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ABSTRACT

To examine whether a professor's reputation affects course selection, a survey was conducted of about 280 students in a junior level marketing class required of all business students at Bowling Green State University (Ohio). The questionnaire listed 25 economics professors and asked what the students had heard about the professors in five dimensions: hard to get an A or B from; easy to get a D or F from; requires hard work; intimidates students in class; and seems to care about students. Students were also asked which professor they would like to have, which they would least like to have, and which they would select assuming they wanted to work hard and learn a lot. Finally, they were asked which professor they had for which class, and whether they would recommend him/her to a friend. Results included the following: (1) the reputation of some professors is not the same for all students; (2) one-fourth of the professors are expected to be easier by students who choose them; (3) most students do not express an opinion about the professor they would choose; and (4) most students who had not had a given professor had as much information about that professor as students who had taken a course with him/her. The questionnaire is appended. 8 references. (KM)

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DOES A PROFESSOR'S REPUTATION AFFECT COURSE SELECTION?

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The consumer model of education is based on the assumption that learners should be sovereign, that they appreciate the implications of alternative forms of teaching, curriculum, and training. While the popularity of Allan Bloom's The Closing of the American Mind (1987) and efforts to demonstrate the dichotomy between students' and professional peers' assessment of classroom performance (Goebel and Cashen, 1985; Haas, Keeley, and Browne, 1979) suggest substantial opposition to the consumer model, university administrators and faculty persist in their fascination with "what students think."

Related to the issue of whether student objectives should direct teaching behavior is debate about the extent of student competence to assess particular faculty behavior. Clearly they are eminently qualified to indicate whether teachers are enthusiastic, punctual, and humorous. Their ability to assess appropriate level of difficulty, quality of the syllabus, or the encouragement of critical thinking is more limited.

The quality of student opinions can be analyzed by two kinds of data - student evaluations at the conclusion of courses and the stock of information they use to choose sections of the courses they take. Of particular significance in such analyses

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is the potential tension between a professor's emphasis on learning more and better and a learner's desire to mute that emphasis. If such a tension exists, it threatens the legitimacy of the consumer model of education.

Student evaluation studies do not reveal powerful generalizations about the impact of the perceived "hardness" on student evaluation scores. The impact may be virtually nonexistent (Baird, 1987), minor (Burdsal and Bardo, 1986), or highly important (Miron and Segal, 1986). So many variables influence student evaluation scores that consistency among student evaluation studies is rare, with the single exception of the almost universal salience of instructor enthusiasm.

This paper analyzes the quality of student opinions by looking at the second type of relevant data - the information students use to select particular instructors. Because this information is so often inchoate, research based on student's selection criteria is infrequent. King (1983) found that expected class size affected the behavior of those students he surveyed; Kassaye (1984) discovered a depressing tendency for students to use ethnic background and national origin as predictors of whether a professor would be selected. Our research focuses on students' expectations about the extent of learning and anticipations about how demanding alternative professors will be.

At those schools where students are allowed to select the section of many of the classes they take, the professor, if

known to the student, becomes a part of the choice process. Students will naturally seek out information about professors from friends and acquaintances. Consequently, a student-generated grapevine of information about professors circulates among students.

From the perspective of the consumer model of education, one measure of the professor's success is student satisfaction. When the student actively chooses a professor, those who respect the consumer model feel that the professor is doing something good. When students refuse to take classes with a professor, it is evidence that the professor is not doing some part of his job in a satisfactory manner. An important question is whether this view of teaching has some hidden costs that may not be in the best interest of the student's education.

When a student chooses among professors, one variable of interest to the student is the prospective professor's grading policy and general orientation toward making the student work. Is it true that students will avoid professors who are harder and thus provide incentives for these professors to become more like their easier peers to maintain customer satisfaction? More broadly, the question we wish to address here is whether the students choose on the basis of the reputation of the professor.

What about the professor's reputation causes a student to choose or avoid a professor? An added question we have asked is whether the grapevine is accurate. Is the information in the grapevine reliable? If the consumer is supposed to make

rational choices, it is important that the information upon which the decision is made is accurate.

