



Co-funded by the European Union



THE LONDON SCHOOL  
OF ECONOMICS AND  
POLITICAL SCIENCE



UNIVERSITY OF  
WEST LONDON



# Types of Cyber-bullying Involvement and Mental Health Problems

Findings from *EU Kids Online*, 2014  
Dr Anke Görzig

# What is cyber-bullying?



## ■ Bullying:

An act of aggression which is intentional, repetitive and directed towards an individual of lower power (cf. Olweus, 1993)

## ■ Cyber-bullying:

An act of aggression which is intentional, repetitive and directed towards an individual of lower power using *electronic forms of contact, specifically mobile phones or the internet* (Smith et al., 2006).

# Bullying & adolescents mental health



- Traditional and cyber-bullying among adolescents are considered a **major public health concern** (Hertz et al., 2013).
- Involvement in bullying as a young person increases the **risk of suicide or suicide-related behaviours** (i.e., suicidal ideation, suicide attempt, self-harming) (Arseneault et al., 2006; Bauman, Toomey, & Walker, 2013; Brunstein-Klomek, Sourander, & Gould, 2010; Price & Dalgleish, 2010).
- Bullying is associated with short and **long-term mental health difficulties** (depression, anxiety, conduct disorder) (Maughan, & Arseneault, 2014)
- Studies on traditional bullying have shown that it is important to differentiate between **different types of bullying involvement (bullies, victims and bully/victims)**

# Types of bullying involvement



## ■ Suicide-related behaviours

(reviews, 30+ studies; Brunstein-Klomek et al., 2010; Kim & Leventhal, 2008)

- Bullies and victims are at risk
- Bully/victims are the most at-risk group

## ■ Psychological problems

- Victims: internalising (emotional problems), peer problems (Hawker & Boulton, 2000)
- Bullies: externalising (conduct problems) (Ttofi et al., 2011)
- Bully/victims: internalising + externalising, peer problems (Cook et al., 2010)

## ■ Psychological problems mediate between bullying and suicide-related behaviours? (cf. Hertz et al., 2013)

- Depression: traditional bullies but not cyber-bullies (Bauman et al., 2013)
- Delinquency/depression: bullies but not victims or bully/victims (Espelage & Holt, 2013)
- Traditional bullying was a risk factor for suicide-related behaviours independent of depression (Kaminski & Fang, 2009)

# Cyber-bullying and suicide-related behaviours: Fact or moral panic?



**Self-harm sites and cyberbullying: the threat to children from web's dark side**  
*(The Guardian, 10.3.2014)*

**Suicide Among Children Is A Bigger Problem Than Ever Before, And Cyberbullying May Be The Cause**  
*(Inquisitr, 31.10.2014)*

**More children 'self-harming because of cyber-bullying'**  
*(Metro, 27.5.2014)*

- Media reports and effects
  - Public concern has been amplified by the mass media, most risks are encountered by a small minority (Vandebosch et al., 2013)
  - Media reports have contributed to a dramatic bias in views on cyber-bullying (e.g., prevalence rates, cause for suicide etc.; Magid, 2011)

# Types of *cyber-bullying* involvement

## ■ Suicide-related behaviours

- Cyber-victims: suicide ideation/attempts, self-harm
- Cyber-bullies: suicide ideation/attempts  
(Bauman et al., 2013; Hinduja & Patchin, 2010; Schneider et al., 2012)
- Cyber-bully/victims: most at-risk group (1 study; 18-24 yr olds)  
(Schenk & Fremouw, 2012; Schenk, Fremouw, & Keelan, 2013)

## ■ Psychological problems

- Cyber-victims: internalising / emotional problems
- Cyber-bullies: externalising / conduct problems
- Cyber-bully/victims: internalising & externalising problems  
(Gradinger et al., 2009; Ybarra & Mitchell, 2004)

