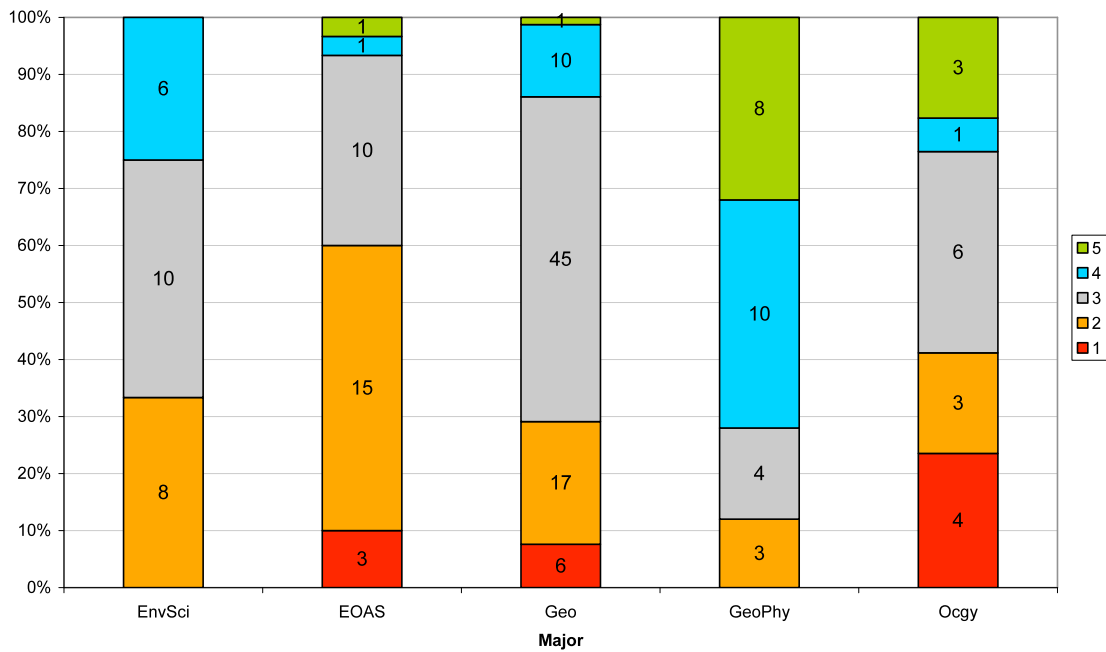
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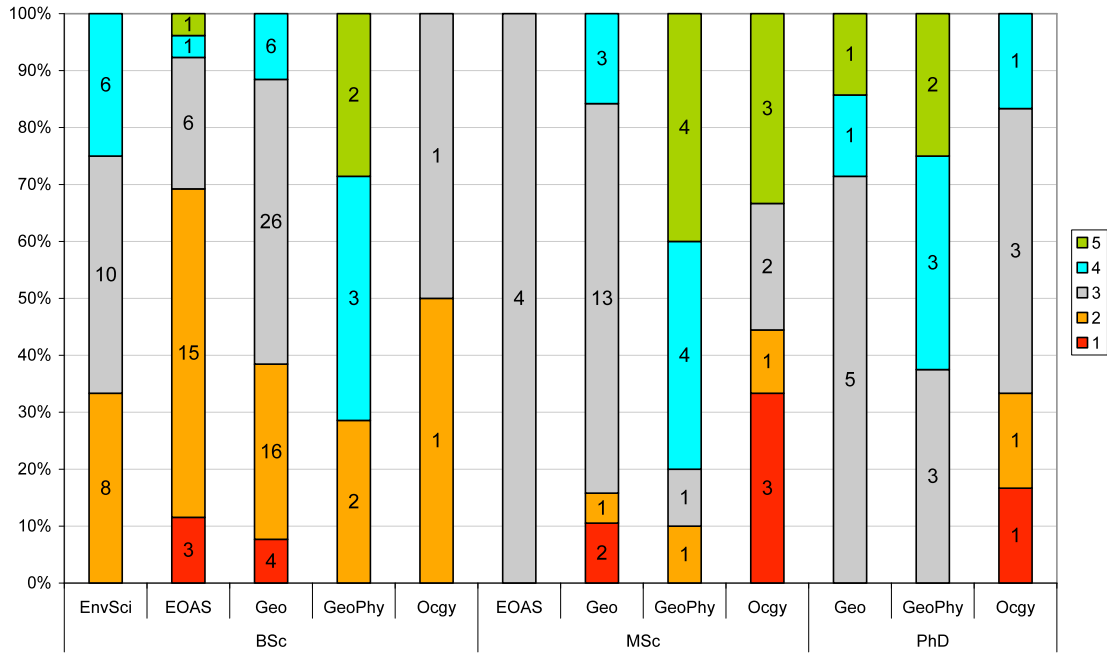
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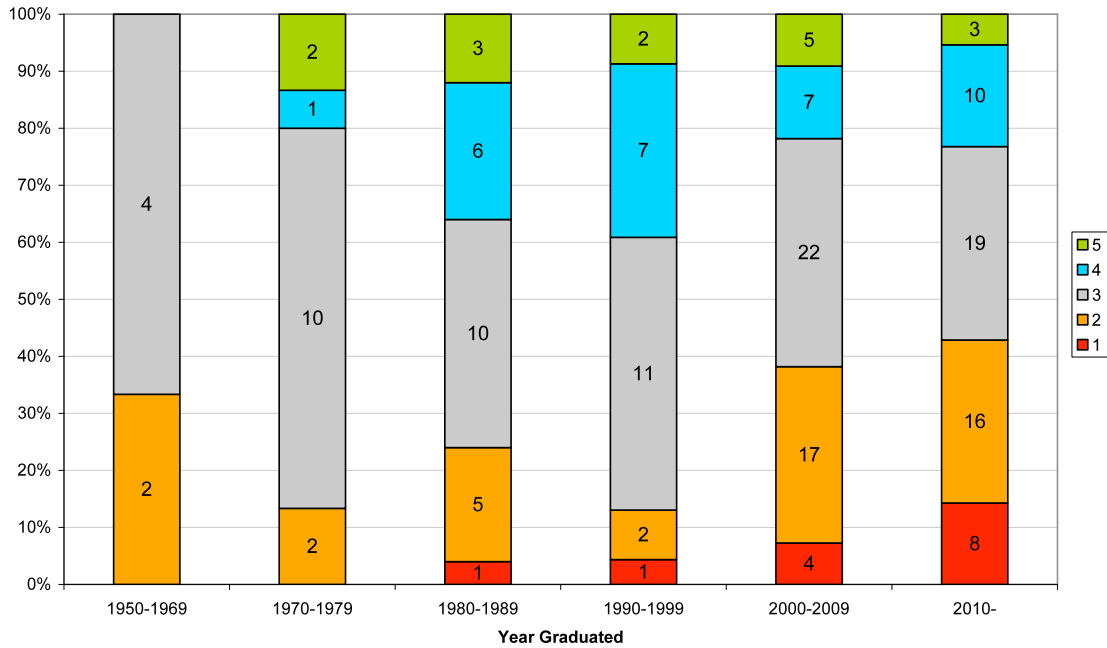
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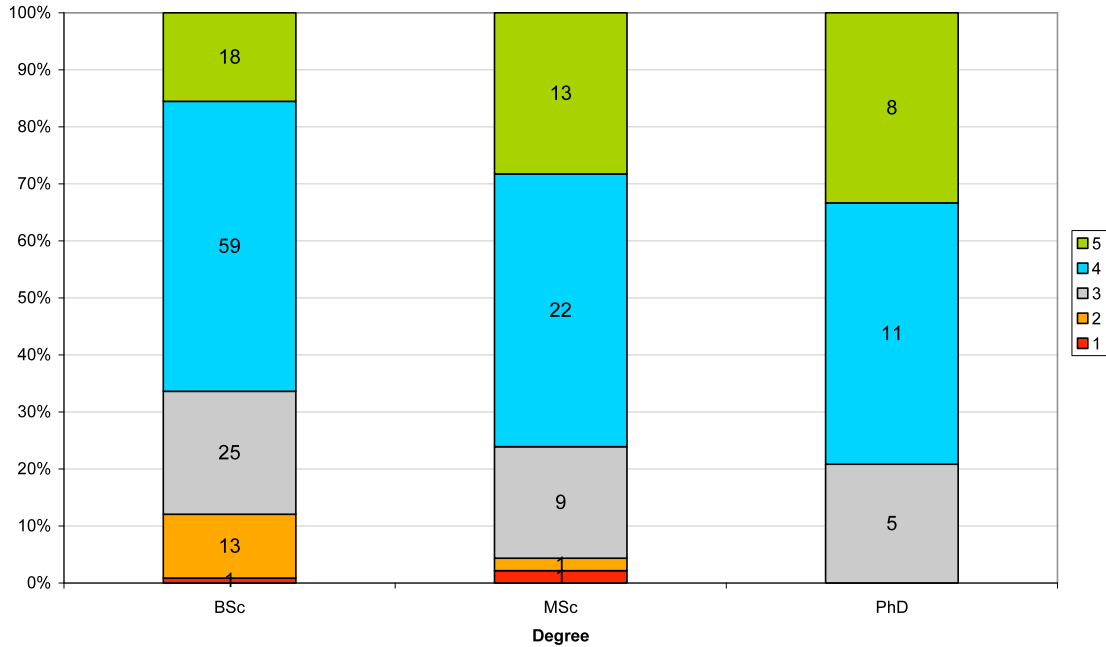
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## Data Interpretation

