Why We Harass Nerds and Freaks: A Formal Theory of Student Culture and Norms

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By a 2-to-1 margin (60% to 28%), American parents say "if forced to choose, they would prefer their sons or daughters to make C grades and be active in extracurricular activities rather than make A grades and not be active."[1] Why? Certainly, they are not expecting their child to make it into the NFL. Probably, they believe extracurricular activities teach teamwork, time management, self-discipline, and other skills important later in life and on the job. Those who participate in sports during high school spend more time doing homework and less time watching TV, are less likely to drop out of high school, are more likely to attend college, and earn more as an adult.

There is controversy, however, about whether the association between sports and earnings reflects a causal relationship or a selection effect. While sports has causal effects on schooling, effects on earnings probably result from selection.[2] Regardless, getting As rather than Cs has much larger effects on high school and college completion rates and labor market success than participating in extracurricular activities. Nearly 99% of students with A averages (and comparably higher test scores) in eighth grade complete high school, while only 80% of C students graduate.[3] For seniors in 1982 who planned on getting a BA degree or higher, chances of actually achieving that goal during the next decade were four times greater for A than C students.[4] Grubb found that, holding years of schooling constant, an A rather than a C average in high school raised male earnings at age 31 by $5,549 (20%) and female earnings by $2,906 (17.7%).[5]

If parents knew these facts, one would think they would choose A grades over participation in extracurricular activities. Many may not know how important academic achievement is to future success. However, we suggest parents responding to the Gallup survey interpreted "makes A grades and not be active" as a code for nerd or dork, while athletics is the ticket to social status.

Coleman[6] was the first sociologist to examine adolescent status systems. In the 10 Illinois high schools he studied in 1958, athletic achievement was the single most important criterion for high status. Tannenbaum,[7] who conducted a similar study at a predominantly Jewish high school in New York City, asked students to react to written descriptions of eight fictitious students. The ratings from most positive to most negative were as follows:

1. Athlete - Brilliant - Non-studious
2. Athlete - Average - Non-studious
3. Athlete - Average - Studious
4. Athlete - Brilliant - Studious
5. Non-athlete - Brilliant - Non-studious
6. Non-athlete - Average - Non-studious

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7. Non-athlete - Average - Studious
8. Non-athlete - Brilliant - Studious.

Note how being smart was acceptable if not combined with studiousness. Getting good grades did not get you into trouble with your peers, it was trying to get good grades.

Parents know adolescents can be cruel. They do not want their child rejected by peers. What is it like to be denigrated by one's middle school classmates? How common is a predatory anti-teacher peer culture in junior high school? Does it typically last into high school? How do peer norms of different crowds in a school get established? Who sets them? How are they enforced? Why are some crowds and individuals more influential in establishing peer norms that apply generally to all students? Why do some crowds have higher status than others? What happens to crowds and individuals who challenge normative dominance of the dominant/popular crowds? What are the long-term effects of being popular/unpopular during secondary school? What effects do context and educational policy have on norms that prevail in the youth culture?

These questions are being addressed by a research program of the Educational Excellence Alliance. This paper discusses the relationship between the study behavior and academic engagement of individual students, the norms and attitudes of close friends, and the peer culture of school. We are particularly interested in how the academic orientation of students and their close friends invites or protects them from harassment by peers.

BACKGROUND

Description of peer culture in this paper is based on review of ethnographic studies of adolescent peer cultures, structured and unstructured interviews conducted by the authors, and responses to survey questionnaires completed by nearly 100,000 middle school and high school students the past four years. The qualitative data reflect the memories of the paper's authors, most of whom had only recently graduated from New York State high schools in 2003, and taped interviews of 10th graders in eight secondary schools serving predominantly White, upper-middle class suburbs in New York State conducted during winter 1998.

Interviewers and respondents were matched on gender. Due to time limitations, both genders were studied in only one school, the culture of male students at another school, and that of female students at six schools (Table 1). The Educational Excellence Alliance collected survey data on attitudes and behavior of secondary school students at more than 400 schools. Multivariate analysis employed data from surveys completed between May 1998 and December 1999 by 35,000 students attending 134 schools. A copy of the Ed-Excel Student Culture survey instrument may be obtained from the first author.

Descriptions and hypotheses developed from qualitative research were used to develop a preliminary, working theory of how crowd and school norms influence peer harassment, student engagement in school, how students

choose their crowd, and why crowds and schools have the norms that they have. Since the interview data is limited to public schools in predominantly White, upper-middle class neighborhoods, further work remains to assure generalizability. We test some of the theory's predictions using data from the Educational Excellence Alliance's survey of Student Culture, and conclude with suggestions for school administrators about strategies to influence the peer culture at their school.

Students and Peer Pressure

Literature on school peer groups draws a distinction between cliques and crowds. Cliques are small groups of friends who hang out together a great deal and are personally close. Crowds, by contrast, are larger, "reputation-based collectives of similarly stereotyped individuals who may or may not spend much time together....Crowd affiliation denotes the primary attitudes and activities with which one is associated by peers....Whereas clique norms are developed within the group, crowd norms are imposed from outside the group and reflect the stereotypic image that peers have of crowd members."[8]

Cliques. Clique members often share similar attitudes and behavior patterns, due in part to the influence clique members have on each other. However, it also arises from selective entry and selective exit from the clique. Sociometric studies with repeated measurement of friendship nominations typically find substantial turnover. These studies also indicate students are often part of more than one friendship circle or clique.[9,10]

Students uncomfortable with the norms and behavior of a particular clique need not join. If they discover other clique members heading down a path they don't like, they can shift their time and attention to another circle of friends, or try to develop new friends. Consequently, high school students must be viewed as choosing the normative environment of their clique. However, selection is not the sole reason that clique members are similar in attitudes and behavior. Cliques have norms and expectations for behavior. For example, a female student describes one such norm: "No getting smacked at a party, because how would it look for the rest of us if you're drunk and acting like a total fool? And if you do hook up with somebody at the party, please try to limit it to one. Otherwise, you look like a slut and that reflects badly on all of us. Kids are not that smart. They're not going to make distinctions between us."[11]

Damico[12] studied effects of clique membership on academic achievement at a university lab school in Florida. Through 40 hours of observation in a six-month period, and interviews with teachers and students, she charted the

Table 1
Characteristics of High Schools Studied

	Respondents Gender	% to College	% Poor	Income Wealth Ratio	% Hispanic	% Black
Boynton Middle School and Ithaca High School	M	88%	14%	1.21	3%	10%
Harbor Edge High School	F	96%	4%	1.59	6%	1%
Newport Junction High School	F	94%	2%	1.87	10%	7%
Longview High School	F	88%	5%	.88	4%	1%
Madison High School	F	83%	4%	.79	6%	3%
Lakeside High School	F, M	89%	1%	2.54	10%	3%
Wittison High School	F	90%	6%	2.10	3%	1%
Coso High School	F	83%	4%	1.28	1%	5%
New York State Low-Need Districts		92%	3%	1.86	5%	3%
New York State Public School Average		78%	18%	1.00	18%	20%

	$ per Student	Median Teacher Salary	Avg. # Students Per Grade	% Regent Diploma
Boynton Middle School and Ithaca High School	$10,400	$42,000	450	74
Harbor Edge High School	$12,100	$70,000	430	64
Newport Junction High School	$13,400	$65,000	260	80
Longview High School	$11,500	$80,000	1,000	55
Madison High School	$10,700	---	330	53
Lakeside High School	$11,600	$59,000	70	65
Wittison High School	$14,100	$71,000	80	67
Coso High School	$9,000	$45,000	420	69
New York State Low-Need Districts	$12,500	$64,700	---	92
New York State Public School Average	$9,800	$49,500	---	78

clique structure of the school's ninth grade. Aptitude test scores were unrelated to clique membership. Nevertheless, the clique a student was in was a better predictor of GPA than an aptitude test taken during the year.

Crowds. Some stereotypic identities or crowds are respected by most of the students at school. In most schools, the Jocks, Preppies, and Populars represent identities that carry prestige and bring power. Other crowds – Freaks, Goths, Losers, Druggies, Nerds – represent the bottom of the status hierarchy. There also are other crowds whose status vary by school. In schools in this study, most of the student body were floaters or did not classify themselves as members of a distinctive crowd; they were in the middle in terms of status and popularity. Researchers who study peer cultures refer to this category of students as 'the normals.'[13]

Boundaries Between Crowds/Cliques

Crowds represent different "identity prototypes" reflecting "different lifestyles and value systems."[14] One young woman explained: "I usually sit at the same place, with the same people. But then we usually walk around and talk to other people. I'll go and talk to the guys. But then the other girls, I don't really talk to 'cause it's weird. It's weird 'cause they're them and we're us. I can't explain it."

Crowd affiliation is most fluid at transition between schools, such as entry into middle school or transferring between schools. Many students said they were aware of their crowd assignment, and the assignment of most of their friends, within a month or so after they started middle school. Many were not happy with the stereotypic identity they were assigned, and tried for the next couple of years to escape. However, once classmates categorize you, changing categorization is difficult. In small schools changing one's crowd essentially involves convincing classmates you have become a different person. Downward mobility is easy for them to recognize. Upward mobility is harder to accomplish.

Barriers to entry into high-status crowds are often substantial. Most student leaders in these predominantly White, upper-middle class suburban high schools were from high-status, all-rounder crowds (called "Preps" in many schools). These crowds are probably the hardest to get into. Entry typically requires one demonstrate achievement in both academics and a respected extracurricular activity. At most schools, President of the Science Club did not qualify. For most preps interviewed, participation in interscholastic athletics rounded out their resume and made them eligible for the prep crowd. Cool clothes also were necessary. Though a barrier for students from modest circumstances, most families in these communities could afford the additional cost of fashionable clothes.

Some activity-based crowds form around teams – cheerleaders, traveling soccer teams, auditioned choirs, "Thespians," Math Olympics, Debate Team, and Chess Team – that require tryouts and auditions. Most high school athletic teams, by contrast, are open to anyone. Joining a team and showing up regularly at practice may gain one admission to the crowd associated with that team. However, practices typically require 10 to 15 hours a week, so students are unlikely to join if they do not enjoy the sport. If not good at the sport, the student may not be accepted into the crowd and become the focus of jokes. At large high schools, playing time may be limited. In effect, such young people may be exchanging a respected position in a low-status crowd, such as the "Brains," for a disrespected role in a high-status crowd such as the Jocks or Preps. Many students probably doubt such an exchange would improve their status.

Admission to high-status crowds with a fun ideology such as the "populars," is typically by invitation. Even during the 'wannabe' phase when the aspirant is trying to become friends with members of the crowd, the "hangout time commitment" can be substantial and no certainty of success exists. In addition, aspirants must demonstrate to the crowd that they buy into the crowd's view of what is cool, who is cool, and who is not cool. As such, an aspirant may need to abandon former friends.