→ **Similar patterns, less evidence**

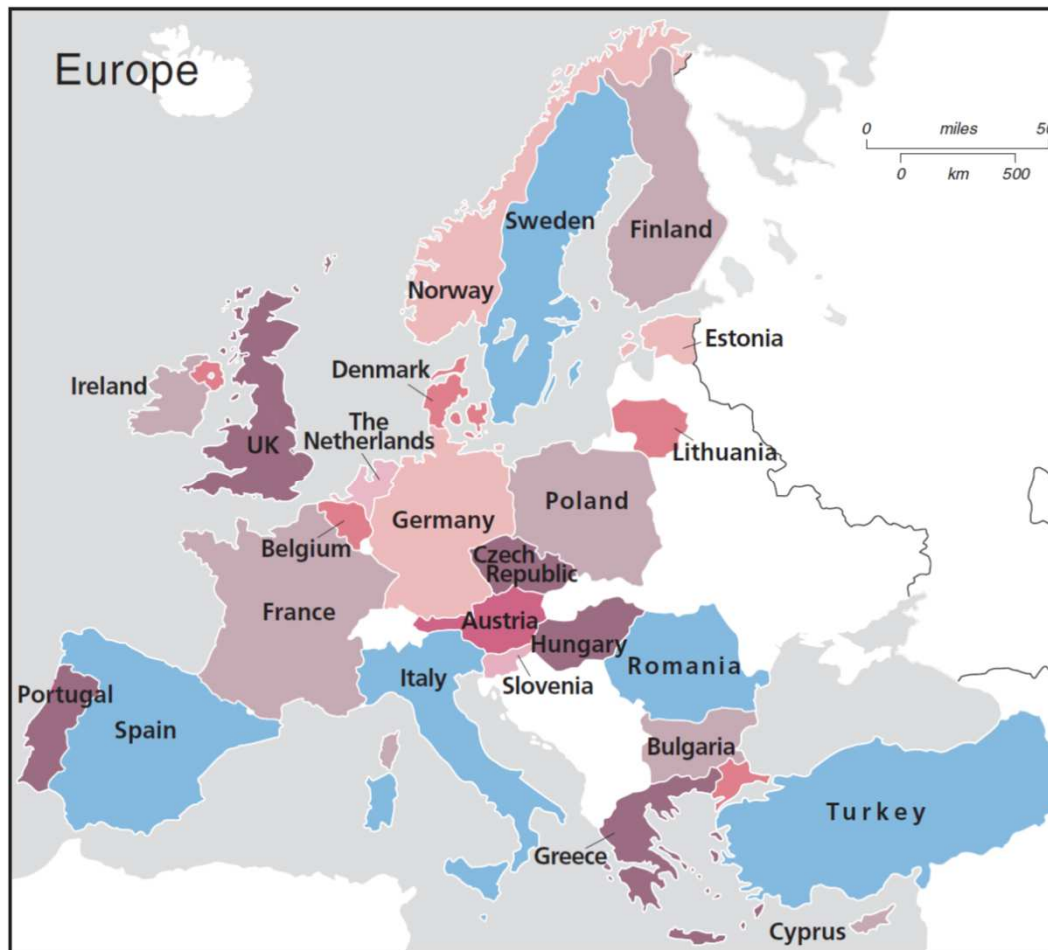
## ■ Psychological problems mediate between bullying and suicide-related behaviours?

# The current study



- Research evidence comparing all cyber-bullying types within one sample is scarce
- Confirm similar patterns for bullying and cyber-bullying on
  - Relation of bullying types and suicide-related behaviours
    - Victims & bullies > not involved
    - Bully/victims >> not involved
  - Relation of bullying types psychological problems
    - Victims: internalising / emotional problems, peer problems
    - Bullies: externalising / conduct problems
    - Bully/victims: internalising & externalising problems
- Explore whether any links of cyber-bullying types with viewing of suicide-related web-content is mediated by psychological problems

# Surveying 'Europe'



- **Random stratified sample: ~ 1000 9-16 year old internet users per country; total of 25142 internet-users, 25 countries**
- **Fieldwork in spring/summer 2010; child + parent interviews at home, face to face**
- **Questions validated by cognitive/pilot testing; self-completion for sensitive questions; care with research ethics**
- **Informed by national stakeholders and an international advisory panel**
- **Survey covered access, use, activities, risks (sexual images, sexual messages, bullying, meeting strangers), parental mediation, coping, vulnerability**



# Cyber-bullying



**Saying or doing hurtful or nasty things to someone. This can often be quite a few times on different days over a period of time, for example.**

**This can include:**

- teasing someone in a way this person does not like
- hitting, kicking or pushing someone around
- leaving someone out of things

**When people are hurtful or nasty to someone in this way, it can happen:**

- face to face (in person)
- by mobile phones (texts, calls, video clips)
- on the internet (e-mail, instant messaging, social networking, chatrooms)

# Cyber-bullying



**Saying or doing hurtful or nasty things to someone. This can often be quite a few times on different days over a period of time, for example.**

**This can include:**

- teasing someone in a way this person does not like
- hitting, kicking or pushing someone around
- leaving someone out of things

**When people are hurtful or nasty to someone in this way, it can happen:**

- face to face (in person)
- by mobile phones (texts, calls, video clips)
- on the internet (e-mail, instant messaging, social networking, chatrooms)

**cyber-bullying**

# Viewing of suicide-related web-content\*



In the PAST 12 MONTHS, have you seen websites where people discuss...

