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Patience Is A Virtue: The Effect Of Students' Time Preferences On Their Academic Results

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Patience is a Virtue: The Effect of Students’ Time Preferences on Their Academic Results

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Let’s do a survey 😊

• Read the information sheet
• Now do the survey

What does the survey reveal?

• Consistency?
  – Once the switch is made, it stays
  – Some of us switch early
    • On or before statement 5
    • On or before statement 10
    • Paid 7 months from now: $x for all statements
  – Some of us switch later
    • On or before statement 15
    • On or before statement 20
  – Some of us never switch
    • Paid one month from now: $54 for all statements

What does this mean?

• Switching early:
  – high discount rate
  – high rate of time preference
  – impatient
• Switching later:
  – low discount rate
  – low rate of time preference
  – patient

What does this mean for our students?

• Expect that:
  – Students with high discount rates will get lower marks
    • More impatient
    • Procrastinate
    • Attend fewer classes
  – Students with low discount rates will get higher marks
    • More patient
    • Get on with tasks
    • Attend more classes
Let’s test this

Data

– Semester one and two 2011
– Economics 1 students
– Lecture 13 in Semester 1 and lecture 4 in Semester 2
– Two metropolitan campuses
– N = 412
  • 191 completed the survey
  • 163 were consistent

Comparison of students who completed the survey (n = 191) with those who didn’t (n = 221)

Students who completed the survey:
• Were slightly older  
  – (F = 8.85; p = 0.0031)
• Had higher mark (55% cf 37%)  
  – (F = 60.40; p = 0.000),
• Had higher course average (60% cf 48%)  
  – (F = 42.39; p = 0.000),
• Attended more tutorials (on average 10 cf 6)  
  – (F = 140.75; p = 0.000)
• Had parents with less education (43% cf 59%)  
  – (chi sq = 8.3518; p = 0.004).

Comparison of consistent surveys (n = 163) with inconsistent surveys (n = 28)

Students who completed consistent surveys:
• Had higher final marks (58% cf 42%)  
  – (F = 18.49; p = 0.000)
• Had a higher course average (68% cf 48%)  
  – (F = 24.00; p = 0.000)
• Lived at an address with a higher socio-economic index (IRSAD) score  
  – (F = 5.85; p = 0.017)
• Were more likely to be studying part-time  
  – (chi sq = 3.0927; p = 0.079)
• Were more likely to be domestic students  
  – (chi sq = 8.3288; p = 0.004).
### Bivariate Results

- Females, on average, have lower discount rates, interpreted as being more patient.
- Tutorial attendance is negatively correlated with discount rates (higher attendance with lower discount rates).
- Differences in discount rates across other student characteristics are not statistically significant.

### Multivariate results

The regression results show that:
- The discount rate is positively correlated with final marks - procrastination is a virtue??
- Enrolment type influences final marks with full-time students having poorer marks on average
- Tutorial attendance influences final marks with final marks increasing with attendance

### The Grasshopper and the Ants by Aesop

One fine day in winter some Ants were busy drying their store of corn, which had got rather damp during a long spell of rain. Presently up came a Grasshopper and begged them to spare her a few grains, “For,” she said, “I’m simply starving.”

The Ants stopped work for a moment, though this was against their principles. “May we ask,” said they, “what you were doing with yourself all last summer? Why didn’t you collect a store of food for the winter?” “The fact is,” replied the Grasshopper, “I was so busy singing that I hadn’t the time.” “If you spent the summer singing,” replied the Ants, “you can’t do better than spend the winter dancing.” And they chuckled and went on with their work.