These last two items are a price that everyone seeking to change crowd affiliation must pay. Deviant low-status crowds, according to students, are more accepting of new recruits than high-status crowds. However, they expect new members to honor the values and norms held by the other members of the crowd and to engage in the behaviors and wear the clothes characteristic of the crowd. Indeed, changing crowds can be costly and uncertain. But staying in a denigrated identity is more costly. What are the costs?

Students rejected by peers are targets of harassment and bullying. In surveys in 1998/1999, 13.1% of boys and 6.7% of girls were "teased, insulted, or made fun of to my face" "almost every day." Another 19.5% of boys and 13.3% of girls were insulted to their face "about once a week." In addition, 16% of boys and 12.7% of girls indicated that "almost every day" they were "insulted or made fun of behind your back." If these rates of peer harassment in EEA schools represent the nation, 2.3 million secondary school students were directly insulted just about every day they came to school that year. Another 3.9 million students had about a one in five chance of being insulted to their face on any given day. Physical confrontations are less common. Almost 4% of students (an estimated 890,000 students) report being "pushed, tripped, or hurt by other students" almost every day. Another 4.3% report it happens about once a week. What is causing this peer harassment epidemic?

Bullies. Some students believe they gain prestige from other students by harassing and humiliating weaker, less-popular students. They entice victims to their clique, then surprise them with insults. One middle school student, trying to make sense of the behavior, said: "Maybe they like to prove to their friends that they're cool, that they can put someone else down without [being put down themselves]." While other qualities – good in sports, outgoing, funny, or attractive – are more important; playing and winning the dominance game is, for some boys, a way of trying to gain respect and prestige.

Becoming a Pariah. Being a nerd is like having a communicable disease. One middle school student said: "If a 'nerd' goes over and sits next to a jock or somebody who's really popular... - it doesn't happen very often - they would probably tell him to leave." Students avoid hanging out with the student since it sends a signal they are a nerd as well. Thus, students who are labeled as outcasts find it difficult to make new friends, and often lose old friends, which limits their ability to develop social skills that can help them get out of their predicament.[15]

Submissive Outcasts. To maximize the humiliation, submissive male outcasts are typically harassed in presence of other students.[16] Humiliation comes not so much from harassment, all students get harassed to some extent, but from lack of an aggressive response. Friends of victims seldom intervene in defense, and sometimes join in the harassment in a joking manner. Friends are trying to escape their own outcast identity and fear that sticking up for a friend will prevent their escape. They fail to realize that not defending a friend simply stigmatizes them as cowards.

Non-aggressive outcasts generally are smaller and weaker than kids who harass them, so a "You Wanna Fight" response is seldom chosen. Another reason why they do not respond by starting a fight is they have been told by parents and teachers not to respond to insults by fighting. They do not want to lose the favorable opinion of teachers, the only people in the school who they feel are on their side.[17]

Looking Different. One student said: "This kid in our grade [10th grade] is really weird looking. He has really big ears and is really tall, really awkward looking. One of the seniors called him 'dumbo' and really hurt his feelings. He was crying. I laughed, only because it was funny. But that kid [the senior] got [the same treatment] back... when he was a freshman. They made him stand up on the table in his boxers and sing 'I'm a little teapot'."

Small Size. At Newport Junction High School, a female spent a great deal of time playing sports (15-19 hours a week) and hanging out (10-14 hours a week). Nevertheless: "I'm picked on all the time because of my size. I guess it's supposed to be a joke, although sometimes I care...Just because I'm smaller, they know they can make fun of me. I'm not really upset - just angry." Powerful support for the proposition that stature and social status during high school influences later success in the labor market comes from Persico, Postlewaite, and Silverman[18] who demonstrated conclusively that in both Britain and the United States height as a teen-ager effects future earnings. When adolescent height was controlled, adult height and height at ages seven and 11 had no effect. Almost one-half of the effect of adolescent height on adult earnings was due to its impact on adolescent self-esteem and participation in extracurricular activities.

Consequences of Peer Harassment. Harassment induces some victims to withdraw from social interaction. Harassed students respond by avoiding the people and situations inflicting the harassment. Classmates laugh at something they say in class, so they do not participate in class discussions. Some try to become invisible, walking quickly from class to class avoiding opportunities to socialize. Often they avoid participating in after-school activities, and leave for home as soon as school dismisses. Such a response, however, makes things worse. When 60,000 students at EEA schools were asked if "Studying a lot tends to make you less popular," only 18% agreed. But 60% agreed with the proposition that "Not spending time to socialize and hang out tends to make you less popular." The climate of intimidation and threat of harassment also can induce withdrawal.

Actively Disliked and Rejected

At the large, suburban secondary schools studied,[19] three types of students achieved outcast status. Overly aggressive boys poor at reading social cues, bullied others, and often got into fights. They have made many enemies, and their antisocial behavior makes others feel insecure. Naturally, kids avoid them. However, bullying does not always make the bully an outcast. Verbal bullying of outcast students in the service of the norms and identity of a popular crowd is generally okay, at least in the eyes of popular crowd leaders. Some kids bully other in hopes of being accepted by a high-status crowd. It's a way of proving one buys into the norms and values of the crowd.

Some groups publicly mock the identity of the school's popular crowds. That is how groups like the Goths, Freaks, and Punks were seen by most other students. This may be the primary reason why it is common for other students to consider these groups as "choosing to be outcasts." Our interviews, conducted before Columbine, encountered several cases where Freaks were being harassed. At Harbor Edge Middle School, one student said: "I'm usually the one picked on...mostly because of my [pink dyed] hair." At Longview High School, we learned of a couple of incidents of serious physical harassment. One student said: *"We were all hanging out...and then a couple of freaks walked by and everybody started throwing things at them, like rocks and stuff...They just kept on walking. They just try to ignore it."*

Studious, non-aggressive, socially unskilled students are frequently outcasts. A Harbor Edge Middle School student who eats lunch with the popular crowd, described Nerds as *"being very involved with school, asking a million questions in class, and not having much fun in their spare time...If someone asks a question and you're considered a nerd, then people will be like, 'Oh, shut up!' But if you're not [a nerd], then no one says anything. It's a double standard."* Despite sympathy for the nerds, she also said, *"Well my friends and I always makes fun of this one girl; all she does is study. It's like she studies for college already [10th grade] – that's so stupid."*

At Newport Junction, a school with a strong international baccalaureate program and a 94% college attendance rate, a female characterized 'dorks' as *"constantly asking questions in class."* This seems to annoy other students. She recounted what happened in her English class: *"Nobody likes this girl. She talks and says the stupidest things which make everyone want to cringe. It gets out of hand, so these boys stood up in the middle of class and shouted, 'You're a loser, just shut up and get out of this class.' The teacher had no control."* Yet, the Newport Junction students agreed that getting good grades did not make you a nerd. *"If you're smart you're lucky; no one considers you a nerd as a result. Everyone wants to get good grades now because of college, so you kind of envy those who do well."*

Certain types of achievement – athletic, funny, friendly, outgoing, popular, and attractive – are better in the eyes of one's peers. However, for academics, an optimal level of academic effort and achievement is the norm. One is sanctioned for exceeding it. Brown and Steinberg note that as a result, "Many of the most intellectually capable high school students strive to be less than they can be in order to avoid rejection by peers."[20]

SETTING NORMS

Who sets the norms? Based on these findings, cool/popular crowds establish the norms in middle school and in some small high schools. In large high schools many crowds exist, and the norms the leading crowd imposed in

middle school continue to influence because they effect the sorting of students into crowds. Each crowd maintains a distinct package of norms and these influence the members' behavior.

How do crowds choose norms? Norms are partially inherited from earlier generations of the crowd and partially established by the current leaders and core members. Popular crowds define school wide norms in ways that it reinforces the popularity and authority of the crowd members. If insecure students are afraid of asserting their individuality, they will evaluate themselves by what the secure, confident students consider "cool." High school crowds tend to value the abilities, resources, and personality traits that the crowd's leadership has in common. Since crowd leaders exemplify the crowd's norms, self-serving bias of the leadership works to reinforce the popularity and authority of the crowd's leadership. Individuals tend to join crowds and cliques that have similar value systems to their own, so a crowd's size depends on the popularity of the normative system and identity that it exemplifies.

The views, values, and actions of the popular crowd, and its leadership represent powerful influences on the peer pressures all students endure.

Popular Individuals

Nearly 100,000 students at Alliance schools were given a list of 12 traits and asked to describe the qualities of the members of the "most popular crowd (your gender)...during the first year of middle or junior high school...." Trait were ranked as: cool clothes (64%), attractive (61%), funny (60%), good in sports (55%), outgoing (53%), self-confident (48%), tough (31%), not attentive in class (24%), worked hard for grades (22%), attentive in class (21%), smart (19%), and made fun of those who study (18%). Traits most often associated with being popular reflected services – telling jokes, entertaining, participating in sports – that popular students provide for classmates. An A student and a member of the "Soccer Girls," one of the popular cliques at Harbor Edge High School, said: *"The group I'm thinking of probably considers themselves to be the popular crowd. I don't know. I do sports, but maybe other people – those involved in Model Congress or World Interest club – consider themselves the popular ones."* When asked what makes the popular crowd popular, she indicated, *"Everyone wants to have a good time, no matter who your friends are. Sports are fun....Battle of the Classes, Sports Night, parties, hanging out...They're all good time. The actual individuals are good people too; they're interesting, they have different talents and abilities and attractable themselves. [Their popularity is] not just based on what they do."*

Popular Crowds

Role Models. Popular students are role models and exemplars of "cool." Many of their peers respect them, so their opinions about who and what is "cool" and who and what is "uncool" are quite influential. Their example influences the dress, attitudes, and behavior of other students much more than parents, teachers, and school administrators. New entrants into middle school are particularly susceptible to such influences. New entrants are insecure, and often hope to eventually join a high-status crowd.

Strong Social Skills. Popular crowd membership confers opportunities to learn from the acknowledged local masters of adolescent social interaction and to practice these social skills. Members become better performers in a middle school status and dominance game with very different rules than the elementary school counterpart. Since popular students already have been sorted into high-status crowds, students outside these crowds are less likely to have someone in their group who can teach and model the behavior needed to become popular.

Validating the Popularity of Others. Since the primary signal of a person's popularity is who one hangs out with, reputation as a popular person depends on *"being allowed to hang out with them [one of the popular crowds]."* As one respondent said, *"If you're friends with popular people, you're considered more popular."* Inviting someone from outside the crowd to a party or including them in lunchtime conversation may be small matter to a popular student, but it sometimes has an important positive demonstration effect on their reputation. This works for groups as well as individuals. If a clique interacts with a popular group, the clique's reputation improves.