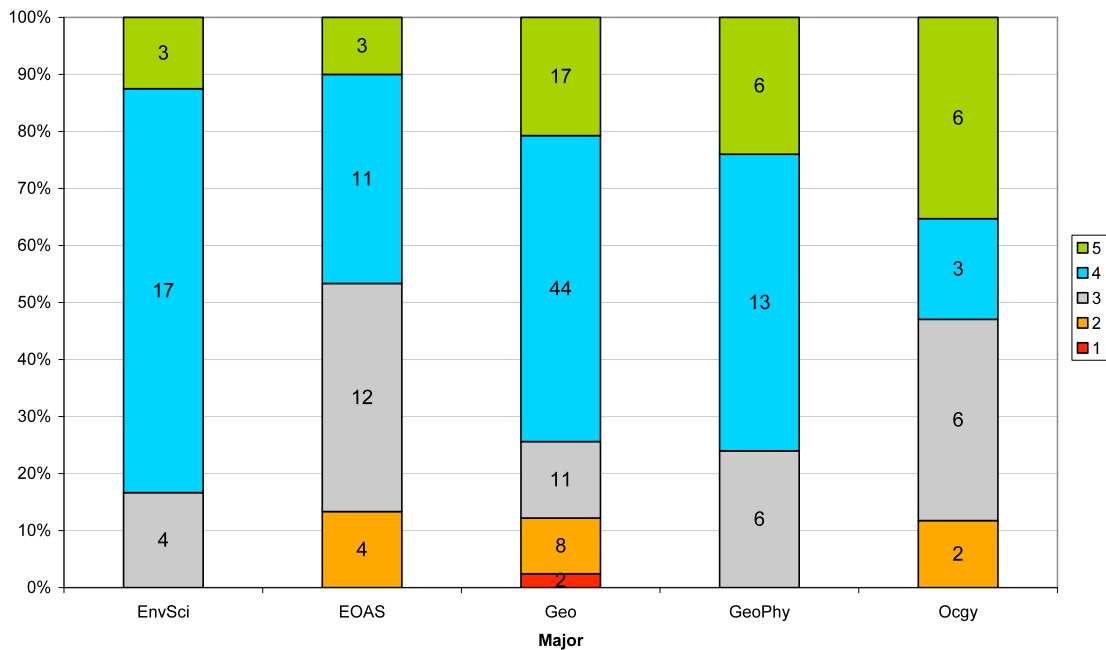
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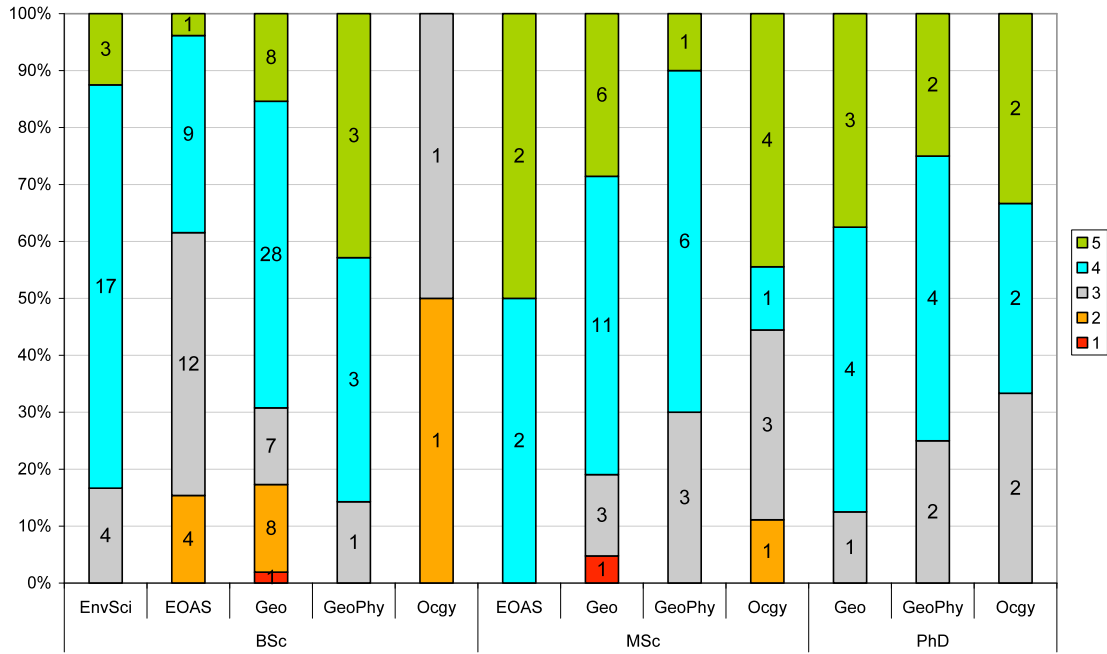
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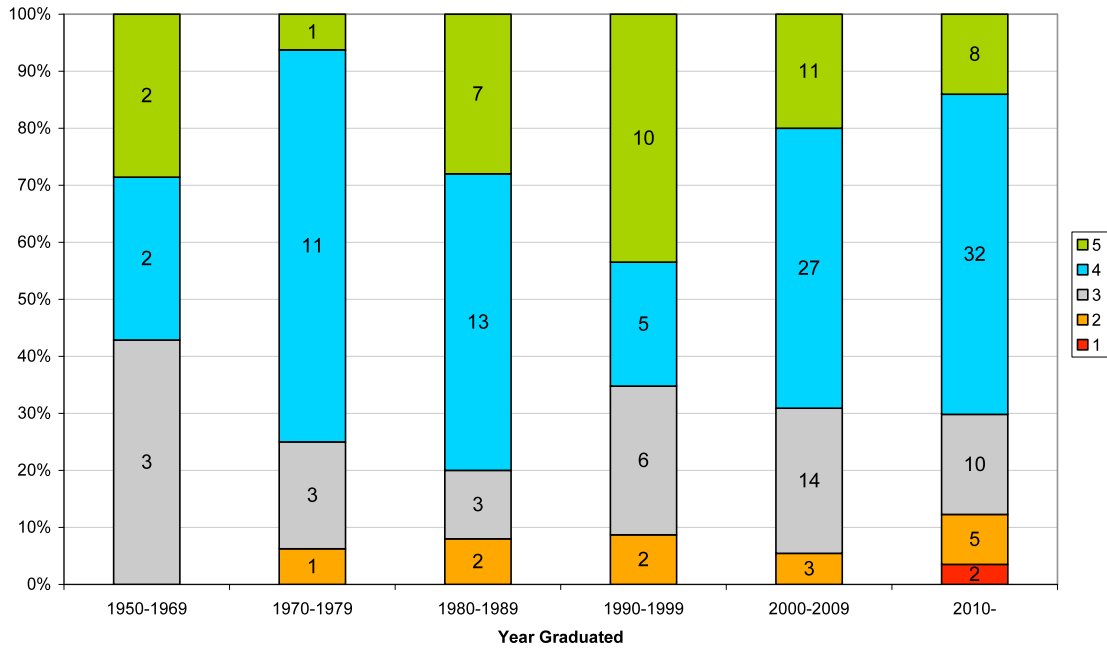
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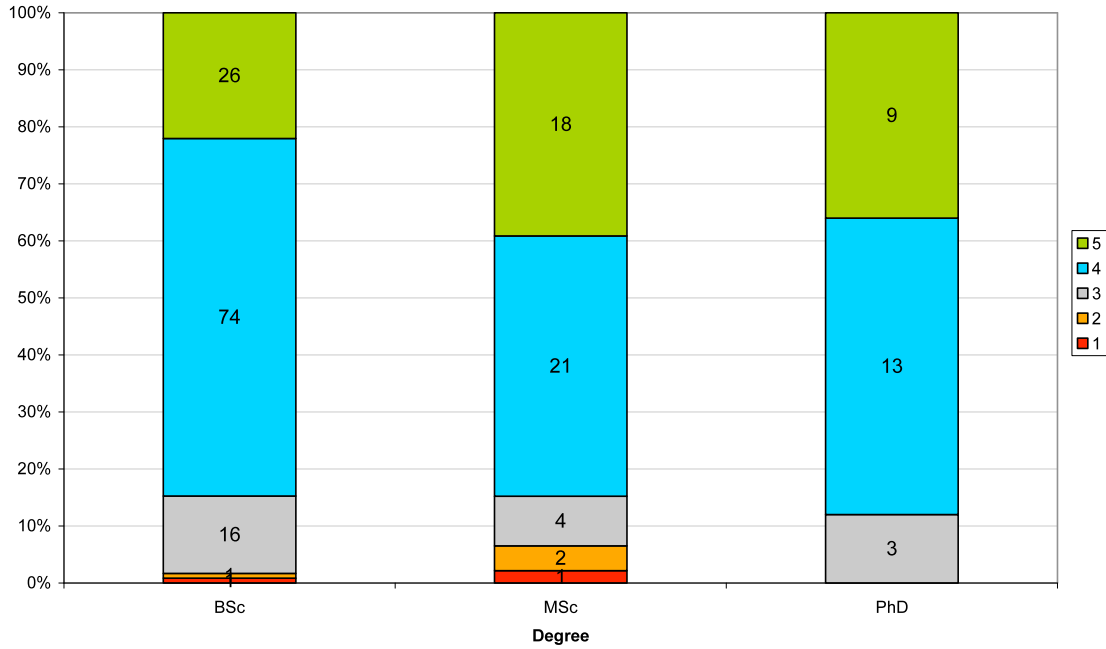
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# Problem Solving Skills

