Hacker Highschool
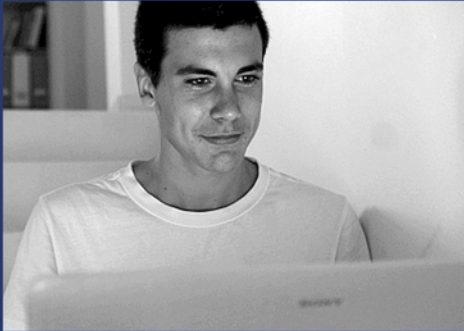## SECURITY AWARENESS FOR TEENS

LESSON 21
HACKING CYBERBULLIES

DRAFT

HACKING IS LEARNING
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Introduction

Bullying can loosely be defined as the consistent unacceptable behavior of a person(s) to criticize, find faults, exclude, isolate, shout at, or otherwise perform an array of other actions aimed at hurting and humiliating another person who is perceived as a victim. Bullying can cause a vicious circle where it makes the victims sad and not want to participate in activities like sports or social functions which in turn are the types of things that the victim is bullied about. Then the bullies take advantage of the perceived incapability of their victims to defend themselves against their aggressive behaviors and actions. Where bullying involves adults it may be criminally prosecuted under any one of various laws that fit the crime whether it's harassment, extortion, black mail, or even assault.

Cyberbullying on the other hand is simply bullying done in and through cyberspace. This usually involves children, preteens or teenagers who are tormented, harassed, humiliated, made to feel embarrassed or even threatened via the Internet, or using digital and interactive technologies and mobile phones by another minor, usually of similar age range. In cases where such actions involve an adult, it is referred to as cyber-harassment or cyberstalking.

Many bullying acts are motivated by the selfish interests of the bully to derive some form of pleasure or feeling of superiority from their victims' suffering. By feeling superior, they continue the bullying because thinking they are superior, they can. So even if they don't feel pleasure from the bullying, meaning they do it to achieve something they want, they may still do it out of a feeling of righteousness as if the bullied person deserves the bullying. Does it hurt? Yes it hurts, sometimes even results in the death of innocent kids who feel vulnerable. Some kids hide, others skip school, some even drop out of school all to avoid the pain and humiliation of being bullied. But this may not be so easy to do online. So cyberbullying amounts to psychological torture that may result in long lasting impact on the bullied child. And being on the Internet, it may even follow them for years and years. Bullies, on the other hand, may never really learn empathy and with each act of bullying they slide further away from being able to function in real society even as an adult. Because they can't empathize correctly. And that will effect the jobs they can get, the people they can meet, and the life they can lead mostly because society is built around communities and those require empathy to build. So while it's just cruel, evil, and wicked to bully anyone for any reason, no society will tolerate a bully because bullies keep a community from properly functioning and are a detriment to any form of society or fair dealings within the economy. Which is why there are such harsh criminal sentences for bullies whether for teens or adults and especially online where it's particularly nasty.

So in a word: don't.

Online vs. Offline Bullying

One may assume that being bullied online may not be as big a deal as compared to physical bullying. It is very much the opposite. Ever heard "It's better to deal with the devil you know?" This phrase best suits cyberbullying. Online, bullying victims often deal with people they do not know; the bullies are like ghosts hiding behind the computer monitors, lying in waiting. In cyberbullying bullies text and call their victims, initiate chats on social networking sites and even email their victims anonymously. There is nobody that the victim can respond to, yell at, or even try to stand up to. It is one of the worst mental tortures that children have to deal with. Repeated cyberbullying has resulted in some victims killing themselves.

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Forms of Cyberbullying

Cyberbullying takes many forms, defined based on the instigators and motives. These are the major forms, namely; *masquerading, harassment, flaming, anonymity* and *outing.*

Masquerading: Masquerading is to disguise oneself as and act like someone else. Masquerading cyberbullying occurs when bullies pretend to be people they are not. To do this, they can coin phony email addresses and even use someone else known to the victim. Some will steal a victim's password and log into their email, then use it to Troll strangers who may respond and start tormenting the real person.

Harassment: To harass is to irritate someone persistently. This is a common form of cyberbullying where the bullies repeatedly send insulting messages or emails to individuals or groups. Some make their threats appear real by sharing in chat rooms or bulletin boards. These messages are geared towards causing fear and annoyance to the victims. They may include messages like "I will kill you" "you will die today" and related nasty threats. The best way to handle this type of bullying is to know how to secure yourself online and make yourself and your online actions more private.