Admission Rules. Around most popular crowds there are "wannabes" actively trying to join the crowd and potential "wannabes" who would try if they thought they had a reasonable chance of success. Crowd members control and limit entry. Often, core members of a clique have the additional power of blackballing potential entrants. For example, at one school, each member of a group was allowed to invite an outsider to sit at their lunch table several times a month, but they must meet at the lockers for other members to approve it first, and then they cannot exceed their limit. *"We don't want other people at our table more than a couple of times a week because we want to bond and bonding is endless."*[10]

Attracting the Opposite Sex. Since cross-gender socializing often occurs in reasonably stable groups, male and female cliques often pair up. Thus, a new romantic relationship can help a student gain entry into a popular clique. This gives popular students a further edge in the competition for attention from the opposite sex.

Posers. "Posers" are individuals or groups who copy the dress and behavior of a high-status crowd, without being in that crowd. By adopting the popular crowds' norms and behaviors as their own, "Posers" assist in transmitting the norms and values of the popular crowd to the school community.

Power Players and Dominance by Insult. Insults from high-status peers are more damaging to one's self-esteem and reputation than insults from low-status peers. Insults from unpopular students can be deflected by calling them names, like "dirt bag" or "low life," that give life to the way others at the school view them. Responses to taunts from popular students is more difficult. Insults are more effective when they target a vulnerability of one's opponent.[17] What aspect of the popular student's persona can the victim counter-attack? The popular person exemplifies what most of the victim's classmates respect.

Pariah Status. When an unpopular kid is harassed by an individual from the popular crowd, "Wannabes" and "posers" may view the incident as an opportunity to improve their status by insulting that victim. Individual popular students can wittingly or unwittingly single out specific students for harassment by others.

Normative Hegemony. The quickest way to change a school's peer norms is to persuade the leaders of the popular crowds that such a change is desirable. The student body is used to following their lead so if they advocate the change and adjust their own behavior to the new requirements others are likely to follow.

A distinction between membership in a popular crowd and the power of this crowd to set the normative environment of the school must be noted. In small schools, students interact with all class members, so popularity is based on one's history of interactions with classmates. However, in large schools students have only superficial contact with a significant portion of their grade, and even less contact with older and younger students. This is particularly true in large middle schools that combine students from different elementary schools. Inside the group one interacts with daily, status and popularity depend on the history of interactions between group members. One's social status and popularity outside this group, however, is defined by the stereotype assigned to one's crowd and the outsider's valuation of that stereotype. Crowd assignment occurs in the first weeks of middle school and is difficult to change. Conformity pressures and learning effects tend to generate contrast effects that make boundary crossing even more difficult.

Given the benefits of popular crowd membership, many students try to join one of them. By high school, however, many students at the schools studied had gotten tired of the dominance by insult game that was important in middle school. A Longview High School student said: *"The people who used to make fun of other people don't anymore because it doesn't really matter. It's not important anymore...because everyone's kind of grown up and everyone's beyond that now."*

STUDENT CULTURE AND THE LEARNING ENVIRONMENT

Social norms and values of students represent contested territory in most high schools. Learning, according to the students interviewed, represented only one reason for attending school. Socializing, sports, and extracurricular activities were equally as important for many students. Other students indicated they came primarily because they were required to by parents and the law.

Teachers often express discontent with students' commitment to learning: "lack of student interest" represents the single most important reason for poor achievement. Many principals feel helpless in the face of a student culture that they sense is a more powerful influence than the threat of failing courses or not graduating. The principal at Longview High School said: *"We have mandated extra help right now... Any child who fails one of the four major subject areas is scheduled for mandated extra help. I will tell you – they didn't go. The kids that have gone, I can only assume...I have to think that a kid who does go has to get something out of it. But, they don't go. And why don't they go? Well, someone said, what do you do when they don't go? We notify the parents. How much more discipline, how much more can we do? It would be an impossible task. What discipline is there if you don't go to mandated extra help? Well, that you'll keep failing..."*

Most high school teachers enjoy the subject they teach, and hope students will find it as interesting. Some students

fit the "learning for its own sake" ideal: 42% of students in EEA high schools said they "enjoy doing math problems," 52% "like the books and plays read in English," and 37% "find the history and science textbooks interesting." Yet, 48% agreed with the statement: "If I didn't need good grades, I'd put little effort into my studies." When all EEA students were asked why they worked hard in school, extrinsic reasons were cited: 77% said, "I need the grades to get into college," 58% "Help me get a better job," and 56% "Prepare myself for tough college courses."

Students are not of one mind on these matters. Different crowds and cliques maintain distinct priorities about learning and reasons for wanting to learn. These peer group norms matter because "Subgroups of youths tend to be granted increasing levels of hegemony in the establishment of social norms and values."[21]

What are these norms? We asked the 35,000 students who completed the Ed-Excel questionnaire during 1998-1999 the following set of questions. "Do you think your friends would agree or disagree with the following statements?" 1) It's not cool to frequently volunteer answers or comments in class. (Agree = 19%, Disagree = 81%); It's not cool to study real hard for tests and quizzes. (Agree = 15%, Disagree = 85%); It's not cool to be enthusiastic about what you are learning in school." (Agree = 27%, Disagree = 73%); It's not cool to be competitive about grades. (Agree = 51%, Disagree = 49%); It's annoying when other students talk or joke around in class. (Agree = 40%, Disagree = 60%); It's annoying when students try to get teachers off track. (Agree = 42%, Disagree = 58%). We also asked about friends' behavior: 24% said "My friends make fun of people who try to do real well in school," and 56% said "My friends joke around and annoy the teacher."

A THEORY OF STUDENT PRIORITIES

To state the theory formally, we begin by laying out notation and describing how the student's utility maximization problem is structured. We assume that students allocate their free time among four activities: studying or learning (T^L), extracurricular activities including sports (T^S), hanging out with peers(T^P), and solitary leisure activities such as reading, video games, and television (T^V) subject to a time budget constraint.

1) Time constraint = $1 = T^L + T^S + T^P + T^V$.

Learning depends on academic ability and previous learning (A^A), quality of instruction (Q^j), and free time devoted to learning (T^L).

2) Learning = $L_i = L(A^A, Q^j, T^L)$ where $L_T > 0$ and $L_{TT} < 0$. Learning generates three kinds of rewards: *Intrinsic Rewards*, $J(L^i)$, reflect the joy of learning; *Direct Extrinsic Rewards*, $\$(L^i)$, depend directly on how much the individual learns during high school, and includes effects that operate through college admission, years of schooling completed, and higher wages holding schooling constant. It also includes the benefits parents derive from the economic success of their children and the honor and prestige given to those seen as high achievers. These benefits are larger if the skills developed in school are signaled to universities, employers, and parents; *Rank Rewards*, $R^i(L^i - L^m)$, depend on the extent to which the student learns more than other students. This would include effect of class rank and GPA relative to the school mean (L^m) on the present discounted value of lifetime earnings and self-esteem derived from

comparisons with others.

3) $U^L = I(L^i) + \$(L^i) + R^j(L^i - L^m)$.

4) $U^S(A^S, T^S)$ = Utility from extracurricular activities depends on time and ability (A^S).

5) $U^P(A^P, T^P)$ = Utility from socializing depends on time devoted and ability (A^P).

6) $U^V(T^V)$ = Utility from solitary leisure depends solely on time devoted to it.

Students seek to avoid being harassed, insulted, teased, and ostracized by peers. In some secondary schools a small number of students who exemplify denigrated traits and behaviors are targeted for harassment and ostracism. The theory treats this kind of peer harassment as punishment whose social purpose is to deter certain types of 'anti social' behavior (eg, squealing on peers, competing for grades, sucking up to teachers, deviating from the group's dress code) and encourage 'pro social' behavior (eg, letting friends to copy homework). Besides avoiding harassment, students desire for popularity – have many friends, hangout with students in the leading crowd, etc. We are concerned with how popularity and harassment depend on allocation of time among learning/studying, socializing, extracurricular activities, and solitary leisure and on success in learning.

We hypothesize that popularity and harassment depends on four things: *Accomplishment in respected extracurricular activities*, $\kappa A^S T^S$, where κ is the valuation peers place on sports and extracurricular achievements when they judge another student's popularity and decide whether to harass him; *Socializing with friends*, $\eta A^P T^P$, where η is the impact of socializing on peer judgments of popularity and the student's likelihood of avoiding harassment; *Conforming to peer group norms about academic commitment and achievement*, $\delta (L^i - L^N)^2$, where L^N is the school norm specifying the optimal level of academic achievement chosen by the leading crowd for the whole school or by the leaders of the crowd to which the student belongs and $\delta < 0$ measures how strong conformity pressures are similar to peers in one's commitment to academic learning [$\delta < 0$]; and *Costs that studious individuals impose on others by pushing ahead of them in a competitive ranking system*, captured by $\Theta R_j(L^i - L^m)$ where L^m is the mean achievement level at the school and Θ is less than zero when peers harass or ostracize the studious as *"nerds...teachers pets...or acting White."* When $\Theta = -1$, the anti-nerd pressure against academic effort exactly offsets losses that trying harder imposes on others $R(L^i - L^m)$ because greater achievement for person 'i' increases school mean achievement, L^m, and lowers everyone else's position relative to the mean (eg, rank in class). If $\Theta < -1$, anti-nerd peer pressure imposes larger costs on the studious than they impose on their classmates. If students honor those who win academic competitions, Θ would be positive. Schools with competitive admissions and nearly universal participation in AP courses such as Stuyvesant High School in New York City maintain a positive Θ. Summarily, we have (7) an equation describing the determinants of harassment and popularity.

7) $H_i = \kappa A^S T^S + \eta A^P T^P + \delta (L^i - L^N)^2 + \Theta R_j(L^i - L^m) + u^i$

Most students care about their popularity with peers. The weight, ϕ_i, they attach to their popularity with other students will, however, vary across individuals.

8) $U_i = J(L_i) + \$(L_i) + R_j(L^i - L^m) + U^S(A^S, T^S) + U^P(A^P, T^P) + U^V(T^V) + \phi^i H_i$

9) $U_i = J(L_i) + \$(L_i) + R_j(L^i - L^m) + U^S(A^S, T^S) + U^P(A^P, T^P) + U^V(T^V) + \phi^i [\kappa A^S T^S + \eta A^P T^P + \delta(L^i - L^N)^2 + \Theta R_j(L^i - L^m)]$

We then maximize (8) with respect to the time budget constraint (1). We obtain the following first order conditions for learning time, for extracurricular time, for socializing, time and for solitary leisure time:

10) $(J_T + \$_T + R)L_T + 2_i\phi \delta (L^i - L^N)L_T + \phi^i \Theta R_L L_T = \lambda$

11) $U^S_T + \lambda^1 \kappa A^S T^S_T = \lambda$

12) $U^P_T + \lambda^1 \eta A^P T^P_T = \lambda$

13) $U^V_T = \lambda$

Where $U^S_T > 0$, $U^S_{TT} < 0$, $U^P_T > 0$, $U^P_{TT} < 0$, $U^V_T > 0$, $U^V_{TT} < 0$.

