

Cyber safety:

Vulnerability, privacy and good online habits

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With thanks to Dr Grainne Kirwan



IADT



PREMIER REFERENCE SOURCE

The Psychology of Cyber Crime

Concepts and Principles



Grainne Kirwan & Andrew Power

CYBERCRIME

The Psychology of Online Offenders

GRÁINNE KIRWAN
and ANDREW POWER

Cyberpsychology and New Media:

A Thematic Reader

ANDREW POWER
and GRAINNE KIRWAN

Vulnerability





Traditional view of online crime

- Some hackers engage in technical hacking
- But many rely on victim behaviour
- ‘Social engineering’ involves using deception to persuade humans to assist
- So why do we do it?



Greed?

 Reply  Reply All  Forward  X  Junk | Close

Online Security Notification

Revenue - Irish Tax & Customs Notice [service@revenue-refund.com]

You forwarded this message on 30/07/2012 11:06.

Sent: 30 July 2012 06:38

To: [Andrew Power](#)

Revenue - Irish Tax & Customs Customer Service

This e-mail has been sent to you by Revenue - Irish Tax & Customs to inform you that we must pay you back 278 EUR.
Please complete all the information to process your refund

Please allow 2 weeks for you money to be availabe in your account.
Total refund amount: 278 EUR

To ensure that your service is not interrupted, we request you to confirm and update your information today by following the link below:

[Revenue - Irish Tax & Customs Customer Service](#)

Thank you for your prompt attention to this matter. Do not reply to this e-mail.
Mail sent to this address cannot be answered.

Member 771390

© Revenue - Irish Tax & Customs 2012



Fear

Hello,

Your transaction PP-319240774 has been made to: **dauidugn88@gmail.com**

If you do not recognize the transaction, please click immediately
[Resolution Center](#)
and complete the measure to remove this transaction from your card.

Sincerely,
Paypal

PROTECT YOUR PASSWORD NEVER give your password to anyone, including PayPal employees. Protect yourself against fraudulent websites by opening a new web browser (e.g. Internet Explorer or Firefox) and typing in the PayPal URL every time you log in to your account.

Please do not reply to this email. This mailbox is not monitored and you will not receive a response. For assistance, log in to your PayPal account and click the Help link in the top right corner of any PayPal page. To receive email notifications in plain text instead of HTML, update your preferences.

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Guilt

“I decided to appeal to you and I hope you can help us. If you own any old portable oven and if not using anymore, I'll be very grateful if you can donate it for us and organize transport of this oven to us (we live 200 km from Moscow)...

If you cannot help with the stove, may be you can send two old sleeping bags- we will be sleeping inside of them during the nights and we will not freeze.”

Sent: 27 October 2010 02:10
To: info@jyb.ie
Subject: Letter to Ireland

Hello,

My name is Valentin, I am a student and I write you from little Russian city.
I found several addresses on Internet and I decided to send you this letter. Our local library give free Internet access for students.

I live with my mother, she cannot see since many years and I take care of her. My father left our family when I was a child.

I work very hard every day, but because of deep financial crisis my salary is very little and not even enough for the things of primary necessity.

Because of extremally hot weather during this summer most of the potatoes and vegetables get withered in our garden. A lot of forests burned.
We were forced to spend all our small savings to buy something to eat for the comign winter to avoid starvation.

Electricity and gas is very expensive in our region and we can not afford to heat our home anymore.

The only way to heat our home in winter is to use portable oven which heat with burning wood. We have wood savings in our shed and this oven would heat our home all the winter, at no cost to us.

Unfortunately, we can not buy such oven as our local market, because the value of it
8,300 rubles, and is a great amount for us (the equivalent of 197 Euro).

I decided to appeal to you and I hope you can help us. If you own any old portable oven and if not using anymore, I'll be very grateful if you can donate it for us and organize transport of this oven to us (we live 200 km from Moscow). These
ovens are different, usually made of cast iron and weigh about 100kg.

Please let me know if you can help and I will write you our home address.

If you cannot help with the stove, may be you can send two old sleeping bags- we will be sleeping inside of them during the nights and we will not freeze.