Anonymous: Here, the bullies send intimidating messages without disclosing any identity. The anonymous bully can create a fictitious name that cannot be traced to any specific person. Dealing with such people is pretty complex and even the police have a hard time trying to unveil the mysterious bullies due to limited time and resources. The best way to handle Anonymous bullies is to become good at DoXing because it's really hard to hide online from hackers who know how to be resourceful.

Flaming: This usually occurs during chats, forums, instant messaging and email exchanges online.. It arises from a disagreement or an argument that the bully blows out of proportion. To avoid this, you should be careful in how you phrase things in writing since it's really difficult for other people to understand your intent through your writing, especially when kidding or being sarcastic. Also never say bitter words online when angry as bullies take that as a platform to hit back at you later. If you think you have to respond then it's always better to write your message back and then wait a day before sending it and see if you feel the same way later. It's easier to identify any bitterness in your own writing after some time has passed.

Trolling: This is an attempt to bully people through forums and public forums by repeatedly mocking what they write and insulting them as a person rather than just their ideas. The best way to handle a troll is not to feed them- don't respond to their insults or try to justify yourself to them. They aren't listening to reason and they certainly don't care about your replies. They will only use your replies to further bully you.

Outing: This when a bully prints out personal and private messages and shares with others with the main aim of psychologically torturing the victims. Outing may be as simple as going through another person's text messages, which is rude. But outing may also include trespassing into the victim's email and other accounts and then post all those messages online in full public view. This is why good hackers are difficult to out because they are so careful with what they make public, what they share, and how they defend their systems. One famous example of outing involved a college person filming his roommate during an intimate but homosexual encounter. He "outed" this person online by posting the video. His roommate later committed suicide from embarrassment. Whatever your feelings or beliefs about sexuallity, that spying and posting of personal details caused huge personal damage for no good cause. That was bullying in its worst form. The person who recorded the video was brought to trial in a court of law.

There are other forms of cyberbullying that teenagers can indulge in that may harm others. Kids without mobile phones, for example, may be excluded from a group and ridiculed by those with such gadgets. Also, cyber stalking is another form of online bullying

where victims are followed to all the online places they post where the cyber stalkers become Lurkers, who just watch and rarely post except to let the victim know they are being watched. Cyber stalkers may even contact and friend the victim's friends and family posing as a good friend of the victim just to get more access to private information. Sometimes cyber stalking becomes real world stalking and real physical assault may be the result..

How Do Bullies Feel?

Every action has a motive behind it and the aftermath of every action is a reaction. Many people wonder why bullies act the way they do. They do it to appear superior to their victims. It lets the bully feel important, self-righteous, in charge and having command over others. The bully might not always feel good, but the knowledge that the kid being bullied feels worse is all they want. The truth is often there is no reason for the bullying. Even most bullies don't really know why they did it. Interviews with adults who were bullies at a younger age provide an even blurrier picture. Some are sad and deeply regret what they did but others justify their actions as just something kids do or something that was normal to do at that time. Bullies caught in the act often can't defend their actions because they can't logically explain their reason to act that way. It may just be a left-over result from evolution where expressing dominance is how one got ahead in a group. All this shows that the act of bullying is primal, emotional, and even possibly hormonal and not a direct, conscious decision to act that way. This of course doesn't excuse the act but it does make it clear that it's often not pre-meditated and therefore can be addressed by altering cultural norms and mandating lessons in empathy, at least until the bully outgrows the hormonal cause. Unfortunately, some bullies never outgrow the habit. Know these habits to protect yourself throughout your life.

How Does It Feel To Be Bullied?

The bullied kids ask themselves an ocean of questions: Why me? What did I do? What does he/she want from me? What should I do to end this nightmare? It is like a nightmare; one wishes to wake up one day and find the nightmare gone. The bullied child is psychologically tortured and at times physically abused. In 2010, 34 children in the USA were reported to have lost their lives in bullying-related cases from other kids. One was killed trying to save a kid brother from a gang of teenage bullies. But not all bullying happens in school by other kids. Kids are also bullied by adults who, perhaps trying to be funny, mock them openly in class which results in ridicule by peers. Bullying causes vicious circles which invite more bullying.

Many people quietly blame the victim of the bullying. Popular culture is full of references where the victim needs to stand up to the bully to make it stop and then the movie or show concludes with the victim over-powering or out-foxing the tormenter to get justice. The reality is that whether the victim brings it on themselves or not there is never any justification for bullying. However since so much of society is still so bent on this idea of some victims "deserving" what they get, and they have difficulty putting themselves in someone else's perspective to see what it must be for them, victims are often on their own to deal with the situation.