This set of first order conditions will look familiar to economists though less so to health care providers. It simply contends students will allocate time between activities that equalizes the marginal utility of the last hour devoted to each activity. The lagrangian multiplier, λ, is conventionally interpreted as the marginal utility of time. Start by looking at (12), the first order condition for time devoted to socializing. It says individual students increase time devoted to socializing if the utility they personally derive from it goes up (first term) or if the popularity/prestige they get from socializing goes up (second term). The popularity benefits of socializing are higher for people who are good at it (high on A^P), when the peer group greatly values it (η increases), and when individuals are particularly sensitive to what peers think of them (ϕ_i is large). We know that η is positive in most schools. Sixty percent of respondents in the EEA survey indicated that "not spending time to socialize and hangout tends to make you less popular." Thus, $\phi_i\eta$ measures the intensity of peer pressure to socialize and $\phi_i\kappa$ measures peer pressure to participate in extracurricular activities. The stronger this pressure the more time will be spent socializing or participating in extracurricular activities, and the less time will be available to study and watch TV. This is the first mechanism by which peer pressure discourages learning. Peers encourage each other to hangout and reward those who do with popularity. Unless studying can be done simultaneously with hanging out, the result is less study time and less learning.

Schools might counter this kind of pressure by organizing study groups, assigning group projects that require face-to-face discussions outside school hours, and promoting extracurricular activities with an academic focus such as debate club and interscholastic academic competitions. Time to socialize is an appeal of extracurricular activities. A portion of the time during athletic practice, chess club, and yearbook meetings is social.

The second type of peer pressure comes from the "Be Like Me" conformity pressure from the school's leading crowd(s) captured by $2\phi_i\delta (L^i - L^N)$ in equation 10. Remembering that δ is negative, this expression is positive when $(L^i - L^N)$ is negative (ie, student has below average grades). Thus, students with low grades are encouraged to try harder and students with grades higher than those of the leading crowd are discouraged from studying. This fact implies that the least-popular students and, therefore, the ones most likely to be harassed by peers, are students whose commitment to school is above or below the norm set by the leading crowd.

This hypothesis will be tested in the empirical work to come. In the empirical work, I assume L^N is the average

achievement level of students. However, our interviews and Reinhold Niebuhr's dictum that groups always act in their own self-interest suggest that a powerful leading crowd will impose on the school a system of normative evaluations (eg, values for $L^N, \phi, \kappa, \eta,$ and Θ in this model) that place it at the top of the school's prestige hierarchy. This implies that if popular crowd leaders set challenging academic goals for themselves, their commitment to academic achievement will legitimate a 'study hard' norm for their entire student cohort as occurred with Lakeside's 11th grade and the class of 1998 in Ithaca High School. Alternatively, a few charismatic leaders promoting a fun ideology might have the opposite effect.

One other reason for peer pressure against studying is the zero sum nature of the competition for good grades caused by grading on a curve and the use of class rank as a criterion for awarding a fixed number of prizes and for admission to competitive colleges. $\phi^1 \Theta R_L L_T$ is the term that captures this effect. Fifty-one percent of EEA students surveyed indicated: "It's not cool to be competitive about grades." Another question evaluated whether students believe that hard work by other students makes it harder for them to get good grades. Our theory predicts that this belief should undermine incentives to study, and we will test that hypothesis.

Another implication of the theory is that since student achievement is measured with error and imperfectly signaled to the labor market, private rewards for learning will be smaller than the social returns to learning and this will lead to under-investment in studying during school. This also implies that better signaling of student achievement to the labor market will increase $\$_L$ and this in turn should increase student effort levels.

TESTING THE THEORY

To conduct a preliminary test of the theory, we estimated

Table 2
Harassment, Study Effort and Grades in School*
[Beta Coefficients]

	Teased Verbal Harassment	No Try Because of Friends	Study with Friends	Engagement in Class	% of Homework Done	Grade Point Average	SD of Independent Variable
Study Behavior - Endogenous							
Verbal Harassment (SqRt #)	***	0.89	---	-.051	-.055	-.007+	3.51
No Try Because Friends (SqRt #)	---	***	---	---	---	-.013	2.46
Study with Friends (SqRt #)	---	---	***	---	.076	.018	3.01
Engagement in Class	---	---	---	***	---	.048	1.00
Percent of Homework Done	---	---	---	---	***	.269	.224
Peer Pressure - Exogenous							
'A' Hard to Get if Others Study	.043	.070	.025	-.047	-.041	---	.681
Hard if Others Study (School Avg.)	---	.022	.029	-.001+	-.001+	---	.118
Good Student Leading Crowd	---	---	.054	.003+	.016		
Bad Students Leading Crowd	.071	---	---	-.021	-.009+	---	.99
Negative Peer Pressure	.100	.160	-.046	-.065	-.002+	---	1.00
Positive Peer Pressure	.012+	.081	.201	.069	.051	---	1.00
Annoyed When Others Disrupt	.008+	.015	.094	.188	.083	---	1.00
(Negative Pressure - Sc Mn) SQ	.021	---	---	---	---	---	1.51
(Positive Pressure - Sc Mn) SQ	.024	---	---	---	---	---	1.79
(Annoyed - Sc Mn) SQ	.055	---	---	---	---	---	1.32
(GPA - 3.0) SQ	.027	---	---	---	---	---	1.28
Pro-Learning Norm - (Sc Mn)	-.014+	.027	.021	.013+	-.008+	---	.665
Student Choices and Time Use							
Hours of Homework Per Day	---	---	---	---	---	.040	1.44
Hours of TV Per Day	---	---	-.056	---	---	-.022	2.13
# Accelerated Courses	.025	.001+	.047	-.023	.015	.057	1.69
% of Honors Courses	.017	-.025	.089	.013+	.049	.223	.341
% Basic Courses	-.002+	.021	-.034	-.025	-.035	-.054	.369
% Heterogeneous Classes	.006+	.001+	-.009+	.003+	-.004+	.004+	.307
# of Study Halls	.023	-.017	.011	---	-.033	-.011	3.42

* Analysis of data on 35,604 students from 134 schools in the Northeast that are members of the Educational Excellence Alliance. Table documented in Insultfin.1st. All models included three variables not shown: individual is of mixed race, data on race is missing, data on family status is missing. The model predicting harassment also included an interaction of middle school with Anti-Learning Leading Crowd and with accelerated courses. A + to the right of a coefficient indicates it is not significant at the 5% level on a two-tailed test.

ordinary least squares models predicting six outcomes: Incidence and extent of teasing and verbal harassment by peers (HARASSMENT); Incidence and frequency of students admitting lack of effort on a test or project because they were afraid of what friends might think (NOTRY); Incidence and frequency of students studying together outside school or talking with friends about what was learned in school (STUDY TOGETHER); An index comprised of questions about paying attention in class, contributing to classroom discussion, and not daydreaming (CLASSROOM ENGAGEMENT); Proportion of homework assignments a student completes on average across four core subjects (HMWK COMPLETE); and grade point average on a 4.0 scale.

Our purpose is to assess how much of the variance of peer harassment and student study effort and engagement (the first five variables) can be predicted by the racial and socioeconomic character of the school and background characteristics of students and how much variance can be predicted by the attitudes and culture of the school and of

Table 2 *(continued from previous page)*
Harassment, Study Effort and Grades in School*
[Beta Coefficients]

	Teased Verbal Harassment	No Try Because of Friends	Study with Friends	Engagement in Class	% of Homework Done	Grade Point Average	SD of Independent Variable
School Characteristics							
Middle School	.024	.026	.032	.017+	-.013+	**.078**	.320
Grade in School	.000+	-.016+	.020	**-.067**	**-.106**	-.003+	.980
All Teachers Good (Sc Mn)	-.023	-.002+	.026	.044	.018	-.001+	.251
All Teachers Demanding (Sc Mn)	-.022	.008+	.029	**.050**	.028	-.039	.192
Parents Motivate (Sc Mn)	---	-.022	---	---			
Future Extrinsic (Sc Mn)	---	.000+	.00	-.004+	.021	---	.218
Student Attitudes							
Intrinsic Motivation Index	-.014	.001+	**.151**	**.292**	**.199**	---	1.00
Future Extrinsic Motivation	-.011	-.031	.017	**.090**	**.135**	---	1.02
Parents Motivate Student	**.055**	.007+	.017	-.004	.000+	---	1.00
Characteristics of Student							
Self-Reported Ability	-.002+	**-.081**	.045	**.114**	**.077**	**.213**	1.97
Reported Ability (School Mean)	.018+	.008+	.006	.003+	-.013+	-.036	.419
Male	**.075**	**.063**	-.034	-.004+	-.043	**-.076**	.498
Parent Schooling	.010+	.002+	.043	.040	**.072**	**.070**	2.89
Parent School (School Mean)	.018+	-.023	**.066**	-.002+	.000+	-.009+	1.19
Single-Parent Family	.019	.020	-.009+	-.025	**-.056**	**-.057**	.408
% Single Parent (School Mean)	-.023+	.013+	-.011+	-.002+	**-.069**	-.007+	.122
# of Siblings	.001+	.033	.005+	-.025	**-.062**	-.045	1.50
Black	.007+	.044	.001+	-.027	-.026	**-.097**	.316
Hispanic	-.021	.011+	-.006+	-.017	-.037	-.024	.192
Asian	-.030	.029	-.004+	-.011	.006+	.009	.210
Native American	.015	.023	.010+	-.020	-.020	-.002+	.075
% Black (School Mean)	.011+	-.047	-.035	-.039	.000+	.019+	.172
% Hispanic (School Mean)	.000+	.007+	-.002+	-.003+	-.002+	**-.052**	.073
% Asian (School Mean)	-.022	-.011+	-.005+	.037	.001+	-.016	.061
Mean Dependent Variable	3.425	.849	4.283	.017	.818	2.97	
S.D. of Dependent Variable	3.513	2.461	3.014	1.01	.224	.84	
RMSE	3.374	2.21	2.64	.817	.190	.593	
R SQ	.0624	.0874	.2215	.3031	.2312	.465	
Number of Observations	24,772	27,190	26,917	26,313	27,443	25,677	
			st	E	h		

* Analysis of data on 35,604 students from 134 schools in the Northeast that are members of the Educational Excellence Alliance. Table documented in Insultfin.1st. All models included three variables not shown: individual is of mixed race, data on race is missing, data on family status is missing. The model predicting harassment also included an interaction of middle school with Anti-Learning Leading Crowd and with accelerated courses. A + to the right of a coefficient indicates it is not significant at the 5% level on a two-tailed test.

the student's clique. The final model uses the peer harassment variable and study effort and engagement variables to predict grade point average. Peer culture and attitudes toward learning will be assumed to influence this final outcome, student GPA, only through their effects on peer harassment, study effort and engagement.

