Behavior and Performance in the Economics Classroom
James E. McClure and Lee C. Spector, Ball State University

If we’re teaching brilliantly, but in the classroom uncivil behavior occurs and we ignore it, then we’re also teaching something else—that those behaviors are permissible. By default, we encourage the behavior. (Gerald Amada, 1999, Chronicle of Higher Education)

In loco parentis, the doctrine explicitly charged professors with guiding students’ intellectual and civic development, has vanished from the vast majority of college campuses. Also gone from campuses is the high degree of civility that once prevailed. According to Stephen L. Carter, author of Civility: Manners, Morals, and the Etiquette of Democracy, college students today exhibit markedly less decorum than did those of previous generations. Anecdotal evidence cited recently in The Chronicle of Higher Education (Mar. 27, 1998) suggests a rise in the number and severity of uncivil behaviors. No one believes that professors have overtly encouraged such behaviors, but as the epigraph correctly points out, uncivil classrooms can emerge when there is a reluctance to oppose them.

In the field of higher education, little has been done to examine the linkages between in student behavior and student performance.¹ This is surprising because such linkages have been under examination for some time in the elementary and high school education literature. In a study of elementary school students that corrected for differences in IQ, Swift and Spivack (1975, p. 8) point to "inattentiveness" and "negative" or "disturbing" behaviors as "dimensions" that negatively affect performance. In a study of high school students, Wentzel (1989) found

¹Attendance of college students is a behavior that has often been analyzed. For example, Devados and Foltz (1996) show that increased attendance lead to better performance. But attendance is not really an “in class behavior.” Our study of in class behaviors was able to ignore attendance because in the classes we studied all students were required to attend classes and consequently there was almost no variation in attendance across students.
that, holding SAT scores constant, wider deviations from classroom protocols led to lower grades.\(^2\)

To our knowledge, there are only two articles about the behavior of college students that are relevant to our investigation. Johnson and Butts (1983, p. 361) found a positive relationship between student achievement and "engaged time."\(^3\) Bob Boice (1996) investigated "classroom incivilities." Fewer "classroom incivilities" occurred in the classrooms of what Johnson and Butts would label more "engaging teachers."\(^4\)

This paper extends on these papers by analyzing how certain well recognized and easily observable types of behaviors are related to students' mastery of course content. We are professors of economics at a mid-size state university in the mid-western part of the United States; our investigation is limited to students enrolled in the economics classrooms at this university. Despite the obvious limitations of our study, we hope that our foray into the social fabric of the college classroom will spur others to do additional work in this area.\(^5\)

---

2. Commenting on Wentzel, Jussim (1991) questions the efficacy of enforcing classroom discipline because lower grades may simply have reflected the negative biases of teachers (who are not accorded respect). Further he speculates that there may be hidden costs to the enforcement of rules such as a reduction in student independence. But this ignores the hidden gains to the enforcement of rules: unny students negatively affect the opportunities their classmates have to learn. An analysis of the tradeoff between a student’s independence and his classmates' learning opportunities awaits future research.

3. "Engaged time" is defined as the sum of the following behaviors: 1) looking at the teacher or chalkboard; 2) taking notes; and 3) talking with the teacher or appropriately with other students. Engaged time is essentially a reciprocal to the "inattentiveness" measure used by Swift and Spivack to evaluate elementary school children.

4. "Boice's study was based on interviews with college students and faculty, and by making some intermittent classroom observations. He attended about half of the class periods (generally the first and last 20 minutes of an 80 minute class), but visited only a fraction of classes studied ("at least once a week").

