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Title Registration for a Systematic Review: Anti-Cyberbullying Interventions for Reducing Cybervictimization in Youth: A Systematic Review

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TITLE OF THE REVIEW

Anti-Cyberbullying Interventions for Reducing Cybervictimization in Youth: A Systematic Review

BACKGROUND

Highly visible tragedies involving cyberbullying in the recent news media have raised awareness and attention to the victimization that occurs in virtual contexts (*The New York Times:* for the case on Tyler Clementi, see Hu, 2010; for the case on Rebecca Sedwick, see Alvarez, 2013). Recent statistics showed cyberbullying prevalence rates at 25% across a 10-year period with an all-time high of 36.4% in 2014 (Patching & Hinduja, 2014). Statistics of youth in the U.K. reported even higher rates, citing seven out of 10 teenagers experiencing being cyberbullied at least once (Ditch the Label, 2013).

Bullying is defined as an aggressive act in which one or more individuals with relatively higher power harm an individual with relatively lower social power in an intentional and systematic way (Olweus, 1993). Research has overwhelmingly supported the negative effects on the social, emotional, academic, and physical development of victims of bullying (see Copeland et al., 2014; Reijntes et al., 2011; Ttofi, Farrington, Losel, & Loeber, 2011). In light of such detrimental effects of bullying and victimization, a large corpus of research has developed on the reduction of bullying; however, meta-analytic reviews of the effectiveness of anti-bullying interventions reported modest effects at best (see Merrell, Geuldner, Ross, & Isava, 2008; Smith, Schneider, Smith, & Ananidaou, 2011; Ttofi & Farrington, 2011). A recent meta-analysis on anti-bullying programs by Yeager, Fong, Lee, and Espelage (2015) found that bullying appeared to be effectively prevented with younger adolescents (i.e., age 12 and younger), but with older adolescents (i.e., age 13 and older) there was a sharp drop to an average of near zero. Yeager et al. attributed such a decline in program effectiveness for older adolescents to changes in the manifestation of problematic behaviour, the underlying causes of the problematic behaviour, and the efficacy of behaviour-change techniques. In particular, they discussed how older adolescents tend to not engage in observable bullying such as hitting or insulting as younger adolescents would, but instead use more indirect forms such as social exclusion or rumours.

In addition, the social structure or setting of bullying changes as adolescents become older. One unique characteristic of the adolescent context is greater access to technology and thereby engagement in online forms of bullying. The last two decades have seen rapid advancement in the field of computers, information technology, and social networks. Because of this progress, a social environment known as the cyberspace has emerged, resulting in intense human activity and interpersonal interactions. One interaction prevalent among cyber-users is cyberbullying (see Lapidot-Lefler & Dolev-Cohen, in press; Hinduja & Patchin, 2008; Huang & Chou, 2010).

Cyberbullying is defined in a similar fashion to bullying but in the context of a virtual space, using applications intended for technological platforms that enable interpersonal communication such as the Internet or cellular phones (Tokunaga, 2010). With an emphasis on the use of electronic devices, cyberbullying can take many forms. Willard (2006) documented the following manifestations of cyberbullying: ridiculing the victim, offending, humiliating, intimidating, threatening, blackmailing, slandering, spreading malicious rumours about the victim, public outings of sexual minorities, exclusion or removal from social groups, or stalking. Much like traditional forms of bullying, cyberbullying has been shown to cause a staggering host of harmful and maladaptive outcomes for youth (see Smith et al., 2008; Tokunaga, 2010).

The prevalence of cybervictimization has contributed to mandated anti-bullying prevention programs and other initiatives. A recent meta-analysis conducted by Modecki, Minchin, Harbaugh, Guerra, and Runions (2014) found a strong correlation between cyberbullying and traditional bullying and suggested intervention efforts to focus on "poly-aggression" prevention. Thus, understanding what works in reducing cyberbullying can also inform our current understanding of traditional anti-bullying and their related school-based policies and practices. Given the changing nature of bullying and victimization for older adolescents in a growing digital age (Yeager et al., 2015), better evidence is needed for understanding the programs that really work in reducing the kind of victimization that occurs on and offline.