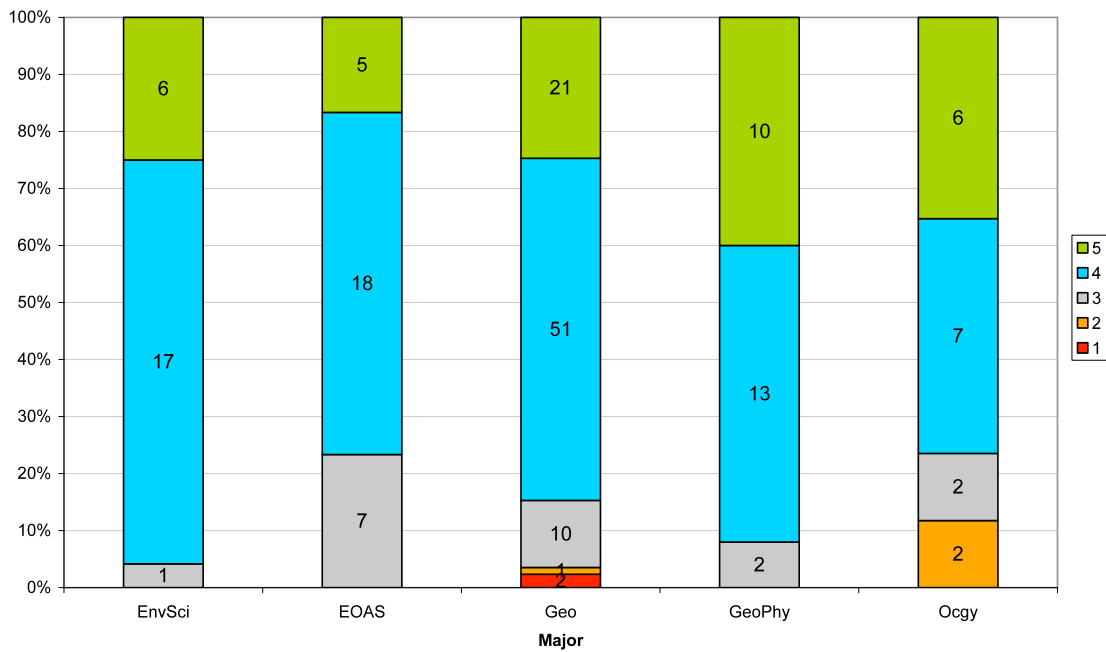
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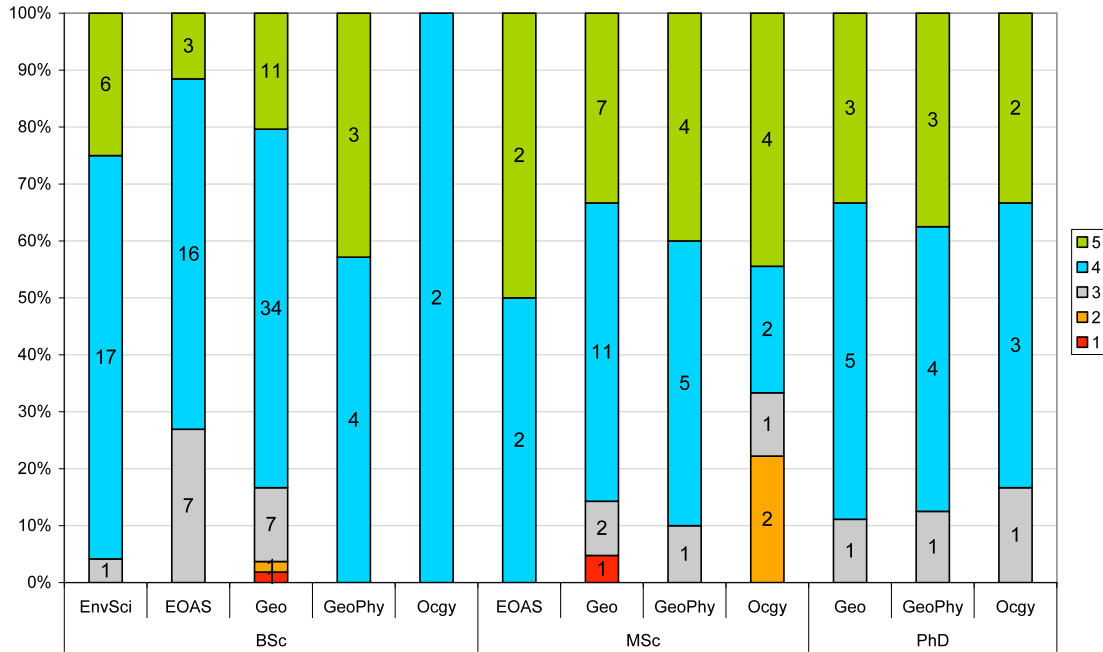
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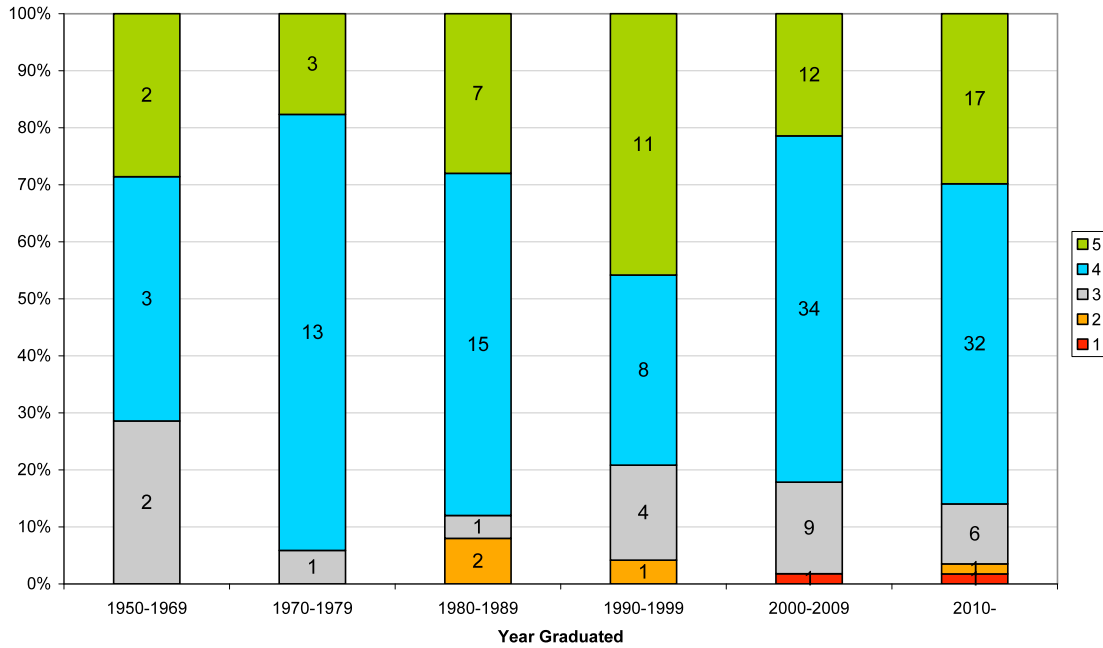
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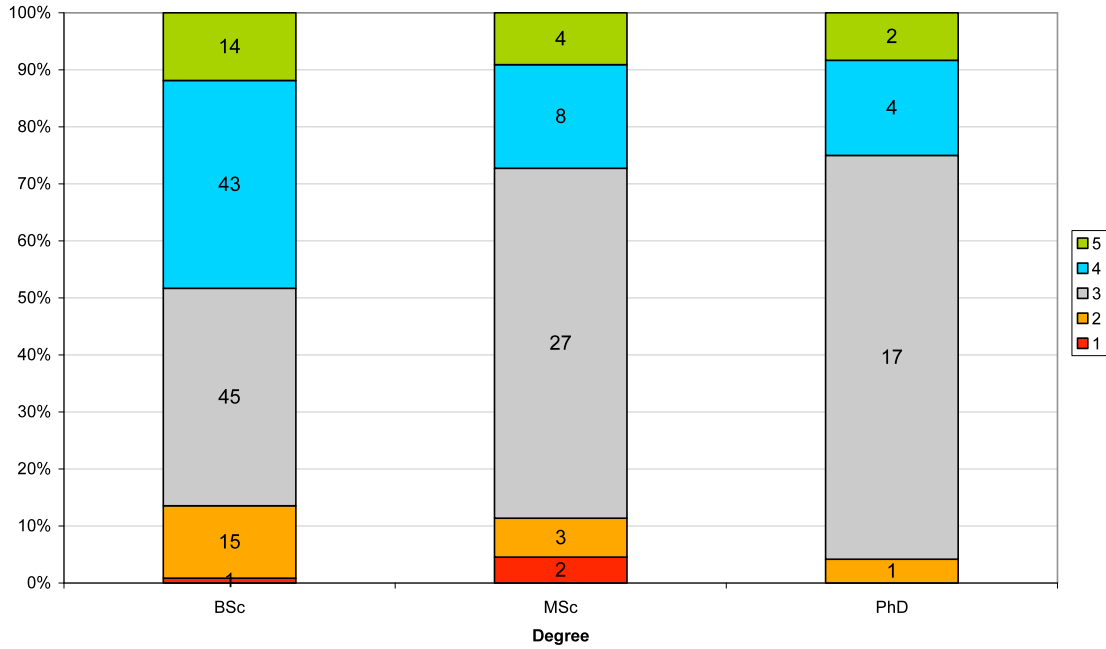
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# Calculus

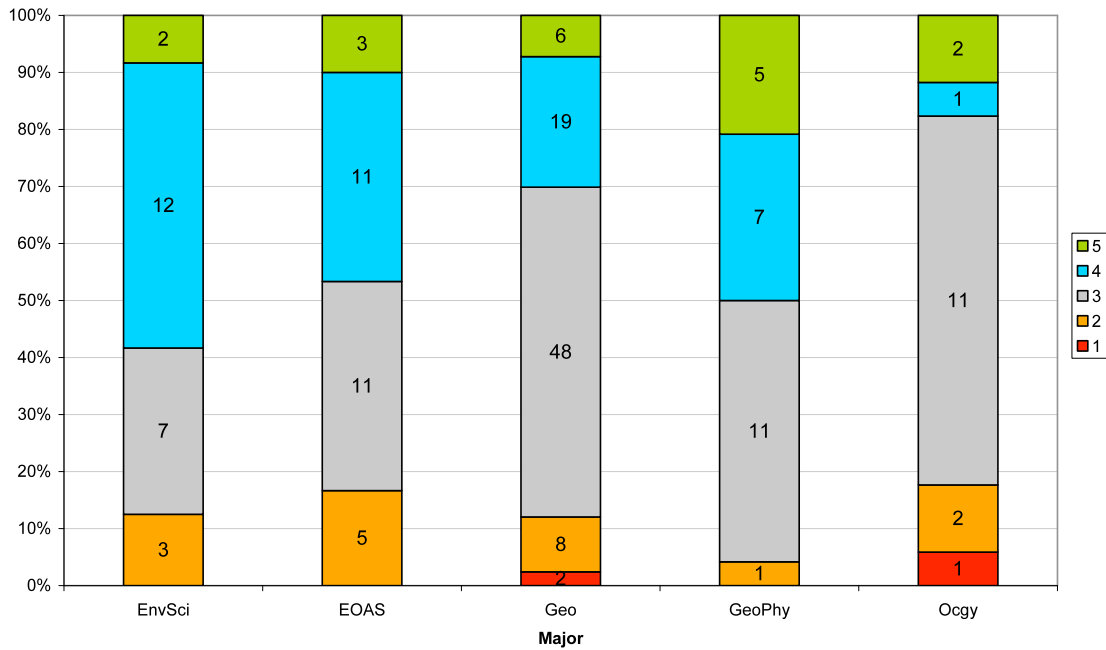
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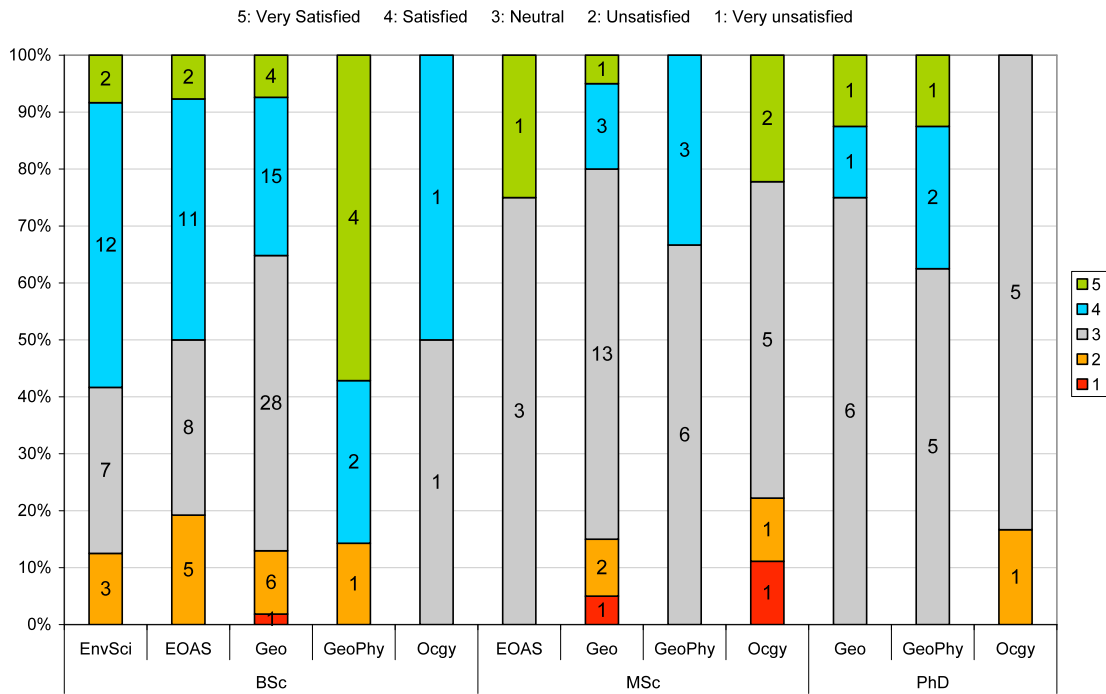


