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## Peer Harassment: A Weapon in the Struggle for Popularity and Normative Hegemony in American Secondary Schools

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This paper addresses two of secondary education's most serious problems—peer abuse of weaker socially unskilled students and a peer culture that in most schools discourages many students from trying to be all that they can be academically. We have documented the two problems by reviewing ethnographies of secondary schools, by interviewing students in eight suburban high schools and by analyzing data from questionnaires completed by nearly 100,000 students at Educational Excellence Alliance schools. Grounded in these observations, we built a simple mathematical model of peer harassment and popularity and of the pressures for conformity that are created by the struggle for popularity and then tested it in data from the Educational Excellence Alliance.

Students entering middle school learn its norms by trying to copy the traits and behaviors of students who are respected and by avoiding contact with those who are frequently harassed. Peer norms are enforced by encouraging 'wannabes,' aspirants for admission to popular crowds, to harass those who visibly violate them. Consequently, one can infer the norms by noting who gets harassed and who doesn't. Traits that in EEA data led to higher risks of being bullied and harassed were: being in a special education, being in gifted programs, taking accelerated courses in middle school, tutoring other students, enjoying school assignments, taking a theatre course, not liking rap-hip hop music and liking instead musicals, heavy metal, country, or classical music. The relationship between harassment and academic effort was curvilinear; both the nerds and the slackers were harassed. To some degree these norms are, as Kenneth Arrow suggests, trying to internalize externalities. But why are music preferences such good predictors of harassment? Why are the student tutors victimized? We propose that norms also have a "We're cool, Honor us" function of legitimating the high status that the leading crowds claim for themselves. As a result the traits and interests that members of leading crowds have in common tend to become normative for everyone. The norms that prevailed were: "Spend your time socializing, do not "study too hard." Value classmates for their athletic prowess and their attractiveness, not their interest in history or their accomplishments in science."

#### Keywords

peer, harassment, weapon, popularity, hegemony, American, schools, secondary, education, student This paper addresses two of secondary education's most serious problems—peer abuse

#### Comments

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This paper addresses two of secondary education's most serious problems—peer abuse of weaker socially unskilled students and a peer culture that in most schools discourages many students from trying to be all that they can be academically. We have documented the two problems by reviewing ethnographies of secondary schools, by interviewing students in eight suburban high schools and by analyzing data from questionnaires completed by nearly 100,000 students at Educational Excellence Alliance schools. Grounded in these observations, we built a simple mathematical model of peer harassment and popularity and of the pressures for conformity that are created by the struggle for popularity and then tested it in data from the Educational Excellence Alliance.

Students entering middle school learn its norms by trying to copy the traits and behaviors of students who are respected and by avoiding contact with those who are frequently harassed. Peer norms are enforced by encouraging 'wannabes,' aspirants for admission to popular crowds, to harass those who visibly violate them. Consequently, one can infer the norms by noting who gets harassed and who doesn't. Traits that in EEA data led to higher risks of being bullied and harassed were: being in a special education, being in gifted programs. taking accelerated courses in middle school, tutoring other students, enjoying school assignments, taking a theatre course, not liking rap-hip hop music and liking instead musicals, heavy metal, country, or classical music. The relationship between harassment and academic effort was curvilinear; both the nerds and the slackers were harassed. To some degree these norms are, as Kenneth Arrow suggests, trying to internalize externalities. But why are music preferences such good predictors of harassment? Why are the student tutors victimized? We propose that norms also have a "We're cool, Honor us" function of legitimating the high status that the leading crowds claim for themselves. As a result the traits and interests that members of leading crowds have in common tend to become normative for everyone. The norms that prevailed were: "Spend your time socializing, do not "study too hard." Value classmates for their athletic prowess and their attractiveness, not their interest in history or their accomplishments in science."

We want to thank Lara Gelbwasser, Shanna Green, Erica Peterson, Anna Rubinsztaj, Antonio Ruiz-Quintanilla, Shannon Smith, Jarrett Taubman and Andrew Zuckerman for their valuable assistance on this research project. This paper benefited immeasurably from the contributions of these student research assistants. They conducted the interviews, wrote ethnographies of the schools they studied, managed the survey data collection, helped with the statistical analysis and debated how to interpret the data. Most of my collaborators, however, have not yet seen this new paper so we accept responsibility for any misinterpretations of the data.

# Peer Harassment: A Weapon in the Struggle for Popularity and Normative Hegemony in American Secondary Schools

"For some reason they just hear about me and say 'Hey let's bug the kid or let's chase him.' I don't know, that always seems to amaze me—like kids that I've never seen before know my name, know about half the things about me; some of them I don't know." [Morton in 7<sup>th</sup> grade of Cronkite JHS] Morton was correct that he was known (by reputation) throughout the school. Once agreement existed that an individual was a Mel, peers who knew him only by reputation felt free to harass. <sup>1</sup>

"A lot of people make fun of him [William, one of the other outcasts at Cronkite JHS]. He is really nice to me. But sometimes I'm mean to him. One time, it was really so nice of him...he took my punishment for me. Sitting in the seat all period. I didn't even thank him. I was spitting on him [figuratively]. I don't know why. I felt like it. He was really upset. (Becky)"

Why do most middle schools have at least one group of students who are treated with remarkable cruelty by peers? Why is bullying so frequently done in front of spectators? Why do bystanders seldom intervene on the side of the victim? Why do bystanders frequently join in?<sup>a</sup> According to one student, "Students bully so they can be part of a group and they do it so the group will respect them more." There is considerable empirical support for this student's characterization of motives. Developmental psychologists studying verbal bullying have found that bullies are often among the most popular students in a school and that bullying behavior is positively associated with within group status. Why do peers tolerate even reward classmates for being mean? What is the role of harassment and bullying in adolescent peer cultures? How does the phenomenon influence student behavior and learning?

This paper attempts to answer these questions by developing and testing a theory of student culture and norms, how norms arise, how they are enforced and the effects of norms/culture on the academic climate of a school and the engagement and study effort of students.

<sup>&</sup>lt;sup>a</sup> Video tapes of playground bullying incidents in Canada found that peers were involved in 84 percent of incidents. Peers were coded as respectful of the bully 74 percent of the time and respectful of the victim in 23 percent of the incidents. W. M. Craig and D. J. Pepler, "Observations of bullying and victimization in the school yard," <u>Canadian Journal of School Psychology</u>, 1997, 13, 41-59.

Empirical studies of peer effects, social capital and social interactions have generated persuasive evidence that individuals are influenced by the norms and behavior of coworkers and close associates. Developmental psychologists have been studying peer effects on engagement with school for decades, sometimes using experimental designs.<sup>5</sup> Education production function studies consistently find that the socio-economic status of the other students in a school influence learning gains of individuals. Until recently it was not clear, however, whether this finding reflected a causal relationship or was instead a selection effect caused by parents with strong preferences for education choosing to move to high SES communities. Recent studies based on data free from such bias show that causal peer effects do exist. Randomly assigned college roommates have been shown to influence each other's academic performance.<sup>6</sup> An elegant study by Carolyn Hoxby has shown that boys and girls learn more when girls account for a larger share of the students in a grade. Angrist and Lang's study of Brookline schools found that increasing the number of Boston Metco students in a classroom did not affect the learning of white students but had significant negative effects on learning of Black 3<sup>rd</sup> graders who were Brookline residents.<sup>8</sup> Hanushek, Kain and Rivkin's analysis of Texas data found that high ability Black students learned more in years in which their grade had a higher proportion of non-black students.<sup>9</sup> Using experimental data from Project Star, Boozer and Cacciola have demonstrated that the students who were taught in small classes during their first years in school had positive spillover effects on their classmates in regular third and fourth grade classrooms once the experiment was completed.<sup>10</sup> Using panel evidence from administrative data, Andrew Zau and Jullian Betts, found that "changes in the average achievement at the school have independent large effects on student learning." These effects were substantially larger than the effects of class size and teacher credentials, education and experience. 11

These studies demonstrate that peer effects are real--when one group of students has been successful at academic learning during time period 't', classmates learn more during 't' and subsequent time periods. But how can this knowledge be used to improve schools? For policy

implications we need to look inside the black box of gender, race and SES effects and understand how peer spillover effects are generated. The SES, skin color and gender of classmates probably do not directly influence learning. Rather the observed spillover effects are probably generated by the norms and behavior of classmates. Some students help their classmates learn, others disrupt their learning. Some honor academic engagement, others make fun of kids who are friendly with teachers. We need to discover how to increase the proportion of students who have pro learning norms and behavior patterns. This requires improved understanding of how groups of students develop their norms and characteristic behavior patterns, how these norms are enforced and then how they are transmitted to the next generation of students.

The goal must be not just to specify a theoretical model of how or why norms influence student behavior, but also to explain where the particular norms that prevail came from, how they are enforced and how they are taught to new generations of students. The norms and culture I speak of are developed by students, for students and are enforced by students, all without the assistance of a legitimizing political process, a governmental structure or access to funds to pay policemen. Moreover, the norms promoted by the peer culture are sometimes in opposition to the rules and norms that principals, teachers and parents are trying to promulgate. In the face of these difficulties, it is truly remarkable that middle school and high school students so frequently establish strong independent sub-cultures that make highly prescriptive demands on group members—demands that many members of the group wish they didn't have to conform to.<sup>b</sup> How do they do it?

The first problem that peers face when they try to establish a culture with prescriptive norms is that norm enforcement (like law enforcement) is a public good. Fehr and Gachter (2000)

Brown, Eicher and Petrie asked 1297 students why joining a crowd was or was not important to them. Thirty-six percent of students who were members of a crowd and 41 percent of those in the Jock/Popular crowd cited conformity pressures as reasons for <u>not</u> joining a crowd. Only 4 percent cited conformity as an attractive feature of crowds. The attractions of joining a crowd were friendships, activities and support (eg. 'builds self-confidence' and a sense of 'being liked'). On the other hand, 33 percent of all members and 42 percent of Jock/Populars complained about their crowd restricting their friendships or not liking some of the people in their crowd. Wanting to improve one's reputation was cited as a positive reason by 17 percent of all members and 14 percent of Jock/Populars. Bradford Brown, Sue Ann Eicher and Sandra Petrie, "The importance of peer group ('crowd') affiliation in adolescence," Journal of Adolescence, 1986, Vol 9, 73-96.

found that allowing participants in a four-person public goods experiment to punish anonymous players who contributed little to the public investment, resulted in free riders being heavily punished and a big increase in contributions to the public investment. Many players devoted some of their money to punishing norm violators even though punishing others was costly for them.<sup>12</sup> If many volunteer to punish "norm violators" when the costs are substantial, what will happen when the costs are very low? That is the situation that prevails in middle school and high school.

The second problem they face is agreeing on the norms. One way consensus is achieved is by sorting into cliques and crowds that have a homogeneous outlook. 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."<sup>13</sup>

Similarity of normative outlook among members of a crowd is due in part to the influence that the members have on each other and pressures to conform. But, it also arises from selective entry and selective exit. Students who are uncomfortable with the norms and behavior of a particular clique or crowd need not join it or leave it when they discover the problem. Consequently, high school students must be viewed as choosing the normative environment of their clique and their crowd.<sup>c</sup> Each crowd tends to value highly the abilities, resources, and personality traits that the crowd's leadership and core members have in common.

<u>Method:</u> To start with we reviewed the quantitative studies of student peer cultures and bullying that have appeared in educational, psychological and sociological journals. In addition, we read every ethnography of adolescent peer cultures we could find.<sup>14</sup> We also interviewed

<sup>&</sup>lt;sup>c</sup> Students will not always join the crowd whose norms match their own norms most closely. The prestige of the crowd, having friends already in a crowd and barriers to entry into high prestige crowds are often more important than a perfect match of your norms to the crowd's norms.

students ourselves and recruited and trained six student interviewers to do the same. The qualitative data and quotations come from taped interviews of 10<sup>th</sup> graders in eight secondary schools serving predominantly white upper-middle class suburbs in New York State conducted during the winter of 1998.<sup>15</sup> We felt we would get a more accurate picture of peer cultures if we matched interviewers and respondents on gender. The time available for interviewing was limited so, we were able to study both genders in only one school, the culture of male students in another school and the culture of female students in six schools. A short description of the high schools and middle schools included in the qualitative data collection can be found in the Appendix.

The next stage of the theory development process was devising a four-page questionnaire on the attitudes and behavior of secondary school students and recruiting schools to administer it to their students. Over the course of the last four years nearly one hundred thousand middle school and high school students in 325 schools have completed one of three versions of our student survey. The multivariate analysis employs data from surveys completed by 95,000 students attending 325 schools. A copy of the version of the Educational Excellence Alliance's Student Culture survey used after January 2000 is in Appendix B.

The descriptions and hypotheses developed from the qualitative research and from looking at responses to the EEA student culture survey have been used to develop a simple theory of why crowds and schools have the norms that they have, how students choose their crowd, how school-wide and crowd norms are enforced by harassment and other pressures and how these norms influence the school's academic climate, student engagement and study effort. Since our interviews and surveys were conducted in public schools serving racially integrated or predominantly white middle class communities, the theory will require revision before it can be applied to schools in poverty neighborhoods and schools where nearly all students are Black or Hispanic. Section 1 of the paper presents the theory and provides justifications for key modeling choices by reference to our interviews and the ethnographic literature. Section 2 and 3 offer some tests of a few of the theory's predictions in data from the Educational Excellence Alliance's surveys

of Student Culture. The final section reviews the findings and makes suggestions for reducing peer harassment and bullying and building a pro-learning student culture.

#### I. A Theory of Peer Group Norms and Enforcement Mechanisms

Students entering middle school will spend up to 2000 hours annually for seven years in the company of their school peers. Not surprisingly they are strongly motivated to fit in and to gain a respected role in the school's social system.<sup>17</sup> The norms of middle school peer cultures are different from the norms that prevail in elementary school. Sixth graders learn their new school's norms by noting and trying to copy the traits and behaviors of students who appear to be respected by older students and avoiding the traits and behaviors of students who are frequently harassed.

#### 1.1 What are the Norms?

One of the first norms they are taught is 'don't ask adults for protection.'

"I ask them why they tease and they start giggling. My mother has already tried to call their parents... I don't tell her to call anybody because the next day they call me a narc. The way we figured it out is that narc probably means like a tattletale or a squealer (Les)." 18

Verbal harassment and bullying occurs outside the earshot of adults. It is now so pervasive and hard to define that most school administrators lack the ability to protect individual students from it.<sup>d</sup>

In many schools they are also taught: "No alliances with teachers." Ethnographer, Don Mertens, asked William and Scott, two of the outcasts at Cronkite Junior High why they and their friend Les were being singled out for harassment:

"One thing, he [Les] is more like a teacher's pet. He always hangs around teachers. That I don't like. I don't know how to say this but it looks like you look at teachers as your friends. They [one's peers] got to think that a teacher is not your friend (Scott in 8<sup>th</sup> grade).<sup>19</sup>

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<sup>&</sup>lt;sup>d</sup> Harassment is hard to define because insulting words are a pervasive part of peer interactions even among close friends where there is no intention to humiliate. Students told us that conversations with close friends are often sprinkled with insulting words. Insults intended to hurt and humiliate are different, they said, coming from kids outside their group or said in a different tone of voice or picking on a real (not fanciful) feature of the victim's persona. This makes it difficult though not impossible to define and enforce a prohibition against peer harassment.

William knew what it took to be popular. As he saw it, one needs to: "pay no attention and talk [in class]. Don't listen to the teacher and tell jokes all day....Yeah, really not pay attention and goof around." Despite having recognized some of the elements that made a person cool...William still preferred to be the sort of person he valued.... "Les Renault is my friend....Nobody ever really liked us because we like to stay straight. There's Mr. Muscular and Mr. Cool. We don't like doing that—we're acting how we want to act...Why can't anyone act themselves in school? I'm a goodie-goodie. I want to be straight—I want to do good things in my life. I don't want to be bad. (William in the second semester of 7<sup>th</sup> grade)."<sup>20</sup>

At the beginning of 8<sup>th</sup> grade, however, William decided that he didn't "want to be the little kid pushed around any more" and tried to change. "I've been taking a lot of people's punishments, to get them out of trouble. Or say they flunk a test. I grade it 100%. It's how everybody does it. Everybody fits in better. I don't tattle like I used to." Les had a different view of William's transformation:

"This year he [William] does not want to be teased. So what he is doing is challenging kids who are younger than him to fight. I think it is super stupid because he didn't like it when everybody was bugging him, so why is he going around bugging everyone else. I'm just strickly in the middle. I'm not going to be any bully or any wimp. (Les in 8<sup>th</sup> grade)"<sup>22</sup>

Les and Scott's efforts to escape Mel status were fruitless. William's strategy worked. "Now everybody likes me... I would say I'm in the top 10. I mean everything has changed. I know it's the best I've ever felt in my life (William at the end of 8<sup>th</sup> grade)."

The anti-teacher norms that prevailed at Cronkite Junior High School are not unusual. At Boynton Middle School, a school where children of college faculty account for a large share of the students, boys (but not girls) were not supposed to "suck up" to teachers. One student told us, you avoid being perceived as a "suck up" by:

- -- "avoiding eye contact with teachers",
- -- "not handing in homework early for extra credit",
- -- "not raising one's hand in class too frequently, and"
- --"talking or passing notes to friends during class" [this demonstrates you value relationships with friends more than your rep with the teacher],

Nerd, Dork and Geek are denigrated identities at just about every school, but there are many other groups of kids who share their outcast status and who account for most of students who are regularly harassed and ridiculed. Sometimes it's rural kids ('Hicks"), special education

students ("Dummies"), gay kids, short kids, fat kids, or unattractive kids.<sup>e</sup> Since our focus is on how norms regarding academic engagement and effort are established, the theory does not directly address the motivations behind the harassment of most of these other students.

#### 1.2 Why the Popular Crowds have the Power to Set Peer Norms

So far we have described the school wide norms as inherited from previous generations of students. But the transmission mechanism is the popular or leading crowds. The students we talked to viewed the popular/leading crowds as the source of school wide norms. Indeed the members of the popular crowds were often seen as role models and exemplars of "cool." Many peers respected them, so their opinions about who and what was "cool" and who and what was "uncool" were quite influential. When asked what makes the popular crowd popular, Jackie pointed out, "Everyone wants to have a good time, no matter whom 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 [sic] themselves. [Their popularity is] not just based on what they do."