Control Variables

Controls for student background include gender, grade in school, a dummy variable for seventh or eighth grade, parent's education, number of siblings, living in a single-parent family, self-reported ability, dummy variables for being African American, Hispanic, Asian, Native American, mixed ethnicity, and did not answer questions about race. Controls for school characteristics included mean for parents' education, proportion of students in single-parent families, African American students, proportion Hispanic students, proportion Asian students, mean self-reported ability of students, mean for the school on the 'teachers are demanding' index, and mean on the 'teachers are interesting and motivating' index. School means on the 'parents motivate me' index and 'future extrinsic motivation' index were included in the models predicting study effort and engagement. Items included in each of the attitude indices may be obtained from the first author.

The curriculum track pursued by students was controlled by including number of accelerated courses taken in middle school, share of the semester's courses that were honors or AP courses, share of 'basic' courses or local in New York State parlance, share of heterogeneous or mixed courses (share of college prep courses was the excluded category), and number of study halls. To prevent overestimation of the

effects of clique norms and attitudes, controls for student's self-reported motivation were included: intrinsic motivation, future extrinsic motivation, and parents motivate me index.

Hypotheses

The primary focus was the effect of student culture. Students experience a school culture specific to their grade and gender, and to the attitudes and norms of their clique of close friends. Researchers attempted to measure both. An overall pro-learning school environment index was constructed by taking an average of the intrinsic motivation scale, positive peer pressure scale, and the 'it's annoying when students joke around scale' for the student's grade, gender, and school. We expect a pro-learning environment to be associated with less harassment, fewer students saying they do not try, more studying together, and greater engagement in school.

We also calculated a grade/gender/school average of answers to "If others study hard, it is harder for me to get good grades." This variable measured the belief within the student body that they are engaged in a zero sum competition with their classmates. We expect it to have a negative relationship with engagement and homework completion and a positive relationship with harassment, NOTRY and study together. The reason for this last prediction is our expectation that students will want to learn from the smartest student in their friendship circle and to monitor how hard others are studying when they perceive their school to have a competitive grading system. Other student culture variables are measured at the clique level. These variables are scales constructed by averaging normalized

Figure 1
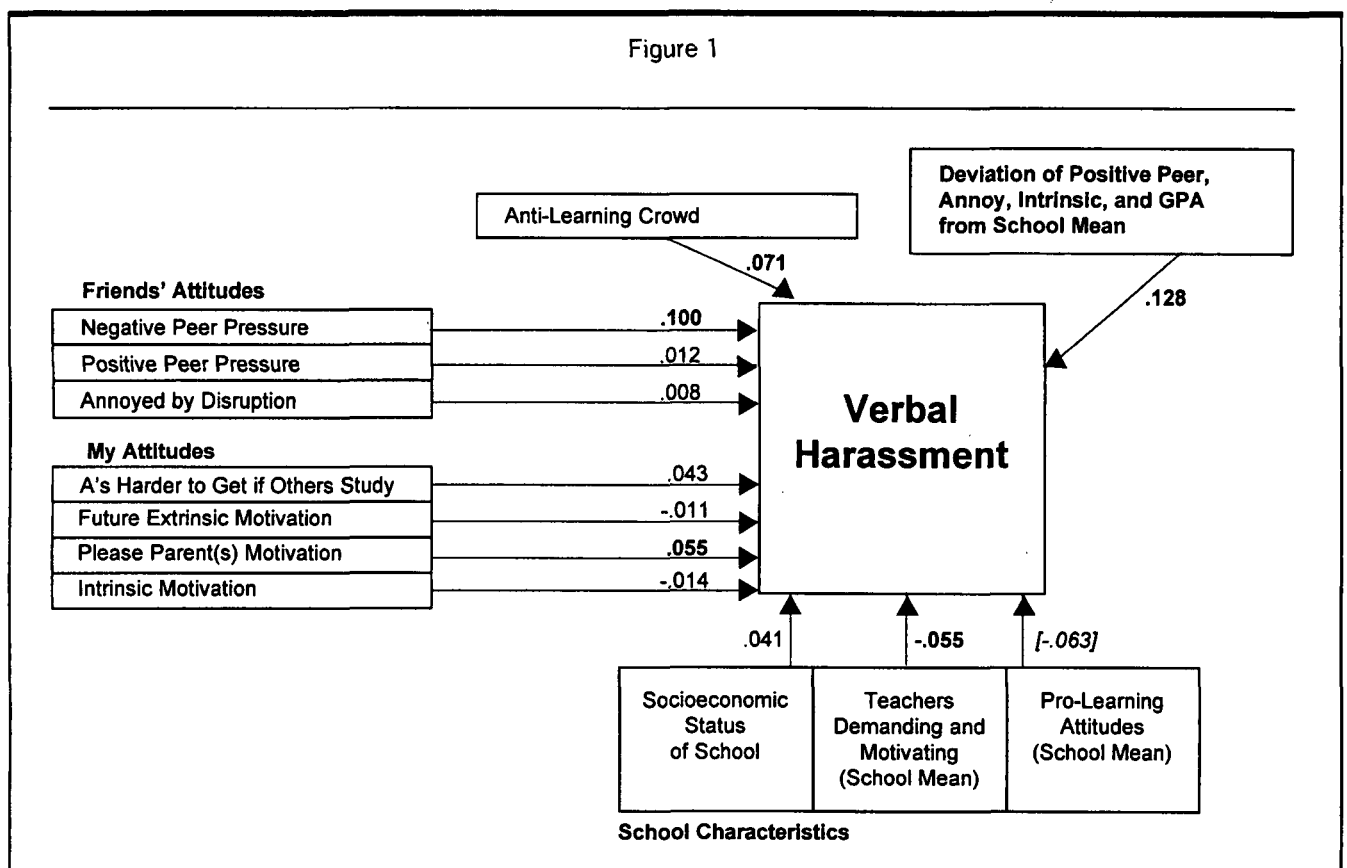
answers to two to six questions about the attitudes and norms of friends.

Scales were developed for negative peer pressure, positive peer pressure, annoyed when others joke around in class, the middle school leading crowd was anti-learning, and the leading crowd was pro-learning. Our theory predicts that negative peer pressure and anti-learning leading crowd will have a positive relationship with harassment and NOTRY, and a negative relationship with engagement and homework completion. We also predict that positive peer pressure, the annoyed when others joke around scale, and pro-learning leading crowd will form a positive relationship with studying together, engagement, and completing homework. The final peer pressure variable assessed student beliefs about whether it's harder for them to get good grades when others study hard. We expect this to have a positive relationship with harassment, NOTRY, studying together and a negative effect on engagement and homework completion.

The final set of peer culture variables measured deviation from the school-wide norm of the student's GPA and his clique's academic commitment – positive peer pressure, annoyed when others joke around scale and negative peer pressure (reflected). We expect students who significantly deviate from school norms on these variables will experience more harassment. We have no reason to expect clique academic commitment variables to have a curvilinear effect on the other outcomes studied, so squared deviations from school norms were not entered in any of the other models.

Table 2 contains standardized regression coefficients from models predicting all six outcomes. A '+' to the right of a coefficient implies the effect is not statistically significant (at the 5% level on a two-tail test). Column 7 of Table

2 provides standard deviations (SD) of independent and dependent variables.

RESULTS

Peer Harassment

Average annual number of incidents of verbal harassment was about 23. 'Behind your back' insults (34 per year per student) were more common. Boys experienced more harassment than girls. Hispanics and Asians experienced less than Whites and African Americans. Children of well-educated parents, students in high SES schools, and students in middle schools were more likely to experience insults and teaseing. However, the demographic characteristics explained only 2.1% of the variance.

When student attitude and peer pressure variables were added, variance explained by the model tripled but remained low at 6.2%. Figure 1 contains the main findings from the analysis of the attitudinal and cultural predictors of peer harassment. Attitudes and beliefs of students are arrayed on the left underneath the norms of the student's clique. School characteristics are arrayed along the bottom. School SES effect reported there is the sum of the beta coefficient on the parent's schooling and Beta coefficient for the proportion of students living with both parents. The effect reported for teachers is the sum of the Beta coefficients on the teachers are demanding and the teachers are motivating index. When we report the effect of a school average of student attitude scales the effect reported [in brackets in this case] is what would happen to the dependent variable in standard deviation units if student attitudes in the school/gender/grade went up by one student standard deviation.

Most of the hypotheses were supported. Incidence of

Figure 2
Peer Harassment's Association
with the Pro-Learning Attitudes of One's Clique
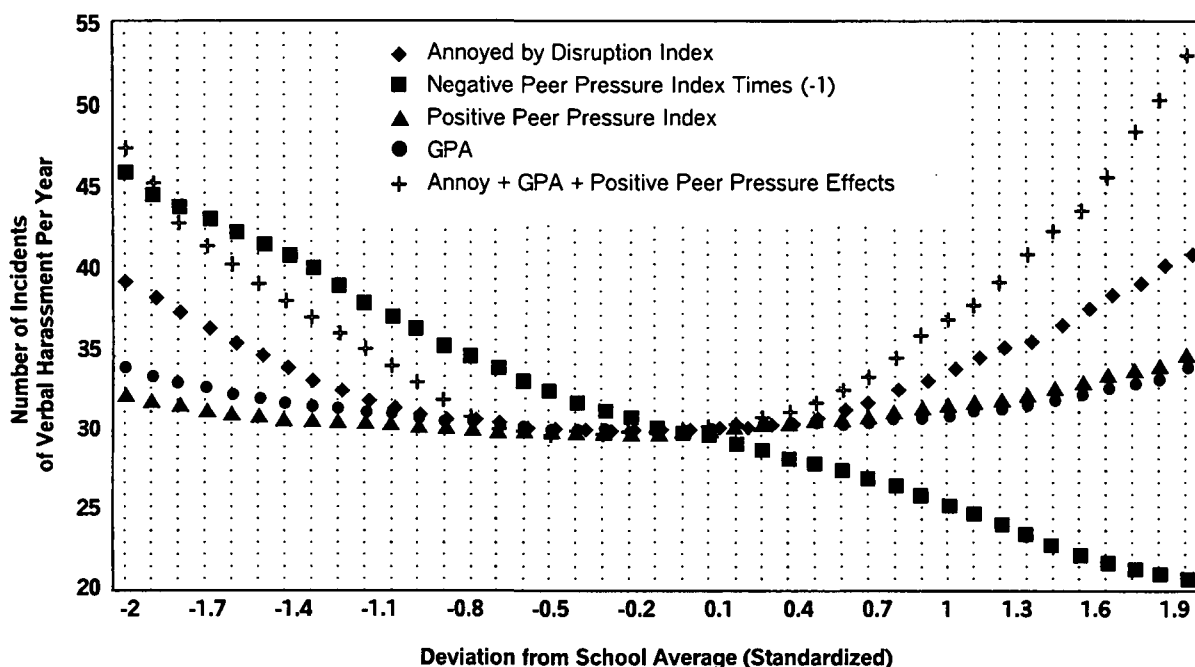
harassment was lower in schools with demanding and motivating teachers. Incidences were greater for honors students, students with many study halls, and students who took accelerated courses in middle school. Peer harassment rates were greater for students who reported an anti-learning leading crowd in middle school and for students who