- ways of committing suicide
- ways of physically harming or hurting themselves

Suicide

Self-harm

\*(11+ yrs., N = 19,406)

# Psychological Problems\*



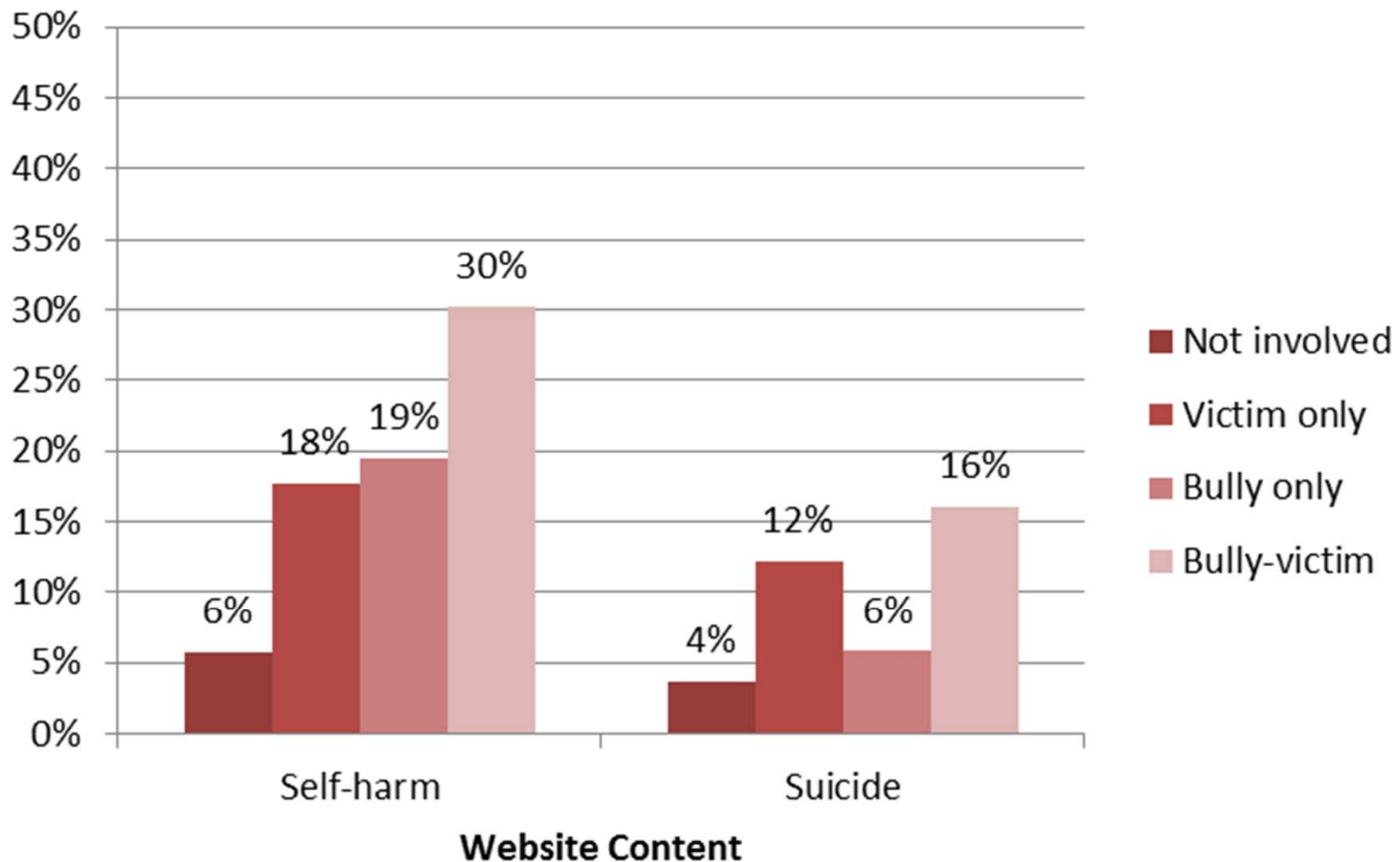
- **Strengths and difficulties questionnaire (SDQ; Goodman, 1998)**
  - Emotional difficulties, e.g. “I am often unhappy, sad or tearful.”
  - Peer problems, e.g. “Other people my age generally like me.” (reversed)
  - Conduct problems, e.g. “I get very angry and often lose my temper.”
    - 5 items each, 3-point scale: (1 = *Not true*, 2 = *A bit true*, 3 = *Very true*)
  