Since the primary signal of a person's popularity is who one hangs out with, ones reputation as a popular person depends on "being allowed to hang out with them [one of the popular crowds]." As one of our respondents said, "If you're friends with popular people, you're considered more popular (Boynton Middle School)." 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 that kid's reputation. This works for

e Two examples follow. Paula 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." When asked where she sits at lunch, she laughed nervously and admitted, "I mostly eat my lunch in the bathroom. There are groups in the cafeteria and I don't really feel comfortable there." [Student at Newport Junction High School, interviewed by Lara Gelbwasser.] Donna Eder's ethnography of Woodview High School provides a second example. "Students also ridiculed female isolates by making fun of their perceived unattractiveness.... A common way to do this was for boys to convey their romantic interest in a particular isolate and make fun if she took it seriously....[Sharon explained to Stephanie Parker, the interviewer] Now they really make fun of her [Theresa, a student who had fallen for the ruse] because she'll start to cry." Donna Eder, School Talk, (New Brunswick, Rutgers Univ. Press, 1995), p. 50.

groups as well as individuals. If your clique interacts with a group that is seen as popular, your clique's reputation will improve.

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.

Members of the crowd control and limit entry into the crowd. "Posers" are individuals or groups who copy the dress and behavior of a high status crowd, without being a part of that crowd. By adopting the norms and behaviors of a popular crowd as their own, "Posers" assist in the transmission of the norms and values of the popular crowd to the wider school community.

In addition, certain core members of the leading crowds and 'wannabes' trying to be accepted into these crowds are often the enforcers of the norms. Many students expressed resentment and hostility towards the popular crowds and the 'vigilantes' who enforced the school wide norms. When asked if there is a cool crowd at Newport Junction, Kate remarked "Everyone looks up to [the populars], but I don't really know why. There's nothing really different about them except that they hang out with upperclassmen and play sports." Judie described them as "a big group of blond snots." Eliza, a member of the 'populars,' boasted about their snobby reputation, proudly confiding, "When [all my friends] are together, everybody hates us."<sup>24</sup>

#### 1.3 How are Peer Norms Enforced?

A norm that is frequently violated without provoking sanctions will crumble and eventually disappear. Consequently, penalties for engaging in behavior proscribed by school wide norms need to be significant enough to deter almost everyone. The form of the sanctions that enforce peer norms will vary across crowds. Students in high status crowds might be risking being pushed out of their crowd. Norm violators from crowds of intermediate prestige risk being exiled from their crowd. Other types of sanctions—e.g. harassment, teasing and

f A member of the popular crowd at a school studied by David Kinney said "At lunch we sit at our own table [but] if you go out to lunch with the wrong person, rumors would go around that you went to lunch with a geek!" David A. Kinney, "From Nerds to Normals: The Recovery of Identity among Adolescents from Middle School to High School," Sociology of Education, vol. 66 (January 1993), p. 27.

intimidation--are necessary to get loners and students in low status crowds or oppositional crowds (such as the Freaks) to avoid proscribed behavior. This is what was happening to the Mels at Cronkite JHS.

What follows are examples of how norms are enforced by these more overt mechanisms. The question about a cool crowd elicited the following response from one Harbor Edge student: "They seem to think they are. They're usually into sports and because they have so many friends, they just think of themselves as popular....They are so obnoxious; they just make fun of others for who they are and I don't think that's right." Even though she ate lunch with them, Robyn described Harbor Edge's popular crowd as "the loud ones. Some of them make fun of the dorks and the nerds, and then the rest of them hang out with the meaner people. They're known to act like this; no one will make fun of them, because [they] are afraid they'll be totally abused." Robyn is suggesting here that the leading crowd maintains the group's status and the hegemony of its norms, in part, by including in their ranks 'vigilante' norm enforcers who intimidate the rest of the students. Note further the resignation of these voices regarding the power of the 'populars.'

There are resentments but no budding revolution or even the energy to propose and publicly defend other norms.

Norm enforcement is sometimes accomplished by physical intimidation and violence. At Longview High School a student told us: "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." Another incident was described third hand, "They threw them down Suicide Stairs—the big stairs over by the music wing. I think the freaks avoided that area just so that they wouldn't get thrown down the stairs. They would yell 'Oh it's a Freak,' and start beating them up."<sup>26</sup>

Why would popular crowds go to the trouble of ruling by violence, intimidation and teasing designed to destroy self-esteem? Why don't norms of fairness and civility trump the desire to signal that certain behaviors or forms of dress are unacceptable in the eyes of peers? One

possibility is that the stakes are perceived to be high because the popularity and power of the leading crowds is on the line. Secondary school students divide themselves into crowds, each with its own norms and characteristic behaviors. Every crowd would like students outside their group to respect its norms and to honor the crowd's characteristic behaviors. But there can only be one set of school wide norms defining what traits and behaviors are respected and what is disrespected and which crowds are respected the most. What is unique about the "cool" or popular crowd(s) is that they have succeeded in defining school-wide norms in such a way that it reinforces the popularity and authority of the members of their crowd(s). Many less secure students, afraid of asserting their individuality, will evaluate themselves by what the secure, confident students consider "cool." The new arrivals in middle school are particularly susceptible to these pressures and that is when the struggle over school wide norms for that cohort of students is joined and the issue is decided. The crowds that get their preferred norms accepted as the school wide norms become the leading or popular crowds.

The problem with this explanation is that in most schools the hierarchy of crowd prestige has been stable for decades. While the Freaks publicly scorn the norms of the leading crowds, they are not mounting a serious bid for normative hegemony. Neither are the Nerds. William pleaded, "Why can't anyone act themselves in school?" Why couldn't Les and William's seventh grade behavior be tolerated? The answer, we suggest, is that Les and William were seen as taking the side of the teachers in their effort to establish pro-learning norms. Elementary school teachers typically have normative hegemony in their classroom. In the new circumstances of junior high school, the most aggressive and physically dominant boys were rebelling against the pro-learning norms that teachers typically support. Winning this struggle was so important that they were willing to cast aside norms of civility and tolerance in order to guarantee the success of

<sup>&</sup>lt;sup>g</sup> Uncertainty over who will be in the popular crowd and what its norms will be is greatest in the first year of middle school. This may be why there is a strong positive association between bullying (verbal harassment of other students) and popularity in the first year of middle school but not in 7<sup>th</sup> and 8<sup>th</sup> grade. Dorothy Espelage and Melissa Holt, "Bullying and Victimization during early adolescence: Peer influence and Psychosocial Correlates," forthcoming in <u>Journal of Emotional Abuse</u>, 2003, 1-32.

their revolution and their position at the top of the student prestige hierarchy. William (in 7<sup>th</sup> grade) and Les were thus casualties in the teacher's losing struggle to establish pro-learning norms at Cronkite Junior High.

Why did so many students join the gang harassing the Mels? Don Mertens' answer was "...in order to set themselves apart from the categorical identity [the Mels represented]."<sup>27</sup> In other words, they joined the posse of norm enforcers to signal their support for (what they believed to be) school wide norms because they were afraid that otherwise they might be the posse's next victims. The bullying of the Mels and Freaks not only deters others from joining their ranks; it involves a large share of the student body in the job of punishing the violators and affirming the norm. As a deterrence mechanism, harassment and bullying in middle school is certainly efficient. No lawyers, judges, juries or policemen are required. Students needn't be persuaded that punishment is likely if they violate the norm. They see some classmates being humiliated and they want to avoid that fate. That fear is sufficient to change even deeply held norms and behavior patterns. Efficient yes, but it is not optimal. Many members of the posse have no independent knowledge of the outcast's "crimes." When they joined the posse, some members may not even have known that the behaviors the victims are charged with were proscribed by peer norms. The norms are frequently not in the general interest of the students—benefiting some students at the expense of others. The bullies are not even motivated by a desire for justice. Their primary motive is avoiding becoming the next victim and currying favor with the powerful. As so frequently happens when vigilantes enforce norms without due process, the effort to deter and punish norm violators results in many injustices.

#### 1.4 Why peers try to influence how much studying others do?

There are four reasons why students try to influence the study time and engagement of their classmates.

1) The attractions of spending time socializing: Socializing is a group activity.

Students who do not socialize force their friends to engage in this pleasurable activity with

someone else. This naturally limits one's ability to make friends. Sixty percent of the respondents in the EEA survey agreed that, "not spending time to socialize and hangout tends to make you less popular."

This phenomenon also works in reverse. Students who are unpopular are also sometimes induced by the threat of harassment to avoid some after school activities and go home right after school. This gives them more time to study. They also often avoid the cafeteria during lunch, eating a sandwich in the bathroom or library while studying. Thus, the characteristic studiousness of the ostracized nerds is in part a consequence of their unpopularity. Their lack of popularity at school also helps explain why nerds and other ostracized kids often spend a lot of time at home watching TV, playing video games and role-playing games with other ostracized kids.

2) "I'm Cool, Be Like Me" Conformity pressures from other students: For most types of achievement—being athletic, funny, friendly, outgoing, popular and attractive— more is better in the eyes of peers. However, for academics, a school typically has a norm—an optimal level of academic effort that maximizes popularity and minimizes harassment. Deviating from that norm in either direction is sanctioned. The purpose of "I'm cool, Honor me" norms is first and foremost to define who is popular and to legitimate the high status that the leading crowds claim for themselves. A side effect of "I'm cool, Honor me" norms is that many students adopt these norms and try to exhibit the traits and behaviors valued by the norms in hopes of becoming more popular. Thus, the "I'm Cool, Honor me" norm becomes a "Be like me" behavioral prescription. However, adopting and exemplifying school wide norms does not insure entry into a popular crowd. Instead, it may result in one being mocked as a "poser" or "wannabee." Nevertheless, many students are discouraged from making comments in class or studying long hours and encouraged instead to hangout or participate in extra curricular activities.

Making mistakes in class or asking "stupid" questions often produces titters among classmates. Fear of such a reaction may induce a few students to prepare more thoroughly for class. A more common reaction, however, is for struggling students to sit silent in class and send out signals that they think the whole enterprise is a waste of time. Thus, "I'm Cool, Be Like Me" norms often fail to induce struggling students to try harder, but instead push them to adopt a "slacker" persona that is proud of it's disrespect for the academic enterprise. Thus "be like me" can sometimes deter both the well prepared and the unprepared from talking in class.

3) Rate Busting and Zero-Sum Competition for Grades: But is a desire to impose conformity the sole reason for nerd harassment? Let's listen to what members of the popular crowd have to say about nerds. At Harbor Edge, a school sending 96 percent of graduates to college, Robyn 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 her expressed sympathy for the nerds, Robyn said at another point in the interview, "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 [10<sup>th</sup> grade]—that's so stupid."<sup>28</sup>

At Newport Junction, a school sending 94 percent of its students to college, Eliza characterized 'dorks' as "constantly asking questions in class." This annoyed the other students. She recounted what happened in her English class. "Nobody likes this girl. She talks and says the stupidest things which makes 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." When, however, students were asked a direct question about the effect of studying on popularity, students denied that studying made one 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." 30

At small intimate Lakeside High School where 89 percent of graduates go to college, the direct question elicited: "If you study too hard, it will reflect in a good grade, and nobody makes fun of a good grade... People who don't care about [grades], they don't say anything because probably they wish they could have gotten the same grade. So if you study hard and you get a good grade, people may envy you...but you wouldn't get ridiculed for it."<sup>81</sup> But even this class appears to have a norm against working hard.

"In our grade in general, nobody wants to work hard at all. I'm friends with people who are juniors...and they are pushing...I think it's a little too competitive, so I'm glad I am not in that grade.... [In our grade] everybody is smart enough to do the work, but everybody is too lazy to actually do it." 32

There was one exception to this generalization: Rebecca a recent transfer from a competitive private school. Her goal was to be the valedictorian. How did people react to her? "Rebecca is really, really smart. But I think [school work] is all she does. She only cares about school and she stresses on school way too much. And it gets annoying to people." Rebecca realized she was unpopular, but gave her situation a positive spin. "I don't like it here, but the only good thing is that since [Lakeside] is so small, you have a better chance at being higher in the class. So maybe, hopefully I'll be valedictorian, and be at the top. <sup>33</sup> Lakeside's 10<sup>th</sup> graders saw themselves as reacting to Rebecca's obsessive personality, not to her academic work ethic. But if Rebecca had been obsessed about being the best basketball player, would they have reacted negatively? Probably not. Success in becoming a better basketball player helps Lakeside defeat rival schools. Becoming the valedictorian, by contrast, means someone else in the class does not.

EEA survey responses confirm that being competitive about grades tends to make one unpopular. Fifty-one percent of students said, "It's not cool to be competitive about grades." By contrast, only 19 percent said 'It's not cool to frequently volunteer answers or comments in class." and only 15 percent said 'It's not cool to study real hard for tests and quizzes." Thus, the third reason why peers might try to discourage 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.

Kenneth Arrow has said that "norms of social behavior, including ethical and moral codes ....are reactions of society to compensate for market failure." Peer group norms may, similarly, be reacting to the rat race character of the competition for grades in academic classrooms and the perception that academic standards are negotiable.

Peers can monitor how classmates behave in class and sanction those who exhibit too much devotion to learning. They are unable to monitor studying at home, so deterring "too much" home study is based partly on (1) observing how much time a student spends in extra curricular activities and hanging out after school and rewarding that activity and partly on (2) observing grades and then sanctioning those who appear to have gotten high grades by working hard. Thus by this argument the purpose of nerd harassment is not punishing high aptitude students for being smart, but discouraging study effort. Indeed, pressure against doing all your homework or participating a lot in class will probably be stronger in low track classes than high track classes because the students in low track classes are more likely to have chosen an identity that rejects school. It is not clear, however, that the 'do not compete for grades' motive is decisive because students can also benefit from the study effort of classmates.

4) Learning Multipliers: The fourth reason why students might care about the study/learning effort of their classmates is the positive effect that the engagement and achievement of one's classmates has on individual learning discussed in our review of the peer effects literature. This might arise because classroom discussions are more worthwhile, classmates explain things that were not understood at first, teachers move through the curriculum more rapidly or because teachers have more time to give me individual attention. If students perceive these effects to be important, they have an incentive to encourage their classmates to try to learn the material, to pay attention in class and to do their homework.

Which of these effects—"Lets hang out together," "don't be a rate buster or compete for grades" or learning multipliers--dominate? The "rate busting--don't compete for grades" motivation will tend to dominate when students believe that classroom standards are negotiable, that they are being graded on a curve and that rank in class is the key to getting into selective colleges and universities. The "I want other students to try hard" motive will tend to dominate when students believe that laziness by others significantly limits their own learning and when students enjoy learning for its own sake or believe that career success depends on absolute achievement, not how they rank relative to others.

#### 1.5 What will be the school wide norms?

The high status crowds typically signal and teach the school wide norms to younger students by setting an example (ie. modeling the behavior that others are to follow and avoiding activities that are proscribed) and sanctioning (or encouraging others to sanction) students who engage in proscribed behavior and/or who publicly oppose their normative hegemony. Most schools have more than one high status crowd (eg. jocks, preps, populars) exemplifying somewhat different normative orientations. Many popular individuals have friendships in more than one of the leading crowds. As a result, consensus school-wide norms have to honor all of the activities and signals (achievement in sports, popularity with the opposite sex, partying, drinking, grades good enough to get into college) that are characteristic of the school's high status crowds. As noted before for most types of achievement more is better in the eyes of peers. When it comes to academics, however, peer pressure sets a norm—an optimal level of academic effort—that if adhered to prevents many students from achieving to their potential. In schools where all three activities generate roughly equal prestige, the all-rounder who leads the team on Friday night, parties on Saturday night and gets "good enough" grades during the rest of the week often sits at the top of the prestige hierarchy. At the bottom of the prestige hierarchy are those not perceived as successful along any of the dimensions valued by consensus norms. They are not good at sports, not attractive to the opposite sex, not 'social'

and at one of the extremes on academic engagement and achievement. Peer norms also typically proscribe actions deemed 'anti peer' such as squealing on peers, competing for grades and 'sucking up' to teachers and encourage 'pro peer' helping behaviors such as letting friends copy homework and giving good grades when homework is exchanged and graded. The harassment of the nerds tends to deter others from engaging in proscribed nerdy behavior and spending "too much" time studying.

New members of a school's leading crowds learn the norms of their crowd from older members and from school wide stereotypes that apply to their crowd. The current leadership of leading crowds also select and groom the next generation of leaders. Leadership typically goes to the members who show the greatest commitment to crowd norms and who spend a great deal of time interacting with other members. Cusick concluded that, "It is simply not possible to be a sometime group member and expect to maintain any influence." If the students who gain leadership in a crowd have internalized the norms they were taught, norms will be transmitted unchanged from one generation of students to the next. Despite the forces for stability just described, circumstances and personalities change so the norms preferred by the leaders of prestigious crowds will change. It is costly, however, for new leaders to change the norms of their crowd and the school. Consequently, it is natural to assume that norms will adapt only partially to a discrepancy between the current leadership's preferences and last year's norms. This is likely to be particularly true for school wide norms. What would school wide norms look like in equilibrium (i.e. successive generations of leading crowds had identical utility functions and a stable external environment)?

Let's put ourselves in the shoes of the leader(s) of the popular crowd(s). How do they decide whether, in what direction and how much to try to change school wide norms? Their maximization problem is different, from the one faced by other students. In equilibrium their behavior is consistent with school wide norms because they have changed school wide norms so that the personal choices they make (in their own private interest) are normative behavior for

everyone. Thus, the leadership's decision about how hard to study determines their own achievement level and sets an example for everyone else that establishes the new values for the school wide target level of academic engagement and studying. They are also able to influence the rewards for conforming to school norms and the severity of the sanctions imposed on those who violate them. When they make these decisions, the leaders must assume that effort levels of other students will respond to their decisions about study effort and their ability to enforce the norms they signal. If they study harder, their classmates will study harder but not necessarily to the same degree. If they slack off, classmates will slack off but again not to the same degree. Consequently, the academic engagement and study effort of the members of leading crowds have particularly large multiplier effects on the effort and achievement of classmates.

Our interviews suggest that a powerful leading crowd (or coalition of popular crowds) will lead their peers to a system of normative evaluations that place the members of these crowds at the top of the school's prestige hierarchy. Norms are not set in a political process that gives everyone a vote. Indeed school elections are not the arena where these issues are debated and decided. Instead norms will reflect the personal preferences of the leadership and core members of leading crowds, groups that are not representative of the student body as a whole. These students are stronger, taller, slimmer, more self-confident, more athletic, more social, more attractive, smarter, richer and more clothes and appearance conscious than the average student. They are more likely to have a dominating personality and a taste for hanging out with peers and the opposite sex. For boys, strength, toughness and athletic ability are particularly important. For girls attractiveness and social skills are particularly important. The norms that they promote will reflect their gifts and their interests. The traits just listed will likely be highly valued in the normative system the populars propose the whole school adopt.

h This is an important feature of the model. If the leading crowd(s) could establish a school wide norm against studying hard while violating the norm themselves, they could exploit their norm setting power to aggrandize themselves at the expense of the other students. Hypocrisy is not likely to be a successful strategy because it would be discovered and the leaders would be deposed or ignored. Leadership based on persuasion (as must inevitably be the case for student leaders) must be by example.