Therefore, the focus of this systematic review and meta-analysis will be to address critical questions of whether the extant literature indicates that anti-cyberbullying interventions effectively reduce cyber-bullying and victimization and which specific types of programs are most effective.

OBJECTIVES

What is the effectiveness of anti-cyberbullying interventions on cyberbullying and cybervictimization?

Is the effectiveness of these interventions moderated by the following variables: age, gender, country of origin, outcome, and program features and elements (e.g., duration, curriculum)?

EXISTING REVIEWS

There is a considerable number of reviews of anti-bullying program effectiveness (e.g., Brown, 2009; Evans, Fraser, & Cotter, 2014; Farrington & Ttofi, 2011; Merrell et al., 2008; Polanin, Espelage, & Pigott, 2012; Smith et al., 2004; Vreeman & Carrol, 2007). However, none of the previous reviews explicitly included programs targeted to reducing cyberbullying and measured its related cyber- outcomes. Moreover, many of these reviews limited their

scope of school-based K-12 programs, which may exclude cyberbullying programs occurring outside of the school setting and with older adolescents beyond secondary school. To our knowledge, no existing reviews on anti-cyberbullying programs have been attempted or completed. Another Campbell review (Mishna et al., 2009) examined interventions targeted against "cyberabuse" mainly focused on study outcomes of Internet safety and online risky behaviour such as revealing one's identity. They only located one included study that evaluated cybervictimization outcomes, a dissertation conducted ten years ago (Salvatore, 2006). In contrast, our systematic review will not only include recent studies that incorporate the advent of cyberbullying research but also outcomes that directly relate with cyberbullying. Lastly, although narrative reviews of anti-cyberbullying interventions have been discussed (see Patching & Hinduja, 2012), a quantitative synthesis of these interventions has yet to be conducted.

INTERVENTION

The eligible interventions include any programs that target anti-cyberbullying. These interventions occur in many forms and address the needs of two groups: cyberbullies and cybervictims. In addition, parents, teachers, administrators, and employers of the first two groups may be the participants in interventions, particularly in "whole-school" approaches. Programs are often implemented by researchers or practitioners, who either provide the program components directly or provide trainings to teachers, administrators, and employers to deliver program components. These interventions can range in time from one hour using short videos or interactive online activities to curricula that can span over a year. Content can take the form of training (assembly lectures, online activities or video games, role play), counseling (individual and small groups for both victims and bullies), and policy (zero tolerance policies, punishment). Comparison groups typically consist of classes or schools that do not participate in the anti-cyberbullying programs (or business-as-usual; e.g. Williford et al., 2013).

Anti-bullying programs that do not measure specific outcomes of cyberbullying or cybervictimization will not be included. Although these programs may discuss cyberbullying in their program components, we cannot assume their impact on traditional forms of bullying or victimization necessarily include their virtual counterparts.

POPULATION

The types of populations include youth with equivalent ages to students in primary, secondary, or postsecondary education. Specifically, the included population consists of individuals between the ages of 5-25, the typical range of the beginning of formal schooling and the end of some form of higher education, and within the developmental period of childhood and adolescence. Individuals within the determined age range, but not attending any schooling, will not be excluded.

OUTCOMES

The primary outcomes include cyberbullying and cybervictimization. Secondary outcomes include overall well-being, social and academic adjustment when available.

STUDY DESIGNS

The types of study designs include randomized controlled trials (RCTs) and quasi-experimental designs (QEDs); however, pre-post designs without any comparison group will be excluded. Qualitative data will not be included in the systematic review.

REFERENCES

Alvarez, L. (October, 2013). Felony counts for 2 in suicide of bullied 12-year-old. *The New York Times*, p. A20.

Brown, J. A. (2009). *Identifying effective interventions for reducing/removing aggressive tendencies among school-aged adolescents: A meta-analysis.* (Doctoral dissertation). Retrieved from ProQuest. (Order No. 1480393)

Copeland, W. E., Wolke, D., Angold, A., & Costello, J. (2013). Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry*, *70*, 419–426. http://dx.doi.org/10.1001/jamapsychiatry.2013.504.