Bullying Teachers

Teachers are the custodians of children whenever children are at school and off their parent's watch. Teachers enjoy a "position of trust". The parents trust the teachers to carefully watch over the kids in their care. However, recent research indicates that teachers are among the worst bullies, a situation that has left many parents worried. 45% of elementary school teachers in Houston, USA admitted to having bullied their students at

some point. Abusing that position of trust is often legally actionable – the teacher can suffer court cases for abusing their students.

Teacher bullying can be defined as the usage of powers to punish, disparage or manipulate a student beyond what is perceived as a sensible disciplinary action. This might be because the teacher loses control of his/her emotions when administering an otherwise acceptable punishment. It might take the form of screaming at a student, threatening the student, or using biting sarcasm to disgrace the kid before the rest of the class. This is similar to research that shows that police officers are more likely to misjudge how much force they use after a chase than before one, often seriously injuring or killing a perpetrator. When emotions get control over people's heads, reason often fails to register in their minds.

Unfortunately, the overwhelming majority of bullying cases are not reported. Many kids suffer in silence when they feel they have been bullied by their teachers, not even sharing with their parents. Even if the kids share with the parents, some parents might not be in a position to do much. Some only ask for their kids to be excluded from the bully teacher's class. However, a majority of the teachers believe bullying of any form is a hazard to their work and must be stamped out at all costs.

Can an Email or Text Message Kill?

Cyberbullying doesn't stop at making the bullied person miserable and the bully feel better; it can result in more tragic consequences, the worst being suicide. According to the Center for Disease Control (CDC), about a third of deaths among young people are through suicide. This amounts to close to 4,400 deaths annually. Also, 7% of USA high school students have attempted suicide with double the number-14% contemplating suicide as an option to tackle persistent bullying of various forms.

According to a study by Yale University, bullying victims are between 2 and 9 times more likely to contemplate suicide than the non-victims. In Britain, another study showed that at least 50% of suicide cases among youths are connected to bullying, with the kids between 10 and 14 being at higher risk. Indeed bullying can kill and people have lost lives through such cases.

The Dangers of Sexting

To sext is to send a sexually explicit message or photographs, usually through a mobile device, to another person. Sexting was first published in a 2005 Sunday Telegraph magazine and has since been widely acknowledged. Social interaction has been enhanced by the advancement of technology. Many kids and teenagers own mobile phones today and can share texts, messages, photographs, or multimedia messages that may be more sexually explicit.

In some countries, sexting has great legal consequences, especially when minors are involved. In another case of really stupid legislation in some countries, teenagers who sent explicit texts and images have been found guilty of distributing child pornography while the recipients can be accused of handling child pornography. Seriously, these countries have rules that prosecute the recipients of messages for receiving a message, wanted or not. These legislators are clearly not thinking that even they can receive a message, even accidentally, that they shouldn't see. Furthermore, criminalizing teens for voluntarily sharing pictures of themselves naked, an age period known for hormonal urges, by marking them for life as a sex offender is in itself a criminal form of bullying.

However, there is another side of this. One form of sexting as cyberbullying is to send disturbing sexual pictures to those who don't want them. A survey conducted in the UK in

2009 indicated that 38% of teens aged 11 to 18 had at some point received "distressing and offensive" sexual text and email messages.

Another risk of sexting as related to cyberbullying is the ease with which they can be propagated without the control and even the knowledge of the originator, especially by a bully. Even closest friends may have ill-advised motives or be upset when the friendship may come to an end. This is when they can take advantage of the photos in their possession to malign other's names. Sexting is a dangerous game and teens must understand that whatever they write or send online or store on a digital device may end up on servers around the Internet forever.

Case Study: Assume you have a girl/boy friend. You're really, really close; you're just terribly excited about each other. You enjoy all the usual activities of people your age, including dating, hanging out together, and similar. Assume you start sexting each other. Then something changes in the relationship. Let's say you decide that this person is not the love-of-your-life and decide to break it off. You have moved on to someone else. But your "ex" friend still has all those sexts, perhaps including explicit (compromising?) photographs of you. In a fit of pique, they decide to "share" with everyone to show them "how bad you really are". Perhaps including your new girl/boy friend. Perhaps the entire school. Perhaps a pornography service. How will you handle this situation? How could you have prevented it?   Discuss this with some friends you trust, or perhaps ask questions in this lesson.