If you need, I can send medical documents about the disease of my mother.

I send you best wishes from Russia,

Valentin and my mother.

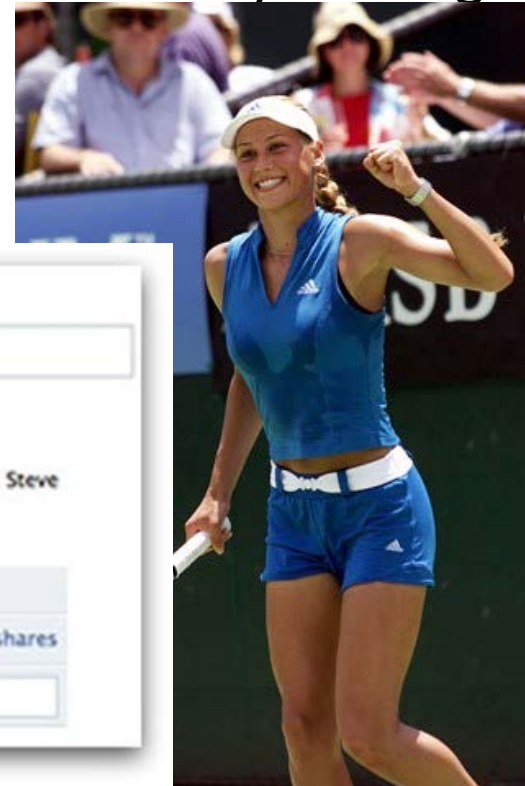
Psychological traits

- Cognitive dissonance
 - Need to justify previous actions
- Salience
 - rely only on website content (such as language, tone, and logos) to establish authenticity
- Projected authority
 - Pool table scam
- Confirmation Bias
 - New car syndrome, seek information and cues that confirm hypothesis or belief



Curiosity?

- "I Love You"
 - infected millions of computers virtually overnight
- Anna Kournikova
- Steve Jobs



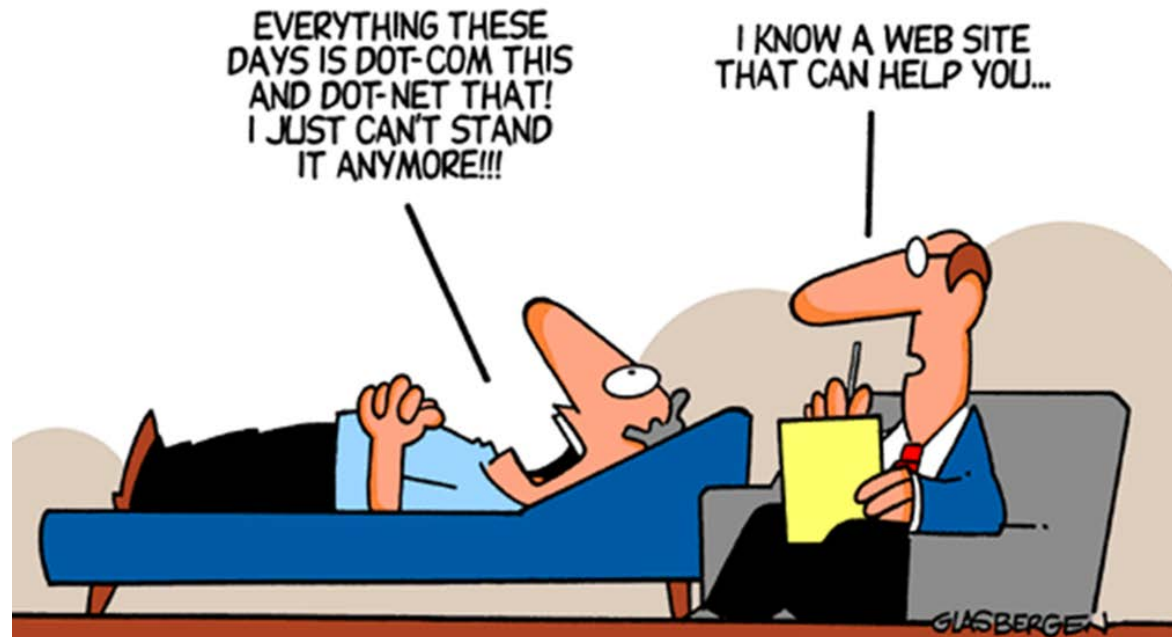
Responding to Cybercrime

- Four interconnected approaches
 - Law as legislation
 - Law as private rules
 - Law as code
 - Law as a negotiation(This is increasingly known as multi-stakeholder governance)
- But mostly it is about awareness and education
- The normalisation on online life



Privacy

- Privacy concerns have grown as we spend more and more time online



Where are we going online?



