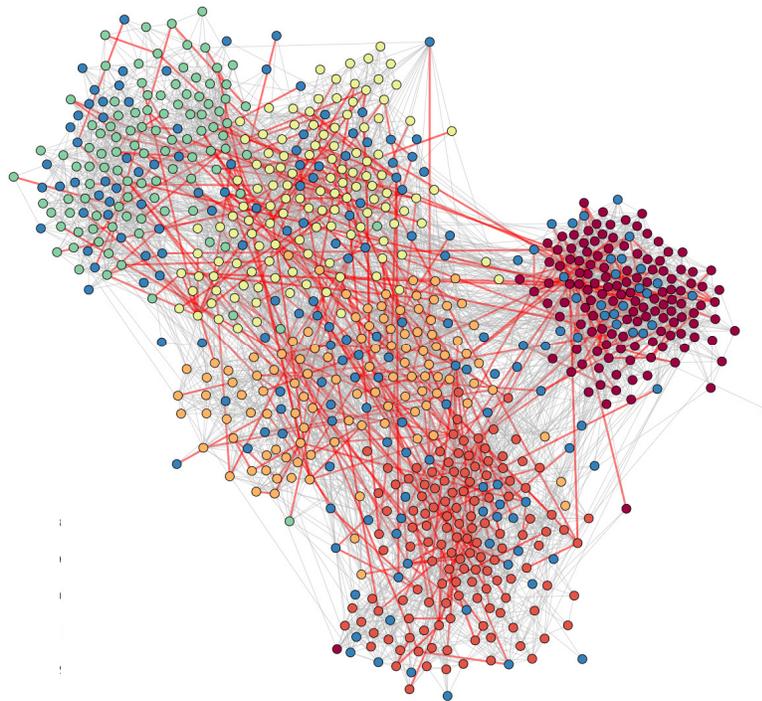


Social Networks and Aggression at the Wheatley School*

Robert Faris and Diane Felmlee,
Department of Sociology,
University of California at Davis

Executive Summary

CNN's Anderson Cooper 360° recently partnered with UC Davis sociologists Robert Faris and Diane Felmlee to engage in a systematic social network analysis of school bullying and aggression. After identifying an excellent school in an affluent Long Island suburb—the Wheatley School—they surveyed students about aggression at four time points over the Spring of 2011. Their analysis found that 42% of Wheatley students had harassed one or more schoolmates, while 31% were harassed by a peer. Instead of kids falling into stable roles of bully and victim, involvement in aggression fluctuated from week to week, and a sizable number (17%) of students were both aggressive and victimized. Aggression was most commonly verbal (verbal abuse, threats) or “indirect” (spreading rumors, ostracism, manipulation), and only 10% of incidents involved physical violence. Girls and boys were equally aggressive, but in slightly different ways, with girls somewhat less likely to use “direct” forms (verbal harassment or physical violence) and somewhat more likely to spread rumors and ostracize. Girls, however, were more likely to be victimized than boys. Aggression tended to stay within gender, racial, and grade lines. Peer status (centrality in the school social network) increased the likelihood of both aggression and victimization—until kids reached the pinnacle of the hierarchy, when they became less involved. Aggression spreads through the social network, as kids adopt aggressive behaviors from their friends. Most (80%) aggressive incidents are not reported to adults, primarily because kids do not feel like adults will be helpful. In the majority (77%) of aggressive incidents, peer bystanders did not intervene, though ultimately 43% of students were named as having intervened at least once.



The Wheatley School's social network
Dots are students (colored by grade), gray lines are friendships, and red lines indicate aggression

* The authors would like to thank Kwan-Liu Ma, Tarik Crnovrsanin, Christopher Muelder, Shaun Geer, and Whitney Mollenhauer for their assistance in compiling the data for this report.

Social Networks and Aggression at the Wheatley School

I. Background

Last February, UC Davis sociologists Robert Faris and Diane Felmlee published a paper showing that adolescents' aggressive behavior was strongly related to their position in their school's social hierarchy, which is based on the dense web of friendships among schoolmates. Aggression increases as youth gain social status—until they approach the very top of the hierarchy, at which point, their aggression tends to drop. The most aggressive kids were not the friendless, troubled schoolyard bullies, but neither were they the “queen bees” of the school. Instead, they were in the middle to upper ranges of status—the queen bee's court, so to speak.

CNN'S Anderson Cooper 360° sought to both replicate their original study—which was based in three counties in North Carolina—and raise new questions about bullying and harassment, so we found a school that was quite different from the ones in the original study: the Wheatley School, on Long Island, is small (less than 800 students), includes 8th graders, and is located in an affluent community on Long Island. The students in North Carolina mostly lived in small towns and rural areas, and were less affluent than the national average.