The leadership and core members of popular crowds spend more time on sports, extracurricular activities, hanging out and partying than their peers. This makes it difficult for them to devote a lot of time to doing homework and other academic work. It wasn't their academic achievements that made them prominent and powerful in the eyes of their peers. This suggests that these leaders will tend to set norms that give high priority to extracurricular and social achievements and low priority to academic achievements [at least relative to the norms that might have been established by a democratic process or a randomly selected group of students]. Their leadership will transmit messages like: "Partying, hanging out, and sports (the activities the members of the leading crowd(s) enjoy and devote a lot of time to) are fun and confer prestige. Chess, programming computers and other activities we don't enjoy are "uncool."

# II. Testing Nerd-Slacker Harassment Theory in the 2<sup>nd</sup> Wave of the Educational Excellence Alliance's Survey of Student Culture

The empirical analysis focuses on testing eleven hypotheses derived from the theory just presented:

- (1) Students who believe that school is a rat race--a zero-sum competition for grades--are more likely to consider it "uncool" to study a lot and to have friends who act on that belief by harassing nerds,
- (2) Academic ability, like athletic and social ability, will help one succeed in becoming popular and avoiding harassment. High ability also influences who one hangs out with—typically students taking honors courses—and this should also reduce harassment.
- (3) "I'm Cool, Be like me" # 1-- Conditional on ability, there is a curvilinear relationship between measures of effort and engagement in school and peer harassment. Students who substantially deviate from the school's effort norm on the down side and get low GPAs will experience above average amounts of harassment—"Slacker Harassment" it might be called. Students who deviate from the effort norm on the plus side and get high GPAs will also experience above average amounts of harassment. Nerd harassment is the traditional name for this phenomenon.
- (4) "I'm Cool, Be like Me" # 1a---. Nerd harassment is more common for boys than girls.
- (5) "I'm Cool, Be like me" # 1b—Nerd harassment will be more prevalent among less able students who are found in middle and bottom track classes.

- (6) "I'm Cool, Be like me" # 2—Students who are visibly different from the leading crowd(s) i.e. in special education, vocational education, theatre courses, accelerated courses and/or gifted programs—will be harassed more than other students.
- (7) "I'm Cool, Be like me" # 3—Students who are in crowds/cliques that reflect an alternative identity—Freaks, Hicks, the Orchestra crowd, the drama club—are harassed more than other students. Students who like the most popular type of music—Rap and Hip Hop—will experience less harassment.
- (8) Nerd harassment will be reduced when teachers set high academic standards in their class and students perceive these standards to be non-negotiable.
- (9) Students who spend little time hanging out with classmates or participating in extracurricular activities will have a higher hourly risk of being harassed than other students.
- (10) Students who spend a lot of time at home watching TV or playing video games will be harassed more frequently than other students.
- (11) Students who spend a good deal of time working in a paid job outside of school will be harassed more frequently than other students (because this reduces the time they can spend hanging out).

#### 2.1 The Belief that School is a Rat Race--Correlates

Only a small number of students believe that school is a rat race—a zero-sum competition for good grades and admission to selective colleges. Eighty-two percent disagree with the statement "If others study hard, it is harder for me to get good grades." Only 4.1 percent "strongly agree" with the statement. We are fortunate that this number is so small, because those who do "strongly agree" have very negative attitudes toward school. This can be seen in Table 1.

Table 1
"School is a Rat Race" Beliefs are Strongly Associated
with Anti-Learning Attitudes and Harassment

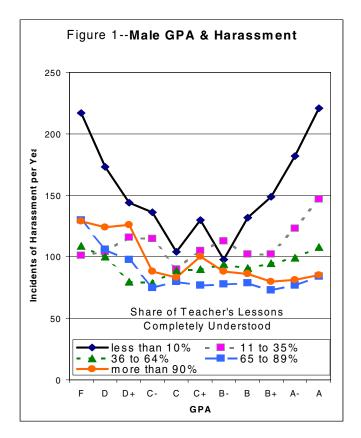
with Anti-Learning Attitudes and 1	If others study hard, it is harder for me to get good grades			
	Those who Strongly Agree	All those who Disagree	Ratio of Strongly Agree to all who Disagree	
Proportion who agree with the statement below				
My friends think, "It's not cool to frequently volunteer answers or comments in class."	.315	.129	2.44	
My friends think, "It's not cool to study really hard for tests and quizzes."	.270	.092	2.89	
I think "Studying a lot tends to make you less popular."	.407	.136	2.72	
My friends make fun of people who try to do really well in school.	.353	.150	2.60	
My friends DO NOT want me to study harder than they do.	.316	.146	2.16	
I do not feel safe in this school.	.376	.157	2.40	
Number of times it happens per year				
I didn't try as hard as I could at school because I worried about what my friends might think.	24.8	5.3	4.66	
Someone threatened to hurt me at school.	30.3	7.7	3.92	
I was pushed, tripped or hurt by other student(s).	28.7	8.5	3.36	
I was insulted, teased or made fun of to my face.	40.9	19.9	2.05	
I think I was insulted or made fun of behind my back.	56.2	32.3	1.74	
Total number of Incidents of harassment	154.6	67.5	2.29	
Number giving specified answer to "rat race" question.	2584	52170		

Those who strongly agree that "It is harder for me to get good grades, …if others study hard" are 2.6 times more likely to have friends who 'make fun of those who try to do well in school' than those who disagree. They are nearly three times more likely to describe their friends as thinking "it's NOT cool to study really hard before tests" and 2.4 times more likely to describe them as thinking "it's NOT cool to frequently volunteer answers or comments in class." They report 4.7 times as many instances in which, "I didn't try as hard as I could because I worried about what my friends might think." They are 3.9 times more likely to be threatened at school and 3.4 times more likely to be "pushed, tripped or hurt by other students." They are 2.4 times more likely to say they feel unsafe at school.

#### 2.2 Correlates of Peer Harassment

Who is harassed by their peers? In this paper we focus on 'the frequency of teasing and verbal and physical harassment by peers.' It is defined as: The total number of Incidents per year for four different kinds of harassment—"I was pushed, tripped or hurt," "Someone threatened me at school," "I was insulted, teased or made fun of to my face," and I was insulted or made fun of behind my back." The mean was 89.9 for males and 56.5 for females.

Let us first examine graphs describing how the number of incidents of harassment is related to a student's ability and GPA. Figure 1 depicts harassment of males as a function of their ability and GPA.



More able students receive less harassment. However the graph of harassment on GPA for low ability students has a very pronounced V shape or U shape. Holding ability constant, harassment appears to be minimized when GPA is between a B minus and a C minus. Most students GPAs exceed C minus. Indeed 88 percent of the struggling students--those who

completely understand the teacher's lesson less than 65 percent of the time—have GPAs above C- and so are predicted to suffer increased peer harassment if they improve their grades. Thus it is less able students who must work diligently to get good grades who appear to get most of the nerd harassment. For more able males peer harassment does not rise with GPA once GPA exceeds C minus. It looks like the male subculture in the honors track neither rewards nor sanctions getting high grades while norms in the lower tracks often discourage trying hard to get good grades.

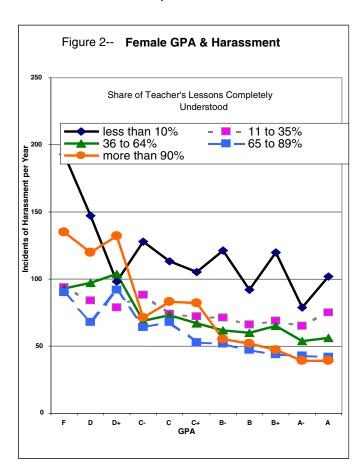


Figure 2 plots harassment relationships for females.

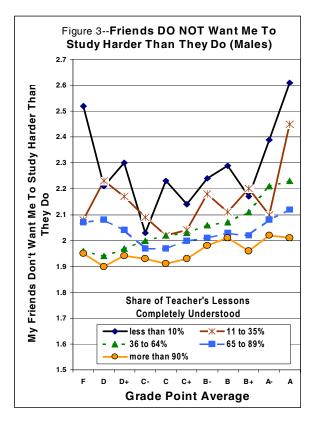
For girls, as for the boys, high ability is associated with lower risks of peer harassment. For females, however, a higher GPA is also associated with lower risks of harassment in all ability groups. This suggests academic success enhances popularity with classmates and this is true even for girls of low ability. Girls are rewarded by their peers for studying, not sanctioned as

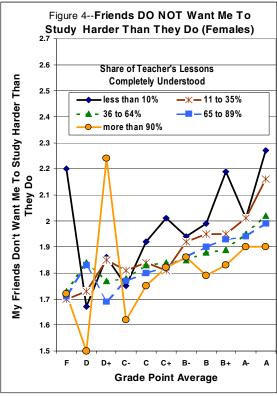
boys are. Apparently, in the middle class schools surveyed, slacker harassment is prevalent in both the male and female sub-cultures. Nerd harassment, by contrast, was not found in the female sub-culture, only in the male sub-culture.

To explore these issues further we graphed the effect of ability and GPA on answers to two questions where students reported on the direction of peer pressure regarding studying:

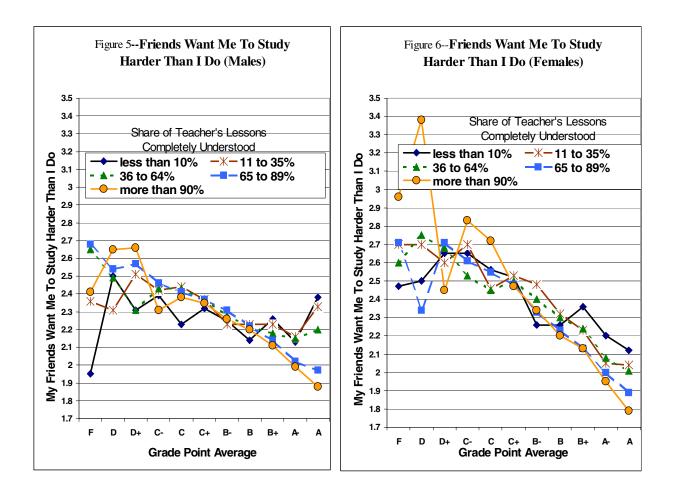
- □ "My friends DO NOT want me to study harder than they do." [1 to 4 scale running from Strongly disagree to strongly agree]
- □ "My friends want me to study harder than I do" [1 to 4 scale running from Strongly disagree to strongly agree]

The results for 'Friends DO NOT want me to study harder than they do' are presented in Figures 3 and 4. Males and less able students are more likely to report this kind of direct pressure against studying. Holding ability constant, pressure against studying harder than friends gets stronger as GPA rises.



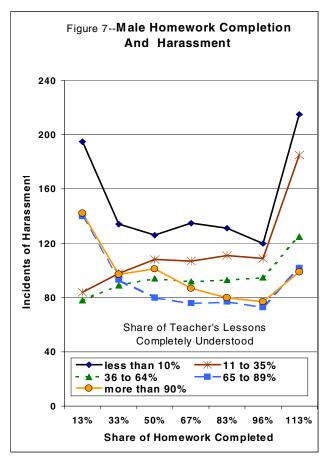


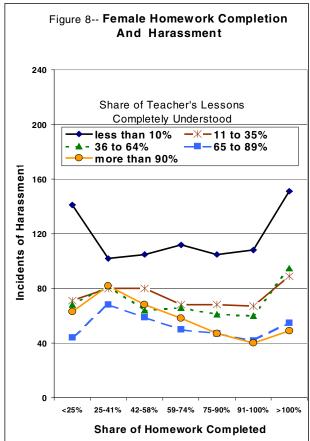
The results for 'Friends want me to study harder than I do' are presented in Figures 5 and 6.



Direct pressure from peers to study harder seems to be unrelated to ability but is much greater on students with low GPAs. Encouraging peers who are slacking off to try harder seems to be somewhat stronger for girls than boys, but it is substantial for both. Taken together these results suggest once again that students tend to encourage students who are doing poorly in school to try harder and to discourage high performers from working so hard. This is exactly what one would expect if there is an effort or achievement norm.

How is harassment related to direct measures of effort? Figures 7 and 8 present data on harassment by ability and a direct measure of study effort.





Our measure of effort is the proportion of homework completed by the student. Rates of harassment are significantly lower for females but relationships between harassment and other variables are similar for males and females. The most academically able students experience considerably less harassment. Holding ability constant, there is an unmistakable U shape to the relationship between homework completion and harassment for both males and females. Rates of harassment are very high for students who report doing none of their homework in at least one of their courses. Rates of harassment are even higher for students who said that in some courses they did "more than required" by the homework assignment. These students are apparently considered nerds by their classmates. Male students who consistently said they did 'some of it [homework],' 'most of it' or 'all of it' experienced roughly comparable low levels of harassment. For female students of moderate and high ability, the students who do all of their homework experience the lowest rates of harassment.

#### 2.3 Multivariate Analysis of Peer Harassment

In order to see whether these conclusions hold up when a full set of controls are included in the model, OLS models predicting Peer Harassment and the two direct measures of directional peer pressure were estimated. Multivariate analysis is desirable because peer harassment does not depend solely on how classmates react to (sanctioning versus honoring) a student's study effort and grades. Other qualities such as participation in sports and spending time socializing matter more. These other qualities need to be controlled for. Another concern is that incidents of harassment are also likely to depend on whom one is hanging out with and how much time one spends with them. In some cliques and crowds insults and teasing are a customary part of daily interaction. In others crowds, teasing and insults are discouraged. Crowds also differ in their normative orientation. Finally kids are labeled by their crowd assignment and some of these labels generate harassment (eg. the Freaks in Longview High School). The multivariate models, therefore include a host of variables designed to measure other influences on rates of peer harassment such as time spent involved in extracurricular activities and hanging out and indicators of which crowd the student is considered to be a part of.

While these control variables reduce the risk of finding spurious relationships, these estimations should not be interpreted as structural estimates of a causal model in which student beliefs and behavior increase or reduce the risks of peer harassment. We pointed out in the theory section that, for many key variables, causation runs in both directions generally in a self-reinforcing way. Tests of significance are, therefore, often evaluating relationships that are generated in part by efforts to enforce norms (that have been the focus of our discussion) and in part by the student's reactions to being harassed (e.g. Going home right after school, becoming mute in class, etc.) that are also a part of the theoretical model.

<u>Control Variables:</u> The controls for student background include grade in school, a dummy variable for 6<sup>th</sup>, 7<sup>th</sup> or 8<sup>th</sup> grade, parent's education, books in the home index, parents

speak a foreign language at home, dummy variables for having one or more personal computer at home, number of siblings, living in a single-parent family, living in a blended family [having a step-parent], living with no parent [with relative or a friend], two self reported indicators of learning ability, dummy variables for being African-American, Hispanic, Asian, Native American, mixed ethnicity and did not answer questions about race. The means and standard deviations of all variables are presented in Appendix D.

#### **Hypotheses and Findings**

Results are presented in Table 2. The first two columns present results from regressions predicting harassment estimated in the full data set (50,732 students after observations are excluded because of missing data). The analysis presented in columns 3 through 8 use data from a version of the questionnaire that has the two directional peer pressure questions analyzed in Figures 3-6 and questions about 'types of music you listen to the most.' We asked about preferences in music because it is a signal of which crowd a student is in and of the student's extracurricular interests. Students spend time listening to music with other members of their clique, so this is one of the choices they are forced to be conformist about. The kids who like heavy metal tend to hang out together as do those who like country music or classical music. When the music questions are included in regressions predicting harassment, there are 37,184 students with complete data in the analysis sample.

<sup>&</sup>lt;sup>i</sup> The EEA survey did not ask students a direct question about which crowd they were in for three reasons. We would have had to construct a separate questionnaire for each school using local names for the crowds (as Bradford Brown and colleagues have done). Accuracy of the self reports is a second problem. Students who are classified by peers as in a low status crowd often self identify themselves as in no crowd or a higher status crowd. Finally, we were concerned that some students might be upset by the question.