We realize that the professor's reputation is not the only aspect of the choice students make. There are many other variables in the selection process. When does the section meet? How many days a week does the class meet? What friends are signed up for the class? And so on. Despite the salience of these criteria, there is an incentive for students to collect information about professors and their expectations concerning student performance. What information does the grapevine have about the difficulty of the professor? Does this information affect student choice of their professors? And just how efficient is the grapevine? How accurate? This paper attempts to address these questions.

DATA

In the fall of 1986, a questionnaire was developed and used to survey about 280 students in a junior level marketing class required of all business students at Bowling Green State University. The questionnaire listed 25 professors in the Department of Economics at Bowling Green State University and asked the students what they had heard about each of these professors in five dimensions: Hard to get an A or B from, easy to get a D or F from, requires hard work, intimidates students in class and seems to care about the student. In addition, the student was asked which of the twenty-five professors they would like to have for the intermediate level economics classes (if

they had not had the classes). Two intermediate level economics classes were required of business majors at that time. Students were asked for professors they would least like to teach their particular intermediate class. They were also asked who they would take for the intermediate classes assuming they wanted to work hard and learn a lot. Finally they were asked what economics classes they had had, who their professor was and whether they would recommend that professor to a friend. A sample of the questionnaire (with professor names removed) is shown in the appendix. The analysis that follows is based on this data set.

ANALYSIS

Our first effort is to examine why students choose some professors and actively avoid others. We want to know whether the evidence is consistent with the hypothesis that the student is avoiding professors because the professor is perceived as hard. Our suspicion is that the harder the professor is perceived to be, the less likely a student is to sign up for the professor.

To test this hypothesis, we did the following. When a student said that he or she would choose a professor, we put that student's view (of the hardness etc.) of that professor into one data set. We had twenty-five "would choose" data sets, one for each professor. We then did the same with those professors who students would actively avoid. We then took the data from the "would choose" file and found averages of the five traits for each professor and did the same for the "avoid"

file. The two sets of averages for each professor were then compared for statistically significant differences. This comparison would tell us whether there is a significant difference between the perception of the various traits by the students who would choose the professor and those who would avoid the professor. If there is no difference in the means of these variables, students are choosing or avoiding on the basis of some factors other than the traits we have examined. If the difference of the means is significant, we expect that mean for the "avoid" group will indicate a harder rating for the professor. The results are shown below in Table 1.

Table 1
Do Students Who Choose a Professor View the Professor
Differently Than Those Who Avoid the Professor?
t Statistics Measuring Difference in Means
* significant at the 5% level

Question	Hard A	Easy F	Works Hard	Intimi- dates	Cares	N1	N2
1	1.9640	-1.9519	-1.5714	0.6513	-2.600*	4	5
2						9	1
3	3.7159*	-3.7508*	-1.4763	1.5697	-3.7984*	6	32
4						8	1
5	5.9295*	-0.4045		-0.6000		3	5
6						1	21
7	1.1397		1.9564	1.6862		36	3
8	1.9359	-1.6917	0.1439	1.3843	-1.6686	12	5
9						1	19
10	1.2674	-0.5477	1.0583	3.1361*	-4.7074*	7	3
11						0	6
12						13	1
13						1	1
14	3.8891*	-3.4780*	0	12.0748*	-3.3166*	3	3
15						1	7
16	3.5176*	-3.7669*	1.7736	1.9370		10	2
17						1	1
18	4.0573*	-1.2509	-0.0237	3.3037*	-4.2991	12	6
19	6.1659*	-2.6160*	1.8717	0.3885	-1.5352	13	11
20						23	1
21	3.0210	-3.0000	3.0000	5.6568*	-1.0247	2	3
22						1	3
23	1.3568	-0.1706	1.0884			2	17
24	2.4664*	-1.6808	0.1270	15.5805*	-2.0967	7	8
25						5	1

Some observations are in order. First note that the N_1 is the number of students who would choose the professor while N_2 is the number who would avoid the professor. In fact, since not all students who choose a professor responded to every question about the professor, N_1 and N_2 are the largest number of the respective students responding to any question about the professor. Second, in any case where the professor had one or fewer respondents to any question, the t test for that question failed. If there was only one respondent, the variance was zero. Third, the hard A question is scaled so that low scores indicate hardness. Thus a positive t statistic means that those who would choose the professor thought he would be easier to get an A from than those who would avoid the professor. Similarly a negative t for the easy F question means that those who would avoid the professor thought that it would be easier to get an F from the professor than those who would choose the professor.