Top sites

Top 10 websites in Ireland 2007	Top 10 websites in Ireland 2011	Top 10 websites in Ireland 2013	Top 10 websites in Ireland 2014		Top 10 websites in the world 2014
Google.ie	Google.ie	Google.com	Google.ie		Google.com
Bebo	Google.com	Google.ie	Google.com		Facebook
Yahoo	Facebook	Facebook	Facebook		YouTube
Google.com	YouTube	YouTube	YouTube		Yahoo
YouTube	Yahoo	LinkedIn	LinkedIn		Baidu
Windows Live	Wikipedia	Wikipedia	Wikipedia		Wikipedia
MSN	Windows Live	Yahoo	Yahoo		Qq
Facebook	LinkedIn	Twitter	Twitter		LinkedIn
MySpace	Twitter	Windows Live	Windows Live		Taobao
Wikipedia	Blogger.com	DoneDeal.ie	AIB		Twitter

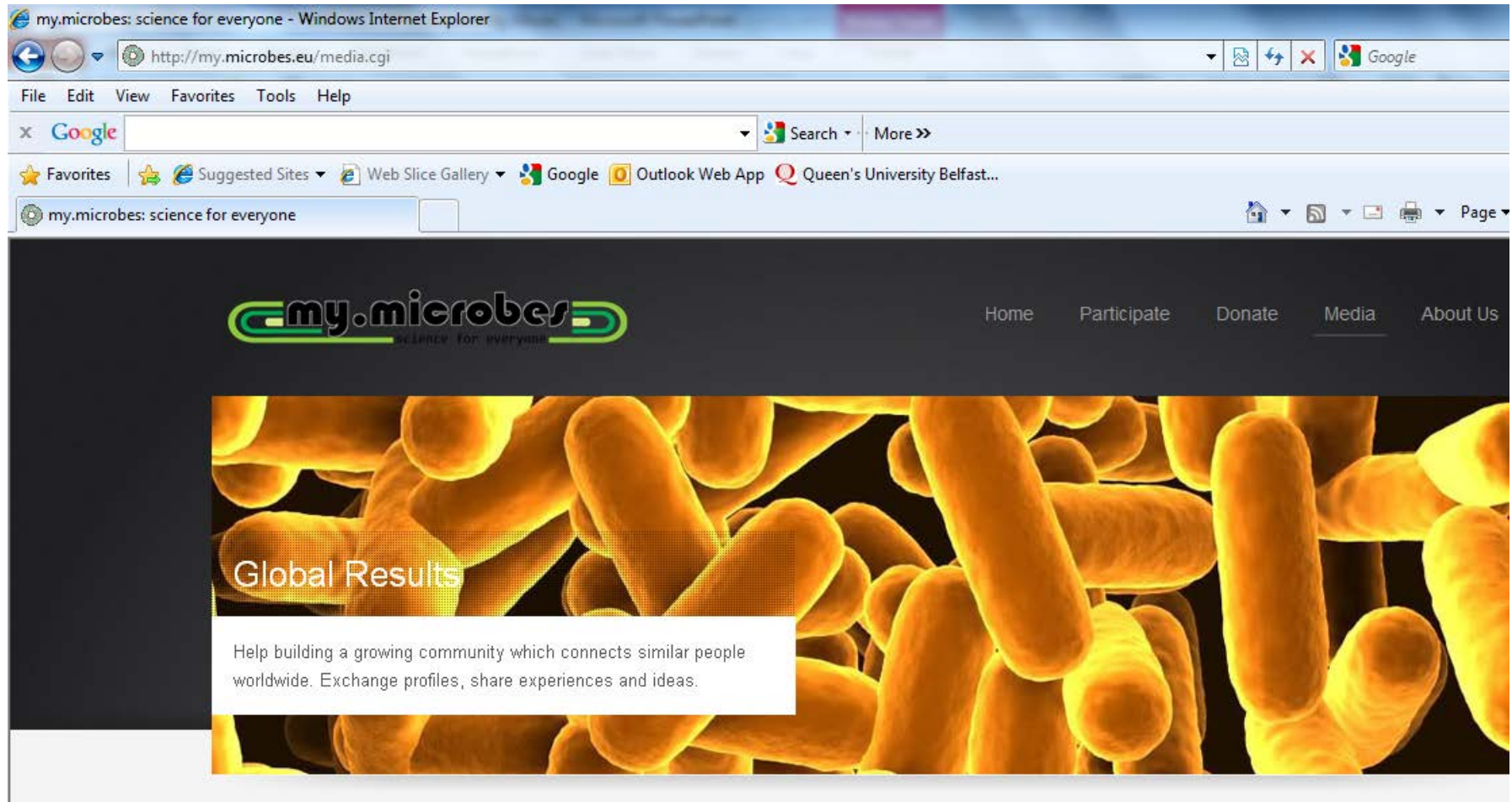


Top Social Networking sites

Top Social Networking sites in Ireland 2011	Top Social Networking sites in Ireland 2013	Top Social Networking sites in Ireland 2014
Facebook	Facebook	Facebook
YouTube	YouTube	YouTube
LinkedIn	LinkedIn	LinkedIn
Twitter	Twitter	Twitter
Boards.ie	WordPress	Boards.ie
Flickr	Pinterest	WordPress
LiveJasmin	Boards.ie	Pinterest
MySpace	Tumblr	Tumblr
Bebo	TheJournal.ie	Reddit
Foursquare	Flickr	imgur



An ever expanding community!



The 'wiring of humanity'

- Cross income
- Cross gender
- Cross generation



Privacy Issues

- If it's digital it's public
 - “private” information on SNS
 - Text messages
 - Phone calls
 - Location tracking(We exchange privacy for convenience)
- If its digital it's permanent
 - Images
 - Learning to live with and accept our personal histories



Theories of Power

- The ability to make decisions and enforce action
- The power to define the agenda and manipulate choice
 - We are “governed through freedom”. Freedom is a creative way of constituting strategies for the indirect shaping of conduct
- The power to mould perceptions and preferences
 - This third dimension is the most effective kind of power. It can be exercised “through the control of information, through the mass media and through the process of socialisation” (Lukes)