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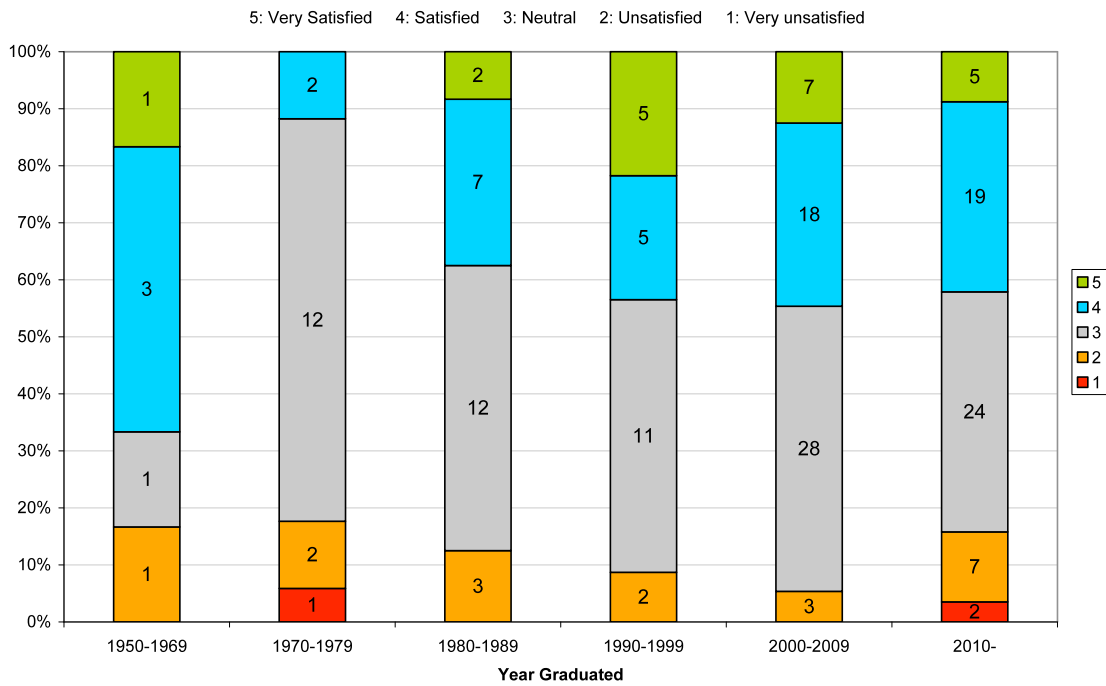
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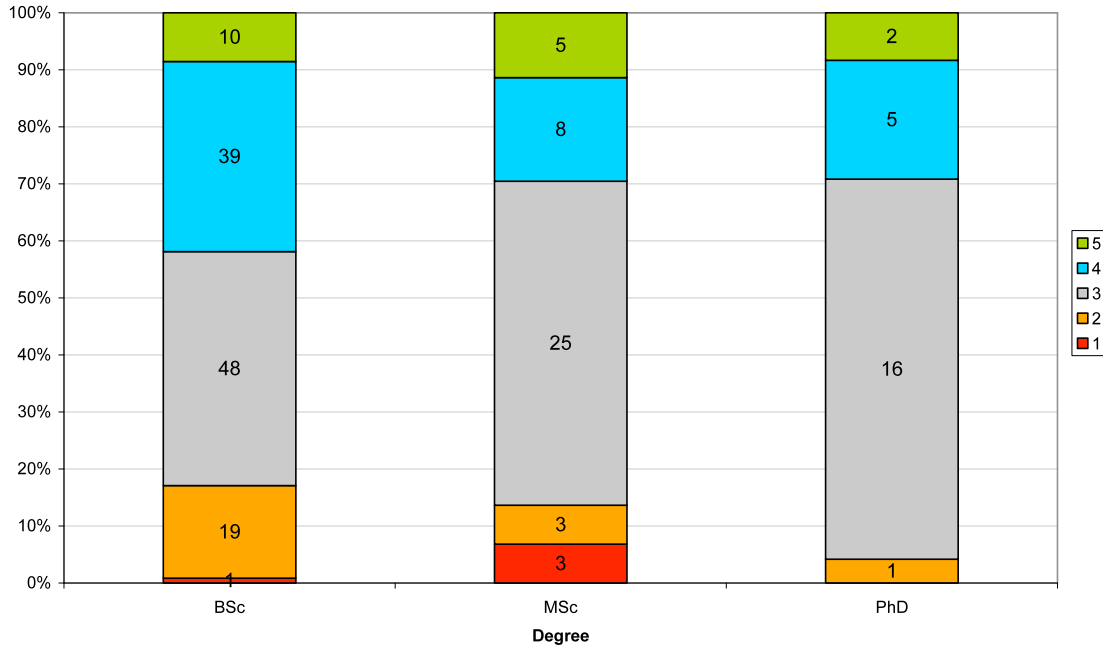
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**Calculus**



# Differential Equations

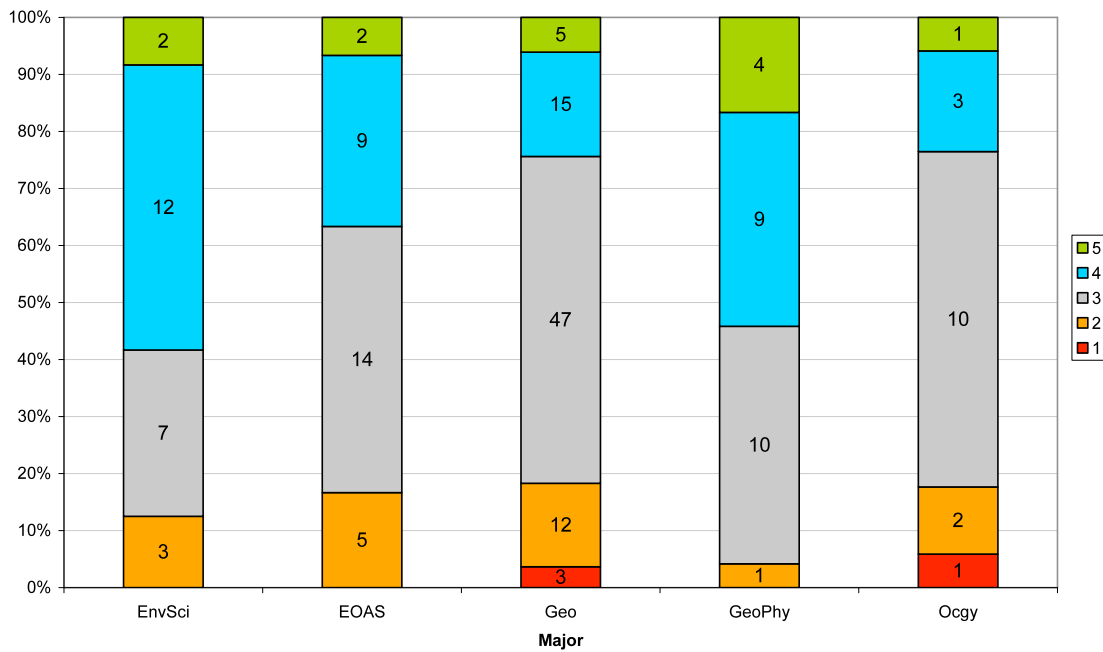
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Differential Equations**

5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



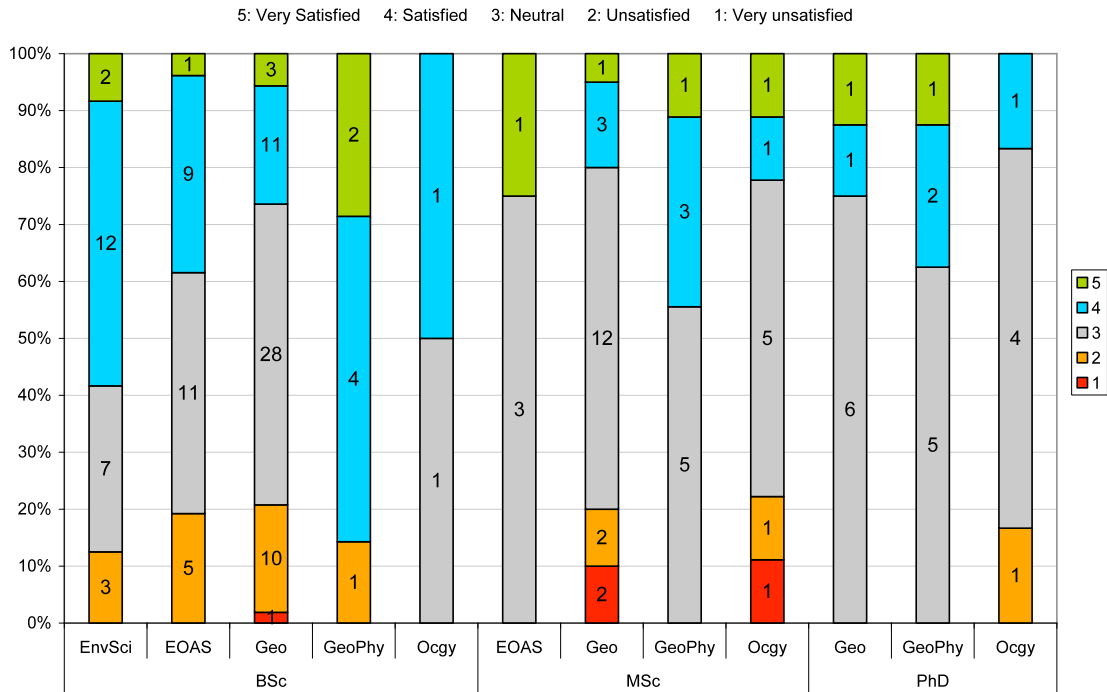
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Differential Equations**

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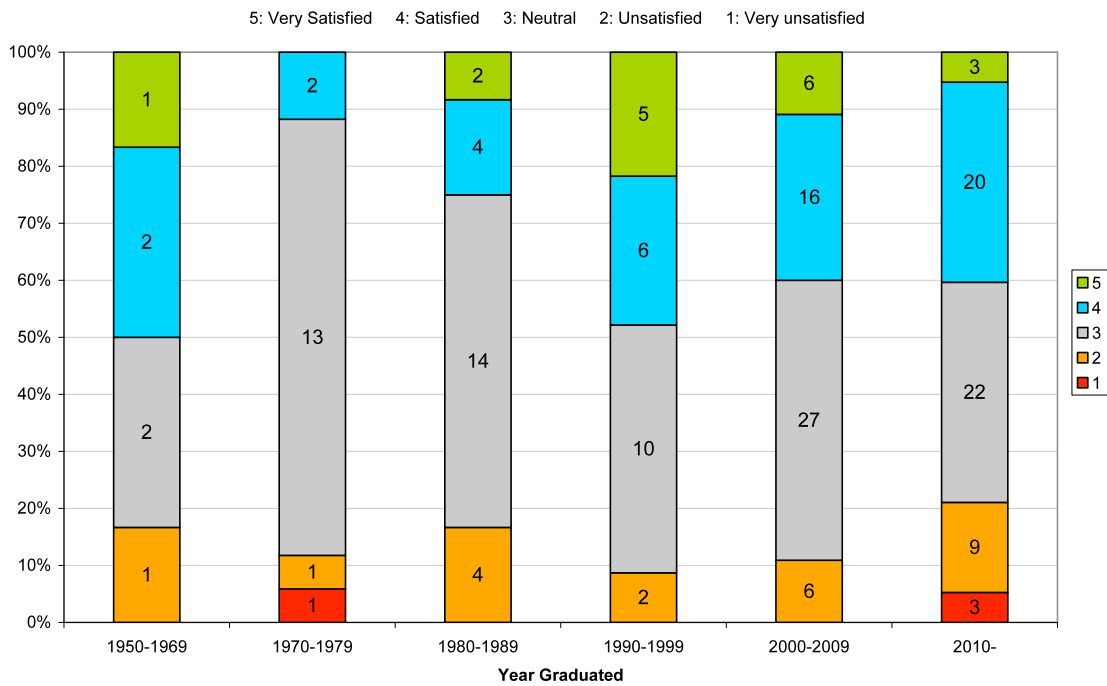




How Satisfied were you acquiring the following skill during your EOAS degree?  
**Differential Equations**