Feed Your Head

Celebrities are often the victims (and not always the perpetrators) of having risque photos of themselves end up around the Internet. Despite the saying, the contrary is actually true and not "all publicity is good publicity". How do they handle it? Denial. One of the reasons that so many people are aware that the Internet needs to remain free of identifying information is because in the case of privacy leaks, deniability is often one's only option. They say it's a look-alike, "It wasn't me. I don't care who that looks like or where that looks like it was, it's not me. It looks scarily like me but believe me, I wish I looked that good naked." And some people believe them and others don't but in the end it usually goes away, forgotten over time. Deniability is a very strong method of hacking social situations and human beings function in such a way that they accept deniability as a valid defense maybe because they too someday want or need that particular defense for themselves.

That particular ability to deny is how celebrities can put up with life under the microscope and dealing with their housekeepers stealing their intimate bedroom moments on film ("We thought the red light meant the camera was charging after a day of site-seeing").

Deniability or the power to explain or contest a situation is valuable to us as individuals and to society. Imagine the police have a telephone log on a suspected terrorist. He mis-dials and gets you at home. You talk for 1 minute where confusion abounds because you're unsure who the caller is and the caller is confused by who you are. He keeps repeating your telephone number back to you and says stuff you can't understand. You repeat back what he thinks he said. Then he hangs up. Now imagine that scenario as an outsider reviewing the phone log and tape of the call while the whole time in your mind being suspicious of the caller. It doesn't look good for you. You will be investigated. You may end up on "lists". And all because you never had the chance to explain it was a wrong number call.

But if we are all law-abiding citizens with no shameful habits to excuse then what's the problem? The problem is when mistakes occur. And with the error record of most governments and corporations who may be collecting your data, it is very scary. So a

passport number typo can land you on the No-Fly list. How do you get off that list? If you can, how much time and money will it cost you to get off? Will the airline even refund your ticket?

So like celebrities, it's not really the privacy infringement that should worry you. It's the places and times where you can't contest or deny all the places your identity shows up in those papers and paparazzi websites. Because they know that losing deniability is really losing freedom.

How to Hack a Cyberbully

Being a good hacker is being able to avoid or defuse bullying in most situations. Unfortunately there's not much information about this anywhere and hackers may end up at the brunt of a lot of bullying because the means to deal with it seems so foreign. But it's really just a form of hacking.

Hackers tend to make good bullying victims because they're strange, different, and may exclude themselves from sports and other social activities offline. This is a mistake. Remember that bullying is an emotional response that kids have to anyone who is different and puts up a chase. A good hacker can also hack the social situations and make an appearance at the right places so as not to look like an outsider, even if you don't stay. At least you showed up. The more you do that, the less of an outsider you will begin to appear. Secondly, don't give chase. You can dismiss a bully by not interacting, walk away, or put yourself in a new location where there are authority figures who can help but don't do it in a way that appears to be you running from the situation. It's the same online. Don't interact and make yourself invisible where possible.

First off, hacking allows you to see what interactions need to be blocked both online and offline. They can use **DoXing** to identify the perpetrator of anonymous or masquerading bullying and perhaps even turn the tables on them. Legally, however, this evidence collected is better to present to the authorities to give the appropriate punishment.

Having the information about the perpetrator will also allow the hacker to have a stronger defensive position online. Knowing your enemy is a huge advantage because you will know who you are blocking. You can avoid their flames, hate messages, or online harassment. Email software has ways to block or refuse email from certain originators (blacklisting). Another way to avoid online harassment is to only authorize mail from certain people (whitelisting). Most Internet Service Providers (ISPs) have provisions for these approaches; explore the capability and understand how to use it. If you are receiving harassing messages on your school account, talk to the technicians; they may be able to either blacklist or whitelist your email account at school. If you are receiving harassing text messages, your cellular phone provider might provide similar services; investigate it. If they are masquerading you can collect evidence of when the message came, from where, and get help from the IT staff to determine which computer it was sent from and if there were any other logins from that same IP address near that same time. That will help you catch the bully for not just harassment but also for breaking into someone else's account to masquerade as them. And that's a criminal offense where the police may be called into the school to lead the bully out in handcuffs.

Sometimes DoXing will work and sometimes it won't. But at least the hacker knows who the bully is and the bully knows that the hacker knows things about him (just not how much the hacker knows and well, a little **social engineering** can keep the bully wondering how much you know. In some cases, the bully may threaten the hacker to keep their mouth shut in which case the hacker can accept that as a sign that the bullying from that person will lessen and may even stop.

Some governments deal with online big-mouths in forums and mailing lists with **Trolling**. As the online people post using inflammatory speech or illegal speech, they have people who Troll them by insulting them, their character, and making fun of how they say things. It is also a technique that hackers can use to shut-up bullies who spout hateful and mean things about them by using masquerading and anonymity as well to "out" the bully as a bully. Trolling will shut down a cyberbully without needing to resort to the low or mean things they say.