- **Borderline clinical cut-off points** (Goodman et al., 2000)
  - Used widely for screening in **CAMHS** (Child & Adolescent Mental Health Services)
    - Emotional difficulties: sum > 6
    - Peer problems: sum > 4
    - Conduct problems: sum > 4

\*(11+ yrs., N = 19,406)

# Results



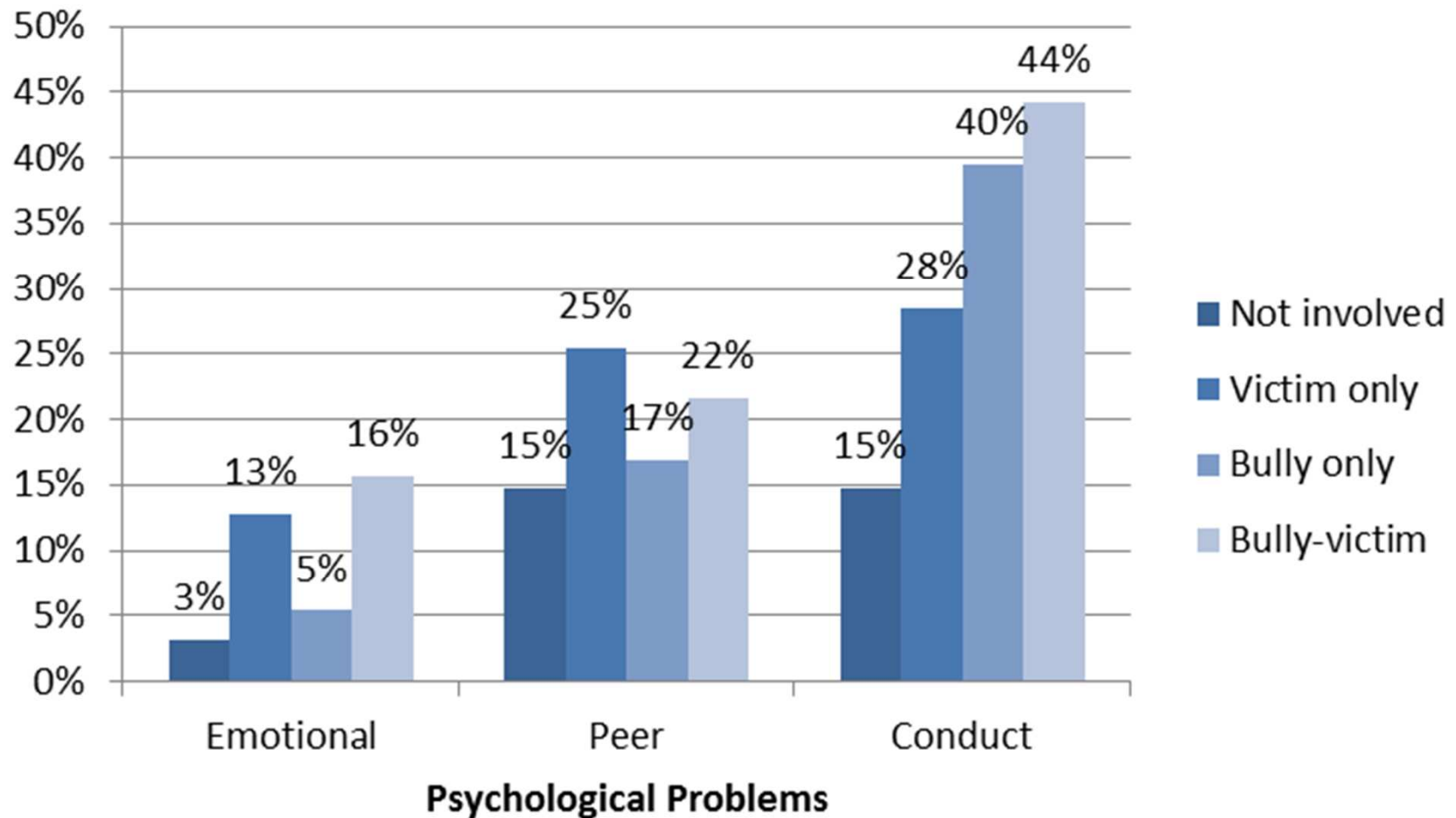
## Percentages for Viewing of Suicide-Related Web-Content within Cyber-bullying Involvement Types.