The main result from this exercise is that for some professors, there is some evidence that those who would choose the professor believe that the professor has different traits than those who would avoid the professor. Thus the reputation of the professor is not the same for all students. Second, in seven of the thirteen cases we report, those who would choose a professor believed he or she was significantly easier than those who would avoid the professor. No significant differences occur where the professor chosen was thought to be harder by students choosing the professor. Hence, for one fourth of the professors, students who choose the professor do so with an expectation that

the professor is easier. Note that there is a similar but weaker relation for the hard F question. In only four of the seventeen cases we report is there a significant difference in the student view of a professor with regard to getting an F. But in all four cases, the students choosing the professor did so with the expectation that it would be hard to get an F. Generally students are not avoiding professors because they believe they are likely to get F's. Finally, the two groups of students seem to have remarkably similar views of the professors. For example, both those who would choose and those who would not have the same belief about how hard they are likely to have to work.

The most important observation is that most students do not express an opinion about who they would choose or not choose for the intermediate level courses. Only in the cases of eight professors do we even have observations on all traits for both choose and not choose to conduct the statistical test. In every other case, either the professor was not selected for a course or was not avoided so that the difference of means could not be calculated for all traits.

We can tell something about the choice process if we examine the number of times each professor was chosen and the mean of the variables and the number of times students chose to avoid the professor and the means of those variables. This information is shown in Tables 2 and 3. In Table 2 we report the means for the variable for students who would choose the

professor, while Table 3 includes the means for the variables for students who would avoid the professor.

Table 2

How Many Students Would Choose to Take a Course
and the Mean of Their View of the Professor

Question	Students	Hard A	Easy T	Works Hard	Intimidates	Cares
1	4	4.50	3.50	2.67	5.00	2.00
2	9	4.44	3.14	4.00	4.67	3.17
3	6	2.83	4.60	1.00	1.83	1.67
4	8	4.75	2.43	5.50	5.88	1.43
5	3	5.33	4.00	6.00	2.50	1.00
6	1	1.00	7.00	1.00	1.00	
7	36	6.06	2.06	5.41	6.04	2.48
8	12	3.58	4.09	2.33	5.33	1.50
9	1	1.00	4.00	2.00		
10	7	2.83	4.33	2.00	5.43	1.57
11	0					
12	13	5.77	1.73	5.22	6.25	2.80
13	1	5.00	3.00	3.00	6.00	2.00
14	3	5.33	2.33	3.00	7.00	1.67
15	1	5.00	5.00	5.00	6.00	4.00
16	10	5.50	2.29	5.62	5.75	2.60
17	1	1.00	6.00	1.00		5.00
18	12	3.83	3.83	2.18	5.00	2.27
19	13	5.31	3.00	4.15	5.09	3.00
20	23	5.36	2.50	4.22	6.36	1.78
21	2	4.50	4.50	4.50	6.50	4.00
22	1	1.00	5.00	1.00	6.00	4.00
23	2	3.50	5.00	4.50		
24	7	5.17	2.20	3.43	6.80	2.14
25	5	4.00	3.75	2.20	6.60	1.25

Table 3
How Many Students Would Not Choose to Take a Course
and the Mean of Their View of the Professor

Question	Students	Hard A	Easy F	Works Hard	Intimidates	Cares
Prof						
1	5	3.00	5.20	4.50	3.80	5.25
2	1	2.00	4.00	1.00	7.00	1.00
3	32	1.16	6.59	1.33	1.20	5.08
4	1	3.00	5.00	4.00	3.00	
5	5	1.20	5.00	2.33	3.00	4.33
6	21	1.38	5.53	2.29	3.14	4.92
7	3	5.00	1.00	3.33	4.00	6.00
8	5	1.75	6.67	2.20	3.50	3.33
9	19	1.11	6.47	1.27	2.69	6.23
10	3	1.00	5.00	1.33	1.00	4.50
11	6	1.17	6.67	1.20	4.50	6.33
12	1	7.00		7.00	7.00	1.00
13	1		5.00			
14	3	1.67	6.50	3.00	2.50	5.33
15	7	1.71	6.14	2.00	2.29	6.71
16	2	2.00	5.50	3.50	3.00	5.00
17	1				3.00	
18	6	1.50	5.00	2.20	2.17	5.33
19	11	2.09	5.11	2.89	4.71	4.57
20	1	1.00	4.00	5.00	6.00	2.00
21	3	1.67	6.00	3.00	2.50	6.33
22	3	1.67	6.00	2.00	2.00	7.00
23	17	2.29	5.20	3.60	5.20	5.13
24	8	2.38	4.38	3.29	1.50	4.60
25	1	2.00	6.00	5.00	7.00	3.00