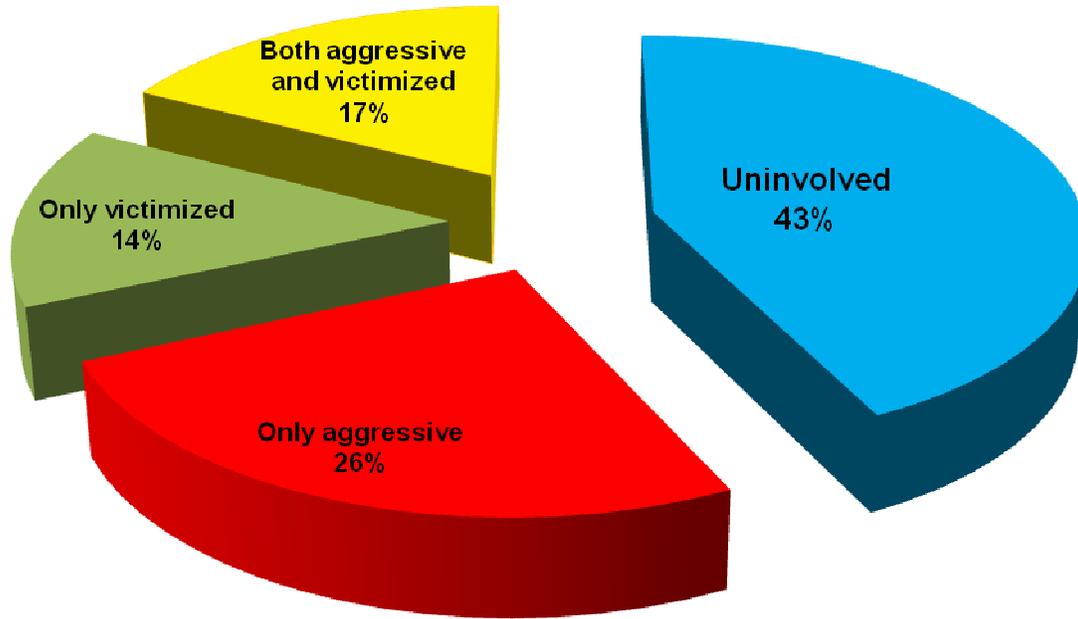
The core part of the study involved collecting social network data from the students at Wheatley. We asked them to name up to ten of their closest friends. From those nominations, we were able to construct the social network of the school. Kids who are named as friends by many kids who are also named by many kids as friends are the most “central” in the school social network. We also asked kids to name up to eight classmates “who picked on you or were mean to you,” and up to eight who “you picked on or were mean to.” We did not use the word “bullying” in order to avoid stereotypes, and kids were also instructed to disregard playful teasing. We also collected other background information in the survey, which was administered four times over the last two months of the spring quarter.

II. Basic Findings

A. Prevalence

Over the last two months of spring, 42% of students at Wheatley harassed at least one schoolmate, and nearly one-third (31%) were picked on by one or more peers. **Overall, the majority (56%) of students were involved in aggression or victimization**, either as pure aggressors (25%), pure victims (14%), or both (17%) (Figure 1). These findings are similar to those found in North Carolina (covering the past three months), where 48% of students were involved in some way: 17% were only aggressive, 13% were only victims, and 17% were both aggressive and victimized. It is somewhat higher than a national estimate of 19% annually (Nansel et al., 2001), but that study asked explicitly about “bullying,” which research shows leads kids to underreport more subtle forms of harassment.

Fig. 1: Pattern of Involvement in Aggression at Wheatley



Because we asked kids to name who they picked on and who picked on them, we can also address the question of *who bullies whom?* We do this by examining all *possible* pairs of kids in a school and calculating the percent of those pairs that actually involve bullying. At Wheatley, there are 620,156 possible pairs of kids (where Alice→Betsy and Betsy→Alice are each counted as distinct pairs). Of those, 584, or just 0.09% involved bullying. This may seem like a small number, but is typical in networks this size. What is more important is the relative rate of bullying for different groups, since it allows us to compare whether, for instance, boys pick on girls more often than girls pick on boys. These are questions we cover in the sections below.

B. Change between waves:

In contrast to the stable role implied by the term “bully,” we find a lot of change even over the period of two weeks. Comparing the first “wave” of the survey with the second, which was collected two weeks later, here’s what we found:

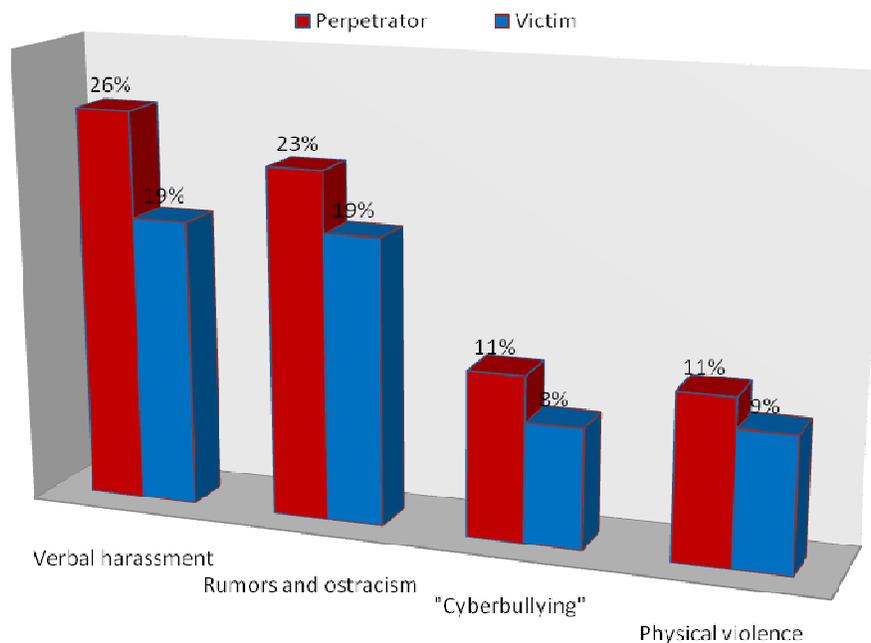
Aggressive at wave 1 but not wave 2:	12%
Aggressive at wave 2 but not wave 1:	14%
Aggressive at both waves:	7%
Victimized at wave 1 but not wave 2:	10%
Victimized at wave 2 but not wave 1:	10%
Victimized at both waves:	4%

Essentially, **this is pretty volatile behavior, and kids do not always fall into the stable roles of bully & victim.** Instead, they seem to be sporadically pulled into conflict. Less than one percent of kids were aggressive at all four waves; the same is true for victimization. The aggressor-victim relationship was comparably unstable—only 9% of aggressive relationships or incidents (e.g., Alice reporting that Betsy picked on her) were reported in more than one wave of surveys.

C. Types of aggression

We also asked kids to report whether the aggression entailed verbal harassment (calling names, threats, etc.), “indirect” or “relational” aggression (gossip, rumors, and ostracism), “cyberbullying” (using computers or cellphones to harass a peer), or physical violence. Kids could say more than one type of aggression occurred, and this was typical. The most common forms were verbal harassment and indirect aggression: 26% of kids verbally harassed at least one classmate, and 23% spread rumors or ostracized a peer, while the rates for cyberbullying and physical violence are both 11% (Figure 2).