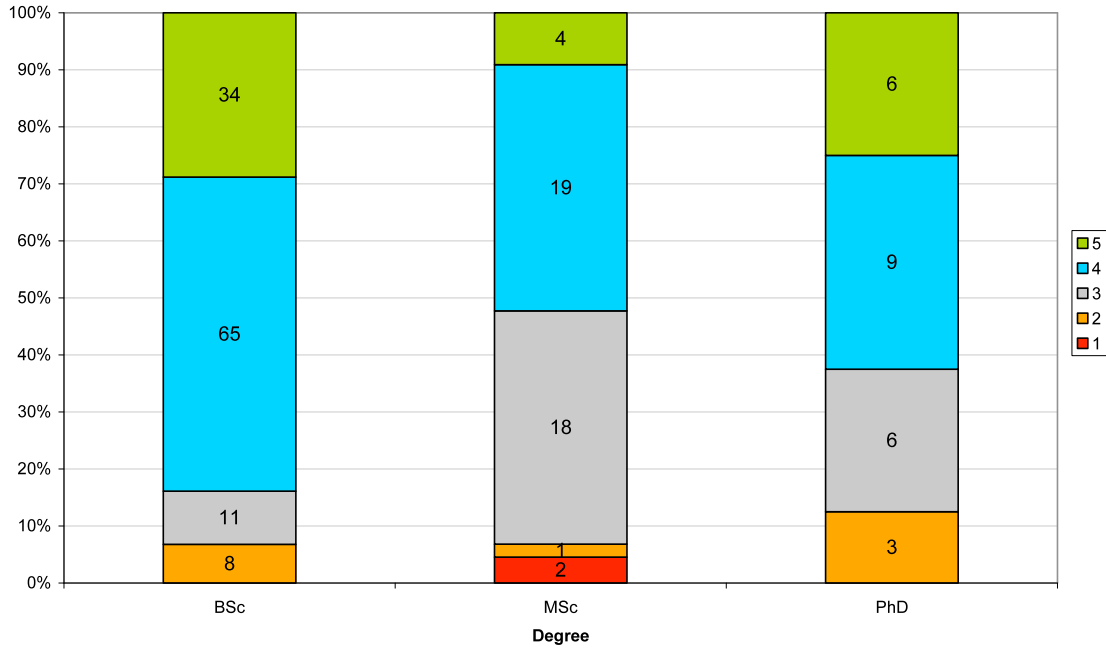
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Differential Equations**



# Teamwork Skills

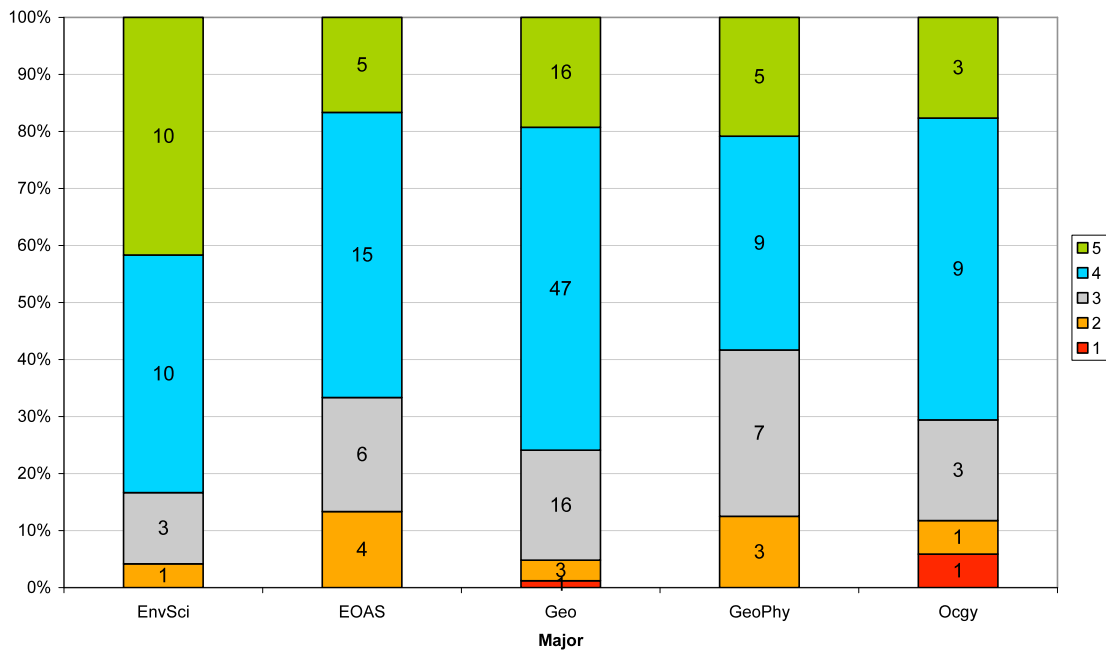
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Teamwork Skills**

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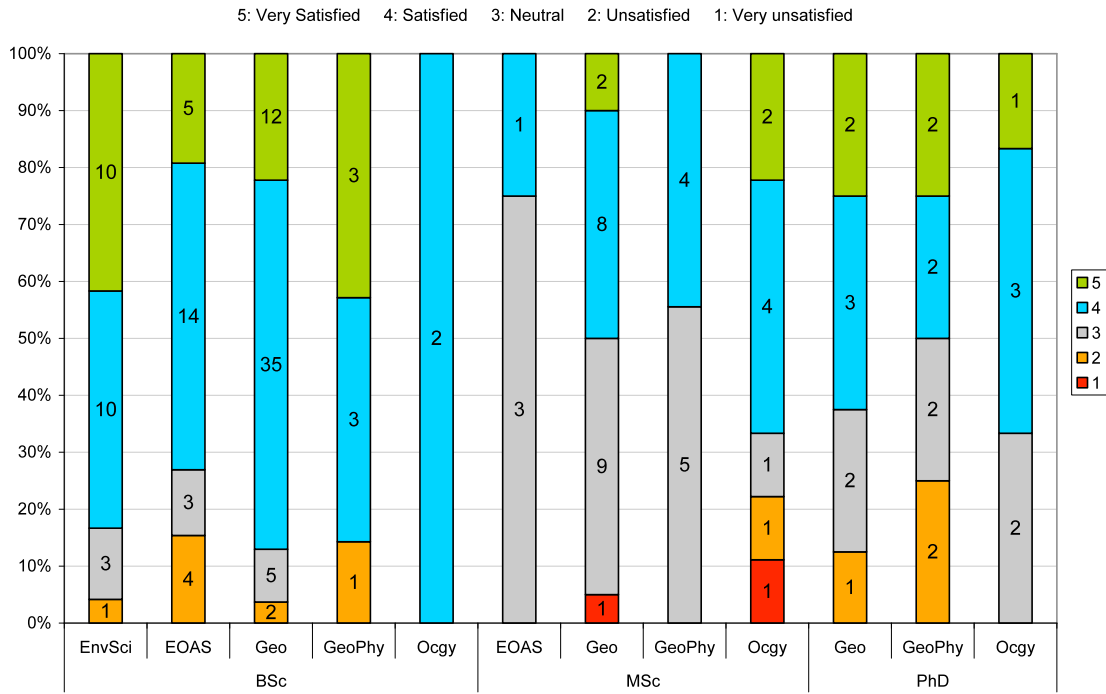


How Satisfied were you acquiring the following skill during your EOAS degree?  
**Teamwork Skills**

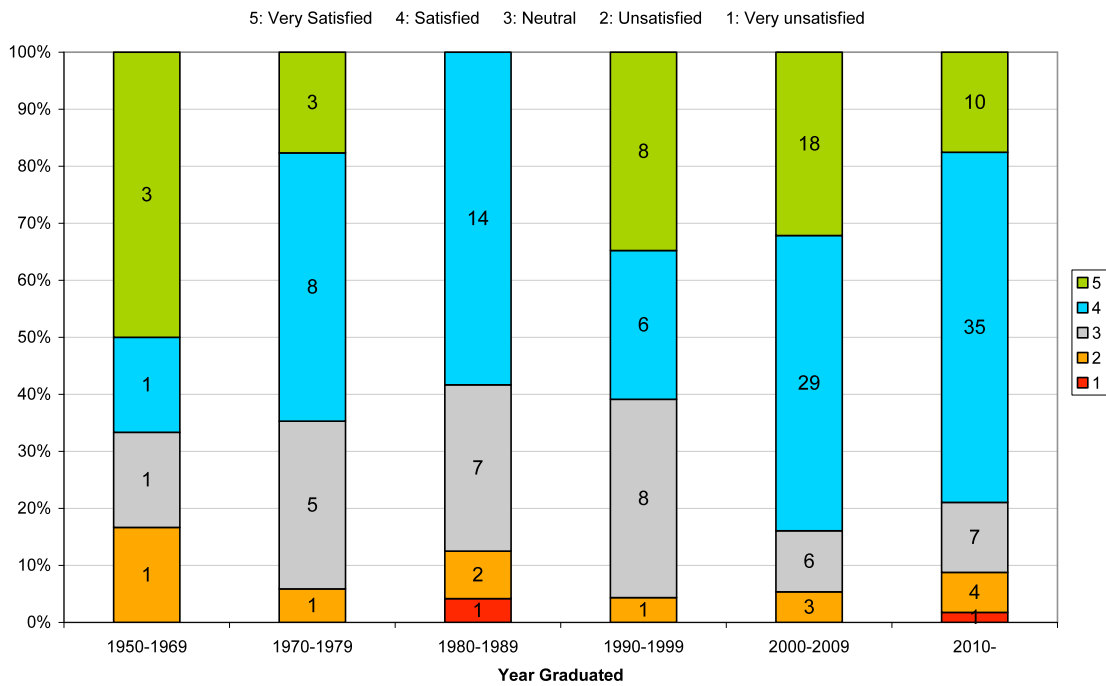
5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



How Satisfied were you acquiring the following skill during your EOAS degree?  
**Teamwork Skills**



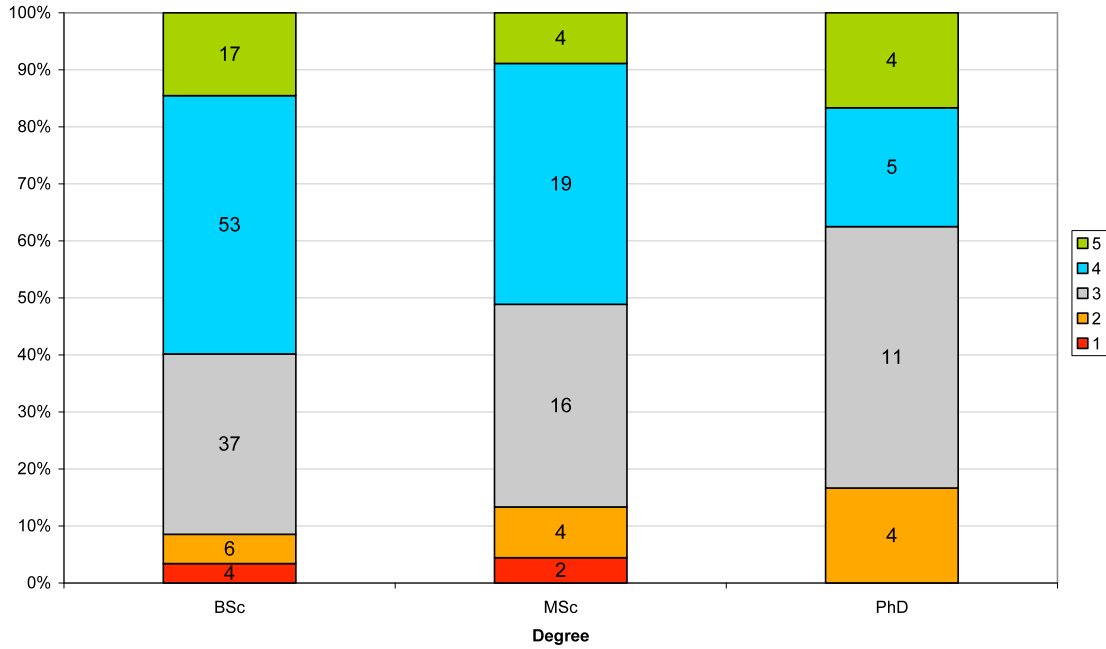
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Teamwork Skills**