In one sense, these two tables are more revealing than the difference of means. It becomes apparent that students are somewhat more aggressive about choosing a professor when the professor is viewed as easy or avoiding a professor when the professor is perceived as hard. In general the larger the number who choose a professor, the higher the average hard A, and the easier the professor is perceived. Similarly the higher the number who choose to avoid a professor, the lower the average hard A score and the harder the professor is perceived.

If we regress the number who choose against the average hard A score, we find the following relationship.

$$\text{Number choosing} = -2.4748 + 2.468 \text{ Hard A}$$

$$(t = 2.666) \quad R^2 = .244$$

Again, because a large hard A number implies it is easier to get an A, there is a significant relationship between the number who choose and hard A. *Ceteris paribus*, this means that more choose the instructor when the instructor is viewed as easier.

To examine the idea that the grapevine is accurate, we divided the data set into two subsets for each professor. One subset consisted of those who had had the professor for some course. The second subset included those who had not had the professor for any course. For each subset, we calculated the mean of the five main questions and asked whether the mean response to each of those five questions was different between the two samples. The idea is that the students who actually had the professor might view the professor differently than those whose information was only hearsay. If the grapevine is accurate, we would expect that the means would not be statistically significantly different. If the grapevine is not accurate, we would expect that the means of the two samples would have a statistically significant difference. The results of these calculations are shown in Table 4. N1 is the maximum number of students who had the professor and responded to any trait question, while N2

represents the maximum number of students who have not the professor, but responded to any trait question.

Table 4
Do Students Who Had a Professor View the Professor Differently Than Those Who Have Not Had the Professor?
t Statistics Measuring Difference in Means
* indicates significant at the 5% level

Question	Hard A	Easy F	Works Hard	Intimidates	Cares	N1	N2
1	1.3046	-1.8122	0.0160	1.5842	-0.6631	32	30
2	-0.4437	-1.2325	0.6793	2.8904*	-0.9204	15	42
3	0.5374	-0.2197	-1.8252	-0.0853	-3.0927	22	71
4	-1.3629	0.2670	1.4233	0.6844	0.1591	14	25
5	0.1769	-2.1074*	1.0318	2.0085	-1.7253	12	25
6	0.6400	-2.1125*	2.1015*	2.7210*	-0.8195	8	54
7	1.5036	-1.6252	1.4603	-0.2108	1.2234	39	90
8	2.4983*	-2.6531*	1.8004	2.9336*	-2.3017*	24	47
9	-0.6633	0.8289	-1.9257	1.0010*	-1.3217	12	61
10	-3.8310*	0.3144	-1.6765	0.6066	-1.5263	18	16
11						0	41
12	1.2412	-1.6521	1.7018	1.3254	-0.7816	4	40
13	0.9559	-1.6665	-1.1711	0.3849	-1.1711	2	13
14	0.6076	-1.0306	-0.1962	0.6774	-0.5736	6	20
15	0.3317	-0.1806	2.3157*	1.9565	-2.6471*	13	15
16	-1.8126	-0.4409	1.3627	1.4727	1.3504	13	34
17						1	10
18	-1.7764	0.4200	-0.8288	-0.6569	-0.6282	32	35
19	2.7720*	-1.5511	-0.0728	0.4432	2.2115*	47	43
20	-0.6061	-0.9676	-0.7387	2.7193	-1.6626	37	24
21	1.1586	-1.4302	0.3236	1.5627	-1.9004	11	10
22	-0.1259	-0.8864	0.2339	-0.9959	0.1468	8	13
23	1.4369	-0.9669	0.8985	2.5023*	-1.5033	42	43
24	1.5525	-1.7883	1.3331	2.0681*	-0.5305	30	21
25	-0.5954	0.2597	-0.6470	0.6806	-1.4386	22	18

The main conclusion from this exercise is that most students who have not had a given professor seem to have as good information about a professor as that of the students who have had a professor. There are some cases where those who had the professor have a different view of the professor than those who have not had the professor. But there are only two professors who are viewed differently on at least three attributes.