Figure 2: Types of Aggression Perpetrated/Experienced



We found that kids typically use more than one form of aggression, and there were particularly strong links between verbal, indirect, and internet harassment. Physical violence was somewhat distinct, perhaps because it is likely to result in significant punishment from school administrators.

D. Students' Illustrations of types of aggressive behavior.

Students were asked to describe a recent incident of aggressive behavior, and most described at least one such situation.

Verbal Harassment: Incidents of verbal harassment constituted the most common means of aggression in the school. Students described cases in which someone said mean and cruel statements, such as making fun of a person on the basis of their: ethnicity, sexual orientation (or presumed orientation), religion, physical disability, clothing or style, “lack” of musical, sports, or artistic talent, a “lack” of intelligence, being “too smart”, being (supposedly) over (or under) weight.

One student reports: “Student A made all of his friends hate me; all the time he would talk badly about me & cursed at me. In the end he told me he hated me because of my ___ ethnicity and because “I’m ugly.”...I did not respect him, but it still hurt.”

Or as an additional person states: "Student C made mean jokes about student D because she [has a disability]; I didn't interfere because these girls are popular and I didn't want to get on their bad side."

Competition between rivals is also evident in some verbal incidents, such as in this one: "This kid tells people that I am bad at the sport I play, even though I am [only] one spot behind him."

Rumors and Ostracism: Students also spoke about the use of rumors and exclusion as tools to harm another. One rumor that was especially harmful involved telling people that a girl was pregnant. As one reports:

"The girl got mad because another girl hooked up with the guy she had been with. Rumors spread from there."

"Rumors were spread about a person's sexual relations that aren't true."

Another says: "This person told everyone that I was a lesbian to a good friend of mine and everyone in the grade found out. Then classmates started to ask if my friend and I had been "doing anything." It just got to the point that everyone was asking my friend and I.I still remember today, because it struck me hard."

Students also spoke about the pain associated with ostracism:

"People still exclude me from social groups, & not until this year did I find a friend who would actually invite me over. Despite popular belief, Wheatley isn't perfect. It sucks seeing the same kids who have hated you since elementary school because you're different from them. It's high school. Wheatley has bullying, too."

Cyberbullying: Students described a number of cases in which people were harassed over the internet, such as in texts, Facebook wall posts, emails or other forums. A couple of students maintained that this was the most common form of bullying in high school. Says one:

"Most of the bullying at Wheatley doesn't occur within the school walls. It happens online. People are using blum and SMS messages to hurt others. Formspring is widely used as well."

Another student recounts an incident in which one student "made a Facebook account" under her name and said some nasty things on the account, until eventually legal action was taken.

Multiple students recounted stories of aggression aimed at kids who belonged to the Gay-Straight Alliance Club. In one case "His friends make fun of him for it, & constantly paste things on his Facebook wall. They say they're only kidding but the kid has asked them to stop on many occasions & they haven't listened. This incident is still going on..."

Reports another: "On the Facebook, this girl pretended to like this kid. This kid is a very nice kid, but has somewhat of a [disability], so he doesn't get a lot of attention from girls. The way this girl was speaking you could tell that she was pretending."

Physical Aggression: Students also described cases in which one person physically attacked another by shoving, pushing, kicking, fighting, or other forms of physical violence.

In one incident, a boy “physically attacked another and punched” another boy in a limb that was already broken.

Another boy reports: “He made fun of me [for physical characteristics]... several times; someone bullied me and then two kids came over and pushed me when I was already down.”

An additional boy states: “Whenever they [the bullies] see me in the hall they push me around and punch me.”

Multiple Forms of Aggression: Students also reported the use of multiple forms of aggression aimed at them. For example, one says that:

“People threw spit balls at me, verbally called me names,...and then threatened me. They told everyone I was gay, excluded me from social groups.”

Kids Admit to Aggression: In a number of instances, students admitted that they, themselves, had harmed another person. In most, but not all, of these situations, students now expressed regret.

Says one: “I for years bullied a kid and made him feel bad. I feel terrible and try to stop myself from bullying...Even though I got detention, [it was] making him feel bad that made me feel the worst.”

Negative Consequences of Aggression: Some students wrote about the harmful results of these aggressive actions for the victims.

Notes one: “The student’s self-esteem was destroyed...”

Others mentioned a student who ended up “changing high schools” after becoming the victim of rumors and verbal harassment. Several said that they themselves were “hurt,” “depressed,” and/or “lonely,” and had “lost friends” because of untrue gossip and other forms of aggression aimed at them.

Table 2: Illustrations of Types of Aggression According to Student Reports

Verbal	Rumors & Ostracism	Cyberbullying	Physical
called stupid repeatedly	rumors about pregnancy	Facebook identity theft	Punching/hitting
called ugly for weeks	left out of study groups	texting rumors	Tripping/kicking
called fat	teaming up to exclude a kid	posting that a kid is gay	pulling hair
accused of terrorism	gossip about clothing & style	hurtful SMS messages	slapping/wrist-locks
chanting "fag"	left alone because "different"	gossip online	ganging up & beating up
racial slurs	rumors about stealing date	pretending to friend lonely kid	"swirlie"

II. Background Factors

A. Gender

We found equivalent rates of aggression among boys (43%) and girls (42%), who averaged 1.8 and 1.7 victims, respectively. However, we find that girls (36%) were

both significantly more likely to be harassed than boys (27%), and to have more attackers (2.5 vs. 2.2, on average). Both of these findings are consistent with the North Carolina study.

We also found differences in the ways boys and girls are aggressive and victimized (Figures 3a and 3b). Girls are somewhat less likely than boys to be verbally abusive and much less likely to be physically violent, but more likely to spread rumors and ostracize peers. Girls are victims of verbal harassment at roughly the same rates as boys, but are much more likely to be victims of “cyberbullying,” and gossip or ostracism. They are, however, much less likely to be victims of physical violence.