# Results



## Percentages for Psychological Problems within Cyber-bullying Involvement Types.

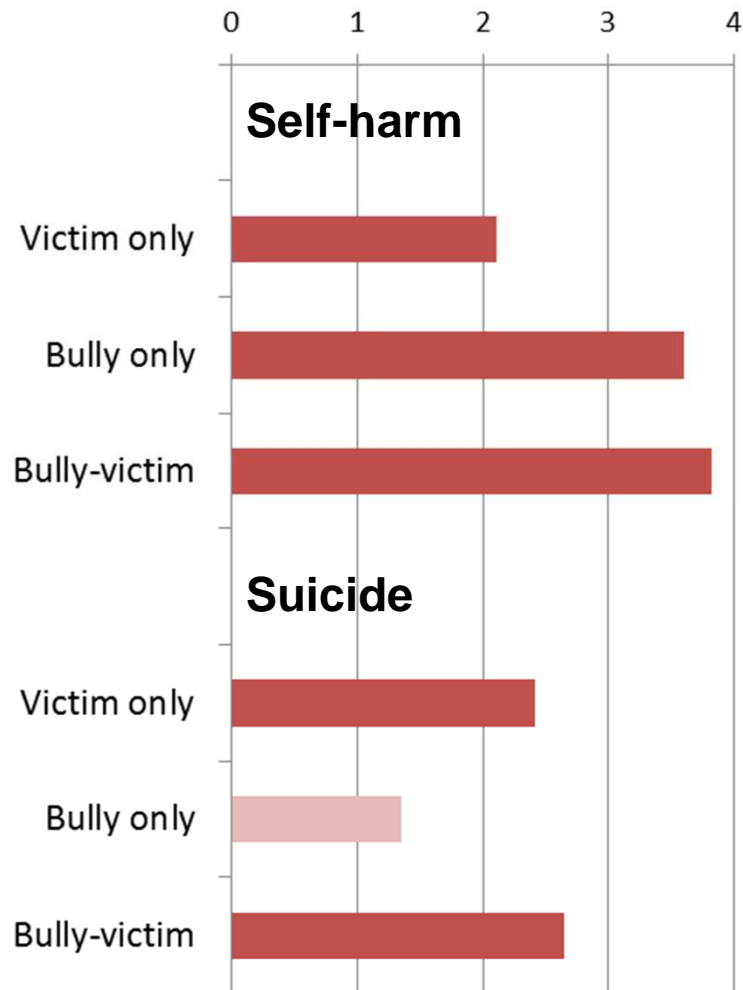


# Multi-Nominal Regressions: Viewing of Web-Content and Psychological Problems on Cyber-bullying Involvement Type



**Regression – Step 1 (viewing of web content only)**  
**Odds Ratios** (reference group: not involved; controls: age, gender)