The interesting point is that there is no consistent pattern. There is no trait that is frequently missed by students. There are 5 cases where the intimidate factor is viewed differently by those who have had the professor than those who have not. But all other traits show at most three professors with significant differences. For the hard A question for one professor, students who had the professor generally believe the professor is harder than those who have not had the professor. In two other cases, those who have not had the professor believe that the professor is harder than those who had the professor. But on the whole, the student grapevine seems to have information that those who have had a professor would corroborate.

CONCLUSION

There may be a weak form of Gresham's Law at work in academics. If a student is allowed to select which of several professors to take for a course, the student has an incentive to select the professor who will provide the best grade since the grade goes on the transcript, not the name of the instructor or the quality of the instruction. Our data is consistent with the hypothesis that a professor with higher standards and who may be more challenging is less likely to be chosen.

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APPENDIX
QUESTIONNAIRE

This questionnaire is to ascertain what you know and think about the faculty in the Department of Economics. We believe that there is a student grapevine which rates professors. We want to find out what information is in the grapevine.

Section I

What have you heard about the professors in Economics? Answer by circling a number which best describes what you have heard or experienced about the professors in the department of Economics. If there are professors about whom you have no information, leave those lines blank.

PROFESSOR:

	Hard to get an A or B from						Easy to get an A or B from
One	1	2	3	4	5	6	7

PROFESSOR:

	Hard to get a D or F from						Easy to get a D or F from
One	1	2	3	4	5	6	7

PROFESSOR:

	Requires hard work						Does not require hard work
One	1	2	3	4	5	6	7

PROFESSOR:

	Intimidates students in class						Does not intimidate students in class
One	1	2	3	4	5	6	7

PROFESSOR:

Seems to
care about
students

Does not
seem to
care about
students

One 1 2 3 4 5 6 7

Section II

If you have not had Economics 302, 303, 304 or 311, do Parts A, B, and C.
 If you have had Economics 302 or 304 and 303 or 311, go to part C.
 If you have had 302 or 304 but neither 303 nor 311, do Parts B and C only.
 If you have had 303 or 311 but neither 302 nor 304, do Parts A and C only.

Part A

If you have not had either 302 or 304, who would you choose to teach this course if you could choose anyone of the professors listed above?

Are there any professors from whom you would not take this course even if it meant waiting until another semester to take the course to get another professor? If so, who?

Part B

If you have not had either 303 or 311, who would you choose to teach this course if you could choose anyone of the professors listed above?

Are there any professors from whom you would not take this course even if it meant waiting until another semester to take the course to get another professor? If so, who?

Part C

If your objective is to choose professors who will make you work hard and push you to learn the most you could, who would you choose to teach you 302 or 304 if you could choose any professor listed above? (You may list more than one).

If your objective is to choose professors who will make you work hard and push you to learn the most you could, who would you choose to teach you 303 or 311 if you could choose any professor listed above? (You may list more than one).

Section III

In this section we are requesting some basic demographic information about you so that we can more clearly understand the answers you have given above.

	YES	NO		
Have you had Economics 202?	—	—		
If yes, who was your professor(s) for 202? _____				
Would you recommend this professor to a friend for this course?	—	—		
Have you had Economics 203?	—	—		
If yes, who was your professor(s) for 203? _____				
Would you recommend this professor to a friend for this course?	—	—		
Have you had Economics 302 or 304?	—	—		
If yes, who was your professor(s) for 302 or 304? _____				
Would you recommend this professor to a friend for this course?	—	—		
Have you had Economics 303 or 311?	—	—		
If yes, who was your professor(s) for 303 or 311? _____				
Would you recommend this professor to a friend for this course?	—	—		
Have you had any economics course more than one time?	—	—		
If yes, which one(s)? _____				
What is your GPA? _____				
What is your college? _____				
What is your major? _____				
Circle the ones that apply:	Freshman	Sophomore	Junior	Senior
	Female	Male		

Thank you for your cooperation.