Figure 3a: Type of Aggression Perpetrated, by Gender

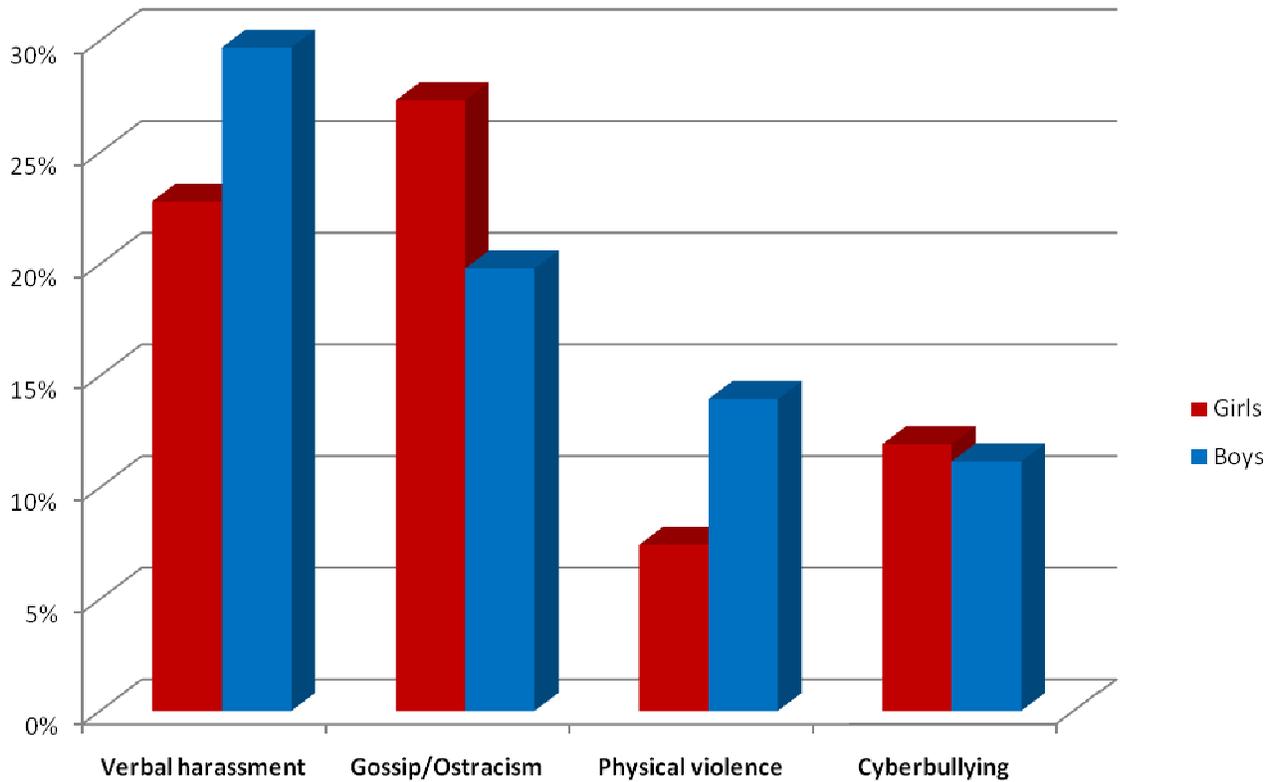
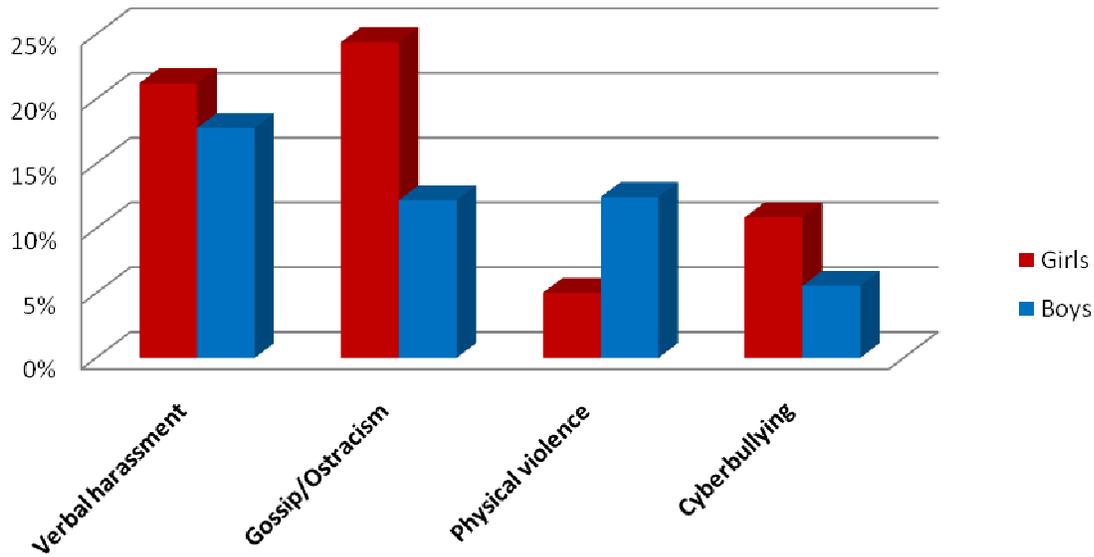
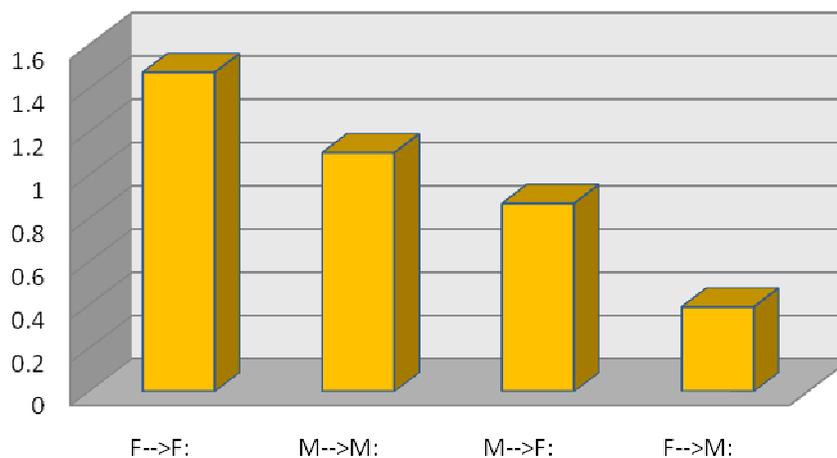