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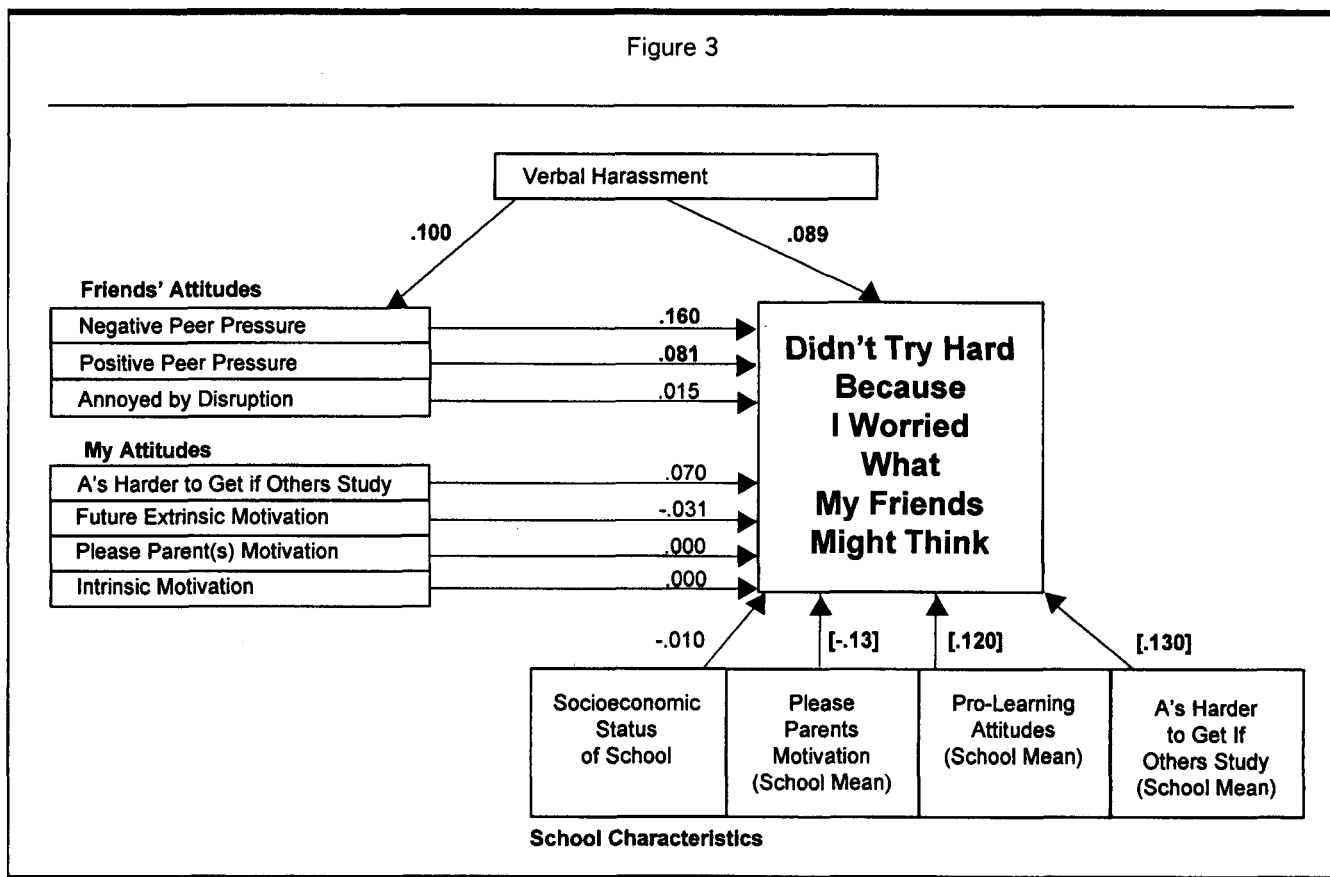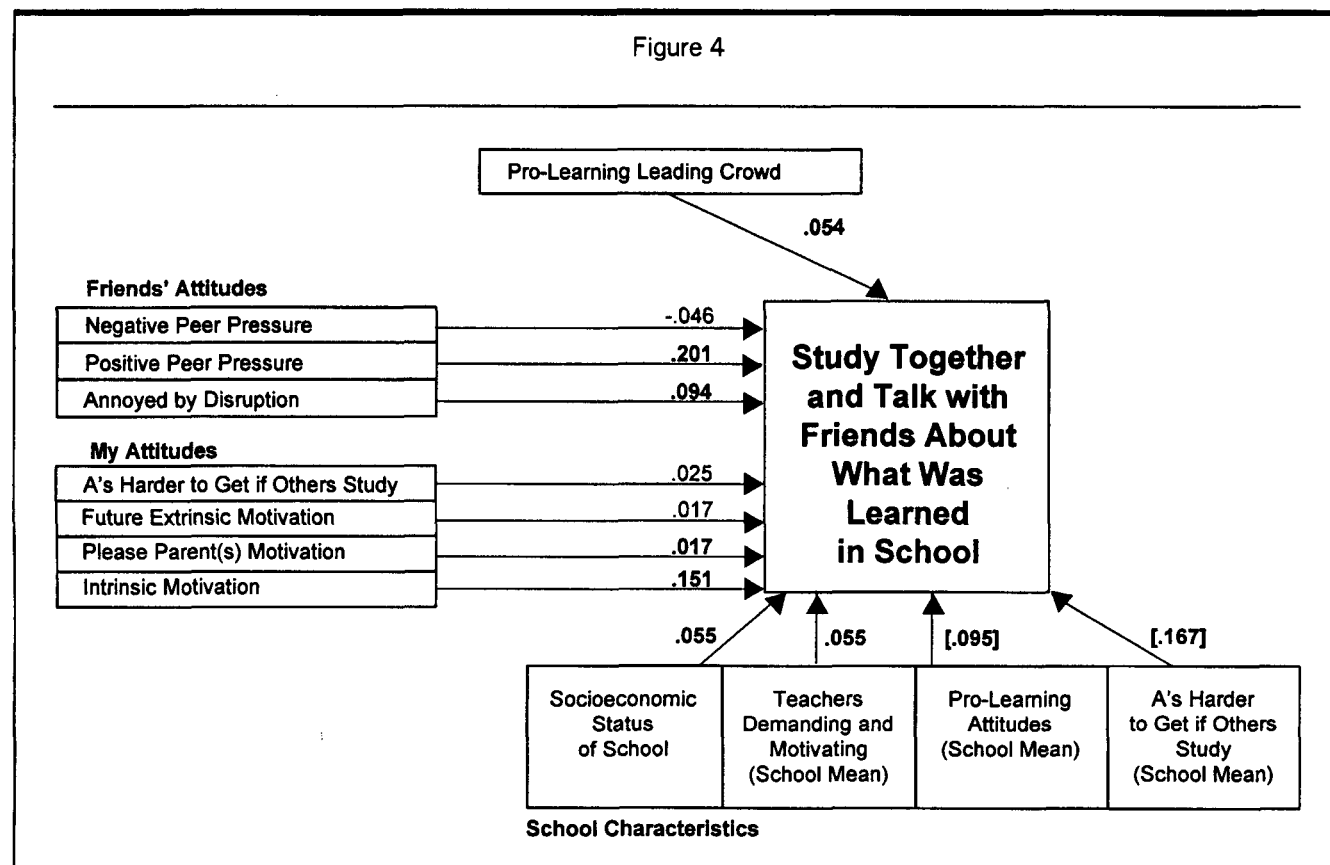### Figure 3

Verbal Harassment

.100   .089

Friends' Attitudes

Negative Peer Pressure	.160
Positive Peer Pressure	.081
Annoyed by Disruption	.015

My Attitudes

A's Harder to Get if Others Study	.070
Future Extrinsic Motivation	-.031
Please Parent(s) Motivation	.000
Intrinsic Motivation	.000

Didn't Try Hard Because I Worried What My Friends Might Think

-.010   [-.13]   [.120]   [.130]

| Socioeconomic Status of School | Please Parents Motivation (School Mean) | Pro-Learning Attitudes (School Mean) | A's Harder to Get If Others Study (School Mean) |

School Characteristics

Figure 4

Pro-Learning Leading Crowd

.054

Friends' Attitudes

Negative Peer Pressure	-.046
Positive Peer Pressure	.201
Annoyed by Disruption	.094

My Attitudes

A's Harder to Get if Others Study	.025
Future Extrinsic Motivation	.017
Please Parent(s) Motivation	.017
Intrinsic Motivation	.151

Study Together and Talk with Friends About What Was Learned in School

.055   .055   [.095]   [.167]

| Socioeconomic Status of School | Teachers Demanding and Motivating (School Mean) | Pro-Learning Attitudes (School Mean) | A's Harder to Get if Others Study (School Mean) |

School Characteristics

believed they were being graded on a curve. Students high on the negative peer pressure index [one of whose items is 'my friends make fun of those who try to do real well in school'] were also harassed much more frequently (Figure 2). Compared to the baseline of incidence of 30 per year, students who were 1.5 SDs above the mean (93rd percentile) on the negative peer pressure index were harassed 41 times a year. Those hanging out in cliques that were 1.5 SDs below the mean on this scale were harassed only 24 times a year on average.

A GPA significantly above or below the school norm led to increased harassment. When a clique's commitment to academic achievement (positive peer pressure and annoyed when others joke around scales) deviates significantly from the school norm, the members also experience more harassment. How strong is the pressure for conformity to school norms? Figure 2 presents a calculation of how much harassment increases as a student deviates from school norms on these four indices. We picked 30 insults a year of each kind as the baseline level of harassment received by students who were at the school mean on GPA, positive peer pressure and 'annoyed when others joke around.' Holding negative peer pressure constant, students who were 1.5 SDs above the mean (93rd percentile) on GPA and the commitment indices were harassed 43 times a year, a 42% increase from the baseline student. Students hanging out in cliques that were 1.5 SDs below the school mean on GPA and academic commitment were harassed about 39 times a year a 30% increase over the baseline level.