# Leadership Skills

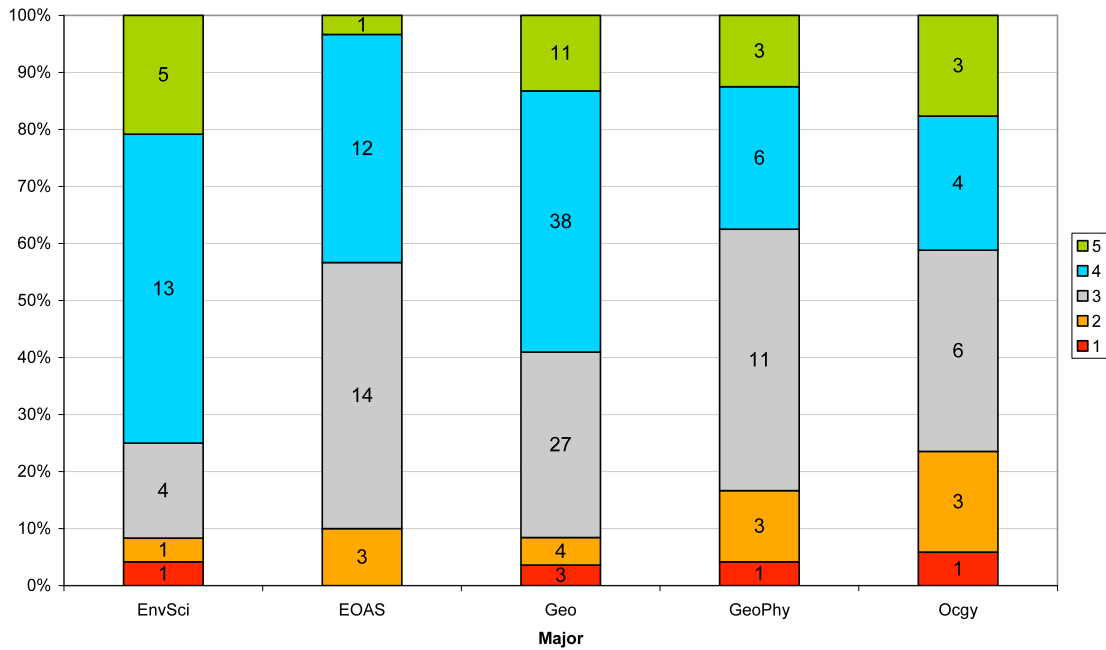
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Leadership Skills**

5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



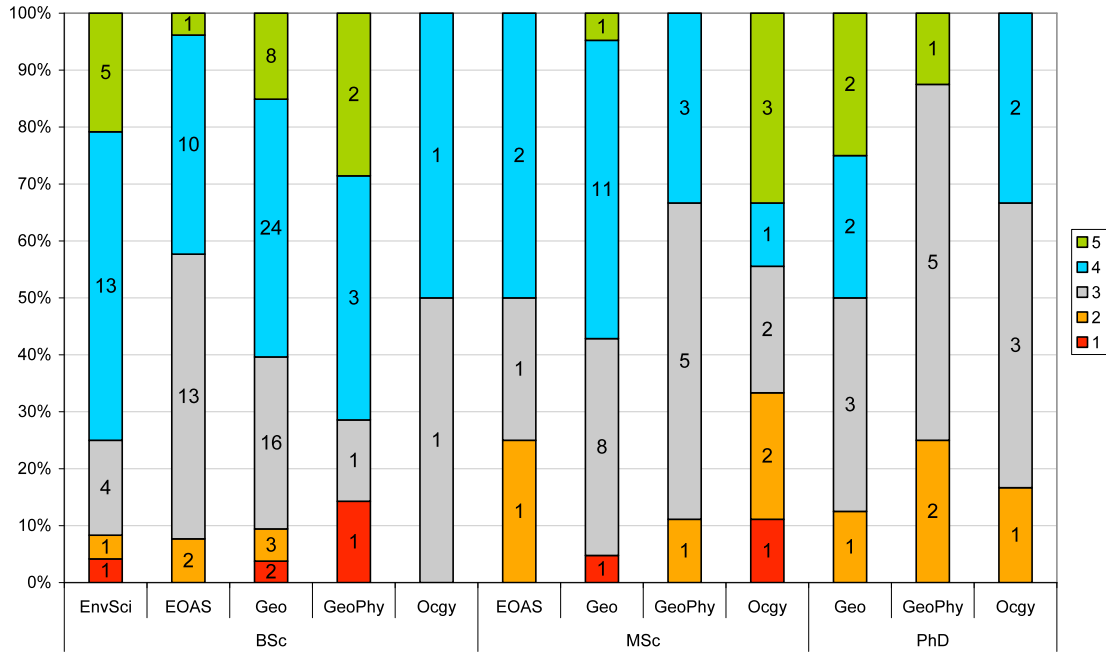
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Leadership Skills**

5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



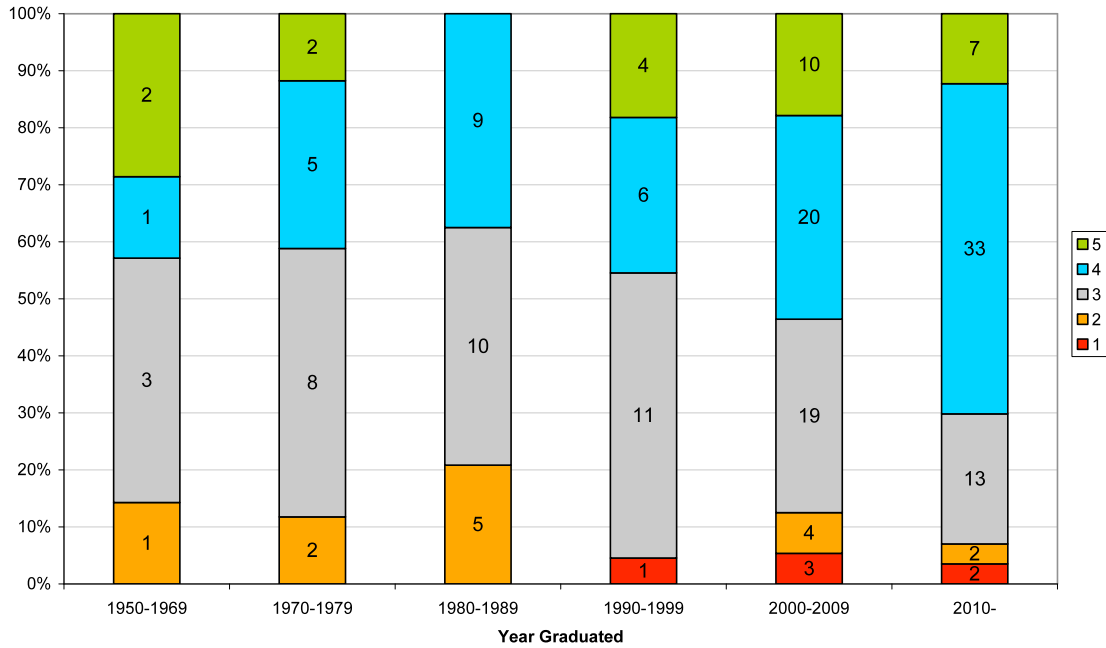
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Leadership Skills**

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How Satisfied were you acquiring the following skill during your EOAS degree?  
**Leadership Skills**

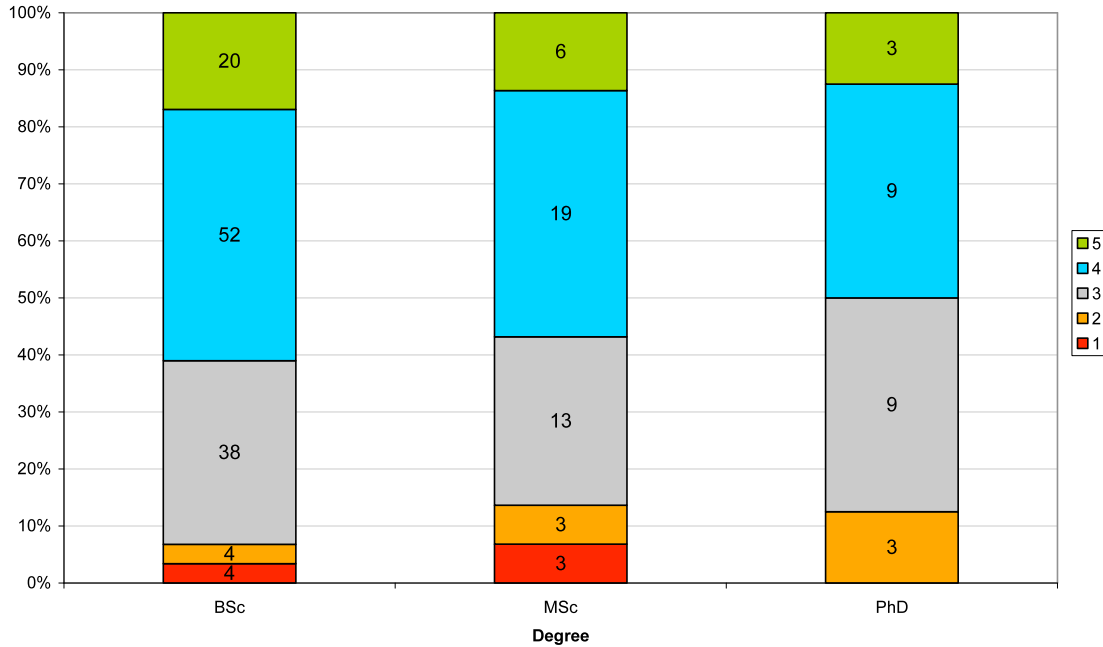
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# Time Management Skills

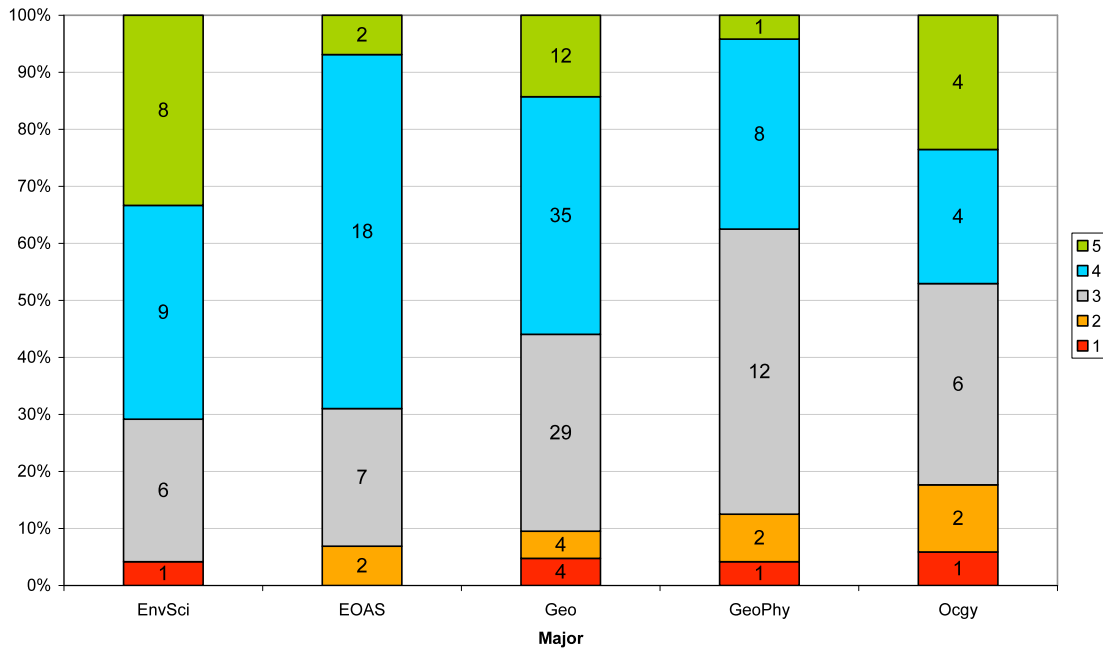
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Time Management Skills**