Figure 3b: Type of Victimization Experienced, by Gender



Because we know who was mean to whom, we can examine whether aggression was more or less common between certain types of people. Because there are so many possible pairs (over 600,000) and well less than 1% involved aggression, we talk about the rate per thousand pairs (but a rate of 1.47 is the same as 0.147%, or about one-sixth of one percent). Here, we can see the gender disparity quite clearly (Figure 4). **Girls harass other girls more frequently than boys harass other boys, but boys harass girls far more frequently than girls harass boys.**

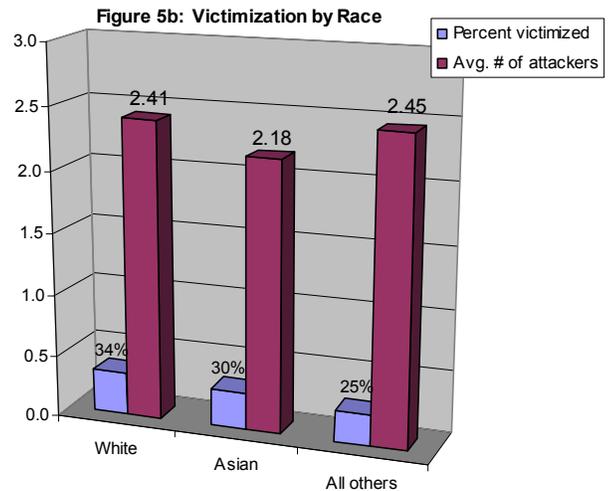
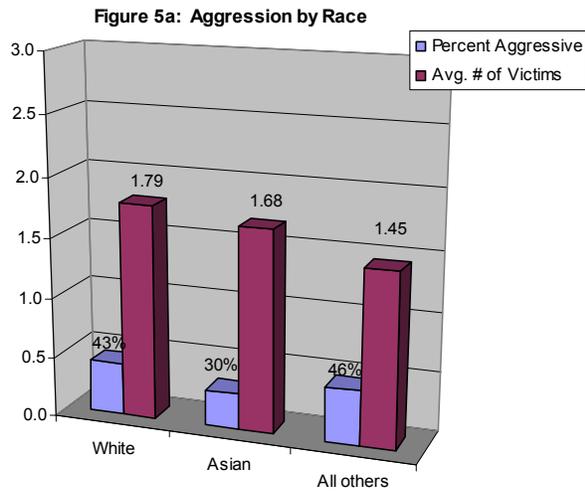
Figure 4. Rate of Aggression Per 1,000 Pairs, by Gender



B. Race

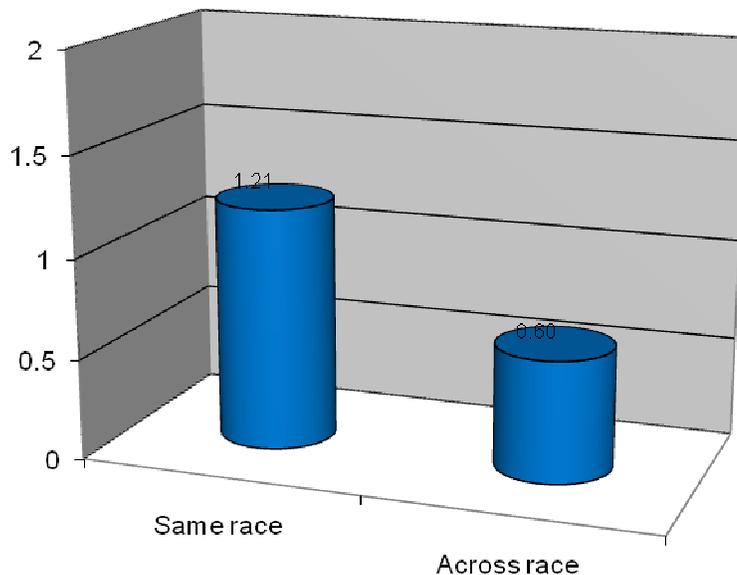
Compared to gender, the racial differences in aggression and victimization are less striking. Whites and “other” minorities are more likely to be aggressive than Asians, and

whites have the highest average number of victims. Whites are also somewhat more likely to be victimized (Figure 5a & 5b).



When we examine the rate of bullying at the pair level, we see clearly that **aggression is most frequent within, rather than across, racial groups** (Figure 6).

Figure 6: Rate of Aggression per 1,000 Pairs, by Race Composition



C. Family Background

Students tend to come from family backgrounds that are relatively high in occupational status. Approximately 72.2% of the fathers worked in either professional or managerial occupations. More specifically, close to half were in professional occupations (e.g., lawyers, doctors) (49.3%) and about 22.9% were officials and managers (e.g., company owner; business manager). Only about 6.8% of the fathers were employed in blue collar occupations, such as operatives, craft, or laborers. Over half of mothers (52.6%) were

employed in jobs that were either professional (e.g., teacher, nurse) or managerial (e.g., business manager) as well.

Family structure (single parent home vs. two parent home), **parent occupation** (manager/professional status vs. other) **and parent education** (no parent attended college) **do not have any significant effect on either aggression or victimization.**

D. Grade

The most aggression occurs among the 8th graders, but the only significant difference was between them and 12th graders, who have the lowest levels. This is consistent with both the NC study and other national studies. Presumably, the low levels among 12th graders are due to them looking forward to college/work, rather than competing for status in high school. Nearly half (49%) of all 8th graders picked on a peer; while just 29% of 12 graders did so. Victimization rates were proportional. At the pair level, kids in the same grade were 6.6 times as likely to pick on each other compared to kids in different grades, but if both students are in 8th grade, they are 12 times as likely to pick on each other.

