

## What is CyberPsychology?



- CyberPsychology: study of the impact of technology on human behavior
- Internet psychology, virtual environments, AI & IA, gaming, digital convergence, mobile telephones and networking devices
- CyberPsychology: exponential growth - rapid acceleration of Internet technologies and the 'unprecedentedly pervasive and profound influence of the internet on human beings' (Yan, 2012)
- Forensic CyberPsychology: from Organised Cyber Crime to Cyberstalking

# Insight: Human/Technology Interface

#### **HUMAN**

Privacy Dignity
Self-Endangerment Insider
Needs, Habits & Emotions
Identity Harassment
Anonymity Immersion
Welfare & Rights
Development Creativity
Online Disinhibition Resilience
Education Environment

CYBER PSYCHOLOGY

#### **TECHNOLOGY**

Big Data Policy
Governance IOT Cyber Law
Al v's IA Mobile Threat
Content Industry IP
Cyber Physical Systems
Security Risk
Authentication/verification
Privacy Fragmentation
Tools Safety

#### The Real World & Virtual World



"Claims for the independence of cyberspace...are based on a false dichotomy...physical and virtual are not opposed; rather the virtual complicates the physical, and vice versa" (Slane, 2007)

# **Cyberpsychology of Cyberspace**

- Anonymity (Joinson, 2001)
- Online disinhibition effect (Suler, 2004)
- Cyber immersion (Takatalo et al., 2008)
- Cyber presence (Riva et al., 2007)
- Self-presentation online (Gibbs et al., 2006)
- Internet 'privacy paradox' (Barnes, 2006)
- Escalation online (White & Horvitz, 2002)
- Hyperpersonal communication (Walther, 1996)
- Altruism (Adar & Huberman, 2000)
- Cyberspace -environment (Suler, 2004)
- Real world & virtual self (Young, 2012; Aiken, 2015)
- Curation of virtual self (Zhao & Lindley, 2014; Aiken, 2015)
- Next generation HMDU's (Aiken & Berry, 2015)



# Cyberbullying



Cyberbullying: long lasting effects on victims

Physical harm & self harm, Psychological harm including depression, anxiety, stress, Damage to reputation, ancillary impacts, foregoing work, study or social life

#### **Escalation in an age of technology:**

- 2010 to 2014: children are now more likely to be exposed to hate messages (from 13% to 20%), pro-anorexia sites (from 9% to 13%), self-harm sites (from 7% to 11%) and cyberbullying (from 7% to 12%)
- Biggest increase: 2010 to 2014 percentage of children who have been cyberbullied Ireland (from 4% to 13%) (11 to 16 years EU Kids Online) In EU 9 to 10 year olds (3% to 10%) (Net Children go Mobile, 2014)
- Among younger Irish teenagers (13-14 year-olds) bullying on social media platforms has overtaken that of f-t-f bullying (Net Children Go Mobile, 2014)
- Real v's virtual: Three in four 12-15s most people behave in a different way online to when they talk to people face to face (Ofcom, 2014)

## **Cyberstalking & Cyberharassment**

Cyberstalking is the use of information technologies to harass and intimidate an individual..similar to traditional forms of stalking but the use of sophisticated technology can make intrusions into a victim's life far beyond those made possible by physical harassment



- Consequences: fear, alarm, depression, stress, anxiety, lowered self-esteem, loss of trust respondents reported changing/losing jobs, isolating themselves, giving up social activities,
  having relationships break up
- **Multiple channels:** 74.2% victims reported that they were harassed in more than one environment, over 50% harassed in 3 or more different ways: victims of **multiple modes** of harassment = **victim more likely to experience severe psychological impacts**.
- PTSD: victims of severe electronic harassment suffer from post-traumatic stress disorder (National Centre for Cyberstalking Research, 2011)
- Amplification of harm, larger audience, permanent record the Internet does not forget
- **Syndication** those with deviant or criminal intention finding like minded online (Aiken, 2015: in press)

## **Kids in Cyberspace**

- A Developmental Cyberpsychology issue
- Kids online: Four in ten children aged 5-15 go online using a tablet computer, almost twice as many as in 2013 (42% vs. 23%), while two in ten children aged 3-4 go online using a tablet (20% vs. 12% in 2013) (Ofcom, 2014)
- Parental skill: One in ten (11%) parents of children aged 3-4 agreed their child knows more about the internet than they do (Ofcom, 2014) Duty of care?