Not Trying

When directly asked whether "I didn't try as hard as I could in school because I worried about what my friends might think?", 80% said it had "never" happened. For those who said it had happened at least once, number of instances was 28 per year on average. What are the characteristics of the students who report consciously reducing effort because of a fear of how friends might react? They are more likely to be middle school students, male, to be Native American, Asian, Hispanic or African American, to live with only one parent, to have many siblings and to have parents with less schooling. Incidence of NOTRY is also lower in high-SES schools, and schools with larger numbers of African American students. However, these variables explain only 2.3% of the variance of the square root of the frequency of not trying.

What are the effects of peer pressure and norms on not trying? When peer pressure variables are added to the model, 8.8% of the variance is explained. Figure 3 presents the main findings from the analysis of the determinants of not trying hard because of a fear of a negative reaction by friends. The most powerful determinant of not trying was being in a clique where negative peer pressure was strong. Not trying because of fear about how friends would react was higher for students who were frequently harassed and for students who believed that "If others study hard, it's harder for me to get good grades." Surprisingly, students in cliques with strong positive peer pressure were also more likely to report not trying as were students in schools that had strong pro-learning norms. Schools where many of the students reported working to please and impress their parents had fewer instances of not trying. In addition, schools where many students believed they were being graded on a curve also had significantly higher incidence of not trying.

Studying/Talking with Friends

Studying with friends and talking about what you have learned outside of class is more common for girls, for those living with two well-educated parents, for middle school students, and in high-SES communities. Studying also positively correlated with self-reported ability. These variables, however, explain only 7% of the variance of square root of the frequency of studying together variable.

When peer culture scales and the student course taking patterns and attitudes are added to the regression, variance explained rises to 22%. Studying together was more common for students in honors courses and for students who had taken accelerated courses in middle school. Figure 4 presents findings from their analysis of the effects of student motivation and peer pressure. Incidence of studying together after school is higher in schools with demanding and motivating teachers, schools with a pro-learning student culture, and schools with a pro-learning leading crowd in seventh grade. As hypothesized, studying together with friends was more common in schools where students thought they were graded on a curve.

Students with high levels of intrinsic motivation were more likely to study with friends. Students motivated to impress parents or get into college and obtain a good job were only slightly more likely to study with friends. The norms and attitudes of one's clique significantly affected studying together. Positive peer pressure and "annoyed when others joke around" had a strong positive relationship with studying together. Negative peer pressure had a negative relationship.

Classroom Engagement

Classroom engagement is lower for male students, students from single-parent families, students whose parents have limited amount of schooling, and students with many brothers and sisters. Holding school characteristics constant, African Americans, Hispanics, and Asians recorded the same level of engagement as Whites. Only Native American and mixed-ethnicity students were significantly less engaged. Schools with the highest levels of engagement had large Asian, African American, and Hispanic minorities, and schools serving the children of poorly educated parents. Findings suggest disengagement from school is not a problem confined to minority communities and low-income neighborhoods. These variables, however, explain only 7% of the variance of the engagement index.

When peer culture scales, attitudes, and self-reported ability were added to the regression, variance explained rises to 30.3%. Engagement is higher for more-able students and lower for students in basic classes. It is higher in middle school and in the early grades of high school and in schools with motivating and demanding teachers. Figure 5 presents findings from analysis of the effects of student motivation and peer pressure. Intrinsic motivation has a powerful positive effect on engagement as does future extrinsic motivation. Students motivated by a desire to impress their parents were not more engaged in class.

Peer pressure effects also were substantial. Students in cliques annoyed when others joked around in class were

more engaged. Positive peer pressure had the expected positive effect and negative peer pressure a negative effect. Engagement was lower for those who believed they were graded on a curve and for students who were frequently verbally harassed by peers. An anti-learning leading crowd in seventh grade also was associated with lower engagement.
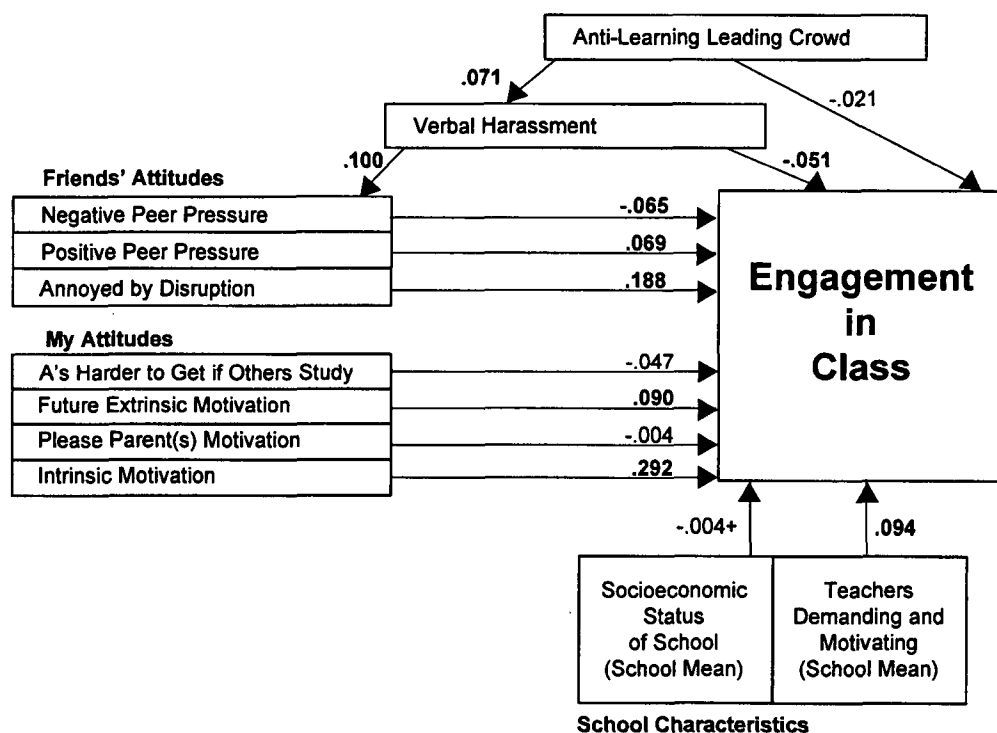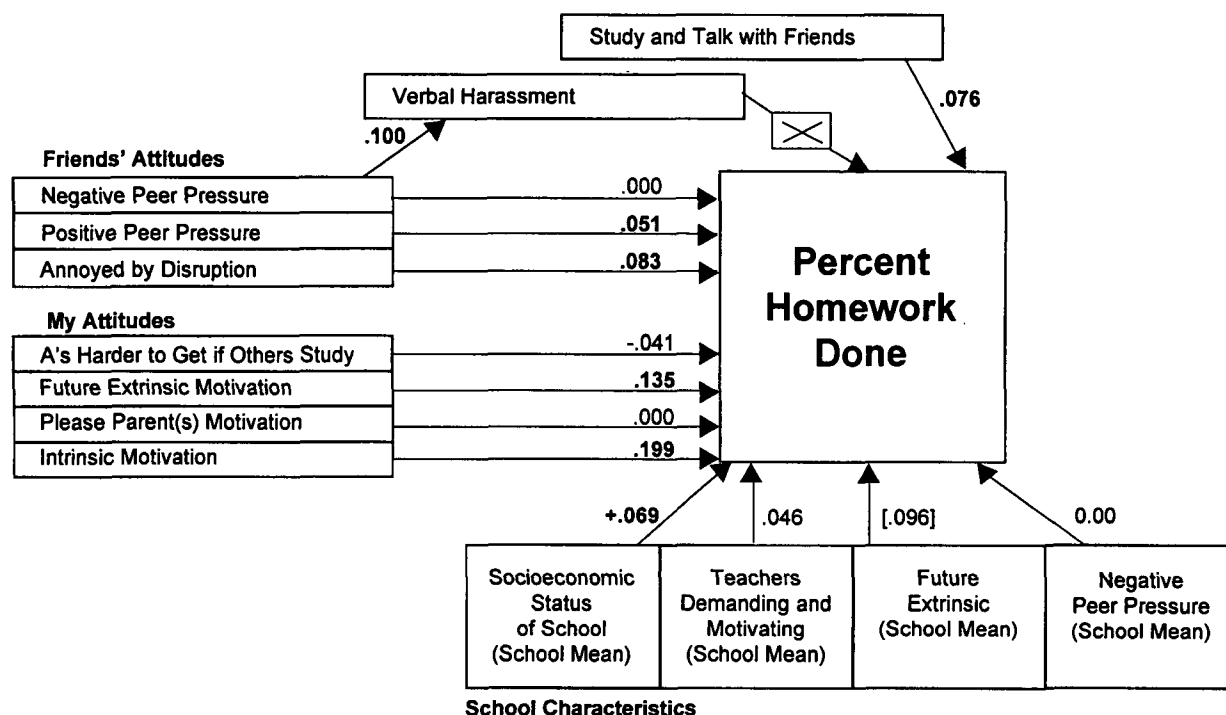
Figure 5

Figure 6

Completing Homework Assignments

Proportion of homework assignments completed is lower for male students, students from single-parent families, students whose parents have limited amounts of schooling, and students with many brothers and sisters. Hispanics and Native Americans completed less homework, Asians completed more. Homework completion was higher for more-able students and students in honors classes. Students with many scheduled study halls complete less homework. Completion rates were higher in schools with only a few single-parent families and in schools with interesting and demanding teachers but decline as the student progresses through high school. These demographic variables explain 8.3% of variance of homework completion.

When peer culture scales, attitudes, self-reported ability, and course taking patterns are added to the regression, variance explained rises to 23.1%. Figure 6 presents main findings from analysis of effects of student motivation and peer pressure. Intrinsic motivation has a powerful positive effect on Homework completion as does future extrinsic motivation. Students motivated by a desire to impress their parents did not complete more of their homework.

Peer pressure effects also were substantial. Students in cliques annoyed when others joked around in class and that encouraged each other's learning were more likely to complete homework. Negative peer pressure had no effect, suggesting that when a school activity is done in private, negative peer pressure attitudes of one's clique have little effect. Students who studied with friends completed a larger share of homework. Homework completion was lower for those who believed they were graded on a curve and for students who were frequently verbally harassed by peers. A pro-learning leading crowd in seventh grade was associated with higher rates of homework completion.