E. Sexuality

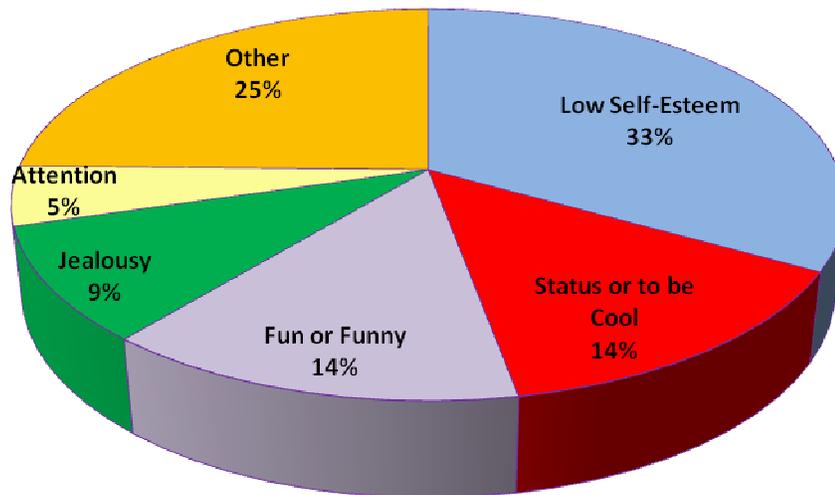
Between 20 and 30 students (3-4%) identified as something other than straight, so results for this group have substantial uncertainty. Despite their relatively small numbers, we do find that **youth who identified as something other than straight are significantly more likely to be picked on...but are also somewhat more aggressive.** The majority (58%) of non-straight youth were aggressive toward at least one classmate, and 38% were victimized, compared to 41% and 32%, respectively, for straight students. This pattern holds at the pair level, but we see that the highest rates of aggression occur between non-straight students. Straight students seem to be more likely to pick on non-straight students than non-straight students are to pick on straight students, but these differences are not statistically significant. However, we did find that **straight kids are significantly more likely to pick on non-straight kids than they are to pick on other straight kids.**

III. Students' Own Opinions as to Why Kids Do Mean Things

Students were asked why kids do mean things to others in an open-ended format. The most common type of response, mentioned by approximately one-third of student responses (33.2%), was that those who were mean suffered from low self-esteem, or a lack of self-confidence, and that they were attempting to feel better about themselves when picking on someone. Notes one student: "Kids are insecure and pointing out the flaws of others makes them feel better and more powerful." Another commonly reported reason (13.9%) was that mean students are trying to increase their status and reputation, or attempting to be "cool," by harassing a peer. For example, one of the participants reports that kids behave badly towards others "to gain elevation in the status hierarchy." An additional, frequently mentioned explanation (13.9%) was that people were trying to be funny and get a laugh, or just have fun, by being mean. According to one person: "They probably think it's funny. They don't know how it feels to be treated badly." A variety of other explanations were mentioned, such as jealousy, attention, problems with family, boredom, and retaliation. See Figure 7.

Main Point: Students at the schools report that kids are mean mainly because they are trying to feel better about themselves and attempting to improve their social status.

Figure 7: Students' Own Reasons Why Kids Are Mean



IV. The School Social Life

A. Extracurricular Activities

We examined the full range of extracurricular activities listed by students, and found very few differences in aggression or victimization. The sole exception was that **students in performing arts are less aggressive than their schoolmates, on average.**

B. Dating

In addition to collecting information about with whom students are friends and who they pick on, the survey also asked them to report on current and previous dating partners. We found frequent disagreements about whether two people had dated, so there is uncertainty about the actual dating status of students. However, **the more schoolmates who claim to have dated a respondent, the more likely he or she will be picked on.** The risk of subsequent victimization increases by 20% for each additional dating partner. This effect was the same for both boys and girls, and analysis of pair data suggest that the difference is not due to dating partners attacking each other.