Just remember that as a hacker, you are resourceful. You can inform yourself and find things out. You can protect yourself with strong encryption so that your photos and messages don't leak where you don't want them to. You are discrete and careful with your data and your devices. You can use anonymous proxies or Tor to hide your IP address when online. You can use a VPN over wireless communications and you can keep an eye on potential bullying attacks by capturing any unencrypted wifi packets for the network you are on and even actively doing a search and replace on anything they write which substitutes your name with their own. Most of all, you will be able to ride the information wave of the Internet rather than have it ride you. So you'll be able to research your options and which authorities: parents, teachers, police, can help you avoid the worst of the bullying.

There is nothing positive about cyberbullying. In any bullying case, there are three main parties involved; the bully, the victim and the bullying witnesses. The way the three handle the issue is of great significance and can either escalate the problem or help solve it. Parents and teachers have a role to play as well.

The Bully: Bullies should be made to understand that causing harm to others doesn't benefit them in any way. Threatening, harassing and embarrassing others aren't cool; it only makes the bully appear mean, desperate and isolated. Instead of being quick to punish and condemn bullies, parents, teachers and friends must make them understand the consequences of their actions and the harm it can cause. Self acceptance and happiness with one's abilities is the surest way to overcome desires to bully others.

The Victim: Victims of bullying might at some point also have bullied others. It is sometimes a give and take. So how does it feel? It hurts right? Then do to others what you want done to you. No matter if you're different, strange, or scary, you don't deserve to be bullied. Nobody does. Unfortunately your society might expect you to stand up for yourself or else give you the blame for "letting yourself be bullied". In that case, you need to hack the situation and find the right people to help you. And don't stop until you get the help you need. Be relentless.

The Bullying Witness: If you witness a bullying scene, you should intervene and report the incident. Nobody thinks less of the person who intervenes in bullying. They may say stuff momentarily in the heat of the moment, since bullying is an emotional response, but after a cool-down period, it's rare that the person who intervened is ever seen negatively by the bully or those around who also did nothing to intervene. If you are a friend of a bully who sends nasty messages or emails to others, and you do nothing about it, then you are an accomplice. Deter bullying rather than participating in such a mean act.

Parents and Teachers: Parents and teachers should be at the forefront, guiding young people on safe interactions both online and off. They should help young people understand the dangers of bullying, consistently teach and correct any lack of empathy when it arises, and provide better conflict resolution methods, dialogue and non-confrontational ways of dealing with bullies.

The Bottom-Line

It is the collective responsibility of all people directly and indirectly involved in cyberbullying to help stamp out bullying among the young population. The bullies, the bullied, the witnesses, teachers and parents have a role to play. With deaths being reported, high school dropout cases and psychological harm, cyberbullying and any other form of bullying must be dealt with at its earliest time.

Exercises:

1. Open your favorite email program or client. Check the "Help" for topics like "Blocking a Sender". See if you can set up a filter or rule to always delete traffic from a particular address.
2. If you have webmail accounts, open the accounts and see if you can restrict who can send you traffic (whitelisting).
3. Check with your text messaging service: how can you deny messages from particular senders? How can you deny messages from anyone except a particular list of senders?
4. List two or three people you trust enough to talk to them about bullying.
5. Have a discussion: if you see a friend being bullied, what can you do? List these things.
6. Open a browser online and search for "signs of bullying", "signs of depression", and "signs of suicide". Does anyone you know fit the descriptions? If so, please tell the school counselor or nurse, a trusted teacher, or parent.

Today's teens are in a world with major communication and productivity channels open to them and they don't have the knowledge to defend themselves against the fraud, identity theft, privacy leaks and other attacks made against them just for using the Internet. This is the reason for Hacker Highschool.

The Hacker Highschool project is the development of security and privacy awareness learning materials for junior high and high school students.

Hacker Highschool is a set of lessons and a practical means of making hackers. Beyond just providing cybersecurity awareness and critical Internet skills, we need to teach the young people of today how to be resourceful, creative, and logical, traits synonymous with hackers. The program contains free security and privacy awareness teaching materials and back-end support for teachers of accredited junior high, high schools, and home schooling. There are multiple workbooks available in multiple languages. These are lessons that challenge teens to be as resourceful as hackers, including safe Internet use, web privacy, researching on the internet, avoiding viruses and Trojans, legalities and ethics, and more.

The HHS program is developed by ISECOM, a non-profit, open-source research group focused on security awareness and professional security development and accreditation.

Hacker Highschool
SECURITY AWARENESS FOR TEENS

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