Grade Point Average

Parent's schooling and living with both parents both had positive effects on GPA. African Americans, Hispanics, and students with many siblings had lower GPAs. Asian American students had higher GPAs. Mean GPAs were higher in middle schools and schools with large shares of Asian American or African American students. Schools serving communities with well-educated parents did not have a tendency for better grades. These demographic variables explained 16.4% of the variance of GPAs. When self-reported ability and course taking patterns were added to the regression, variance explained rose to 35.2%. Students in accelerated classes in middle school and currently in honors classes had higher GPAs.

The final regression predicting GPA reveals how the five student behavior indicators combine to generate a teachers overall judgment of student performance. Attitudes and peer norms were assumed to influence GPA only through their effects on study behavior, so they were left out of the regression. Adding study behavior indicators to the regression increased the explained variance to 46.5%. Proportion of homework completed generated a larger effect on GPA than other effort indicators. Increasing the proportion of homework done by one standard deviation (.224) increased GPA by .23 or more than one-third of the within school standard deviation of GPA. Classroom engagement was the second most important effort-related determinant of GPA. Harassment by peers had no direct negative effect on GPA.

However, since harassment influenced engagement and homework completion it has indirect negative effects on GPA. Studying together had direct and indirect effects (through homework completion) on GPA.

IMPLICATIONS

This paper addresses two of secondary education's most serious problems – peer abuse of weaker, socially unskilled students, and a peer culture that discourages some students from trying their best academically. Two problems were documented by reviewing ethnographies of secondary schools, by interviewing students in eight New York State suburban high schools, and by analyzing data from questionnaires completed by 35,000 students at 134 schools. Based on these observations, a simple mathematical model was created of peer harassment and popularity and of the pressures for conformity created by the struggle for popularity.

The theory and data analysis suggest that, while the two problems are related, solving one will not necessarily solve the other. Nerds and Geeks represent one of many groups of outcasts in secondary schools. If suddenly it was cool to be a Geek, other groups would still be targeted for harassment, and the Nerds would likely participate in the harassment with everyone else. Nevertheless, the oppression that nerds experience sends powerful normative signals to other students to withdraw from alliances with teachers and get with the program of becoming popular with peers. "Be like us," the 'populars' say. Spend your time socializing, do not "study too hard;" value classmates for their athletic prowess and attractiveness, not their interest in history or accomplishments in science.

What do students so dislike about the students they outcast as nerds and geeks? They tell us it's the nerds' fault. They do not socialize much, "say stupid things," have geeky interests, wear unstylish clothes, are competitive about grades, talk too much in class, and lack self-confidence. These indeed are the stereotypes. However, a chicken and egg problem exists. Students identify nerds in the first weeks of middle school. Once singled out, they are subjected to harassment intended to wear down their self-esteem. Is it any wonder they lack self-esteem, leave school at 3 pm, and hang out with other geeks? Perhaps they started out being a little different then the harassment and ostracism turned them into the stereotypical nerds.

Changing the School Culture. Requiring adolescents to attend an institution where they are regularly bullied by classmates is unjust. While some parents respond by moving to another town or enrolling their child in private school, most cannot afford that option. In time, some parent may successfully sue a school district over the issue.

Harassing the students also poisons the pro-learning environment educators attempt to establish. To many students, nerds exemplify the "I trust my teacher to help me learn" attitude prevalent in elementary school. The dominant middle school crowd is telling them that trusting teachers is baby stuff. It's 'us' versus 'them.'

How can schools and teachers meet this challenge? Schools must vigorously defend the position that school is first and foremost about learning, and students are expected to work hard. EEA schools with the most-demanding teachers reported significantly lower levels of peer harassment; students studied together more frequently, were more

engaged in class, and completed homework more regularly. Schools high on the teachers are motivating index also recorded lower levels of harassment and higher levels of engagement and homework completion. The first best solution is for teachers to take over normative leadership of the school and make working hard the norm, as at KIPP Academy middle schools:

The cool kids in our school are kids who work hard, because we as adults have made sure that to be "in" you have to work hard. We have an extensive system of rewards and consequences that every teacher in every grade administers the exact same way. The consistency from classroom to classroom and across grade levels is the key, and it has helped us to establish that culture of hard work. We are all working together and have been successful because, to be frank, we haven't allowed kids, who in the past may have gotten away with not doing any work or who may have put other kids down for being nerdy or too studious, the opportunities to become "cool" or "in." Our discipline is firm; if you don't work hard you don't get to sit with your friends at lunch, go on field trips, participate in gym class, attend special events, etc., and we, the adults, are all on the same page with this. It's hard to set the norms when you are not the one participating. On the flip side, if you do work hard, then you will be rewarded in fun ways—pizza parties, skating trips, things like that. So, to have fun and fit in, kids must adapt, they must work hard. You're probably saying to yourself that this doesn't sound like your traditional middle school and why would any kid want to put in such hard work. But the kids love it here, because they are discovering that great things happen to people who work hard. And they want to be included. (Dean of Students at a KIPP Academy).

KIPP academies are non-selective choice schools that run from 8 am to 5 pm during the 180-day school year, schedule compulsory Saturday enrichment programs three times a month, and convene a three-week summer school. Students commute from all over the city. During the summer prior to first-time entry to the school, new students spend a couple of weeks in skill-building exercises, learning the KIPP culture, and bonding with future classmates and teachers. The goal is to develop the skills and knowledge necessary to gain admission to and succeed in a private or charter high school. If they achieve at the required level, they will all make it into good high schools.

However, when students and parents are not choosing the middle school, as in regular public schools, establishing a strong adult-dominated, academically focused student culture is more difficult. For certain types of achievement – athletic, funny, friendly, outgoing, popular, and attractive – more will always be better in the eyes of peers. However, when it comes to academics, peer pressure sets a norm – an optimal level of academic effort – that seeks to prevent many students from achieving all they are capable of academically. How do policy makers get serious engagement with learning to be normative among students? Niebuhr's dictum provides us with a number of avenues.

Leading crowds, and other crowds as well, can be counted on to promote norms that reflect their own interests. If the leading crowd is taking learning seriously, peer norms about the optimal level of academic effort will shift up and the whole school will be pulled to a higher level. Thus, all of the instruments for persuading individuals to take on academic challenges and study harder – hiring competent and demanding teachers, state or departmental end-of-course exams, minimum competency exam graduation requirements, higher college admissions standards, increases in payoffs to schooling and learning, etc.– will have the same effects on peer norms that they have on the incentives faced by individuals.

An anti-learning peer culture is likely to develop if students perceive academic classrooms to be zero-sum games that pick winners and losers but cannot make everyone better off. To avoid this, the academic enterprise needs to be and needs to be perceived to be a positive sum game in which everyone can succeed. Teachers should not grade on a curve. Grades should be based on student effort (completing homework assignments), good discipline (not disrupting the learning of others), and absolute achievement (quiz and test results). Schools should not publish or call attention to class rank. Course content assessed externally by state department of education standards or advanced placement program also is desirable.

Set College Completion as a Common Goal. Almost all middle school students aspire to attend college – even those with poor basic skills.[22] Middle schools should encourage this universal aspiration by taking students on trips to local colleges, briefing parents on financial aid options, and inviting former students to talk about the enjoyable aspects of college life and the importance of studying in secondary school. All students should be presumed to have college as a goal, including children from disadvantaged families. Many students do not realize the academic foundation developed in high school is critical to success in college. Once this mistaken belief is corrected, students will be more motivated to take demanding courses and study hard.

Teachers should make a special effort to persuade leaders of influential student crowds to set particularly demanding personal goals (eg, attending the state's top public university or a competitive private college). If the leadership and core members of the leading crowd are trying to get into competitive colleges, they will need to take honors classes and work hard in them. This will tend to make studying and contributing in class normative and will encourage other students to raise their aspirations and commitment to academics.

Encourage Academic Competition Among Schools. Band, choir, theater, cheerleading, and athletic programs receive enthusiastic community support because the organizations represent the school to neighboring communities, and student achievement in these arenas are visible to the community and student body. Academic extracurricular activities need to harness the energy and school spirit that inter-school rivalry and public performance generate. Individual states and foundations should establish interscholastic team competitions in academic subjects and for activities like debate, constructing robots, and the stock market game.

As many students as possible should participate, and all students who practice regularly should be given a valued role. This goal can be accomplished by arranging separate competitions for each grade, increasing the size of teams, and allowing schools to field larger teams or more than one

team. Academic teams should be celebrated in pep rallies, awards ceremonies, homecoming parades, trophy displays, and local newspapers with the school's sport teams. A sixth-grade team should begin training the first week of middle school. Starting early encourages the creation of large academically oriented friendship networks to give those groups a positive identity and accomplish this while the social order is still fluid.

Promote Normative Pluralism as Preferable to Normative Hegemony by a Leading Crowd. In some schools, a tight knit group of 'populars' wielded normative hegemony over students in their grade. This centralization of normative hegemony in a student group that is typically dominated by athletes, cheerleaders, and students with a fun ideology undermines teacher efforts to develop a pro-learning culture. Students who devote time to academic learning not sports and socializing are viewed as anti-social "rate busters" by the leading crowd and are often harassed and ostracized. A leading crowd that holds normative sway over the entire student body and has the power to marginalize students who study 'too hard' will be able to set a lower target L^N, pulling down effort levels of all students.

If, by contrast, a school has several leading crowds and those excluded from the leading crowds have formed groups of their own, leading crowds are less able to impose their norms on everyone else. In this pluralistic normative environment students who like science or who aspire to get into competitive colleges can find a group of like minded friends and insulate themselves to some degree from peer pressures against studiousness. Target learning levels, L^N, will be set by each crowd, but the average of these levels will be higher than when one leading crowd sets norms for everyone. Where it is not feasible to establish a school wide, pro-learning normative environment, as the KIPP Academies have done, a pluralistic student culture is the next best outcome.

Institute No Pass-No Play. Eighty-five percent of high schools have a minimum GPA requirement for interscholastic sports participation. A clean disciplinary record – no drugs, alcohol, or fights – also is typically required. Such policies have both practical and symbolic effects. Academic support is offered to athletes struggling academically. Some athletes are induced to study harder. Others either avoid parties where drugs and alcohol will be consumed or attend without imbibing. Since athletes form the nucleus of the popular crowds of most schools, their behavior influences the behavior of everyone else.

Another effect of these policies is on the makeup of the team. Students who are unable or unwilling to keep their average above the required minimum are either benched or cut from the team. The composition of the popular crowds changes and, as a result, norms promoted by the leading crowds become more favorable to academic learning. Our final suggestion for school administrators, therefore, is to reinvigorate their no-pass, no-play policy and extend it to

cheerleading and possibly to other high prestige extracurricular activities where students represent the school to surrounding communities. ∎

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