Table 2-- Determinants of Harassment—2<sup>nd</sup> Wave of EEA Survey

	Physical + Verbal Harassment / year		Physical + Verbal Harassment		Friends DO NOT want me to study harder than they do		Friends want me to study harder than I do	
	Male	Female	Male	Female	Male	Female	Male	Female
Belief School is								
If others study hard,	9.9	6.3	9.6	5.2	.092	.111	.046	.065
it's harder to get A's	(1.3)	(1.0)	(1.4)	(1.1)	(.007)	(.007)	(.007)	(.007)
Study Effort & Time	` '	, ,	, ,	, ,	,			
Use								
Share Homework	-2.6	-7.2	-11.4	-6.7	.078	.071	347	494
done	(5.2)	(3.9)	(6.0)	(4.4)	(.029)	(.028)	(.030)	(.029)
[0 <del>→</del> 1.25]	(3.2)	(3.9)	(0.0)	(4.4)	(.029)	(.026)	(.030)	(.029)
Square of (Share of	78.1	52.7	78.1	60.1	.329	.052	438	564
Homework done -	(12.2)	(11.5)	(14.3)	(13.1)	(.071)	(.083)	(.071)	(.087)
.78)								
Studying (hrs/day)	1.8	-1.0	2.67	-0.0	011	004	013	009
3 0 1	(1.0)	(0.7)	(1.15)	(0.8)	(.006)	(.005)	(.006)	(.005)
SQ of (Study hr –	2.0	0.9	1.58	0.63	.0041	.0021	0006	0014
1.87)	(0.3)	(0.21)	(0.36)	(0.23)	(.018)	(.014)	(.0017)	(.0017)
TV, video games	5.1	3.1	4.47	2.50	005	.004	011	002
(hrs/ day)	(0.5)	(0.36)	(0.56)	(0.41)	(.003)	(.003)	(.003)	(.003)
Work for Pay	1.3	0.65	1.36	1.18	001	002	.008	.005
(hrs/day)	(0.5)	(0.35)	(0.58)	(0.41)	(.003)	(.003)	(.003)	(.003)
Extra-curricular	-0.83	8.0	-0.12	0.83	.000	.001	.011	.002
Activity (hrs/day)	(0.55)	(0.43)	(0.64)	(0.50)	(.003)	(.003)	(.003)	(.003)
Hanging out (hrs/day)	-1.7	0.60	-2.12	0.14	003	006	.007	.016
Tranging out (moracy)	(0.54)	(0.38)	(0.65)	(0.44)	(.003)	(.003)	(.003)	(.003)
High Acad.								
	12.8	6.3	9.7	4.3	.002	.001	017	019
In Gifted Program	(2.8)	(2.0)	(3.1)	(2.1)	(.015)	(.014)	(.015)	(.014)
Tutored Other	7.1	5.5	5.7	4.7	013	.008	.015	007
Students	(2.5)	(1.6)	(2.8)	(1.7)	(.014)	(.011)	(.014)	(.015)
	16.9	6.0	14.5	5.9	.021	.005	017	015
Took Theater Course	(2.7)	(1.6)	(3.0)	(1.8)	(.015)	(.011)	(.015)	(.012)
Took Band/Orchestra	3.9	2.2	-0.7	-0.7	.004	.014	024	017
Course	(2.0)	(1.4)	(2.3)	(1.5)	(.011)	(.010)	(.011)	(.010)
# of Accelerated	. ,				, ,	, ,	, ,	
Courses in middle	2.1	1.6	2.3	2.0	.008	004	0073	.0100
school	(8.)	(0.6)	(1.0)	(0.7)	(.005)	(.004)	(.0048)	(.0046)
Taking one or more	3.7	0.1	3.1	0.1	.016	.011	.000	.003
honors or AP course	(3.0)	(2.1)	(3.3)	(2.3)	(.017)	(.015)	(.017)	(.015)
Taking at least one	-8.0	2.4	-3.6	1.8	.002	.012	001	079
AP course	(4.0)	(2.8)	(4.3)	(2.9)	(.021)	(.019)	(.022)	(.020)
# of Honors & AP	-0.5	-1.2	-1.3	-1.1	.003	.006	023	028
courses	(1.0)	(0.7)	(1.1)	(0.8)	(.006)	(.005)	(.006)	(.005)
Low Acad.	. ,			. /			. , ,	
	21.4	25.6	21.7	20.1	.032	.033	.066	.016
In Special Education	(3.9)	(3.4)	(4.5)	(3.8)	(.022)	(.025)	(.022)	(.026)
Took Remedial	-3.2	2.1	-2.0	3.4	012	.005	.028	.026
Course	(2.2)	(1.6)	(2.5)	(1.7)	(.012)	(.011)	(.012)	(.012)
Took a Blue Collar	8.7	9.4	6.3	4.5	.027	.017	.050	.033
Vocational course	(3.0)	(3.2)	(3.4)	(3.5)	(.017)	(.022)	(.017)	(.023)
Friends College	(0.0)	(0.2)	(0.7)	(0.0)	(.017)	(.022)	(.017)	(.020)
Friends think its	-2.3	0.0	4.0	0.7	032	032	.122	400
	-/ 3	-0.3	-1.8	-0.7	- 037	- 0.32	177	.129
important to go to one of the best	(0.9)	(0.7)	(1.1)	(0.8)	(.005)	(.005)	(.005)	(.005)

Table 2 (cont)—Determinants of Harassment

	Verbal + Physical Harassment / year		Verbal + Physical Harassment		Friends DO NOT want me to study harder than they do		Friends want me to study harder than I do	
	Male	Female	Male	Female	Male	Female	Male	Female
Ability- Less visible to								
others								
Share of Teachers' lessons	-39.7	-36.5	-39.7	-28.9	083	044	095	184
completely understood [0 to	(4.4)	(3.2)	(5.2)	(3.7)	(.026)	(.023)	(.026)	(.024)
1]	` ′	` ,	` ,	, ,	` '	, ,		
How quickly I Learn Things?	-0.2	-22.5	08	-24.7	059	.001	112	205
[0→1]	(5.8)	(4.6)	(6.8)	(5.1)	(.034)	(.032)	(.033)	(.034)
Intrinsic Motivation								
Like Learning ICD 41	2.7	1.8	2.7	1.5	.009	.016	.063	.060
Like Learning [SD=1]	(1.1)	(8.0)	(1.2)	(0.9)	(.006)	(.006)	(.006)	(.006)
Teacher Characteristics								
Teachers Interesting	-20.6	-3.8	-21.7	-7.0	079	074	.108	.087
Share of time [0→1]	(5.1)	(3.8)	(6.0)	(4.3)	(.029)	(.027)	(.029)	(.029)
I don't feel close to any of	3.7	0.1	4.5	1.5	.020	.022	011	.003
my teachers	(1.2)	(0.9)	(1.4)	(1.0)	(.007)	(.006)	(.007)	(.006)
Disorganized, Does not			9.8	5.0	.030	.012	005	000
Collect Homework Index			(1.1)	(8.0)	(.005)	(.005)	(.005)	(.005)
I could get good grade			6.8	3.6	.027	.042	075	056
without studying  Music Listened to the Most			(2.3)	(1.6)	(.011)	(.010)	(.011)	(.010)
Music Listened to the Most								
Rap & Hip-hop			-14.0	0.1	.003	017	003	.024
Pop			7.3	0.6	.010	.015	.009	022
Modern Rock			4.3	-0.5	.001	006	030	010
Rhythm & Blues			4.8	2.2	035	019	.013	000
Classic Rock			0.5	-2.2	023	016	016	006
Dance & Techno			4.5	5.8	017	.008	.012	.036
Heavy Metal			15.9	21.7	.009	.025	001	.029
Country			22.1	13.5	.047	.017	.030	.064
Salsa or Latin			-2.8	7.1	.018	023	.061	.067
Jazz			-1.1	2.0	.014	017	.023	.037
Classical			13.2	2.7	034	041	.014	.028
Musicals			20.3	7.1	.016	.010	.015	.012
19 variables describing SES, ethnicity and family structure	х	х	X	x	x	X	x	X
Mean Dependent Var.	87	55.7	85.7	52.1	2.044	1.895	2.19	2.18
Std. Error of Estimate	143	104	140	103	.688	.633	.692	.670
R Square	.055	.055	.077	.064	.038	.036	.120	.159
# of Observations	24,589	26,143	17,714	19,111	17,525	19,076	17,679	19,277

# of Observations | 24,589 | 26,143 | 17,714 | 19,111 | 1 Coefficients that are significantly different from zero at the 5 percent level are in **bold**.

Beliefs that the Academic side of school is a Rat Race: The theory predicts that anti-learning norms are more likely to develop among students when they perceive academic classrooms to be zero sum games that pick winners and losers but cannot make everyone better off. The tabulations in Table 1 suggest the same thing. The multivariate analysis also implies that the belief that school is a rat race is a major stimulus to peer harassment. Holding a host of other variables constant, males (females) who strongly agree that "if others study hard, it is harder for me to get good grades," experience 50 percent (34 percent) more harassment than those who strongly disagree. This single question is the third most powerful predictor of the likelihood of peer harassment--after academic ability and time spent in solitary learning activities. The school is a rat race belief is also the single most powerful predictor of our most direct measure of peer pressure against studying--student reports that "My friends DO NOT want me to study harder than they do."

Indicators of crowd membership: The "I'm Cool, Be like Me" theory predicts that students in the bottom track and top track classes will experience the most harassment. The EEA survey has three indicators of participation in lower track classes: dummy variables for Special Education student, for having taken remedial courses and for having taken blue-collar career technical education courses. The twenty-five percent of students who had taken a remedial course sometime since 6<sup>th</sup> grade were not at greater risk of being harassed. However, the five percent of students who were in special education were at much higher risk (50 percent higher among girls) of being harassed. Students who had taken blue-collar occupational education courses also experienced about 10 percent more harassment.

At the other end of the achievement distribution, the sixteen percent of students in gifted programs were harassed about 15 percent more than other students. Students who took accelerated courses in middle school also experienced significantly more harassment but the effect was small. Current participation in honors and AP courses had no consistent effects on

harassment. The male students whose friends thought it was 'important to go to one of the best colleges' were slightly less likely to be harassed.

The results for the music preference variables are quite revealing. Rap & Hip-Hop music was much more popular (two-thirds of students selected it) than any other type of music. Male students who liked Rap were significantly (17 percent) less likely to be harassed. Liking Rap music had no effect on risks of harassment for girls. Other popular kinds of music--modern rock (selected by 32 percent) and classic rock (selected by 16 percent) had no association with harassment. The types of music associated with higher rates of harassment tended to signal distinctive life styles pursued by small minorities of the school's students. Heavy Metal music was associated with a 40 percent increase in harassment for girls and a 20 percent increase for males. Girls who liked Salsa music or Dance-Techno music experienced about 12 percent more harassment. Rates of harassment were about 25 percent higher for those who liked country music, 15 percent higher for girls who liked musicals, 25 percent higher for boys who liked musicals and 16 percent higher for boys who liked classical music. Taking a band or orchestra course had no relationship with levels of harassment. Having taken a theatre course, however, was associated with a 20 percent increase in harassment for boys and a 10 percent increase for girls. Tutoring other students was also associated with a roughly 10 percent higher rate of harassment. These effects can add up. Boys who like classical music and musicals, have tutored others and taken a theatre course and courses for the gifted are predicted to experience nearly twice as much harassment as other students, even when their homework completion rates and patterns of time use are in line with every one else.

<u>Studiousness:</u> Students who say they like the textbooks and novels assigned and enjoy doing math problems are harassed a good deal more than students who dislike school work.

Consistent with the "I'm Cool, Be like me' hypothesis, studying and completing your homework has a concave relationship with harassment. Those who devote little time to

studying and do not complete their homework tend to be harassed more than those who conform to school norms regarding study effort. Similarly students who study much more than average and complete all their homework also tend to get extra doses of harassment. If a student who currently spends 1.87 hours a day (the sample mean) studying increased study time by 2 hours a day by cutting back on socializing and increased the share of homework done from 78 percent to 100 percent, our regression equation predicts that harassment will increase by 16 percent for males but only 6.7 percent for females. What happens if a student increases studying from zero to 2 hours a day, a level roughly equal to the mean for all students? If the study time comes at the expense of hanging out and the share of homework done goes up 56 percent to 78 percent (a one standard deviation increase in homework completion), harassment is predicted to fall by 5 percent for males and by 16.6 percent for females. While the magnitude of effects is smaller, these simulations of the regression parameters tell the same story as Figures 1, 2, 7 and 8. The culture encourages slackers to try harder and discourages what peers view as 'excessive levels of studying.' The other major conclusion is that the female subculture is considerably more supportive of studying than the male subculture.

This is also the clear implication of the regression analysis of the directional measures of peer pressure in columns 5 through 8 of Table 2. As the share of homework a student completes goes up, fewer students report that 'Friends want me to work harder than I do' and more students report that 'Friends do not want me to study harder than they do.'

<u>Time use:</u> Students who spend a good deal of time 'watching TV, playing video games and listening to music alone or with family' also get harassed more than students who spend a lot of time in extracurricular activities and socializing. Hours spent working for pay is also associated with a higher likelihood of harassment but the effect is much smaller than the effect of an hour spent in solitary activities at home. Time spent in extra-curricular activities has no statistically significant effect on harassment. Time spent hanging out has no significant effect on the harassment of girls but it has a large negative effect on harassment of boys. This pattern

is all the more remarkable when one considers that students who spend more hours socializing or in extra-curricular activities have a longer exposure to peers who might harass them.

Harassment is positively correlated with time spent at home alone and negatively correlated with time spent with peers for two reasons. Spending more time with peers makes one more popular and signals that you are not studying much. As a result the hourly risk of harassment declines. In addition, unpopular students try to avoid being harassed by heading for home as soon as school lets out.

Student-Teacher Relationships: Is there anything schools can do to reduce peer harassment and develop a positive supportive learning culture among students? Yes there is. Students who say their teachers make the subject interesting experience less peer harassment, are more likely to be encouraged by friends to work harder and less likely to be pressured by friends to limit studying. Students who have teachers who are two standard deviations higher on the "teachers were disorganized, didn't care or collect homework" index experienced 21 percent more peer harassment and were more likely to be pressured to study less by friends. Students who say they didn't study because "I could get a good grade without studying" also experience more harassment, are less likely to be pressured to study harder and are more likely to be pressured by friends to study less. In addition males who said they "don't feel close to any of their teachers this year" get harassed a lot more than those who said they have a close relationship with a teacher. These results suggest that the effort to convince students that 'teachers are not your friend' does not succeed everywhere and that good teaching and high standards may be able to reduce the peer harassment at least to some degree.

<u>Family Background</u>: In the model predicting harassment of males, the fourth most important predictor was the number of books in the home, a traditional measure of family cultural capital. Holding time use, crowd membership indicators and other measures of family background constant, boys from families with over 250 books in the home experience 38 percent more harassment than boys from homes with fewer than 10 books. Girls from homes

with over 250 books experience 19 percent more harassment than girls from families with hardly any books. Having personal computers in the home is associated with lower rates of harassment. Parent's education has almost no relationship with harassment. Hispanic and Asian students experience about 20 percent less peer harassment than white students. Black females experience 10 to 20 percent more harassment than white females. When music preferences are not controlled, black males are less harassed than white males. When music preferences are controlled, black males experience about 8 percent more harassment than white males who like the same music.

#### III. Effects of Classroom Engagement on Harassment and School Connectedness

Up to this point we have used time spent doing homework and the share of homework completed as our indicators of a student's commitment to learning. These indicators, however, capture only one component of learning effort. Homework time and completion are not visible to other students, so their impacts on popularity and harassment may be modest. Other types of learning effort— contributing to classroom discussions, frequently raising your hand in class, etc—are visible to other students and might, therefore, have more profound effects on popularity and peer harassment. Indeed our interviews suggest that talking too much in class is seen as one of the defining characteristics of nerds and sometimes the immediate occasion for peer harassment. Slacker behavior—joking around, not paying attention, acting bored, sleeping in class, etc.—are also visible to others and might mark a student for slacker harassment. Consequently, the "be like me" theory predicts that harassment will have a non-linear relationship with frequent participation in class discussions and with an index of disengagement and joking around. It predicts that the slope of the relationship between class participation and harassment increases as the student approaches the upper limit of the scale. A similar prediction is made for the disengagement index. The analysis presented in the first two columns of Table 3 tests these hypotheses.

**Table 3-- Determinants of Harassment and School Connectedness** 

	Ve Haras	sical + erbal esment / ear		Feel Safe School	to be	Happy at this chool
	Male	Female	Male	Female	Male	Female
Belief School is Zero-Sum						
If others study hard, it's	8.9	5.0	095	.085	012	015
harder to get A's	(1.4)	(1.1)	(.007)	(.007)	(.007)	(.007)
Study Effort & Time Use	(****)	( )	(1001)	(1001)	(1001)	(1001)
Share Homework done	-9.3	-1.8	.098	.020	.052	.055
[0 <b>→</b> 1.25]	(6.1)	(4.5)	(.031)	(.030)	(.029)	(.029)
Square of (Share of	53.1	48.6	.246	.051	276	177
Homework done78)	(14.9)	(13.4)	(.075)	(.087)	(.070)	(.084)
,	4.3	.57	.012	001	.014	.025
Studying (hrs/day)	(1.2)	(8.0)	(.006)	(.007)	(.006)	(.005)
CO of (Ctudy by 1.97)	1.16	0.53	.0003	.0033	0081	0091
SQ of (Study hr – 1.87)	(0.36)	(0.23)	(.0018)	(.0015)	(.0017)	(.0015)
Participate in Class	5.71	4.27	006	.001	.019	.013
Farticipate in Class	(0.84)	(0.59)	(.004)	(.004)	(.004)	(.004)
Sq (Class Participation – 4)	2.73	2.31	.003	.0045	0017	0098
34 (Class Fathcipation – 4)	(0.54)	(0.39)	(.003)	(.0030)	(.0033)	(.0024)
Disengagement in Class	9.61	7.83	.029	.006	037	021
Bloongagomont in Glado	(1.43)	(1.01)	<b>(</b> .007)	(.007)	(.007)	(.006)
Sq of Disengagement	4.44	.51	001	002	015	005
	(0.86)	(.73)	(.004)	(.005)	(.004)	(.005)
TV, video games (hrs/ day)	4.0	2.23	.006	.009	009	011
	(0.6)	(0.42)	(.003)	(.003)	(.003)	(.003)
Work for Pay (hrs/day)	1.06	1.10	.009	.004	013	013
	(0.58)	(0.41)	(.003)	(.003)	(.003)	(.003)
Extra-curricular Activity	-0.75	0.30	005	.003	.012	.018
(hrs/day)	(0.55)	(0.50)	(.003)	(.003)	(.003)	(.003)
Hanging out (hrs/day)	-3.1	-0.41	.007	002	007	007
	(0.66)	(0.44)	(.003)	(.003)	(.003)	(.003)
High Acad. Achievement						
In Gifted Program	8.0	3.7	.036	.004	048	033
	(3.1)	(2.1)	(.016)	(.014)	(.015)	(.014)
Tutored Other Students	3.9	3.9	.043	.012	020	.005
	(2.8)	(1.7)	(.014)	(.011)	(.014)	(.011)
Took Theater Course	12.1	4.4	.026	.006	.010	.014
	(3.0)	(1.8)	(.015)	(.012)	(.014)	(.011)
Took Band/Orchestra Course	-0.7	-0.5	014	004	.022	.037
	(2.3)	(1.5)	(.012)	(.010)	(.011)	(.011)
# of Accelerated Courses in	2.0	1.8	.003	001	013	013
middle school	(1.0)	(0.7)	(.005)	(.005)	(.005)	(.004)
Low Acad. Achievement						
In Special Education	21.4	20.5	.052	.067	.012	.008
in Special Education	(4.5)	(3.8)	(.023)	(.025)	(.021)	(.024)
Took Remedial Course	-1.4	3.9	.027	.022	.004	.002
	(2.5)	(1.7)	(.013)	(.011)	(.012)	(.011)
Took a Blue Collar	5.7	4.0	.021	.008	050	.001
Vocational course	(3.4)	(3.5)	(017)	(.023)	(.016)	(.022)

Coefficients that are significantly different from zero at the 5 percent level are in **bold**.