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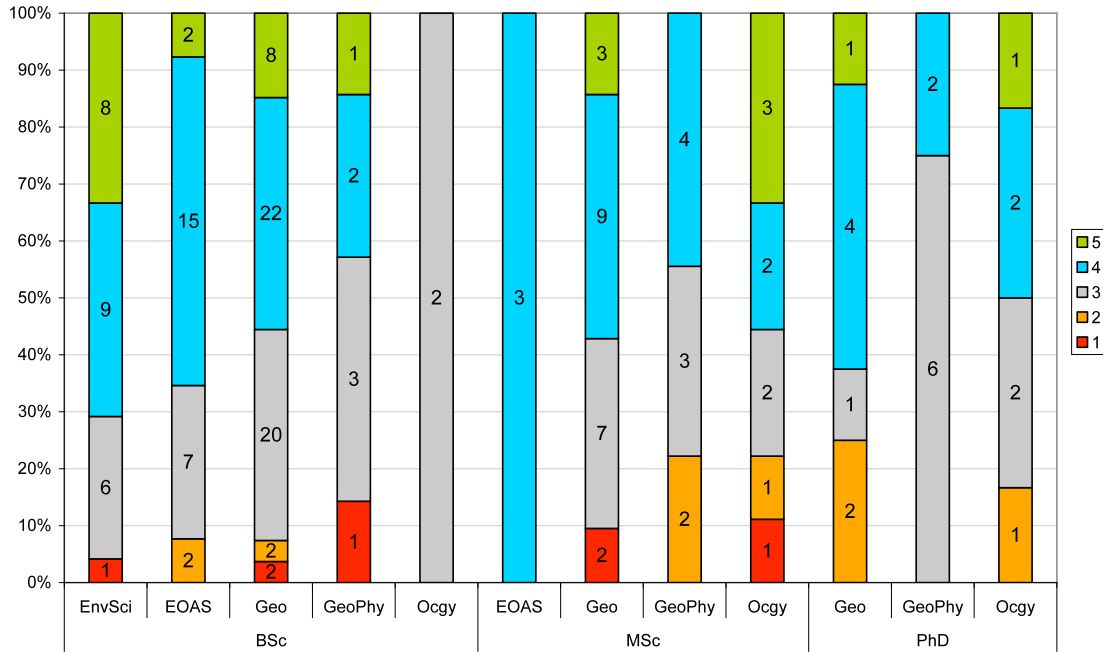
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Time Management Skills**

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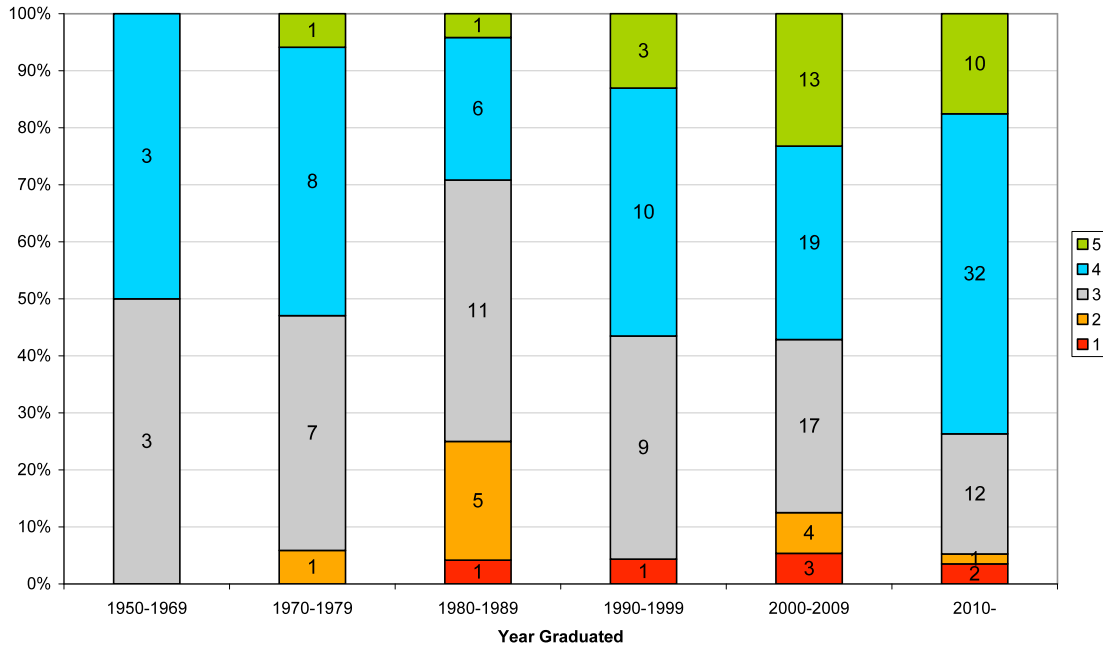
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Time Management Skills**

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How Satisfied were you acquiring the following skill during your EOAS degree?  
**Time Management Skills**

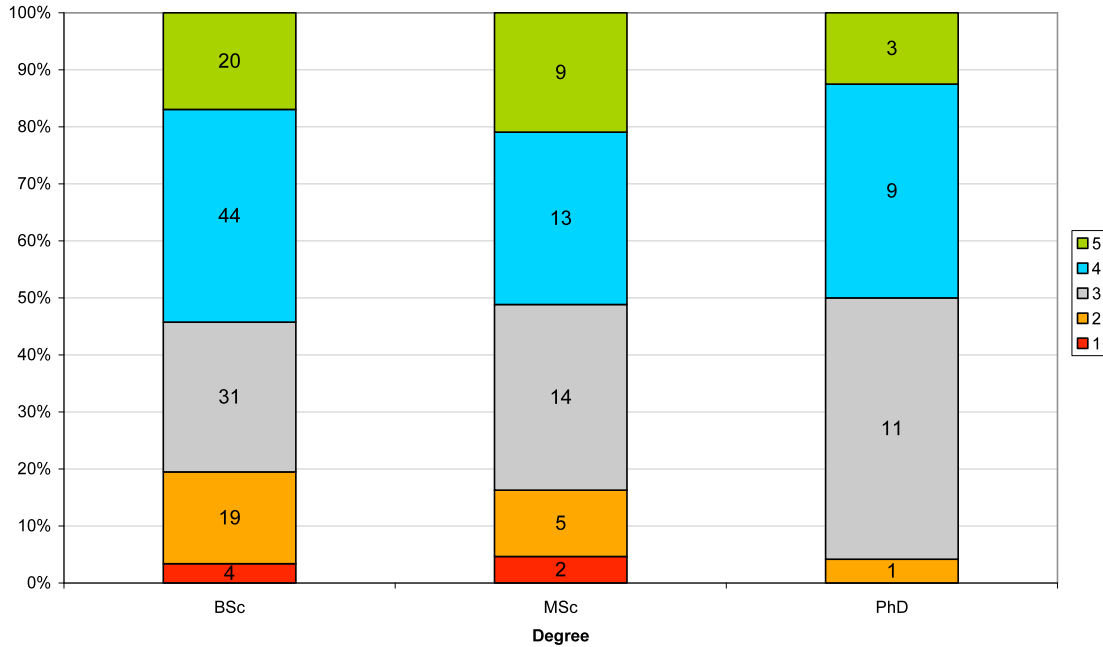
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# Project Management skills

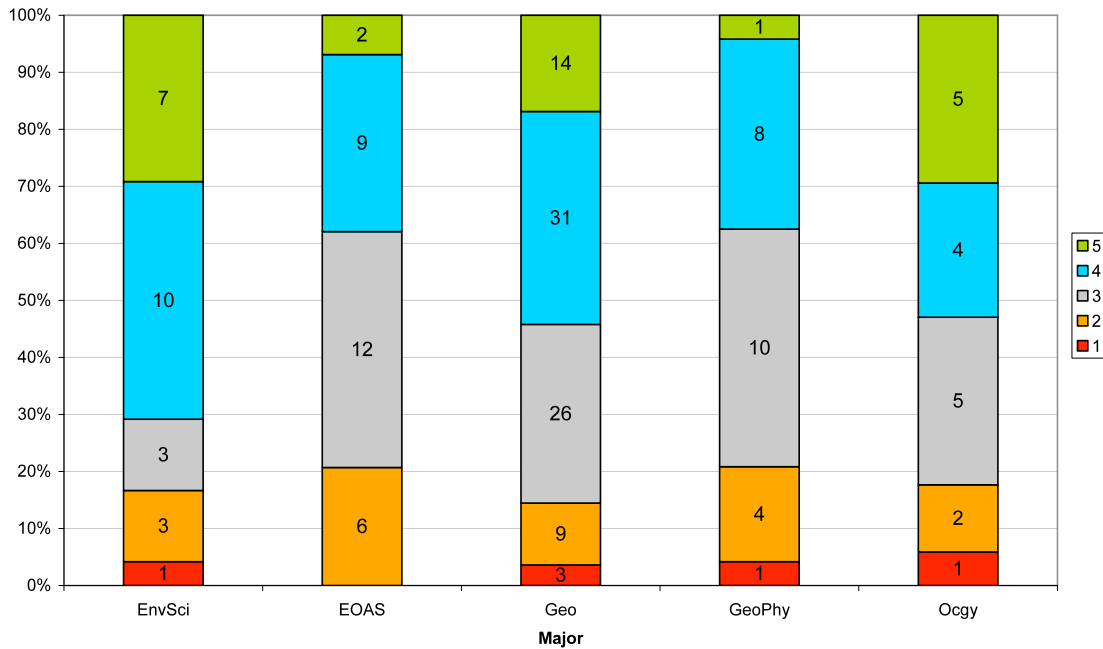
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Project Management Skills**

5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



How Satisfied were you acquiring the following skill during your EOAS degree?  
**Project Management Skills**