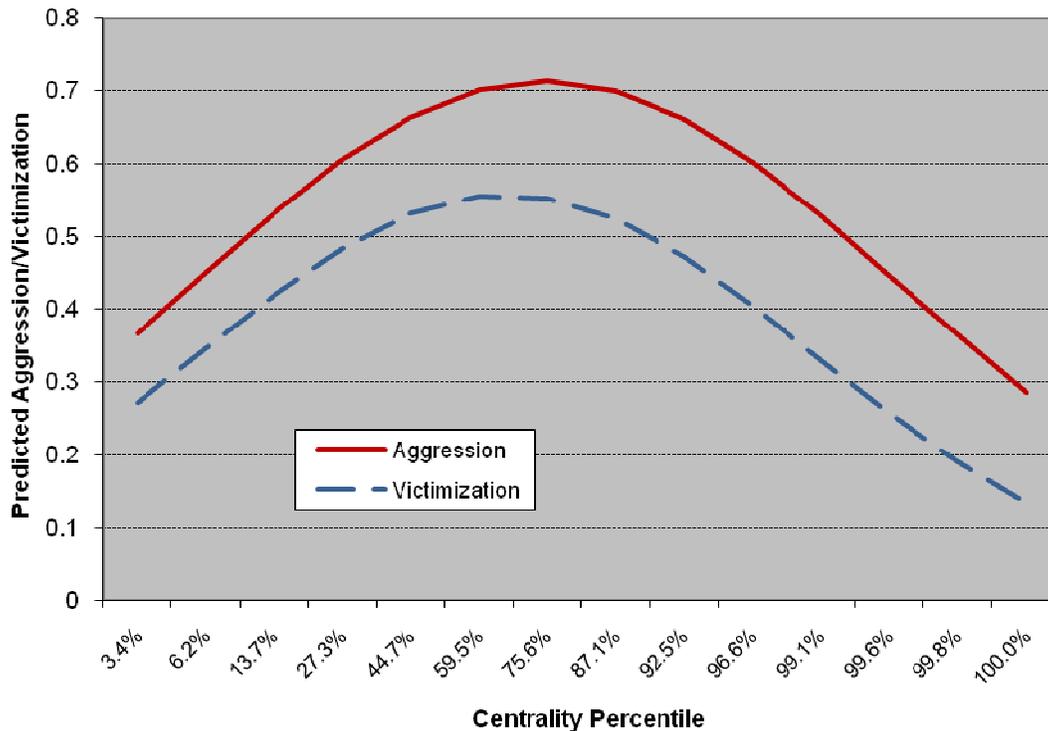
C. Peer Status

As with the North Carolina study, we measured peer status using social network centrality. There are many different measures of centrality, but most of them in practice are similar. Here, we adopt a very simple measure: three-step reach, which is defined as the proportion of the student body that can “reach” the respondent on incoming ties. In other words, the highest scores are going to be obtained by receiving friendship nominations from many peers, who themselves receive many nominations, and so on. However our results are similar regardless of which measure we use.

We find that the students at the very bottom and the kids at the very top of the school hierarchy are the least involved in aggression or victimization. But because there are many kids at the bottom and very few at the top, an increase in social network

centrality¹ at Time 1 is associated with a significant increase in subsequent levels of aggression for the vast majority (89%) of kids. The effect tapers off and reverses, however, so for the 11% most central kids (with scores above 14%), an increase in centrality would be associated with a subsequent decrease in aggression. We find parallel results for victimization. These results are visualized in Figure 8:

Figure 8: Predicted Aggression and Victimization by Centrality



This is consistent with the idea that the highest status kids are somewhat above the fray, and no longer need to be aggressive.

Reciprocal relationship with status: While status increases subsequent aggression and victimization (again, with the exception of the top 11%), **there is no evidence that overall aggression increases subsequent status.** This is what we found in the NC data—but that study also showed that the effectiveness of aggression (for social climbing) really depended on *who was targeted*: when kids were mean to high status kids, kids who were socially close to them (within 1-3 links in the friendship network), or kids who were themselves aggressive, they receive substantial boosts in status. This is a question we will pursue in future research. So, while kids may think cruelty or aggression could help them gain (or maintain) their social position, it doesn't seem to work very well, on average.

Crossovers: There is a significant positive correlation (0.25, which is fairly high for most social science variables—higher than the correlation between father & son occupation, for instance) between aggression and victimization. Part of this is due to the

¹ Centrality here is defined simply as the proportion of the network that can reach the respondent in three links or less, on incoming ties (it is maximized when many people nominate many people who nominate the respondent). But the aggression finding also works with other measures of centrality.

fact that other factors cause both aggression and victimization, rather than one causing the other. Controlling for other factors, I find that, while victimization at Time 1 is not associated with aggression at Time 2, **aggression at Time 1 significantly increases the risk of victimization at Time 2.**

Using the pair data, **we find very few cases** (just four pairs at wave 1, 11 at wave 2, none at wave 3, and two at wave 4) **where both members of the pair reported doing mean things to each other in the same week** However, **if student A harasses student B at one time point, the odds of B eventually attacking A increase almost fivefold.**

Diffusion: In general, kids' behaviors are pretty similar to those of their friends, and aggression appears to be no different, as there is a significant positive correlation between respondents' aggression levels and those of their friends. However, it could be that aggressive youth simply choose other aggressive students as friends. By examining this process over time, however, we can get closer to determining whether kids influence each other's aggressive behaviors. Here, **we find that the more aggressive a respondent's friends are, the more likely she is to increase her subsequent aggression, and the less likely she is to subsequently become a victim.** Take two hypothetical kids, A and B. A's friends are not aggressive at all, while B's friends pick on an average of 1 schoolmate. Our model suggests that B's escalation or change in aggression will be 50% higher than A's, and B's risk of future victimization will be half that of A's.

Who is admired? Finally, we asked kids to name who they admire most in their school. **Girls, artists, and older students are more likely to be admired.** Not surprisingly, **high social network centrality was also strongly associated with the likelihood of being admired by peers.** However, **aggression significantly decreased the likelihood of being admired by classmates.**

V. Intervention and Reporting

A. Intervention

One of the new questions we asked kids is whether someone tried to stop the harassment, and if that person was a fellow student, who he or she was. Such interventions were the exception, not the rule: we found that, **of the 584 aggressive incidents, one or more schoolmates intervened in just 132—or 23% of the time.** However, **over two-fifths (43%) of all students were named as intervening at least once.**

We were interested in learning more about the type of person who is likely to intervene to prevent harassment. Aside from being Asian (which was negatively related to intervention) none of the demographic or family background factors made a difference. **However, intervention was significantly more likely among students who were younger (8th-9th grade), highly central, members of sports teams, aggressive, or who had friends who were victimized.** Compared to 8th graders, students in grades 10-12 were between 33% and 60% *less* likely to intervene in a bullying situation. Athletes were 22% more likely than other students to intervene. For each additional victim respondents picked on, the likelihood of them intervening in a bullying situation increased by 22%. Compared to the average student—who has a centrality score of 10% (i.e., 10% of the school could reach him within three links in the friendship network)—a student with a centrality score of 20% is roughly 20% more likely to intervene. Finally, compared to a student whose friends were not victimized, one whose friends were each victimized by one classmate is 17% more likely to intervene (presumably on behalf of those friends).

B. Reporting to Adults

Over the spring period, there were 584 aggressive relationships (e.g., a bully-victim pair, though any given kid could obviously be involved in many bully-victim pairs) at Wheatley. Of those, just 113, or 19% were reported to adults. Of all victims, 76% reported that *none* of the bullying situations in which they were involved were reported to adults, and just 10% of victims said that all of their bullying situations were reported.

When asked who they would feel “comfortable talking to about a situation where one or more students had done mean things to you or to other students,” only half of all students agreed that they would feel comfortable talking to their parents, and just one-third said the same about a counselor or a teacher (30%). Even fewer said these adults would be helpful in dealing with a bullying situation (Table 1). Fortunately, however, the majority of kids would feel comfortable (72%) talking with one of those adults, and a majority (65%) also felt like at least one of them would be helpful.