Table 3 (cont)—Determinants of Harassment and School Connectedness

	Phy Haras	bal + /sical sment / ear		Feel Safe School	I am Happy to be at this School		
	Male	Female	Male	Female	Male	Female	
Friends College Plans	4.0			200	205	040	
Friends think its important to go to one of the best colleges	-1.6 (1.1)	-0.7 (0.8)	.007 (.006)	002 (.005)	<b>.035</b> (.005)	<b>.013</b> (.005)	
Ability- Less visible to others	(1.1)	(0.8)	(.000)	(.003)	(.003)	(.003)	
Share of Teachers' lessons completely understood [0 to 1]	<b>-32.8</b> (5.3)	<b>-25.5</b> (3.7)	<b>175</b> (.037)	<b>169</b> (.024)	. <b>102</b> (.025)	<b>.108</b> (.023)	
How quickly I Learn Things? [0→1]	-5.3 (6.8)	<b>-28.3</b> (5.2)	.000 (.030)	<b>107</b> (.034)	<b>116</b> (.032)	030 (.032)	
Intrinsic Motivation	(010)	(3:-)	(1000)	(100.1)	(100=)	(100=)	
Like Learning [SD=1]	<b>4.0</b> (1.2)	<b>1.9</b> (0.9)	<b>019</b> (.006)	. <b>020</b> (.006)	. <b>128</b> (.006)	<b>.104</b> (.006)	
Teacher Characteristics	\/	(0.0)	(.000)	(.000)	(.555)	(.000)	
Teachers Interesting Share of time [0→1]	<b>-19.1</b> (6.0)	-6.7 (4.4)	<b>121</b> (.030)	<b>154</b> (.029)	<b>.438</b> (.029)	<b>.318</b> (.028)	
I don't feel close to any of my	4.8	<b>2.1</b> (1.0)	.087	. <b>079</b> (.006)	105	114	
teachers this year Disorganized, Does not	(1.4) <b>8.5</b>	4.5	(.007) .039	.010	(.006) <b>013</b>	(.006) <b>016</b>	
Collect Homework Index	(1.1)	(0.8)	(.006)	(.005)	(.005)	(.005)	
I could get good grade	5.4	3.1	008	005	004	.029	
without studying	(2.3)	(1.6)	(.012)	(.010)	(.011)	(.010)	
Music Listened to the Most							
Rap & Hip-hop	-15.8	-1.3	059	011	.032	004	
Pop	8.6	1.7	.024	.041	.037	.087	
Modern Rock	4.9	6	.006	006	.017	004	
Rhythm & Blues	3.4	2.0	008	001	.000	014	
Classic Rock	-1.7	-3.3	022	.006	.027	007	
Dance & Techno	2.6	4.8	.029	000	002	018	
Heavy Metal	15.6	21.0	.026	.085	103	152	
Country	20.1	13.2	.023	.013	.031	.027	
Salsa or Latin	-3.8	7.1	.024	.007	.021	010	
Jazz	-0.9	1.6	.020	.018	023	003	
Classical	13.2	3.5	.047	.039	032	034	
Musicals	21.9	6.8	.029	.012	.001	026	
19 variables describing SES, ethnicity and family structure	x	х	x	x	x	х	
Mean Dependent Var.	87	55.7	1.94	1.92	2.96	2.99	
Std. Error of Estimate	139	104	.723	.657	.675	.639	
R Square	.088	.055	.069	.061	.207	.189	
# of Observations	17,549	26,143	18,256	19,403	18,256	19,403	

Includes disengagement and % of time understand the teacher.

The regression specification used in these estimations is almost identical to that used for the estimations reported in Table 2. No variable was dropped; four variables describing classroom behavior were added. The first variable is the answer to, "How often do you contribute to classroom discussion?" answered on a 6 point scale running from "Never," to "Seldom," to "Fairly often," to "Often," to "Usually," to "Always." The second variable is a standardized index of classroom disengagement derived from three questions: "How often do you joke around in class?", "How often does your mind wander?" and "How often do you really pay attention in class?" Square terms for each variable (deviated from its mean) were also included.

**Effects of Classroom Engagement on Harassment:** Figures 9 to 12 describe the curvilinear effect of our four indicators of academic engagement on peer harassment.

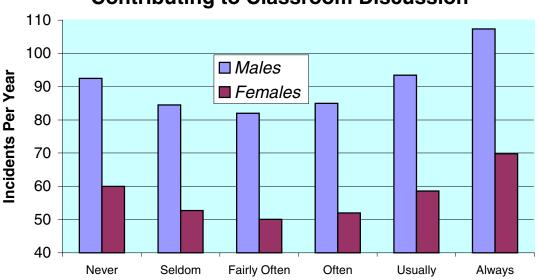
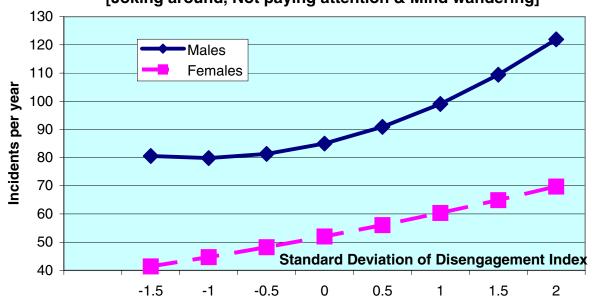


Figure 9--Peer Harassment by Frequency of "Contributing to Classroom Discussion"

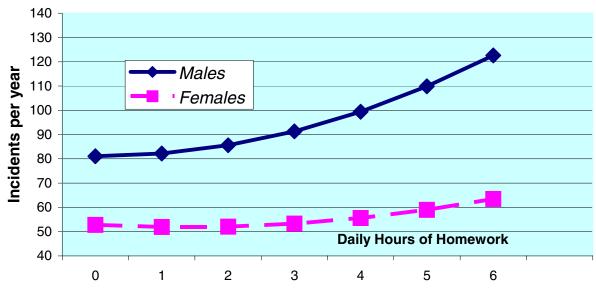
Simulations of the impact of contributing to class discussions while controlling for disengagement, homework time, % of homework completed, time spent hanging out, in extracurricular activities, in solitary leisure activities and a host of other student characteristic and their perceptions of teachers.

# Figure 10--Peer Harassment by Classroom Disengagement [Joking around, Not paying attention & Mind wandering]



Simulations of the impact of disengagement while controlling for contributing to class discussions, homework time, % of homework completed, time spent hanging out, in extracurricular activities, in solitary leisure activities and a host of other student characteristic and their perceptions of teachers.

Figure 11--Peer Harassment by Hours Spent Doing Homework per day



Simulations of the impact of homework time while controlling for disengagement, contributing to class discussions, % of homework completed, time spent hanging out, in extracurricular activities, in solitary leisure activities and a host of other student characteristic and their perceptions of teachers.

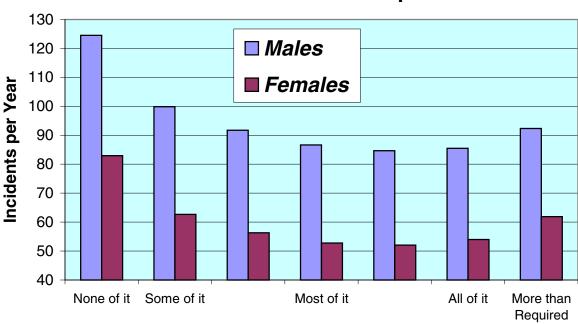


Figure 12--Peer Harassment by Share of Homework Completed

Simulations of the impact of the share of homework done while controlling for disengagement, contributing to class discussions, homework time, time spent hanging out, in extracurricular activities, in solitary leisure activities and a host of other student characteristic and their perceptions of teachers.

As hypothesized, students who "always contribute to class discussion" experience considerably more (31 percent more for boys and 39 percent more for girls) peer harassment than students who participate "fairly often." The relationship is U shaped. Those who "never" participate in class have a 13 to 20 percent higher risk of harassment than those participating fairly often. Disengagement is negatively related to harassment. Girls who are two standard deviations above the mean on the disengagement index experience 34 percent more harassment. Similarly disengaged boys experience 44 percent more harassment than boys with average levels of classroom engagement. For boys the relationship is strikingly curvilinear.

Those who spend a good deal of time doing homework tend to get an extra dose of harassment. The four percent of students who spend 5 to 7 hours on homework per night experience about 46 percent more harassment if male (22 percent more if female) than students who are at the median on homework time (about 1.5 hours per night). Spending no time on

homework is not associated with elevated levels of harassment, but not completing your homework is. The four percent of students who say they usually do not complete their homework, experience 46 to 60 percent more harassment than students who do most or all of their homework. Girls who do "more homework than required" in most of their courses are 17 percent more likely to be harassed. Similar boys are 9 percent more likely to be harassed.

These results are remarkably consistent with the theory and our interviews. Remember Robyn's description of Nerds as "being very involved with school, asking a million questions in class, and not having much fun in their spare time." The statistical analysis found that the two indicators of academic engagement that increased the risk of Nerd harassment the most were talking a lot in class and spending a lot of time on homework. High IQ students who can and do get all their homework done in less than an hour a day were seldom marked for nerd harassment. Certain forms of cooperation with teachers--paying attention in class, not joking around—are normative and do not stimulate nerd harassment. The markers for "Slacker Harassment" were seldom "doing your homework" and seldom "paying attention in class" and frequently "joking around." Thus visible indicators of effort had substantial effects on both types of harassment. When these indicators of effort were held constant, a higher GPA was not associated with increased rates of peer harassment [not shown].

This suggests that it is studious behavior not a high GPA that provokes nerd harassment. Why? One possibility is that a high GPA signals high ability and as one student put it "if you are smart you are lucky; no one considers you a nerd as a result." Another possibility is that students with good grades lie about their grades and how hard they study at home when in the presence of friends who would react negatively. The theory predicts that bragging about good grades will make one unpopular, but we lacked data on bragging so we were not able to test this prediction. If we are correct in our conjecture that peer norms against nerd like behavior are mainly about effort not about achievement, the implications are profound. Norms that punish "too much" effort put struggling students on the horns of a dilemma. If they

try to catch up by taking challenging courses and spending more time on homework and studying, they risk being labeled and harassed as nerds. When they ask teachers for a better explanation of something, they also risk being considered a nerd or alternatively as 'stupid.' High IQ students, by contrast, do not need the teacher to explain things a second time and can get their homework done quickly. They have free time to hang out and pursue extracurricular activities and are, therefore, typically able to gain admission to the school's high prestige crowds. If, instead, peer norms focused on achievement levels not effort, anti-nerd harassment would be focused on the high IQ students who get top grades. The struggling students who need to study long hours just to keep up would not be targeted for harassment.<sup>38</sup> Since minority students typically enter middle school academically behind their white peers, an effort norm that applies equally to all ethnic groups will prevent minority students from catching up and may result in them falling further behind.

**School Connectedness**: Table 3 also presents the results of our analysis of the determinants of how connected students feel with their school. We estimated multivariate regression models predicting two measures of school connectedness--"I do not feel safe in this school" and "I am happy to be at this school"-- answered on a four point agree- disagree scale.<sup>39</sup>

Since peer harassment is a major cause of not feeling safe, we would expect many of the variables predicting harassment to have similar effects on feeling unsafe. And indeed that was the case. Students are more likely to feel unsafe in school when (a) they believe that school is an academic rat race, (b) they do not feel close to any of their teachers, (c) they are slow learners [often not understanding new material the first time something is explained], and (d) they do not have interesting, demanding and well- organized teachers. Many of the indicators of the student's academic engagement that influenced peer harassment had similar effects on feeling unsafe. Boys who studied a lot, who did all or more than the required amount of homework, who spent considerable time working for pay or in solitary leisure activities were more likely to feel unsafe. Those who joked around in class and didn't pay attention were also

more likely to feel unsafe. Girl's feelings of safety were less affected by these indicators of academic engagement. Special education students of both genders felt less safe, as did boys who were in remedial courses or vocational education. Boys who were in gifted programs, tutored others or liked classical music felt less safe. Girls who liked Heavy metal, Pop and classical music felt less safe.

The estimations predicting "being happy at this school" also mirror the harassment regressions. Most of the student characteristics that predict elevated levels of peer harassment also predict that the student is less happy with the school. There was, however, one very important exception to this generalization. "Like learning," a scale derived from responses about how interesting the student thought the textbooks, assigned novels and math problems were, was the most powerful single predictor of liking one's school (with a Beta of .174). Students who liked learning, however, experienced significantly more harassment than students who did not. The next most important determinants of liking one's school were (a) having a teacher who you were close to, (b) having teachers who made their subject interesting, (c) learning things quickly, (d) having friends who thought it was important to "go to one of the best colleges in the U.S." and (e) spending considerable time in extracurricular activities. Spending lots of time hanging out, working for pay and/or in solitary leisure were associated with being less happy with school. The four indicators of academic engagement were also important predictors of being happy with your school. Not surprisingly disliking school was associated with not doing any of your homework, not contributing to class discussions and joking around in class and not paying attention in class. The square terms, which were all positive in the peer harassment regressions, are all negative in the "happy with school" regressions. This implies that there are diminishing happiness returns to increases in student engagement. The most striking case of this was hours spent doing homework. Students who did no homework were a lot less happy. Students doing five to seven hours of homework a night were also less happy.

The students who liked school the most did slightly more than three hours of homework a night (about 80 minutes more than the average for all students).

Students taking honors and AP classes liked school more and boys in the vocational program liked school less. African-American students liked school significantly less. The education of your parents and the number of books in the home were unrelated to how much students liked school.

# III. Further Tests of the Theory of Nerd-Slacker Harassment: the First Wave of the Educational Excellence Alliance's Survey of Student Culture

To conduct some additional tests of the theory, we estimated ordinary least squares models predicting three outcomes in EEA survey data collected before January 2000:

- □ The incidence and extent of insults, teasing and verbal harassment by peers.
- □ NOTRY--The incidence and frequency of students saying they did not try hard on a test or project because they were afraid of what their friends might think.
- Classroom Engagement—An index comprised of questions about paying attention in class, contributing to classroom discussion and not letting your mind wander.

The purpose was to assess how much of the variance of peer harassment and engagement can be predicted by the racial and socio-economic character of the school and the background characteristics of the student and how much of the variance can be predicted by the attitudes and culture of the school and of the student's clique.

Control Variables: The controls for student background include gender, grade in school, a dummy variable for 7<sup>th</sup> or 8<sup>th</sup> 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. The controls for the characteristics of the school were the school mean for parents' education, the proportion of the students at the school living in single parent families, the proportion of students African-American, the proportion Hispanic, the proportion Asian, the mean self reported ability of the students at the school, the school mean for the school on the 'teachers are demanding' index

and the school 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. Appendix D provides a list of the items included in each of the attitude indices. The curriculum track pursued by the student was controlled by including: the number of accelerated courses taken in middle school, the share of this semester's courses that were honors or AP courses, the share of courses that were 'basic' (or local in New York State parlance), the share of courses that were heterogeneous or mixed [the share of college prep courses was the excluded category] and the number of study halls taken. In order to prevent overestimation of the effects of clique norms and attitudes, we included controls for the student's self reported motivation: 'intrinsic motivation,' 'future extrinsic motivation' and 'parents motivate me' index.<sup>40</sup>

Hypotheses: Our primary focus is the effect of student culture. Students are exposed to both a school culture that is specific to their grade and their gender and to the attitudes and norms of their clique of close friends. We attempted to measure both. An overall pro-learning school environment index was constructed by taking an average of the intrinsic motivation scale, the 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 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 measures 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 a positive relationship with harassment and NOTRY. The rest of the student culture variables are measured at the clique level. These variables are scales constructed by averaging normalized answers to 2 to 6 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 leading crowd in middle school 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. We also predict that positive peer pressure, the annoyed when others joke around scale and pro-learning leading crowd will have a positive relationship with engagement. The final peer pressure variable assesses the student's belief 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 and NOTRY and a negative effect on engagement.

The final set of peer culture variables measure the 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. <sup>41</sup>

Table 1 presents the standardized regression coefficients from the models predicting all three outcomes. A '+' to the right of a coefficient implies that the effect is not statistically significant (at the 5 percent level on a two tail test). Column 7 of the table gives the standard deviations (SD) of independent and dependent variables. Unstandardized coefficients can be calculated by multiplying by the SD of the dependent variable and dividing by the SD of the independent variable.

Results—Peer Harassment: We calculated that the average annual number of incidents of verbal harassment 'to your face' was about 23 per student. 'Behind your back' insults were more common: 34 per year per student. 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 be insulted and teased. These demographic characteristics, however, explained only 2.1 percent of the variance.

When we added student attitude and peer pressure variables, the variance explained by the model tripled but remained rather low at 6.2 percent. Figure 13 presents the main findings from our analysis of the attitudinal and cultural predictors of peer harassment.

**Deviation of Positive** Anti-Learning Ldg Crowd Peer, Annoy, Intrinsic & GPA from School. Mean .071 .128 Friends' Attitudes **Negative Peer Pressure** .100 .012 **Positive Peer Pressure** .008 **Annoyed by Disruption** Verbal Harass-.043 My Attitudes ment -.011 A's Harder to get if Others' Study .055 **Future Extrinsic Motivation** -014 Please Parent(s)' Motivation .041 -.055 [-.063] **Intrinsic Motivation** Socio-Teacher's Pro Learning Attitudes **Demanding and Economic** Status of Motivating (Sch.Mean) School (Sch. Mean)

Figure 13

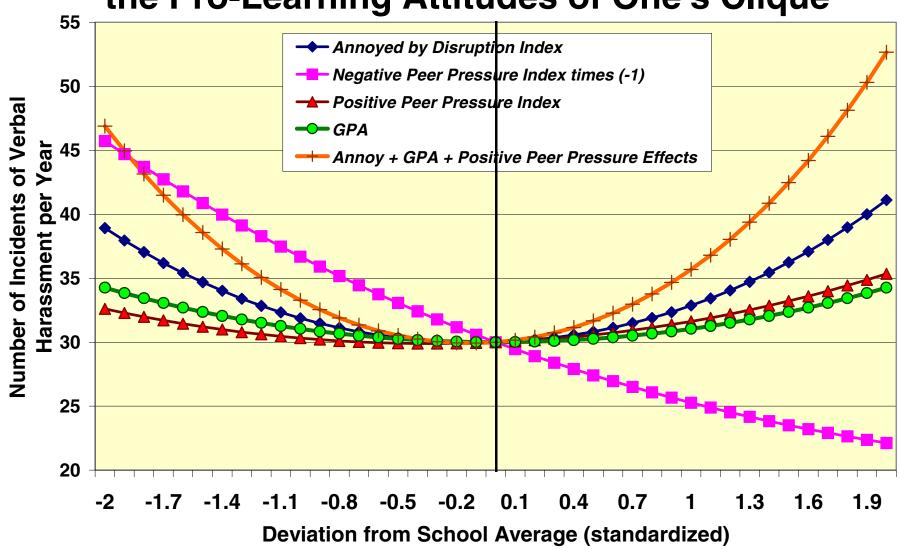
**School Characteristics** 

Standardized regression coefficients greater than .05 are in bold print. Attitudes and beliefs of the students are arrayed on the left underneath the norms of the student's clique. School characteristics are arrayed along the bottom. The 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.<sup>42</sup>

Most of our hypotheses are supported. The incidence of harassment was lower in schools with demanding and motivating teachers. It was greater for honors students, for students with many study halls and for students that took accelerated courses in middle school. Rates of peer harassment were greater for students who reported an anti-learning leading crowd in middle school and for students who 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 (See figure 3). Compared to the baseline of incidence of 30 per year, students who were 1.5 SDs above the mean (93<sup>rd</sup> 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 that was 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, its members also experience more harassment. How strong is the pressure for conformity to school norms? Figure 14 presents a calculation of how much harassment increases as a student deviates from school norms on these four indices.