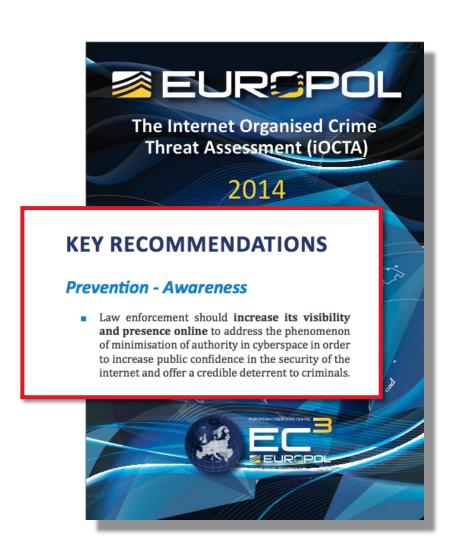
#### The problem space

- Under 13 : many underage users on SNS
  - 20% of 9-10 year olds,
  - 42% of 11 year olds
  - 61% of 12 year olds
  - contravention of terms of service (EU kids online, 2012) (Children's Online Privacy Protection Act -COPPA)
- Cyber Fraud offences committed by minors has jumped by 84% in the past three years (NSW Police, 2015)
- Cyber feral behaviour? Amplification & Escalation online



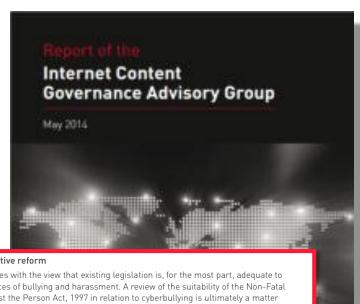
#### **Europol IOCTA: "Minimisation and status of authority online"**

- Organised Crime Threat Assessment (iOCTA, 2014): inform decision-makers at strategic, policy and tactical levels to fight cybercrime more effectively and to better protect online society
- "The CyberPsychology of Internet Facilitated Organised Crime" (Aiken & McMahon, 2014)
- "Minimisation and status of authority online" ODE (Suler, 2004)
- Digital deterrents (criminality/delinquency)
- Digital outreach (victims)



#### **Internet Content Governance Report**

- "Existing legislation is for the most part adequate to deal with the offences of bullying and harassment" (ICGAG, 2014)
- Note: supported by majority not all
- I believe sanctions may be the best deterrent in cyberspace, as in the real world
- Address the minimisation and status of authority issue
- Not about criminalising minors: JLO
- About best practice:
  - New Zealand : Cyberbullying legislation
  - Germany: Jugendmedienschutz
  - Estonia: Web constables
  - US: Cyberbullying vs cyberstalking



#### 3.3.1 Legislative reform

The group agrees with the view that existing legislation is, for the most part, adequate to deal with offences of bullying and harassment. A review of the suitability of the Non-Fatal Offences Against the Person Act, 1997 in relation to cyberbullying is ultimately a matter for the Law Reform Commission. The group also concurs with the view of the Special Rapporteur on Child Protection that the Act is sufficient to cover the offence but that its implementation requires further investigation. A majority of the group also supported the position adopted by the Anti-Bullying Working Group that additional criminal sanctions – as, for instance, currently under consideration in New Zealand – are not appropriate as a means of tackling a complex social problem. However, it may be prudent to monitor



## A better Cybersociety

- Cyberbullying, Cyberstalking & Cyberharassment
  - its all about the digital evidence
- Developmental Cyberpsychology issue
- Insight: critical to understand behaviour in cyberspace
- Big data problem: cyber crime & negative behaviours online
- Sensemaking of data (Network Science)
- **I. A**: machine intelligence solutions to assist governance
- Funding: resources and manpower?
- Solution: I propose a levy on the Household Media Charge
- Invest: in research to inform best practice
- Develop: independent tech solutions to tech facilitated problem behaviours
- Involve: stakeholders
- We levy plastic bags....
- Good laws make for a Just society this too is true in Cyberspace