Table 1: Talking With Adults about Bullying

	Would feel comfortable:	Would be helpful:
Parents	50%	26%
Teacher	30%	35%
Coach	12%	13%
Counselor	34%	38%
Staff	8%	13%
No adult:	28%	35%

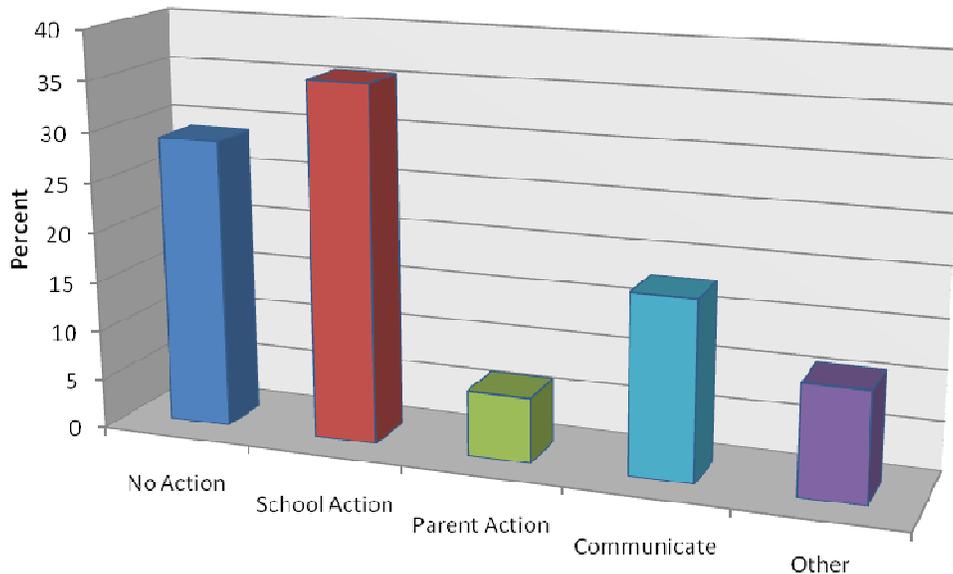
Our statistical models found relatively few significant results for reporting bullying to adults, but female victims were significantly more likely to have the situation reported (not necessarily by them personally) than male victims. The more victimized a respondent was, the greater proportion of the incidents that were reported. And finally, kids who did not feel like any adult would be helpful in dealing with bullying were significantly less likely to report it, unsurprisingly.

VI. Students’ Own Opinions as to How To Prevent Kids from Doing Mean Things

Students also were asked what they thought “parents, teachers, or school staff” could do to prevent students from doing mean things to others. One common response, made by over one-fourth (27.5%), was that there was nothing that could really help prevent the problem. (See Figure As one student replied: “Nothing. Kids make their own decision and no one is going to make them change.” Or another notes: “I think in most situations teachers can’t help, because students won’t listen.” However, most of the students were more optimistic. Over one-third (35.5%) mentioned that schools could help in one way or other, in particular. For example, several (10%) said that more serious consequences and punishments needed to be invoked for bullying incidents. And a number of students (10%) said that educational programs would help prevent such problems from occurring. For example, one student suggests: “Have bullying prevention assemblies more often and talk to the school as a whole on how to stop it.” Others (7%) called for increased surveillance and monitoring, arguing for the increased use of hall monitors and the possible “installation of security cameras.” An additional subset of participants (18%)

thought that communication was key, and that it was important to talk with, or counsel, either the bully, victim, or both, or get the two people to communicate with each other directly. Only a minority of people (6.5%) pointed to parents as being the source for stopping mean behavior. In addition, a few students (2%) believed that school interventions in bullying incidents could make things worse. “Usually when adults get involved, it makes things worse,” argued one person.

Fig. 9. Student Views on How to Stop Bullying



Conclusions

Aggression, bullying, and harassment clearly embroil many school-aged students, even at the very best schools. Aggression is unrelated to a host of demographic and family background factors—factors which are normally strong predictors of behaviors and outcomes. At Wheatley, over half the student body was involved in one way or another. Aggression is one way that youth sort out status hierarchies, and some view it as a means to gain or maintain their status. At both Wheatley and in a larger study based in small-town North Carolina, aggression and victimization rates escalate as students increased in peer status, that is, until they approach the very top of the pyramid. At that point, they rise above the fray, and aggression and victimization rates begin to plummet. Youth are aggressive toward their status rivals, and the majority of aggression occurs within, rather than across, groups like gender, race, and grade in school. Similar research in North Carolina found that, while aggressors sometimes improved their social status (depending on whom they targeted), victims were significantly harmed socially, psychologically, and academically.

Despite the fact that over half of the students at Wheatley were involved in bullying, the vast majority of incidents were not reported to adults. Only half of students reported feeling comfortable talking to their parents about bullying, and just a quarter thought they would be helpful in dealing with the problem. Other adults fared similarly or worse. This may be because aggression is part of jockeying for social position, which kids likely view as intrinsic to school life. If so, it is no wonder they feel that adults are unhelpful.

Despite the fact that aggression is subtle and often invisible to parents and teachers, and despite the fact that kids rarely report it, there is reason for hope. Bystanders typically constitute a majority (and invariably a large proportion) of the student body, and are keenly aware of incidents at school. These bystanders have the power to intervene

or otherwise discourage cruelty. Currently, in the majority of incidents, no peer intervened. Yet at Wheatley, 43% of students were named as having intervened in at least one incident of aggression. Anti-harassment programs, if they are going to be successful over the long term, must focus on these youth since they form the social web in which aggression occurs.

A team of computer scientists at the VIDI Research Group at UC Davis developed a visual tour of the Wheatley social network data. Click on the link below to view images and movies showing how the networks changed over the spring term:

<http://vidi.cs.ucdavis.edu/projects/AggressionNetworks>