Fig. 14--Peer Harassment's Association with the Pro-Learning Attitudes of One's Clique



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 (93<sup>rd</sup> percentile) on GPA and the commitment indices were harassed 43 times a year, a 42 percent increase from the baseline student. Those 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 percent increase over the baseline level.

Table 4

Harassment, Study Effort and Grades in School

	[Beta Coeffici			
	Teased Verbal Harass-	No Try Because of	Engage- ment in Class	SD of Indep Var.
0. 1. 5. 1	ment	Friends		
Study Behavior –Endogenous				
Verbal Harassment (SqRt #)	***	.089	051	3.51
No Try bec. Friends-(SqRt #)		***		2.46
Engagement in Class			***	1.00
Peer PressureExogenous				
A Hard to get if Others Study	.043	.070	047	.681
Hard if others study (sch avg)		.022	001+	.118
Good Student Leading Crowd			.003+	
Bad Students Leading Crowd	.071		021	.99
Negative Peer Pressure	.100	.160	065	1.00
Positive Peer Pressure	.012+	.081	.069	1.00
Annoyed when oth. Disrupt	.008+	.015	.188	1.00
(Neg. Pressure - ScMn) SQ	.021			1.51
(Pos. Pressure Sc Mn) SQ	.024			1.79
(Annoyed – Sc Mn) SQ	.055			1.32
(GPA -3.0) SQ	.027			1.28
Pro Learning Norm-(ScMn)	014+	.027	.013+	.665
Student Choice of Courses				
# Accelerated Courses	.025	.001+	023	1.69
% Honors courses	.017	025	.013+	.341
% Basic Courses	002+	.021	025	.369
% Heterogeneous Classes	.006+	.001+	.003+	.307
# of Study Halls	.023	017		3.42
School Characteristics				
Middle School	.024	.026	.017+	.320
Grade in School	.000+	016+	067	.980
All Teacher Good (Sc. mn)	023	002+	.044	.251
All Tch Demanding (Sc mn)	022	.008+	.050	.192
Parents Motivate (Sc Mn)		022		
Future Extrinsic (Sc mn)		.000+	004+	.218
Student's Attitudes				
Intrinsic Motivation Index	014	.001+	.292	1.00
Future Extrinsic Motivation	011	031	.090	1.02
Parents Motivate Student	.055	.007+	004	1.00

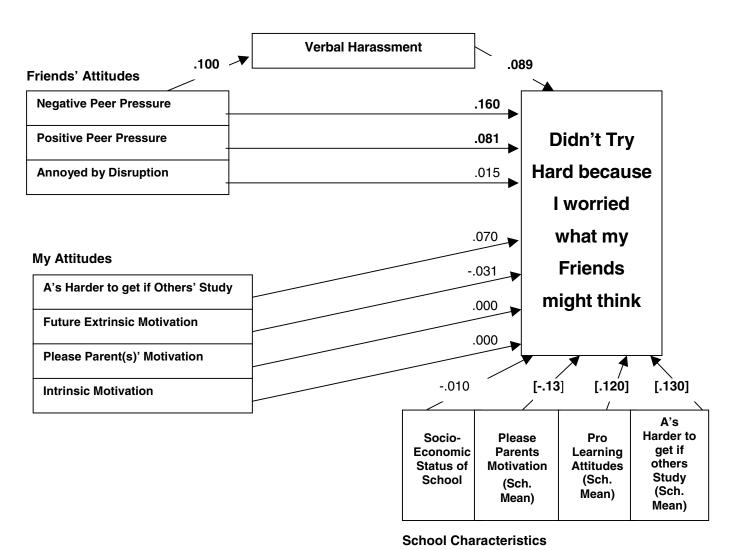
	Teased	No Try		SD
	Verbal	Because	Engage-	of
Table 4continued	Harass-	of	ment in	Indep
	ment	Friends	Class	Var.
Characteristics of Student				
Self Reported Ability	002+	081	.114	1.97
Rept. Ability (Sch mean)	.018+	.008+	.003+	.419
Male	.075	.063	004+	.498
Parent's Schooling	.010+	.002+	.040	2.89
Parent Schooling (Sch Mn)	.018+	023	002+	1.19
Single Parent Family	.019	.020	025	.408
% Single Parent (Sch Mn)	023+	.013+	002+	.122
# of Siblings	.001+	.033	025	1.50
Black	.007+	.044	027	.316
Hispanic	021	.011+	017	.192
Asian	030	.029	011	.210
Native American	.015	.023	020	.075
%Black (sch mean)	.011+	047	039	.172
% Hispanic (sch mean)	.000+	.007+	003+	.073
% Asian (sch mean)	022	011+	.037	.061
Mean Dependent Var.	3.425	.849	.017	
Std Deviation of Dep. Var.	3.513	2.461	1.01	
RMSE	3.374	2.21	.817	
R SQ	.0624	.0874	.3031	
Number of Observations	24,772	27,190	26,313	
			Е	

Analysis of data on 35,604 students from 134 schools located in the Northeast that are members of the Educational Excellence Alliance. Table documented in Insultfin.lst. All of the models included three variables that were 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 tail test.

Results—Not Trying because of what friends might think: 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 percent said it had "never" happened. For those who said it had happened at least once, the 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. The incidence of NOTRY is also lower in high SES schools and schools with larger numbers of African-American students. These variables, however, explain only 2.3 percent 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 percent of the variance is explained. Figure 15 presents the main findings from our analysis of the determinants of not trying hard because of a fear of a negative reaction by friends.

Figure 15

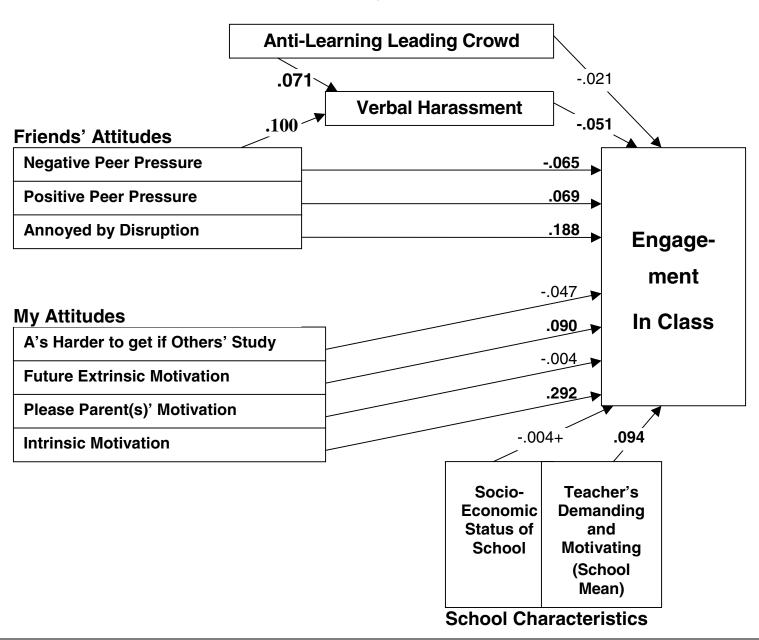


The most powerful determinant of not trying was being in a clique where negative peer pressure was strong. Not trying because of fear about how friends would react was higher for students who were frequently harassed and for students who believed that "If others study hard, it's harder for me to get good grades." Surprisingly, students in cliques with strong positive peer pressure were also more likely to report not trying as were students in schools with strong prolearning norms. Schools where many reported that studying hard was motivated by desire to please and impress 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.

Results—Classroom Engagement: Classroom engagement is lower for males, for students from single parent families, for students whose parents have limited amount of schooling and for students with many brothers and sisters. Holding school characteristics constant, African Americans, Hispanics and Asians have the same level of engagement as whites. Only Native American and mixed ethnicity students were significantly less engaged. The schools with the highest levels of engagement were schools that had large Asian, African-American and Hispanic minorities and schools serving the children of poorly educated parents. These findings suggest that disengagement from school is not a problem that is confined to minority communities and low-income neighborhoods. Upscale suburban schools have just as bad and probably a worse case of the disease than other schools. These variables, however, explain only 7 percent of the variance of the engagement index.

When peer culture scales, attitudes and self reported ability are added to the regression, variance explained rises to 30.3 percent. 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 16 presents the main findings from our analysis of the effects of student motivation and peer pressure.

Figure 16



Intrinsic motivation has a powerful positive effect on engagement as does future extrinsic motivation. Students who reported being motivated by the desire to impress their parents were not more engaged in class.

Peer pressure effects were also quite substantial. Students in cliques that were annoyed when others joked around in class were much 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 7<sup>th</sup> grade was also associated with lower engagement.

# III. Policy Speculations—Outside the Box Thinking about What happens Inside the Black Box

This paper addresses two of secondary education's most serious problems—peer abuse of weaker socially unskilled students and a peer culture that in most schools discourages many students from trying to be all that they can be academically. We have documented the two problems by reviewing ethnographies of secondary schools, by interviewing students in eight suburban high schools and by analyzing data from questionnaires completed by nearly 100,000 students. Grounded in these observations, we built a simple mathematical model of peer harassment and popularity and of the pressures for conformity that are created by the struggle for popularity. The theory and our data analysis suggest that while the two problems are related, solving one will not necessarily solve the other. 'Nerds' and 'Slackers' are just two of the many groups of outcasts in most secondary schools. If somehow it were cool to be a nerd, other groups would still be targeted for harassment, and the nerds would probably participate in the harassment along with everyone else. Nevertheless, the oppression that nerds experience sends powerful normative signals to other students in the school to withdraw from alliances with teachers and get with the program of becoming popular with peers. "We're Cool, Be like us,"

the leading crowds say. Spend your time socializing, do not "study too hard." Value classmates for their athletic prowess and their attractiveness, not their interest in history or their accomplishments in science. Those who break the norms are harassed sometimes by leaders of the popular crowds but more frequently by student 'vigilantes' who aspire to be admitted to one of the leading crowds. Singling out a few nerds and slackers for harassment and social exclusion sends powerful normative signals to the rest of the student body about the behaviors that will make you unpopular.

What is it that the rest of the 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, "they say stupid things," they have geeky interests, they wear unstylish clothes, they are competitive about grades, they talk too much in class and they lack self-confidence. These indeed are the stereotypes. But, unlike the stereotype, the victims of nerd harassment are seldom geniuses with 140 IQs. They are more commonly students of average or below average ability whose inclination at the beginning of middle school was to try to do what teacher's want-- study hard and learn. They tend to lack self-confidence and to be younger, smaller and less aggressive than those not victimized. As one 8<sup>th</sup> grade boy put it: "They are nerdy. If you got someone who will fight, and you have someone who won't do anything, whom would you pick on?" <sup>43</sup> Nerds are identified in the first weeks of middle school. Once singled out, they are subjected to harassment intended "to wear down your self-esteem (BYM)." Is it any wonder that they lack self-esteem, that they leave school at 3:00P.M.or that they hang out with other nerds?

William pleaded, "Why can't anyone act themselves in school?" Why did so many classmates participate in the humiliation of the Mels? Don Mertens' answer was "…in order to set themselves apart from the categorical identity [the Mels represented]." Adolescents have developed a very efficient system of deterring students from violating peer norms. They see some classmates being humiliated and they really want to avoid that fate. That fear is sufficient to change even deeply held norms and behavioral patterns. But the victim gets no hearing before a

judge and the vigilante norm enforcers are not supervised. They are not even motivated by a desire for justice. Their motivation is self-protection, and currying favor with the powerful. As so frequently happens when vigilantes enforce norms without due process, the effort to deter norm violations results in many injustices.

Nerd and slacker harassment poisons the pro-learning environment that educators are trying to establish. In the eyes of most students the nerds exemplify the "I trust my teacher to help me learn" attitude that prevails in most elementary school classrooms. The dominant middle school crowd is telling them that trusting teachers is baby stuff. It's 'us' versus 'them.' The complaint about Les was, "He is more like a teacher's pet. He always hangs around teachers....They [one's peers] got to think that a teacher is not your friend (Mertens p. 19)."

How can schools and teachers meet this challenge? Here are a few suggestions:

High Standards and Good Teaching: High standards, good teaching and a caring community are complementary. The EEA schools with well organized, demanding teachers had significantly lower levels of peer harassment and students were more engaged in class and did their homework more regularly. Students who were close to one of their teachers were less likely to be harassed, felt safer at school and were happier with school. Students who thought their teachers were interesting were less likely to be harassed. Schools high on the teachers are interesting scale had lower levels of harassment and higher levels of engagement and homework completion.

**Kipp Academies:** The best solution is for teachers to take over normative leadership of the school and make working hard the norm. This is what they do 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 of KIPP DC: KEY Academy, 2002).

KIPP academies are non-selective choice schools that run from 8:00 AM to 5:00 PM during the normal 180 day school year, have compulsory Saturday enrichment programs three times a month and a three week summer school. During the summer prior to entering the school for the first time, new students spend a couple of weeks in skills building exercises, learning the KIPP culture and bonding with their future classmates and teachers. KIPP academies are islands of discipline and caring and demanding teachers in a sea of chaotic schools led by dispirited adults. Parents queue for a chance to enroll their child in one of these very demanding schools.

Regular Public Schools: When students and parents do not choose the middle school, establishing a strong academically focused student culture is more difficult. How do state policy makers get serious engagement with learning to be normative among students? 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.

<u>Character education:</u> Character education programs were recently reviewed by the Collaborative for Academic, Social and Emotional Learning (www.casel.org) and many appear promising. Begin by collecting data on your peer culture, how it compares to other similar schools and how it is changing. Set measurable goals for improvement in your students' attitudes and

behavior. Implement the program you have developed. Periodic assembly programs are not enough. A major and sustained effort on the part of the entire faculty and administration will be required. After a year evaluate your progress using the data you periodically collect on attitudes and behavior. Ask what is working and what needs modification and then revise your program.

Defeating bids for normative hegemony by anti-learning student cliques: The struggle over who is popular and whose norms will dominate the student peer culture begins on the first day of middle school and is settled very quickly. Once established, these norms persist. Our data indicate that when members of the popular crowd in sixth grade "make fun of those who study a lot," the high school's peer-culture subsequently takes on a strong anti-learning cast and rates of peer harassment are 50 percent higher. Since visibility and prominence (becoming known to your peers) equates to popularity in middle school, schools need to create opportunities for students who exemplify pro-learning attitudes to become visible and prominent as, for example, tutors, reporters for the school newspaper or participants in school-wide events. You want each new cohort of students to develop its own norms and identity. In order to provide the extra supervision needed during this critical early period, fifth and sixth grade teachers should eat lunch with their students every day.

<u>Competitions between schools in the academic arena:</u> Band, choir, theater, cheerleading and athletic programs receive enthusiastic support from the community because these organizations represent the school to neighboring communities and student achievement in these arenas is visible to the community and rest of the student body. As James Coleman observed in 1961:

"The athlete gains so much status...[because] he is doing something for the school... leading his team to victory, for it is a school victory.... The outstanding student, by contrast has few ways--if any--to bring glory to the school. His victories...are often at the expense of his classmates, who must work harder to keep up."45

Academic extra-curricular activities need to harness the same energy and school spirit. We need to establish inter-scholastic team competitions in academic subjects and for activities like debate,

model UN, constructing robots and the stock market game. As many students as possible should participate. All students who practice regularly should have a valued role. Academic teams should be celebrated in pep rallies, awards ceremonies, trophy displays, exhibits of student work and local newspapers along with the school's sports teams. Academic teams and musical groups should include sixth graders and the training for future events should begin within the first few weeks of middle school. The purpose of starting early is to encourage the creation of large academically oriented friendship networks and to give those groups a positive identity and to accomplish this while the social order is still fluid. Interscholastic sports should start later in middle school and use a "no cuts/everybody plays approach" during middle school.

No Pass-No Play: Eighty-five percent of high schools have a minimum GPA requirement for participation in interscholastic sports. Most schools also require a clean disciplinary record. These policies have both practical and symbolic effects. Academic support is offered to athletes who are struggling. Struggling athletes are encouraged to study harder. There is less temptation to use drugs and alcohol. Since athletes are the nucleus of the popular crowds of most schools, their behavior influences the behavior of everyone else. Students who are unable or unwilling to keep their average above the required minimum are cut or benched. The composition of the popular crowd changes and, as a result, the norms promoted by the leading crowds become more favorable to academic learning. School administrators need 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.

<u>College Completion as a Common Goal:</u> Almost all middle school students aspire to go to college--even those with very poor basic skills.<sup>46</sup> Middle schools should encourage this universal aspiration by taking their 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 so that they are well prepared.

Everyone should be presumed to have college as their goal, including children from very disadvantaged families. Many students do not realize that the academic foundation they are developing in high school is critical to success in college. <sup>47</sup> Once this mistaken belief is corrected, students will be more motivated to take demanding courses and study hard. <sup>48</sup>

Teachers should make a special effort to persuade the leaders of influential student crowds to set particularly demanding personal goals (e.g. 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.

We Will All Succeed if We All Work Hard: Research on peer effects has proved that school is a positive sum game in which engagement and learning by classmates helps me learn. It is important to communicate this fact to students, teachers and parents. Why? Because, students who believe the opposite —i.e. that school is a rat race—tend to develop an alienating anti-learning peer culture. That is what our data suggests. We conclude that the academic enterprise needs to be and to be perceived to be a positive sum game in which success by one individual helps others succeed. Teachers should not grade on a curve. Grades should be based on student effort (e.g. completing homework assignments), good discipline and absolute achievement. Having course content assessed externally by examinations set by the state department of education or Advanced Placement program is also desirable. Schools should not publish or call attention to class rank. The move by state universities in California, Florida and Texas to admit students solely on the basis of class rank is, therefore, very unfortunate. Students at a majority of the high schools in these states are now forced to compete with their friends and classmates for a fixed number of admission slots at the state's flagship universities. 49 Our surveys of EEA schools in other states found that the vast majority of students believe that academics is a positive sum game, not a rat race.