## Web Content



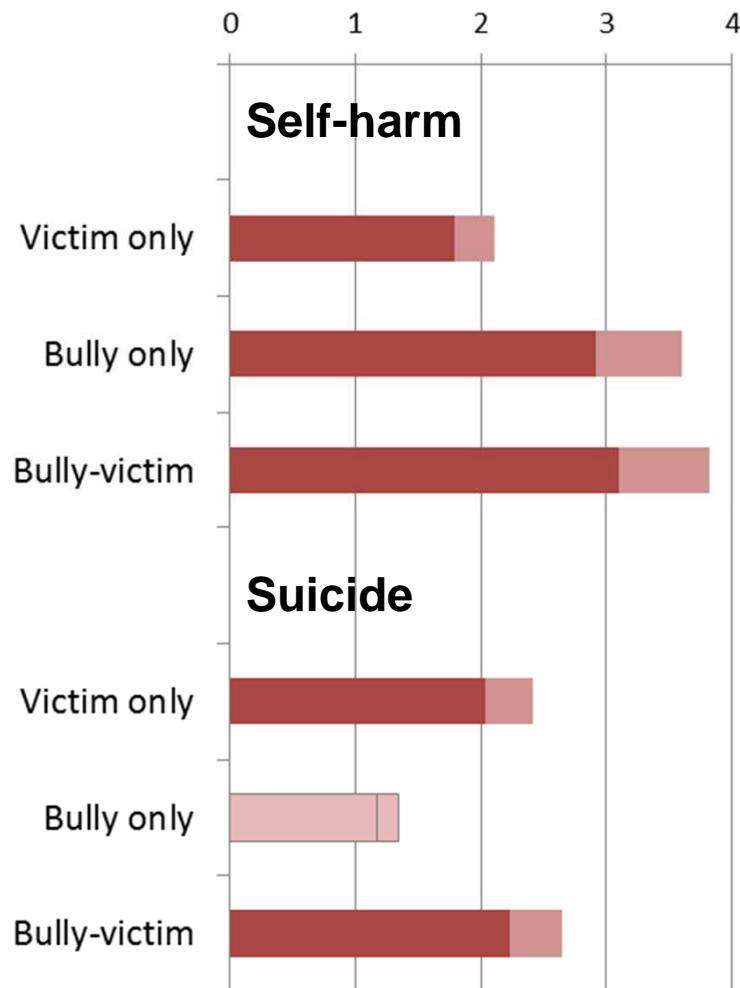
*Solid fill indicate statistically significant coefficients*

# Multi-Nominal Regressions: Viewing of Web-Content and Psychological Problems on Cyber-bullying Involvement Type

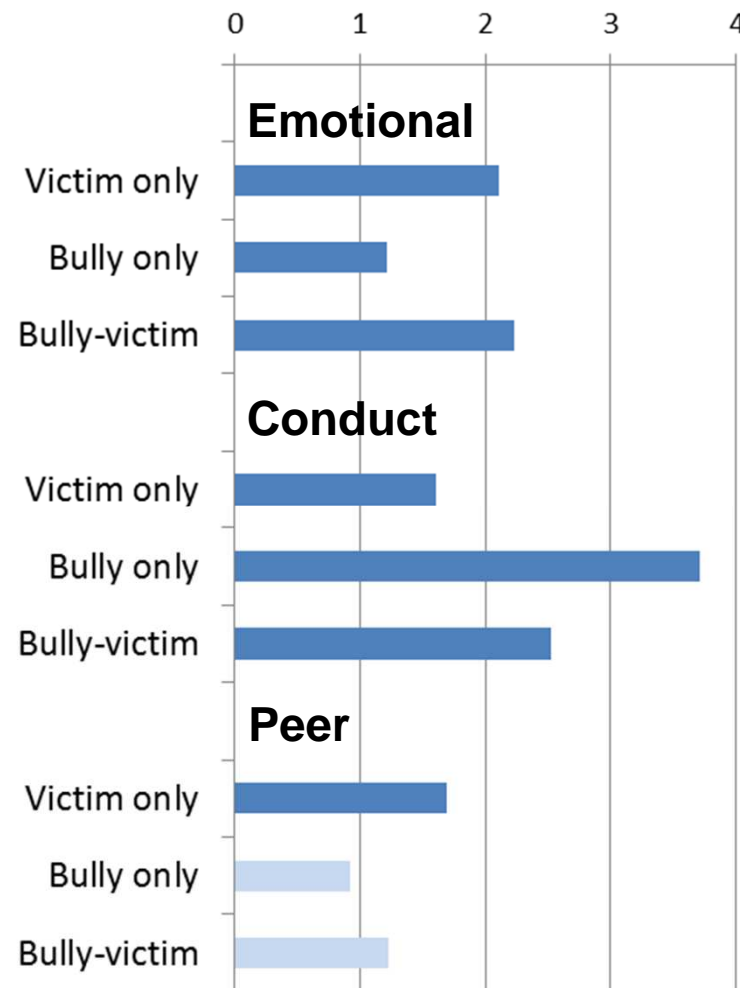


**Regression – Step 2 (+ psych problems)**  
Odds Ratios (reference group: not involved; controls: age, gender)

## Web Content



## Psychological Problems



*Solid fill indicate statistically significant coefficients*



# Discussion: Bullying & cyber-bullying

## Similar patterns?



### ■ **Suicide-related web content**

- Cyber-bully/victims most vulnerable
- Generally all involved groups more at risk than not involved
- Exception: suicide – cyber-bullies no higher prevalence than not involved