- Social media and the Internet, as a kind of panopticon



Good online habits

- For our kids... and the rest of us!



Social Networking

- Stay in touch with friends, especially after leaving school
- Relaxation – games
- Notification of events, both local and fan based
- Good interaction with others, allowing sociability that other activities might not (e.g. TV)
- Time sink
- Public versus Private issues
- Always contactable
- Security levels
- Desire to have large numbers of friends



What do cyberbullies do?

- Some similar to offline bullying...
 - Name-calling
 - Spreading of rumors
 - Ridiculing and insulting
 - Social exclusion
 - Telling secrets
- But in more public settings
 - Social networking
 - Creation of special websites
- Bullying messages can also be directed to email, IM, phone...



Difference between cyberbullying and traditional bullying

- Anonymity provided by the Internet
 - Bully perceives themselves as invisible, and so beyond punishment
 - Person may not know the identity of their bully this may be even more traumatising.



Disinhibition

- Bully does not have to deal with the immediate emotional, psychological or physical effects of face-to-face bullying
- the cyberbully may not realize the ramifications of their actions – see it as a harmless prank as they don't realise how much it hurts the person



Size of the potential audience

- much larger online than offline
- so may be more embarrassing
- Files (such as photos or videos) can be distributed to more people in less time



What are the effects of cyberbullying on victims?

- Psychological, emotional and/or social effects
- May last for years.
- May stop person from exploring the more positive aspects of online life.
- Anger, hurt, anxiety, annoyance, sad, or fearful.
- Inability to fulfill academic potential.
- Even depression and suicide



What to do?