Presumably, this is what students in California, Florida and Texas used to believe. We suspect it will not be long before more and more students at the affected high schools come to realize that school is a rat race. We predict that peer norms will respond to the new reality and nerd harassment will become worse than ever.

The policy ideas just presented are a sample of the initiatives educators described to us when we asked them about their successful efforts to promote a pro-learning environment. The list is certainly not exhaustive and is intended to stimulate thinking about new initiatives. The research of Educational Excellence Alliance on how school policies influence peer culture is just beginning. There is great deal to be learned.

### Appendix A: Characteristics of High Schools Studied

	Sex	% to College	% Poor	Income wealth Ratio	% Hisp	% Black	\$ per student	Median Teach- er Salary	H.S. Stud./ Grade	% Regent Diplom
Boynton M. S. & Ithaca H. S.	М	88%	14 %	1.21	3	10	\$10,400	\$42,000	450	74
Harbor Edge H.S.	F	96%	4 %	1.59	6	1	\$12,100	\$70,000	430	64
Newport Junction H.S.	F	94%	2 %	1.87	10	7	\$13,400	\$65,000	260	80
Longview H. S.	F	88%	5 %	.88	4	1	\$11,500	\$80,000	1000	55
Madison H. S.	F	83%	4 %	.79	6	3	\$10,700		330	53
Lakeside H.S.	F, M	89%	1 %	2.54	10	3	\$11,600	\$59,000	70	65
Wittison H. S.	F	90%	6 %	2.10	3	1	\$14,100	\$71,000	80	67
Coso H.S.	F	83%	4 %	1.28	1	5	\$ 9,000	\$45,000	420	69
NY State Low Need Districts		92%	3 %	1.86	5	3	\$12,500	\$64,700		92
NY State Public School Average		78%	18 %	1.00	18	20	\$ 9,800	\$49,500		78

### **Appendix B: Educational Excellence Alliance**

### Assessment of Secondary School Student Culture—2<sup>nd</sup> Wave

1.	What grade are you	in?	O6	O7	7 O.	8	O9	01	O	11	O12	
2.	Are you male or fem	nale?	OFem	nale	ON	1ale						
O O O	Which elementary sschool outside curreCatholic schoolother private school  If you are in high sc	nt district	O#1 s O#2 s O#3 s	school school school	O# O# O#	4 schoo 5 schoo 6 schoo	0 I 0 I 0	#7 scho #8 scho #9 scho	ool O	)#10 s )#11 s )other	school pub. Sc	
sch O O	nools)public school in otheCatholic schoolOther Private School	er district	OCu O#1	urrent scl school school	hool O. O.		nool nool	O#(	6 school 7 school school	O O	#9 sch #10 sc	ool hool
I ar I do Stu No My My I do Ma I fir I lik I er If o If o If n Wh	Do you agree or dismall happy to be at this so not feel safe in this so dying a lot tends to me to spending time to soot teachers maintain go teachers grade me faton't feel close to any ony of my courses are not the history and science the books and plays and young math probled didn't need good grade of many students get at thers study hard, it is nost of the class did not my teachers do not put the problem of the class did not put the	school school. school. sake you le sialize and od discipli sirly of my teacl not challe ence textbo s we read ems les, I'd put way with I harder for ot underst ut it on the school, I ol wouldn'	ess popular hang out the in the content of the cont	ear. tends to classroom ear esting h rt into my & not do t good gr cept, so	y classe y classe ping their rades me of p later. ore diffic	ou less s r work ult for m	e.	00000000000000	Agre		gree Dis	
	Everyone gets a poor grade? (Darken the OI had bad lu OThe class w	e most imp ck		NE OR T O…I di	WO cho	oices.)		O.,	reason The tea	_		the
	How often  do you really pay attentoo does your mind wandeto you joke around dute you contribute to classe teachers call on stu	er? ring class' ass discus	? ssion?	are not		Never O O O O O	Seldom O O O O O	n Fairly O O O O O	Ofter O O O O	n Usu O O O O	(	vays O O O O
mu	When teachers assi uch of it do you usua arken one choice for e	lly do?		r schoo	l work,	how		What % ke the s				
Ma Eng Soci	Homework is never assigned	None of it O O O O	Some of it O O O O	Most of it O O O O	All of it O O O O O	More than require O O O O	ed le C C	or or or ess to or	f the ime O O O	50% of the time O O O O O O	70% of the time O O O O O O	90% or more O O O O

10.	On week days after school, how many HOURS PER DAY on average are you:		lo ïme	Half ar Hour		1 Hour	2 Hou	irs	3-4 Hours	5- Ho	7 urs	8+ Hours
	a) Studying and doing homework b) Hanging out and/or talking on phone with friend c) Watching TV, playing video games and listening	s C		0		0	0		0	0		0
	to music alone or with family d) Engaged in sports or extra curricular activities e) Working for pay		)	0 0 0		0 0 0	0 0 0		0 0 0	0 0 0		0 0 0
11.	How many hours do you typically study for an end of marking period exam in History	C	)	0		0	0		0	0		0
12.	How many hours a WEEK do you get tutoring of academic help from teachers, tutors or older siduring free periods or outside of school hours I currently get:  How many hours would you prefer:	tude			0		0 0	0		0	C	
13.	How many study halls or free periods (including Ozero-2 O3-4 O5 O6-7 O								15 O.	16+		
Do y Do y Is th	About what % of the time: you listen to a discman/walkman during free periods you listen to music while doing homework? ne TV on in room while you do homework? you completely understand the teacher's lesson?	s at s	choo	10 % or les ol? O O O		11% t 35% O O O O	0	bout Half e tim O O O	65	) ) )	90°	) )
15.	In middle school were you put in accelerated o ONo OYes in all classes OYes in			ed class					(mar es in d			
	Have you attended summer school at any time ONo OYes, once es, Why? ORequired OFailed a course O		٥١	res, twi	се				times For Fur	n O	то С	atch up
	What was your grade point average last term?	A O	A <b>-</b> O	B+ O	ВО	В <b>-</b> О	C+ O	C 0	C- O	D+ O	D O	D-/F O
	What GPA do you think is needed to get into the nearest public university? What is the lowest GPA you can get without	0	0	0	0	0	0	0	0	0	0	0
18.	really upsetting your parents?  How quickly do you learn things? (mark one)	0	0	0	0	0	0	0	0	0	0	0
	OO Slower than most	0.		.O verage	.0		.0		) aster tl			
	My friends put pressure on me. I don't want to embarrass my family. I want to learn the material. I want to keep up with my friends. The teacher demands it.	the 1	-   T   I   N   T	wing redeling the left me for pleas need the left me for the subject m	get se oi se oi ne gi ners ject	a bet impro impro rades enco is inte	ter job ess my ess my to get urage eresting		ents. cher. college o work	e. hard.		

20. Think of the times you did not study for a tes of the following reasons were most important? (A. OI could get a good grade without studying OThe assignment was boring or pointless OI preferred to party or hang out with friends OI didn't understand the material OThe assignment was too long and difficult OI didn't care about the grade in that course ONo one to help me OThe teacher didn't care	ANSWER ONo OTei OMy OSta OI di OI gi OI fo	AS MAN of enough acher did a friends warted too bisliked the of distractory the acted to the act	Y AS AI time be not coll vanted rate, Poe teachested at hassignn was ver	PPLY TO ecause of ect and go me to do or plannier some nent ry disorga	O YOU.) of work a grade ha someth ng anized	and/or sch omework. ing else	ool activitie
create a list in your head of your six closest friend		illik allu			u aliswi	ei tilese t	juestions,
My friends make fun of people who try to do really we My friends think it's important for me to do well in scie My friends think it's important for me to be good at sp My friends think it's important for me to be placed in a Do you think your friends would agree or dis It's not cool to frequently volunteer answers or comm It's not cool to study really hard for tests & quizzes Its annoying when other students talk or joke around Its annoying when students try to get teachers off trad	ence at so ports a high ach sagree tha ents in cla in class	chool. nieving cla a <i>t:</i>	,	Agree O O O O O O O O O O O O O O O O O O	Agree O O O O O O	Disagree O O O O O O	Strongly Disagree O O O O O O O O O O O O O O O O O O
22. How IMPORTANT do your FRIENDS THINK IT IS TO: Study hard to get good grades Participate actively in class Go to parties Continue their education past high school Go to one of the best colleges in the U.S		Very Importan O O O O O		omewhat oportant O O O O O	Not Impo O O O O	rtant Im	lot at all nportant O O O O O
<ul><li>23. How often have each of these things happeness far in this school year?</li><li>My friends and I talked outside of class about things My friends joked around and annoyed the teacher.</li></ul>		d in schoo	every day	About once a weel O O	а	twice	•
I didn't try as hard as I could at school because I worried about what my friends might t My friends and I studied together (outside of class) I was insulted, teased or made fun of to my face Do you think you were insulted or made fun of behind Someone threatened to hurt me at school I was pushed, tripped or hurt by other student(s) I cut a class or skipped school I copied homework from another student	d your bac		0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0
24. During the 1st yr of middle or junior high schwere: (mark all that apply) OReally Smart OAttractive OFunny OS OVery good in sports OAttentive in class ON OMade fun of those who studied a lot OMos school	Self confid Not attent	dent O	.Outgoi	ing C	)Toug rked har	gh O d to get g	ur gender) Cool clothed ood grades ementary
25. Which courses are you taking this Year?  I am taking this year		Soc. Stu 0 0 0 0 0	d. Fo	or. Lang. O O O O O O O	Science O O O O O	e Math V O O O O O O	/ocational O O O O O O
26. Mark if this class meets more than 5 periods	a week?	0		0	0	0	0

OE O7 OF OF	Theater OWord Processing O Remedial Math OComputer Programming O Remedial English OOther Computer Courses O Religion/Ethics ORetail/Distributive Ed O	Shop/Industrial Arts Intro. to Occupation Intro to Technology Construction Occup Auto Mechanics	OBusiness S OAgricultur OMedical C OCoop Edi OOther Vo	. ( re ( Careers ( ucation ( c/Tech coul	OCourse #1 OCourse #2 OCourse #3 OCourse #4 rses
O <i>i</i>	Work-Study OProgram #1 O.	f the following (ma .Bilingual Education .Special Education .Job Shadow		other studer as 2 <sup>nd</sup> Lang	
<b>29.</b> with O <b>N</b>	•			d adult you les, for 3+ y	
30.		uring the school ye Other relative/ G Alone or with frie	uardian or foste		
31.	How many books are there in your home? O0 Omore than 250	) to 10 O11-24	O25-100 (	D100-250	)
32.	Is there a Personal Computer at home that you hoYes, More than one	nave access to?	No OYes	s, only one	
33.	What is your Race/Ethnicity? (mark all that apply) ONative American	OWhite OBla	ck OHispani	c OAsia	.n
34.	Are any of your six closest friends of a different ONone	race/ethnicity than	yourself? O.	.Most O	.Some
35.	How many brothers and sisters do you have?	ONone O1	O2 O3	04	O5 or more
36.	<b>Do your parents speak a language other than En</b> OMostly	glish at home? O	No OSeldo	m OHalf	the time
0 0 0 0 0	What is the highest level that you would to go to in school? buld like to: Leave before graduating Finish high school Technical certificate after high school 2-year college degree 4-year college degree 4-yr college degree plus some further training Post Graduate degree (medical, law, PhD. MBA) Haven't thought about it	Some or finis Some high s Finished high Some college 4-year college Some school	n school e or 2-year degi	s/guardian: ach column Mothe Stepmothe O O O ree O gree O G G G G G G G G G G G G G G G G G G	S.
	When you apply for jobs after leaving high scho ool grades or ask to see a transcript? ONever				<b>our high</b> y OAlways
of t	What importance do you think admissions office the following characteristics. Please Rank them SAT-I or ACT Scores	RANK → Activities s Taken	iversities in your 1st 2nd 3rd 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	our state at 4 <sup>th</sup> 5 <sup>th</sup> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	tach to each

	Strongly			Strongly
41. Do you agree or disagree with the following statements:	Agree	Agree	Disagree	Disagree
In this school, getting better grades than others tends to make you less popular	0	0	0	Ó
I take a positive attitude towards myself.	0	0	0	0
Good luck is more important than hard work for success.	0	0	0	0
People who accept their condition in life are happier than those who				
try to change things	0	0	0	0
It is best to live each day to the fullest and let tomorrow take care of itself.	0	0	0	0
I don't like to do any more school work than I have to.	0	0	0	0
Even if I don't work hard in school, I can make future plans come true.	0	0	0	0
I could do a lot better in school.	0	0	0	0
My friends want me to study harder in school than I do.	0	0	0	0
My friends DO NOT want me to study harder than they do	0	0	0	0
My friends don't ask for help even if they need it	0	0	0	0
My parents don't pay much attention to my grades	0	0	0	0

	42.	Which types of	music do yo	ou listen to the most? (	Mark one	, two or at most three	categories
--	-----	----------------	-------------	--------------------------	----------	------------------------	------------

O..Modern Rock O..Pop O...Rap/hip-hop O..Musicals O..Salsa or Latin O..Classical Music O...Classic Rock O..Jazz

O..Country O...Dance & Techno O..Metal

O..Rhythm & Blues

# Appendix C Scales describing Student Attitudes and Behavior at School

A number of summary indicators combining similar questions were defined to capture various aspects of student motivation to do well or try hard in school and to summarize student behavior. Each of these variables is an average of the student's responses to related questions. Items from different questions with different response formats were sometimes combined. Z scores were created by subtracting the mean response of each component question from the student's individual response and then dividing by the standard deviation for that question. A Z score measures the distance of the student's response from the mean response in standard deviation units. The SPSS mean command was used to average the Z-scores from related questions creating an index variable for each type of motivation. If an individual item was not available, we used the other standardized variables to create the average. In order to make the variables easier to understand, each index was divided by its standard deviation to create a standardized variable with a mean of zero and a standard deviation of one. A one-unit change in the motivation indexes, therefore, is equivalent to a one standard deviation change in the scale. A movement of one standard deviation means one has moved from say the 50<sup>th</sup> percentile of a normal distribution to about the 84<sup>th</sup> percentile or from the 84<sup>th</sup> percentile to the 97.7<sup>th</sup> percentile.

#### **Behavior/Effort at School**

**Disengagement in Classroom**-- The variable measures classroom behavior. A high value for this variable indicates that a student often has a wandering mind, frequently jokes around in class and seldom: pays attention in class [multiplied by negative one in the averaging process to change the direction of the response]. The average response for "How often does your mind wander" is 3.193; slightly above "fairly often" (s = 1.279). The average response for "How often do you joke around in class" is 2.839; slightly below "fairly often" (s = 1.321) The average response for "how often do you really pay attention in class" is 4.617; somewhere between "often" and "usually." (s = 1.01)

Contribute To Class Discussion--The average response for "contribute to class discussion" is 4.184; slightly above "often." (s = 1.33)

Hwkavg is an index of the average share of assigned homework in five core subjects that students actually do. "None of it" was assigned a value of 0, "All of it" = 1, "Some of it" = .333, "Most of it" = .67 and "More than required" = 1.33. On this scale, the index had a mean of .78 for all EEA schools. If no homework is assigned in a course, that item is considered missing. An average was calculated for those subjects that were not missing using the SPSS means command.

#### Interesting teachers Alpha = .663

INTTEACH—Share of time teachers make subject interesting

Q9--% of time teacher makes MATH interesting

Q9--% of time teacher makes ENGLISH interesting

Q9--% of time teacher makes SOCIAL STUDIES interesting

Q9--% of time teacher makes SCIENCE interesting

Q9--% of time teacher makes VOCATIONAL/TECH interesting

#### Like Learning Alpha= .468

LIKELEAR— enjoys the books and math problems assigned

Q5.09--I find the history and science textbooks interesting

Q5.10--I like the books and plays we read for English

Q5.11--I enjoy doing math problems

#### Teacher Didn't Collect the Homework Alpha = .478

NOCOLLEC—didn't do homework because teacher was disorganized, didn't collect/grade homework, or didn't care

Q20.08—The Teacher did not collect and grade homework

Q20.10—The Teacher did not care

Q20.16—The Teacher was very disorganized.

#### Harassment Alpha=.783

HARASS—frequency of verbal and physical harassment.