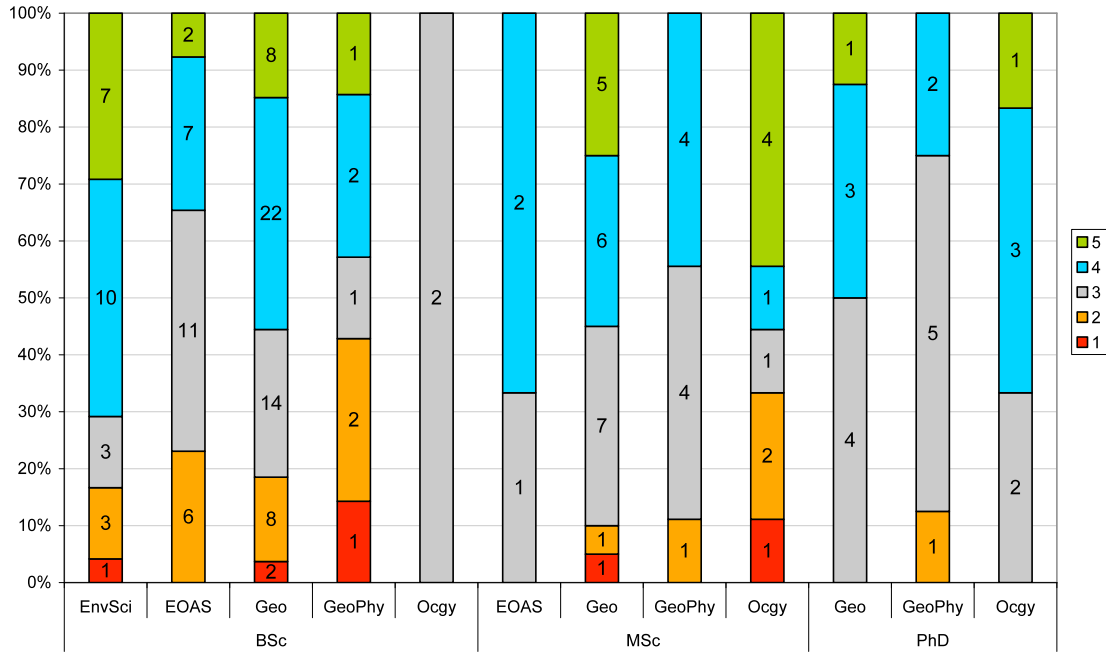
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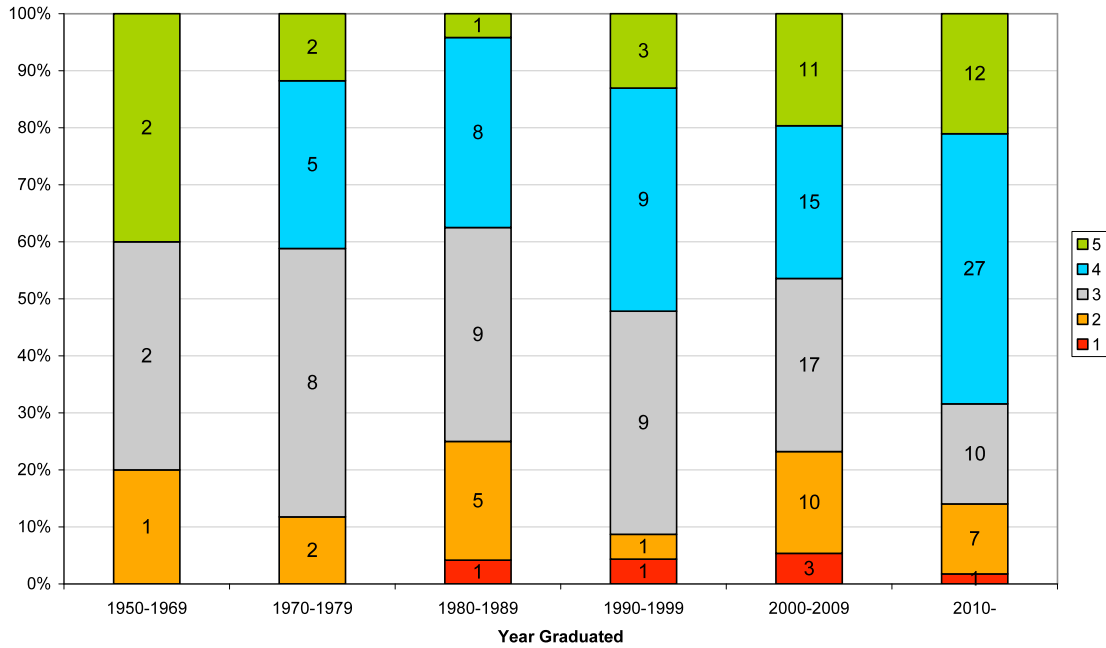
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Project Management Skills**

5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



How Satisfied were you acquiring the following skill during your EOAS degree?  
**Project Management Skills**

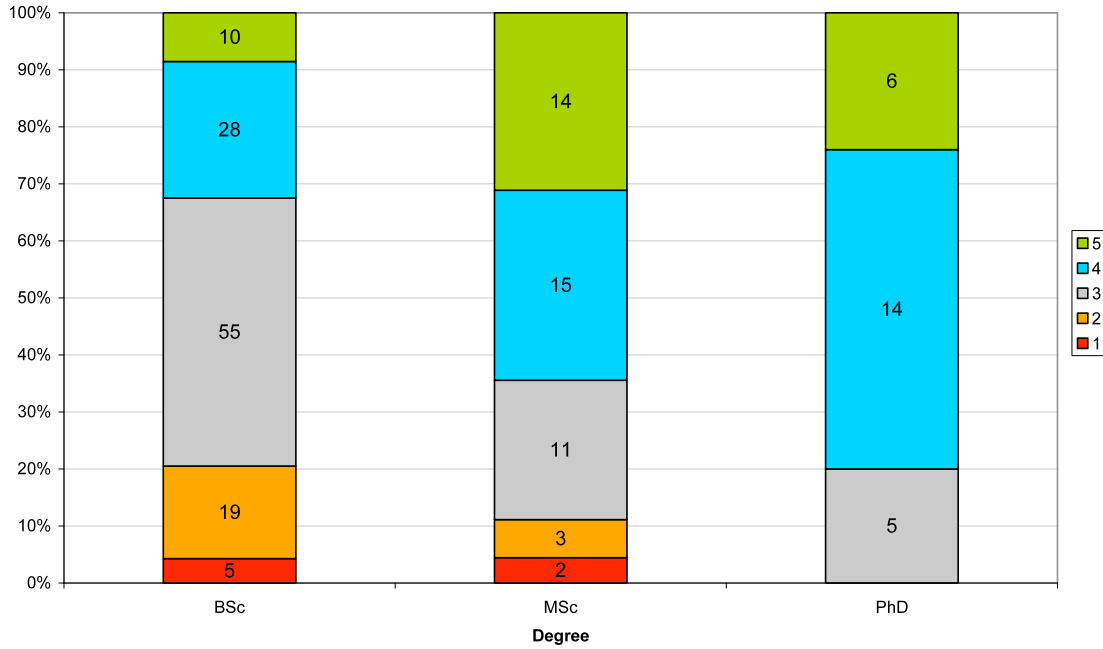
5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



# Teaching and Tutoring Skills

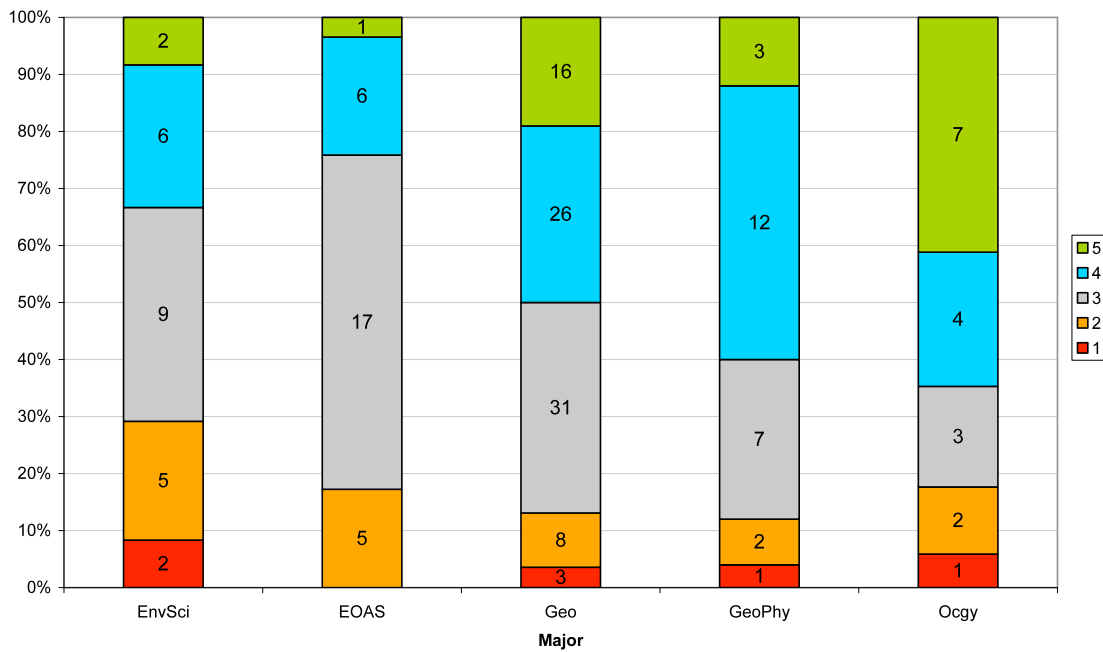
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Teaching or Tutoring Skills**

5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



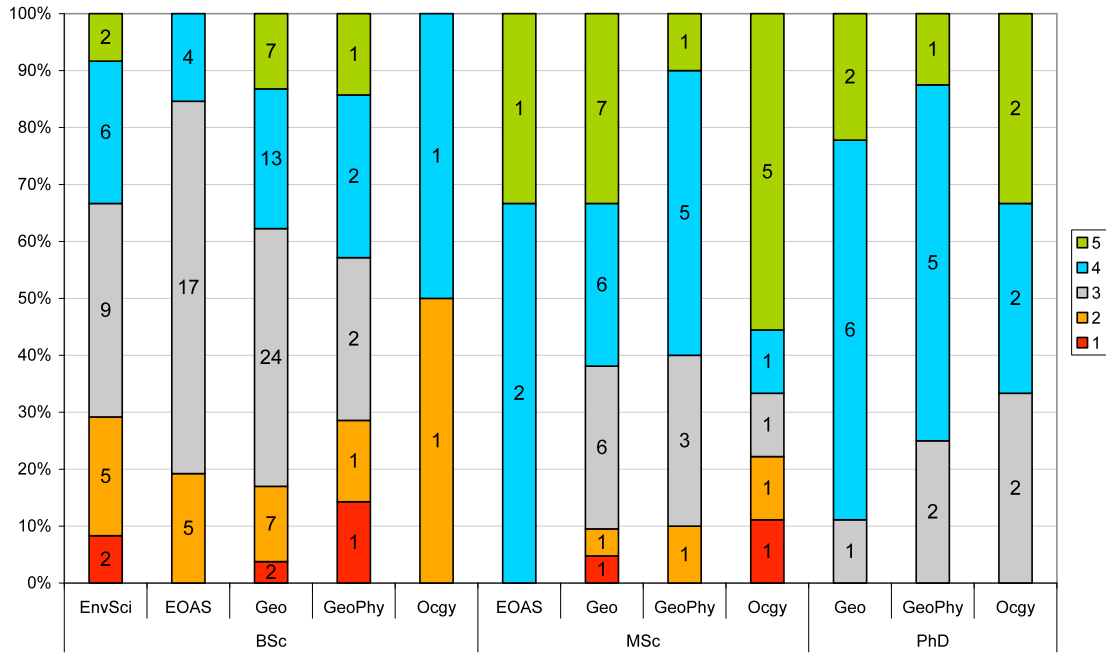
How Satisfied were you acquiring the following skill during your EOAS degree?  
**Teaching or Tutoring Skills**

5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



How Satisfied were you acquiring the following skill during your EOAS degree?  
**Teaching or Tutoring Skills**

5: Very Satisfied 4: Satisfied 3: Neutral 2: Unsatisfied 1: Very unsatisfied



How Satisfied were you acquiring the following skill during your EOAS degree?  
**Teaching or Tutoring Skills**

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