### ■ **Psychological problems**

- Cyber-victims: emotional problems, peer problems
- Cyber-bullies: conduct problems
- Bully/victims: emotional problems, conduct problems
- Exception: conduct problems - cyber-victims higher prevalence than not involved

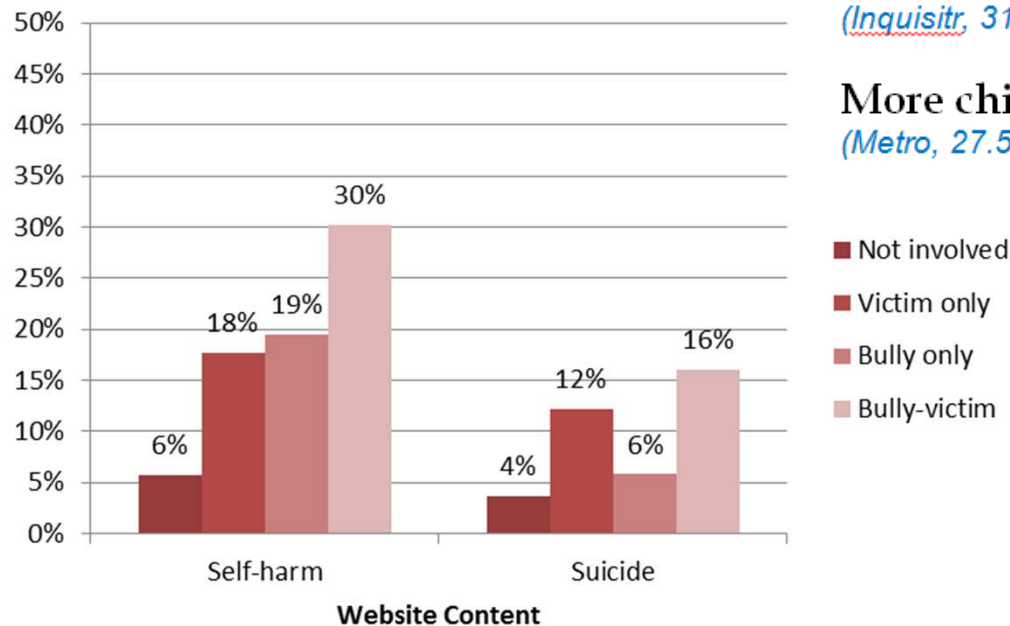
### ■ **Psychological problems mediate between bullying and suicide-related behaviours?**

- No change in coefficients when controlling for psychological problems
- Possible bi-directional nature of bullying and psychological problems (Kowalski & Limber, 2013)

# Limitations



## ■ Cross-sectional study: no implications about causality



Self-harm sites and cyberbullying: the threat to children from web's dark side

*(The Guardian, 10.3.2014)*

Suicide Among Children Is A Bigger Problem Than Ever Before, And Cyberbullying May Be The Cause

*(Inquisitr, 31.10.2014)*

More children 'self-harming because of cyber-bullying'

*(Metro, 27.5.2014)*

- Not involved
- Victim only
- Bully only
- Bully-victim

## ■ Intentions of viewing suicide-related web-content

# Implications



- Mental health problems for different cyber-bullying involvement types on the whole resemble those for bullying involvement types
- Same kind of youth involved in online and offline risks (Görzig & Livingstone, 2014)
- Integrative prevention and intervention strategies (Finkelhor, 2014; Livingstone & Smith, 2014)
- Focus on adolescents' specific problems and developmental needs (Jones et al., 2013)
- Adolescents involved in (cyber-)bullying need support
  - Targeted towards involvement type
  - Prevent the causes and/or consequences of mental health problems



Co-funded by the European Union



THE LONDON SCHOOL  
OF ECONOMICS AND  
POLITICAL SCIENCE



UNIVERSITY OF  
WEST LONDON



**THANK YOU!**

Findings from *EU Kids Online*, 2014  
Dr Anke Görzig