Q23.05--How often happened - I was insulted, teased or made fun of to my face

Q23.06--How often happened - Do you think you were insulted or made fun of behind your back

Q23.07--How often happened - Someone threatened to hurt me at school

Q23.08--How often happened - I was pushed, tripped or hurt by other student(s)

# Appendix Table D—Means & Standard Deviations Second Wave of the EEA Survey of Student Culture

	М	ale	Fei	male
	Mean	Std. Dev.	Mean	Std. Dev.
Belief School is Zero-Sum				
If others study hard, it's harder to get A's $[1 \rightarrow 4]$	1.98	0.77	1.92	0.70
Study Effort and Time Use				
Share Homework done [0→1.25]	.763	.241	.818	.205
Square of (Share of Homework done78)	.059	.0917	.044	.0605
Studying (hrs/day)	1.60	1.34	2.1	1.5
SQ of (Study hr – 1.87)	1.87	4.00	2.25	4.77
Participate in Class	4.18	1.41	4.15	1.38
Square of (Class Participation – 4)	2.01	2.07	1.93	1.95
Disengagement (mind wander, joke around, pay attention)	.140	1.00	182	.877
Square of Disengagement	1.027	1.524	.801	1.05
TV, listening to music, video games (hrs/ day)	2.51	2.01	2.22	1.98
Work for Pay (hrs/day)	1.12	1.99	1.04	1.89
Extra-curricular Activity (hrs/day)	1.87	1.71	1.57	1.50
Hanging out (hrs/day)	1.70	1.77	1.93	1.83
High Academic Achievement				
In Gifted Program	16.4	37.0	16.8	37.4
Tutored Other Students	18.4	38.8	27.1	44.5
Took Theater Course	15.0	35.7	22.9	42.0
Took Band/Orchestra Course	36.1	48.0	38.6	48.7
# of Accelerated Courses in middle school	1.0	1.3	1.0	1.3
Taking one or more honors or AP course	0.51	0.50	0.543	0.498
Taking at least one AP course	0.09	0.29	0.107	0.309
# of Honors & AP courses	1.26	1.59	1.37	1.63
Low Academic Achievement				
In Special Education	0.06	0.24	0.038	0.19
Took Remedial Course	0.26	0.44	0.243	0.429
Took a Blue Collar Vocational course	0.12	0.32	0.046	0.21
Friends College Goals				
Friends think it's important to go to one of the best colleges	035	1.013	.047	.950
Ability- Less visible to others				
ShareTeachers' lessons completely understood [0 to 1]	.685	.248	.672	.241
How quickly I Learn Things? [0→1]	.706	.187	.669	.171
Intrinsic Motivation				
Like Learning [SD=1]	-0.0045	1.03	0.025	0.922

## Appendix Table D (cont)—2<sup>nd</sup> Wave EEA Survey

Appendix Table B (cont)	Mala Famala			
	Male Ctd Day		Female Std Day	
	Mean	Std. Dev.	Mean	Std. Dev.
Teacher Characteristics				
Teachers are Interesting Share of time [0→1]	.505	.214	.512	.202
I don't feel close to any of my teachers [1→ 4]	2.34	0.83	2.30	0.79
Disorganized, Does not Collect Homework Index	.0076	1.019	.0007	.976
I could get good grade without studying	.543	.498	.439	.496
Music Listened to the Most				
Rap & Hip-hop	.684	.465	.651	.477
Pop	.270	.444	.565	.496
Modern Rock	.361	.480	.282	.450
Rhythm & Blues	.185	.388	.229	.421
Classic Rock	.200	.400	.111	.315
Dance & Techno	.151	.358	.165	.371
Heavy Metal	.179	.384	.669	.250
Country	.053	.224	.113	.317
Salsa or Latin	.076	.265	.119	.324
Jazz	.146	.353	.079	.269
Classical	.115	.319	.102	.303
Musicals	.036	.185	.077	.266
School Characteristics				
Grade in school	9.32	1.52	9.34	1.53
Middle School Grades (6 to 9)	.287	.452	.287	.452
Demographic Characteristics				
African-American	22.0	41.4	22.9	42.0
Hispanic	7.9	27.0	7.6	26.5
Asian	8.0	27.1	7.7	26.7
More Than One Race	3.2	17.6	3.3	17.9
Parents speak a Foreign Language at Home	1.5	3.4	1.5	3.3
Living in Single Parent Household	0.039	0.19	0.031	0.17
Blended Family	0.66	0.25	0.08	0.27
Number of Siblings	2.0	1.4	2.0	1.4
Parent's Education	5.1	1.5	5.0	1.5
Father's Education	5.1	1.6	5.1	1.6
D30sipar	0.21	0.41	0.23	0.42
In Bilingual Education	0.12	0.32	0.12	0.32
In English as 2 <sup>nd</sup> Lang	6.1	0.24	5.4	22.6
Books in Home Index [range is 1 to 5]	3.77	1.23	3.90	1.14
One Computer at Home	0.44	0.50	0.47	0.50
Two Or More Computer at Home	0.47	0.50	0.44	0.50
Dependent Variables				
Number of Incidents of Harassment	85.7	145.5	51.9	102.8
I do not feel Safe in this schoolindex	1.935	.7476	1.915	.6768
I am happy to be at this schoolindex	2.962	.7565	2.986	.7079
Num of Incidents of Harassment	85.7	145.5	51.9	102.8
	1			

#### **Endnotes**

Mel is a local term that corresponds to dork or nerd in other schools. Don E. Mertens, "Visibility and Vulnerability: Responses to rejection by nonaggressive junior high boys," <u>Journal of Early Adolescence</u>, Vol. 16 No. 1, February 1996, p. 12.

- Dorothy Espelage and Christine Asiado, "Conversations with Middle School Students about Bullying and Victimization: Should we be concerned?" forthcoming <u>Journal of Emotional Abuse</u>, 2003, p. 8. While students gave many different reasons for bullying, the bystanders that were interviewed often cited the desire for acceptance into a crowd as the explanation of bullying behavior.
- <sup>4</sup> A. D. Pellegriini, M. Bartini and F. Brooks, "School bullies, victims and aggressive victims: Factors relating to group affiliation and victimization in early adolescence," <u>Journal of Educational Psychology</u>, 91, 1999, 216-224. P. C. Rodkin, T. W. Farmer, R. Pearl and R. Van Archer, Heterogeneity of popular boys: Antisocial and prosocial configurations," <u>Developmental Psychology</u>, 36,2000, 14-24; Dan Olweus, <u>Bullying at School</u>, Malden, MA: Blackwell, 1993.
- Thomas Berndt, A. E. Laychek and K. Park, "Friends influence on adolescent's academic achievement motivation: An experimental study," <u>Journal of Educational Psychology</u>, Vol. 82, 644-670. Studies using non-experimental methods include Sandra B. Damico, "The Effects of Clique Membership upon Academic Achievement," <u>Adolescence</u>, vol. X, no. 37, (Spring 1975), p. 93-100; Thomas Kinderman, "Natural peer groups as contexts for individual development: The case of children's motivation in school," <u>Developmental Psychology</u>, Vol. 29, no. 6, 1993, 970-977. For reviews of this literature see: Thomas Berndt and Keunho Keefe, (1995) "Friends influence on school adjustment: A motivational analysis," 248-278 and Thomas Kinderman, Tanya L. McCollam and Ellsworth Gibson, Jr., (1995) "Peer networks and student's classroom engagement during childhood and adolescence," 279-311 in J. Juvoven and K.R. Wentzel (Eds), <u>Social Motivation: Understanding Childrens' School Adjustment</u>, Cambridge, England, Cambridge University Press, and B. Bradford Brown, "Peer Groups and Peer Cultures" in S. S. Feldman and G.R. Elliot (Eds) <u>At the Threshold: the Developing Adolescent</u>, Cambridge, Mass: Harvard University Press, 1990, 171-196.
- David Zimmerman, (1999) "Peer Effects on Academic Outcomes: Evidence from a Natural Experiment' NBER; Bruce Sacerdote, (2000) "Peer Effects with Random Assignment: Results for Dartmouth Roommates," Dartmouth College.
- Caroline Hoxby, (2000) "Peer Effects in the Classroom: Learning from Gender and Race Variation," Cambridge Mass: National Bureau of Economic Research, Working Paper 7867, 1-62;
- <sup>8</sup> Joshua D. Angrist and Keven Lang, (2002) "How important are Classroom Peer Effects? Evidence from Boston's Metco Program," Cambridge Mass, National Bureau of Economic Research, Working Paper 9263, 1-38.
- <sup>9</sup> Eric A. Hanushek, John Kain and Steven G. Rivkin, (2002) "New Evidence about Brown V. Board of Education: the Complex Effects of School Racial Composition on Achievement," Cambridge Mass, National Bureau of Economic Research, Working Paper 8741, 1-38.
- <sup>10</sup> Michael Boozer and Stephen E. Cacciola, (2001) "Inside the 'Black Box' of Project Star: Estimation of Peer Effects Using Experimental Data," Yale University, Economic Growth Center Discussion Paper # 832, 1- .
- Andrew Zau and Julian Betts, "Peer Groups and Academic Achievement: Panel Evidence from Administrative Data," Public Policy Institute of California.
- Ernest Fehr and Simon Gachter, "Cooperation and Punishment in Public Goods Experiments," <u>American Economic Review</u>, Vol. 90(4), Sept. 2000, 980-994. Costly punishment also has substantial effects when players develop reputations and the game is repeated an ex ante unknown number of times. Elinor Ostrom, James Walker and Roy Garder, "Covenants with and without a Sword: Self-Governance is Possible." <u>American Political Science</u> Review, June 1992, 86(2), 404-417.
- B. Bradford Brown, "Peer Groups and Peer Cultures," in S. S. Feldman and G.R. Elliot (Eds) <u>At the Threshold: the Developing Adolescent</u>, Cambridge, Mass: Harvard University Press, 1990, p. 177.

Don E. Mertens, "Visibility and Vulnerability: Responses to rejection by nonaggressive junior high boys," 1996, p.

- The studies and ethnographies that were particularly useful were: Philip Cusick, <u>Inside High School</u>, New York: Holt, Reinhart and Winston, 1973, 1-243; Donna Eder et al., <u>School Talk</u>, New Brunswick: Rutgers University Press, 1995, 1-198; Rosalind Wiseman, <u>Queenbees and Wannabes</u>, New York: Crown Publishers, 2002, 1-336; Penelope Eckert, <u>Jocks and Burnouts: Social Categories and Identity in the High School</u>, New York: Teachers College Press, 1989, 1-195; Rachel Simmons, <u>Odd Girl Out</u>, New York, Harcourt, Inc., 2002, 1-289; Patricia Hersch, <u>A Tribe Apart</u>, New York: Ballantine Books, 1999; Mary Haywood Metz, <u>Classrooms and Corridors</u>, Berkeley: Univ. of California Press, 1978, 1-275, Theodore Sizer, <u>Horaces Compromise</u>, New York, Houghton, 1984, 1-299; Arthur Powell, Eleanor Farrar and David Cohen, <u>Shopping Mall High School</u>, New York, Houghton, 1985, 1-360. Thomas French, South of Heaven, New York: Simon Schuster, 1993, 1-367.
- During the fall of 1997 seven interviewers were hired to collect data for a study of high school peer cultures in eight high performing suburban New York State high schools. The team met frequently during the fall to develop a protocol for the open-ended interviews and a paper and pencil questionnaire that respondents completed just prior to their personal interview. The interviewers were trained in interviewing techniques and used a tape recorder during the interview. We approached high performing high schools that were a short drive from the suburban residences of the Cornell students conducting the interviews during the winter break. Respondents were selected and parental permissions were handled by the cooperating high school. One hundred and thirty-five tenth graders were interviewed (most of them female) during January 1998. The following semester all but one of the interviewers took a seminar exploring qualitative research methodologies and read articles and books discussing student peer culture. The students then wrote an "ethnography" of the school they had studied. Student ethnographies were shared with the principal of the high school studied. A second wave of personal interviewing was undertaken with a convenience sample of male students attending Ithaca area middle schools and high schools.
- The Educational Excellence Alliance is a consortium of schools and school districts that are interested in learning how to more effectively help all their middle and high school students to achieve at higher levels and to respect individual differences. The Alliance offers its members a convenient means of assessing and diagnosing their student peer cultures in a way that allows them to compare themselves to other similar schools and to track changes over time. During the 1998-99 school year, 134 schools in New York, Massachusetts, Connecticut, New Jersey, and Pennsylvania undertook a standardized assessment of the culture of their 10<sup>th</sup> graders and were sent reports comparing their students' responses to the responses at other comparable schools. The questionnaire was revised in January 2000 and another 270+ schools (nearly half of them middle schools) have participated since then. Many of the schools participating in this second wave of data collection are located outside of the Northeast. The reports sent back to each school point out areas of concern and have suggested reading materials that might be helpful in planning interventions designed to build a student culture that honors academic achievement and respects individual differences.
- <sup>17</sup> See Eric Erickson, (1968) <u>Identity, Youth and Crisis</u>, New York: Norton and P. R. Newman and B. M. Newman, "Early adolescence and it's conflict: Group Identity vs. alienation" Adolescence, Vol 10, 127-136.
- Don E. Mertens, "Visibility and Vulnerability: Responses to rejection by nonaggressive junior high boys," 1996, p. 14. Middle school teachers are with a particular student for only 50 minutes a day, so are powerless to stop the dominance by insult game that so many boys play during middle school.
- Don E. Mertens, "Visibility and Vulnerability: Responses to rejection by nonaggressive junior high boys," 1996, p. 19.
- Don E. Mertens, "Visibility and Vulnerability: Responses to rejection by nonaggressive junior high boys," 1996, p. 16.
- Don E. Mertens, "Visibility and Vulnerability: Responses to rejection by nonaggressive junior high boys," 1996, p. 19.
- Don E. Mertens, "Visibility and Vulnerability: Responses to rejection by nonaggressive junior high boys," 1996, p. 18.
- Student at Harbor Edge High School interviewed by Lara Gelbwasser, "Organizational Culture and the Power of Peers," Cornell University, School of Industrial and Labor Relations, Spring 1998.
- Student at Newport Junction High School interviewed by Lara Gelbwasser, "Organizational Culture and the Power of Peers," Cornell University, School of Industrial and Labor Relations, Spring 1998.
- Student at Harbor Edge High School interviewed by Lara Gelbwasser, "Organizational Culture and the Power of Peers," Cornell University, School of Industrial and Labor Relations, Spring 1998.

- <sup>26</sup> Student at Longview High School interviewed by Shanna Green, "The Door Opens Once You Get Here," p. 14,15.
- Don E. Mertens, "Information Versus Meaning: Toward a further understanding of Early Adolescent Rejection," Journal of Early Adolescence, Vol. 16 No. 1, February 1996, p. 41.
- Student at Harbor Edge High School interviewed by Lara Gelbwasser, "Organizational Culture and the Power of Peers," Cornell University, School of Industrial and Labor Relations, Spring 1998.
- Student at Newport Junction High School interviewed by Lara Gelbwasser, "Organizational Culture and the Power of Peers," Cornell University, School of Industrial and Labor Relations, Spring 1998.
- Student at Newport Junction High School interviewed by Lara Gelbwasser, "Organizational Culture and the Power of Peers," Cornell University, School of Industrial and Labor Relations, Spring 1998.
- Andy Zuckerman, "Working Hard or Hardly Working? A High School Ethnography," Cornell University, School of Industrial and Labor Relations, 1998, p. 23.
- Andy Zuckerman, "Working Hard or Hardly Working? A High School Ethnography," Cornell University, School of Industrial and Labor Relations, 1998, p. 23.
- Andy Zuckerman, "Working Hard or Hardly Working? A High School Ethnography," Cornell University, School of Industrial and Labor Relations, 1998, p. 23.
- Kenneth Arrow, "Political and Economic Evaluation of Social Effects and Externalities," in Michael Intriligator, ed., Frontiers of quantitative economics. Amsterdam: North-Holland, 1971, pp. 3–25.
- A study of norms at a predominantly Jewish high school in New York City found peers thought that being bright was fine as long as you were not studious. Getting good grades did not get one into trouble with one's peers, it was **trying** to get good grades. Abraham J. Tannenbaum, "Adolescents' Attitudes Toward Academic Brilliance." PhD Dissertation, New York University, 1960.
- <sup>36</sup> George Akerlof and Rachel Kranton, "Identity and Schooling: Some Lessons for Economics of Education," June 2002, The Institute for Advanced Study.
- <sup>37</sup> Philip Cusick, Inside High School, (New York, Holt Rinehart Winston, 1973) p. 159.
- Many of the EEA schools are in small cities with large university populations. High IQ students with aspirations to attend selective colleges and universities were probably an important part of the leading crowds of many of these schools. These students would, of course, not want high achievement to be stigmatized as nerdy. As an influential segment of current and past student bodies, our theory predicts that peer norms in these university towns will define "nerd" as someone who "studies too much" not someone who "aces every test." Other communities may be different, so our conclusion that nerd harassment norms are about effort not achievement may not generalize to schools where aspirations to go to selective colleges are not so well developed.
- <sup>39</sup> We choose to treat a third school connectedness question—"I do not feel close to any of my teachers this year" as a behavior influenced by teachers not as a student attitude. We treat it as an independent variable in our multivariate models predicting peer harassment and school connectedness attitudes.
- Even with all these efforts to control for personal attitudes and environmental factors, these regressions do not provide unbiased estimates of the causal impact of peer norms on behavior. Bias comes from measurement error in the attitude and peer pressure variables and from possible feedback effects of behavior on our indicators of attitudes and peer pressure (respondent's might be justifying their behavior by describing their friends as advocating it). Another problem is that students have chosen their clique and were probably aware of the peer pressures they would be subjected to when they joined it. The school/gender/grade means of attitude and peer pressure scales should be less subject to measurement error and pretty close to exogenous. Students do not choose the grade they are in and seldom influence the school they are sent to.
- <sup>41</sup> At one reviewer's suggestion we entered the squared deviation variables to models predicting other outcomes to test for curvilinear effects. Despite the large sample size, very few of these variables were statistically significant.
- <sup>42</sup> This parameter is calculated by multiplying the standardized regression coefficient on the school characteristic by the ratio of the student SD for this attitude scale to the school standard deviation for the variable. In most cases this ratio is about 6. This means that the unstandardized coefficients on school mean attitude scales are being standardized by the same SD that the clique attitude scales are being standardized by. This makes the coefficients directly comparable in much the same way that unstandardized coefficients would be comparable.

<sup>43</sup> Dorothy Espelage and Christine Asiado, "Conversations...", p. 8-9.

- <sup>46</sup> In 1980 seventy-five percent of the 10<sup>th</sup> graders in the bottom quartile on achievement tests said they planned to attend college. National Center for Education Statistics, *Digest of Education Statistics*, 1993, p. 137.
- Twelve years later in 1992 only 3.3 percent of students in the bottom quartile on a battery of achievement tests taken in 12<sup>th</sup> grade had actually obtained a Bachelors degree and only 4.1 percent had gotten an Associates degree. Students in the top quartile were 20 times more likely to get a Bachelors degree. National Center for Education Statistics, *Digest of Education Statistics*, 1998 p. 329. When this information is presented to students, it should be stressed that college completion rates are influenced by absolute achievement levels not ones class rank and that poor achievement in the early years of secondary school can be overcome by hard work in the upper grades.
- <sup>48</sup> Making college attendance and completion a part of a school's ethos need not marginalize applied technical education. Many of the jobs that used to be filled by young high school graduates, now require a strong background in writing, math and science and a longer period of occupationally specific training. This training is now being done partly in high school and partly in community college. Consequently, vocational teachers should present their program as the occupational equivalent of Advanced Placement courses in academic subjects. Those who graduate with three or four courses occupational courses earn substantially more and are better able to support themselves while attending college. At the end of 10<sup>th</sup> grade, students with low academic achievement levels should be required to develop a backup plan that involves training for immediate employment after high school.
- In 1997, the first year after Hopwood, the share of in-state enrolled freshman at the University of Texas at Austin who were in the top 10 percent of their high school graduating class was 36.6 percent. By 2002, four years after the implementation of the top 10% automatic admissions rule, this share had risen to 54.4 percent. It is likely to continue to grow. Between 1997 and 2002, the number enrolled from the top 10 percent rose 68.6 percent, while number enrolled with lower class rank but admitted because of high achievement (academic or athletic) fell 18 percent. Gary Lavergne and Bruce Walker, "Implementation and Results of the Texas Automatic Admissions Law at the University of Texas at Austin: Demographic Analysis Fall 2002" University of Texas Austin, Office of Admissions.

Don E. Mertens, "Information Versus Meaning: Toward a further understanding of Early Adolescent Rejection," <u>Journal of Early Adolescence</u>, Vol. 16 No. 1, February 1996, p. 41.

<sup>&</sup>lt;sup>45</sup> James Coleman, <u>The Adolescent Society</u>, New York, Free Press, 1961.