

Consequences of cyber bullying in Victorian students: A longitudinal study



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Definitions



- **Bullying** is traditionally described as any *aggressive, intentional* act or behaviour that is carried out by a *group* or an *individual repeatedly* and over time against a *victim* who cannot easily defend him or herself (Olweus, 1993). It can be categorised as overt or covert in nature.
- **Covert bullying** is often hidden from or unacknowledged by adults. It can include the spreading of rumours or attempts at socially excluding others (Cross et al., 2009).

What is cyber bullying?



Refers to a specific type of *covert bullying* through information and communication technologies and mediums such as:

- Mobile phones
- Computers
- Personal Digit Assistants

The Australian Covert Bullying Prevalence Study (Cross et al., 2009)



- **One in four** Australian students are overtly and/or covertly bullied every few weeks
- **7-10%** of students reported experiences of cyber bullying
- Cyber bullying was **not observed by or reported** to as many staff members as other forms of bullying
- Cyber bullying appears to be **related to age** (or access to technology), with older students more likely to cyber bully than younger students
- **Girls were significantly more likely to report** experiencing covert forms of bullying behaviours than boys

Why is cyber bullying a concern?



- Victims can be reached anytime and anyplace
- The bullying behaviour is covert and the perpetrator can remain anonymous reducing the likelihood of being detected or reprimanded
- It can spread quickly to a large amount of people in a short amount of time - uncontrollable for the victim
- Cyber bullying can cause young people shame, embarrassment, anger, helplessness, loneliness, depression & withdrawal and in some severe circumstances suicide (Raskauskas & Stoltz, 2007; Ybarra & Mitchell, 2004; Dempsey et al., 2009; Juvonen & Gross, 2008; Hoff & Mitchell, 2009)

Rationale for this study



- Serious short-term and long-term effects of bullying on children's physical and mental health have been identified in previous studies
- There is less knowledge about the effects of cyber bullying in young people across Australia
- Inform prevention and intervention strategies to ameliorate the problem

Aim



To investigate the extent to which cyber bullying perpetration and victimisation in Year 9 are associated with psychosocial outcomes in Year 11:

- Suspensions
- Theft
- Violent behaviour
- Marijuana use
- Binge drinking
- Depression
- Self harm

International Youth Development Study (IYDS)



- IYDS is a longitudinal study of 5,769 students recruited in Years 5, 7 and 9 in Victoria, Australia and Washington State, USA in 2002
- This study uses the data from youngest (Year 5) Victorian cohort of the study
- Sample = 651 Year 9 and Year 11 students
- Aged 14-15 and 16-17 years respectively

Student self-report survey



Predictors (Year 9)

- Cyber bullying perpetration

“Have you bullied another student using technology such as mobile phones, the internet, computers, answering machines or cameras in the past 12 months?”

- Cyber bullying victimisation

“Have you been bullied by another student who has used technology such as mobile phones, the internet, computers, answering machines or cameras in the past 12 months?”

Student self-report survey



Psychosocial outcomes (Year 11)

- Suspension from school
- Theft
- Violent behaviour
- Marijuana use
- Binge drinking
- Depression (SMFQ; Angold et al., 1995)
- Self harm

Covariates

- Individual (impulsivity, concentration deficits)
- Peer (adolescent interaction with antisocial peers)
- Family (poor family management, family conflict, parental attitudes favourable towards drug use)
- School factors (academic failure)

Prevalence rates of cyber bullying



Students aged 14-15 years (Year 9) reported:

- 14% cyber bullying perpetration
- 17% were victims of cyber bullying
- No significant gender differences in cyber bullying perpetration
- A significant larger number of females (20%) reported being victims of cyber bullying compared to males (13%) ($p = 0.01$)

Rates of psychosocial outcomes



Psychosocial Outcomes	Year 11 (N = 651) %
Suspension from school	8
Theft- stealing more than \$10	12
Violent behaviour	17
Marijuana Use	11
Binge Drinking	49
Depression	29
Self Harm	9

Year 9 cyber bullying perpetration (N= 651)

Year 11 Psychosocial outcomes	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Suspensions from school	2.4 (1.2, 4.9)*	1.6 (0.8, 3.5)
Theft- stealing more than \$10	2.5 (1.4, 4.5)**	1.6 (0.8, 3.2)
Violent behaviour	1.4 (0.8, 2.5)	0.9 (0.5, 1.9)
Marijuana use	2.7 (1.5, 4.8)***	1.8 (0.9, 3.6)
Binge drinking	2.8 (1.8, 4.4)***	1.9 (1.2, 3.2)**
Depression	2.1 (1.4, 3.0)***	1.6 (1.0, 2.4)*
Self harm	2.3 (1.3, 4.0)**	1.6 (0.9, 3.0)

Year 9 cyber bullying victimisation (N = 651)

Year 11 Psychosocial outcomes	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Suspensions from school	1.9 (1.0, 3.7)*	1.6 (0.8, 3.3)
Theft- stealing more than \$10	1.4 (0.8, 2.4)	0.9 (0.5, 1.9)
Violent behaviour	1.2 (0.7, 1.9)	1.0 (0.6, 1.8)
Marijuana use	1.2 (0.7, 2.2)	0.9 (0.4, 1.8)
Binge drinking	1.5 (1.1, 2.2)*	1.2 (0.8, 1.8)
Depression	2.5 (1.5, 4.1)***	1.8 (1.1, 3.0)*
Self harm	2.2 (1.3, 3.8)**	1.5 (0.8, 2.9)

Summary of results



- Cyber bully ***perpetration*** at Year 9 significantly predicted an almost 2-fold increase in *binge drinking* & a 1.5-fold increase in *depression* at Year 11
- Cyber bully ***victimisation*** at Year 9 significantly predicted a 1.8-fold increase in *depression* at Year 11
- These results are consistent with studies that show emotional & substance use problems are predicted by bullying perpetration and victimisation

Implications



- **Raising awareness**
- **Prevention**
 - Government policy
 - Programs & policies at school
 - Educate families & parents
- **Further research**
 - Preliminary studies about the causes (risk & protective factors) of cyber bullying have been conducted but this area of research is in its early infancy
 - A greater number of longitudinal studies exploring consequences of cyber bullying to consolidate our findings