5. An ethnographic analyses of myriad social interactions taking place in the college classroom are beyond the scope of this paper. But, as an anonymous referee pointed out, the results found later in the body of this paper, do suggest the potential fruitfulness of such
I. Disinterest and Boorishness in Economics Classrooms

In the literature of economic education, the relationship between student characteristics and performance have been studied at great length, but the behaviors of students in economics classrooms have been ignored. The first question that we had to consider was which classroom behaviors to examine. This is an open-ended question that has almost as many answers as there are professors. To narrow our investigation we simply asked our colleagues as to what classroom behaviors they thought were objectionable. Their responses fell into two general categories: 1) behaviors that are disrespectful to the professor because they strongly suggest disinterest in her lectures; and 2) behaviors that are disrespectful to classroom decorum but not necessarily the professor’s lectures (we label these boorish behaviors). 6

The student characteristics disinterest and boorishness are incorporated into an otherwise standard statistical model of student performance. Other student characteristics that have traditionally have been linked to performance in economics classrooms, such as gender and grade point average, are included in our statistical model as control variables. Our model assumes that student performance depends on: 1) an index of disinterest variables; 2) an index of boorishness variables; and 3) a vector of the traditional control variables.

As our measure of performance (P), we used the percentage of the total number of points available that students obtained on the multiple choice examinations that were given in the courses studied. This measure overcomes the objection that attempts to estimate the impact of classroom behaviors upon performance are meaningless because “performance” is subjectively determined by the instructor. 7 The disinterest index (D) is the sum (for each student throughout the semester) of instances of: 1) tardiness to class; 2) talking with other students without permission (each inappropriate conversation added a

---

6: “Boorish” is simply a label that we attach to a particular set of behaviors; no moral judgement should be implied.

7See footnote 2.
stroke to the tally); 3) sleeping in class; and 4) reading outside materials (such as newspapers or textbooks for other courses). The boorishness index (B) is the sum of instances of: 1) eating; 2) beverage consumption; and 3) failure to remove hats.\(^8\) The vector of control variables contains: 1) a dummy variable equalling one if the student is male (XY); 2) a dummy variable equalling one if the student is majoring in pre-business or economics (MJR); 3) the number of college credit hours the student had prior to entering the class (HRS); 4) the student’s grade point average at the start of the semester (GPA); and 5) dummy variables d1 and d2 which take into account that two instructors and two courses were involved.\(^9\)

In terms of the variables above, our hypothesis can be summarized by the following estimating equation:

\[
P = b_0 + b_1 D + b_2 B + b_3 XY + b_4 MJR + b_5 HRS + b_6 GPA + b_7 d1 + b_8 d2 + \epsilon.
\]

Data used to estimate this equation were collected in three classrooms and for two instructors between 1995 and 1997. Instructor A was observed for two different courses: 1) a survey of economics course with 31 students; and microeconomic principles course with 47 students. Instructor B was observed teaching microeconomic principles with 28 students. This allows us to control for differences in both course content and instructors. It is possible that “engaging” course content as well as “engaging” professors might impact student’s behaviors. Graduate students attended the entire class period of virtually every session of each class,\(^10\) keeping records of student behaviors from the back of the

---

\(^8\)Disinterest (D) and boorishness (B) represent (linear) sums of instances of particular sets of behaviors. Given that so little research has been done in this area, we had little guidance in terms of how to construct these variables and used linear weighting by default as the simplest. Also, the factors included in D and B are probably not exactly what every researcher would have included. The factors that we chose were those that we decided upon as a result of discussions with our colleagues. Again, the literature offered us no guidance on the factors to include.

\(^9\)We chose not to use attendance as a control variable because there were attendance requirements in the classes examined dampening absenteeism below the threshold of relevance indicated by Durden and Ellis (1995).

\(^10\)Graduate students were occasionally ill or had job interviews, but these were rare occurrences (once or twice in any one class per semester).
classroom. Students were not told what the graduate students were recording.

The results of running ordinary least squares on the estimating equation (1) are shown in Table 1. Based on the results in the table, the hypothesis that student performance is negatively related to disinterest cannot be rejected at a level just shy of 5%. On the other hand, one must reject the hypothesis that performance is negatively related to boorishness. There is little that is surprising in the results on the control variables. Gender (XY) and grade point average (GPA) have the usual signs found elsewhere in the economic education literature and are highly significant; better performances were garnered by males and students with higher grade point averages. The only other control variable that is significant is the number of hours taken by the student (HRS).