- Keep the message – but you don't have to read it
 - If there is an investigation, it could be very useful
 - Record the details, as well as when it happened
 - Take screenshots
 - Save websites

Don't reply

- Many bullies are looking for a reaction
- Or they are hoping that you will send a nasty response that they can report



Importance of Parental Attitude

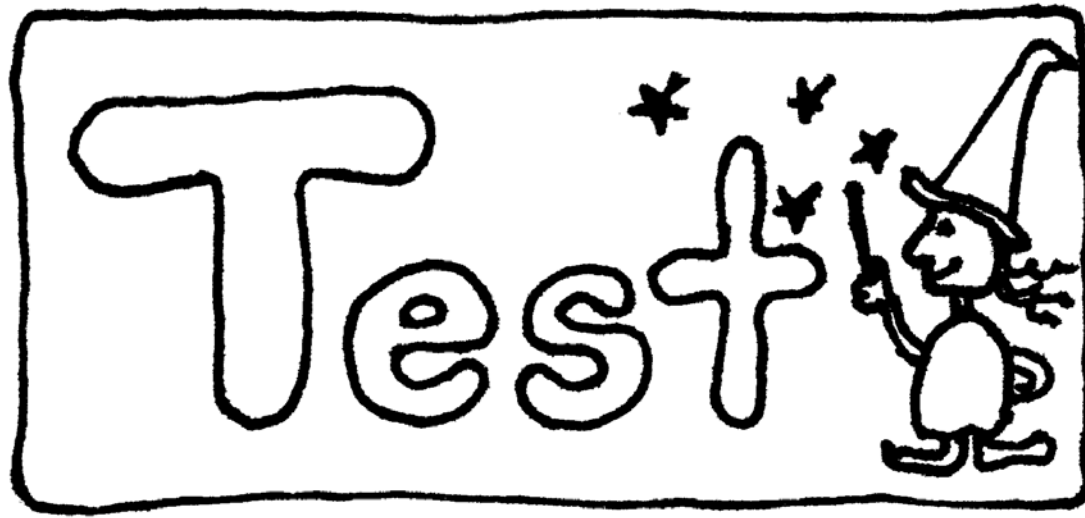
- Lack of Caution
 - Sometimes due to lack of knowledge/experience
- Over caution
 - Sometimes due to lack of knowledge/experience
- Balanced Approach



Protecting Children - software

- Filtering software
- Firewall software
- Anti-virus software
- Anti spyware software
- Check History, Cache, E-mails, etc.





OMG

Oh My God

BRB

Be Right Back

NP

No Problem

A/S/L

Age/Sex/Location

IRL

In real life

AFAIK

As Far As I Know

HTH

Hope that Helps

KOL

Kiss on Lips

NIFOC

Naked in Front of Computer

FFS

For F**ks Sake

POS

Parent over Shoulder

PANB

Parents are nearby

TTC

Trying to Conceive

HTB

Husband to Be



Protecting Children - Education

- Introduce the child to the Internet if possible
- Take courses on the Internet / get the child to teach you
- Encourage the child to talk to you or another responsible adult about their Internet activities, in particular anything that they have concerns about
- Create agreements with children about how the Internet should be used
- Put signs up near computers, so that children will see them when they're using the Internet
- Never threaten to take away a child's internet access / phone / to remove the threat – the child will refrain from telling you if there's a problem if they think this is what you will do



Websites promoting Internet Safety

- <http://ie.reachout.com/> - Reachout.com has information on a wide variety of mental health issues, including cyberbullying
- <http://stopcyberbullying.org/> - Resources for parents, teens, children and educators
- <http://www.ncpc.org/cyberbullying> - US government campaign and information
- <http://www.cyberbullying.info/office.php> - Australian site with lots of useful resources
- www.webwise.ie
- www.internetsafety.ie/
- <http://www.hotline.ie/>



Always end with Cheese...

Before you write anything online **THINK**

Is it **T**True

Is it **H**Helpful

Is it **I**Interesting

Is it **N**Necessary

Is it **K**Kind



Thank you for listening