V. Conclusions and Recommendations for Future Research

If a professor teaches long enough, sooner or later, she will start musing about how great her students were in the "good ol' days." Long ago, in a classroom far, far away, our students seem to have studied harder, been better prepared, had better backgrounds, and communicated their thoughts more clearly. And in discussions of the new breed of students, it is almost inevitable that someone will disparage their class room behavior. Students do change from generation to generation, but so does culture. Regardless of our personal preferences about these changes, it is important to consider how they influence students' performances. The issue that this paper, in a modest way, examines is whether students might be learning less because of the way they are behaving in the classroom.

Admittedly, this paper has only explored the surface levels of a deep subject. We merely constructed a "short list" of classroom behaviors that seemed to rankle our colleagues and then examined in a controlled manner whether such behaviors significantly affected overall performance based on an objective criteria. Our results suggest that the ground for future research is fertile because we were able to show that, taken together, the behaviors that strongly suggest disinterest in the

We are merely reporting what is a standard result regarding the relationship between gender and performance in the field of economics. This result says nothing about the innate intelligence of females because there are so many cultural factors that undoubtedly play into it.
professor's lectures do seem to adversely affect student performance. As pointed out by an anonymous referee, the results of our paper suggest that "ethnographic data collection and analysis" (e.g. "intensive classroom observations over time, individual student interviews, and focus group interviews with student groups and professors") might produce important additional insights into the research questions framing this study. Clearly, much remains to be done.

Given the results found in this paper, what can be said about how instructors should address student disinterest? The answer is not as obvious as the question. One approach would be to institute a system of penalties for disinterested behavior and possible rewards for attentiveness. The problem with this approach is that it may damage professor-student rapport and enforcing it may be distracting and time consuming. Another approach is to simply provide students with the information that disinterest leads to lower grades and let them do what they want (as long as they are not disturbing others). A final possibility is to do nothing – let these young adults infer that disinterest is detrimental by their own experiences. But these latter two "solutions" raise the question of whether we shouldn't do more. Our results do not explain the best way to address student disinterest; analysis of this issue awaits further research.\textsuperscript{12}

Finally, the non-significance of the boorish behavior might seem puzzling. Why doesn't such behavior seem to matter? Perhaps, it is because the behavior we examined is not considered boorish by today's generations. When we were students, smoking was allowed in the classrooms while eating was not; today it is often the opposite. Furthermore, it is likely that students who are engaging in this behavior are not doing so because of a lack of respect for the professor. After all, would one rather have a student taking notes while sipping a soda or a student reading another class's textbook and sipping nothing?\textsuperscript{13} None of this implies that boorish behaviors should be ignored by professors and by future researchers. Our list was far from complete and we did not take into account how such behavior potentially effects others. These

\textsuperscript{12}Perhaps future research using ethnographical analysis might give educators a better idea about the types of classes or the types of students that are most prone to counterproductive behaviors.

\textsuperscript{13}The answer is apparently obvious to those of us who drink coffee or soda as we teach.
potential spillover effects might be important and could be fertile ground for future research.

Table 1:

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Estimated Coefficient</th>
<th>T-Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>16.09</td>
<td>2.23</td>
<td>0.028</td>
</tr>
<tr>
<td>D</td>
<td>-0.33</td>
<td>-1.94</td>
<td>0.055</td>
</tr>
<tr>
<td>B</td>
<td>0.07</td>
<td>0.38</td>
<td>0.706</td>
</tr>
<tr>
<td>XY</td>
<td>9.07</td>
<td>3.09</td>
<td>0.003</td>
</tr>
<tr>
<td>MJR</td>
<td>2.53</td>
<td>0.84</td>
<td>0.402</td>
</tr>
<tr>
<td>HRS</td>
<td>0.10</td>
<td>1.92</td>
<td>0.057</td>
</tr>
<tr>
<td>GPA</td>
<td>12.65</td>
<td>5.68</td>
<td>0.000</td>
</tr>
<tr>
<td>d1</td>
<td>6.91</td>
<td>1.60</td>
<td>0.112</td>
</tr>
<tr>
<td>d2</td>
<td>4.81</td>
<td>1.31</td>
<td>0.192</td>
</tr>
</tbody>
</table>

R-squared: .386
Adjusted R-squared: .335
F-statistic: 7.63
Bibliography


Copyright of Educational Research Quarterly is the property of Educational Research Quarterly and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.