Ditch the Label. (2013). *The annual cyberbullying survey.* Retrieved from http://www.ditchthelabel.org/downloads/the-annual-cyberbullying-survey-2013.pdf

Evans, C. B. R., Fraser, M. W., & Cotter, K. L. (2014). The effectiveness of school-based bullying prevention programs: A systematic review. *Aggression and Violent Behavior*, *19*, 532–544.

Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior*, *29*(2), 129-156.

Hu, W. (October, 2010). Legal debate swirls over charges in a student's suicide. *The New York Times*, p. A15.

Huang, Y. Y., & Chou, C. (2010). An analysis of multiple factors of cyberbullying among junior high school students in Taiwan. *Computers in Human Behavior*, *26*(6), 1581-1590.

Lapidot-Lefler, N., & Dolev-Cohen, M. (2014, online first). Comparing cyberbullying and school bullying among school students: prevalence, gender, and grade level differences. *Social Psychology of Education*.

Merrell, K.W., Gueldner, B. A., Ross, S.W., & Isava, D. M. (2008). How effective are school bullying intervention programs? A meta-analysis of intervention research. *School*

Psychology Quarterly, 23, 26-42. http://dx.doi.org/10.1037/1045-3830.23.1.26

Mishna, F., Cook, C., Saini, M., Wu, M. J., & MacFadden, R. (2009). Interventions for children, youth, and parents to prevent and reduce cyber abuse. *Campbell Systematic Reviews, 2*.

Mishna, F., Cook, C., Saini, M., Wu, M. J., & MacFadden, R. (2011). Interventions to prevent and reduce cyber abuse of youth: A systematic review. *Research on Social Work Practice, 21*, 5-14.

Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: a meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health, 55*(5), 602-611.

Olweus, D. (1993). Bully/victim problems among schoolchildren: Long-term consequences and an effective intervention program. In S. Hodgins (Ed.), *Mental disorder and crime*. Thousand Oaks, CA, US: Sage Publications.

Patching, J. W., & Hinduja, S. (2014). Research in review. *Cyberbullying Research Center*. Retrieved from http://cyberbullying.us/Cyberbullying_Research_In_Review.pdf.

Patchin, J. W., & Hinduja, S. (2012a). Cyberbullying: An update and synthesis of the research. In J. W. Patchin, & S. Hinduja (Eds.), *Cyberbullying prevention and response: Expert perspectives* (pp. 13–35). New York, NY: Routledge.

Patchin, J. W. & Hinduja, S. (2012b). School-based Efforts to Prevent Cyberbullying. *The Prevention Researcher, 19*(3), 7-9.

Polanin, J. R., Espelage, D. L., & Pigott, T. D. (2012). A meta-analysis of school-based bullying prevention programs' effects on bystander intervention behavior. *School Psychology Review, 41*, 47-65. http://dx.doi.org/10.1037//0022-006x.71.1.136

Reijntjes, A., Kamphuis, J. H., Prinzie, P., Boelen, P. A., Van der Schoot, M., & Telch, M. J. (2011). Prospective linkages between peer victimization and externalizing problems in children: A meta-analysis. *Aggressive Behavior, 37*, 215–222. http://dx.doi.org/10.1002/ab.20374.

Salvatore, A. J. (2006). *An anti-bullying strategy: Action research in a 5/6 intermediate school* (Order No. 3210027). Available from ProQuest Dissertations & Theses Full Text. (304957278).

Smith, J. D., Schneider, B. H., Smith, P. K., & Ananiadou, K. (2004). The effectiveness of whole-school antibullying programs: A synthesis of evaluation research. *School Psychology Review, 33*, 548-561.

Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry, 49*(4), 376-385.

Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, *26*(3), 277-287.

Ttofi, M.M., & Farrington, D.P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology, 7*, 27-56. http://dx.doi.org/10.1007/s11292-010-9109-1

Ttofi, M., Farrington, D., Losël, F., & Loeber, R. (2011). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research, 3*, 63–73.

Vreeman, R. C., & Carroll, A. E. (2007). A systematic review of school-based interventions to prevent bullying. *Archives of Pediatrics & Adolescent Medicine, 161*, 78-88.

Willard, N.E. (2006). *Cyberbullying and cyberthreats*. Eugene, OR: Center for Safe and Responsible Internet Use.

Williford, A., Elledge, L. C., Boulton, A. J., DePaolis, K. J., Little, T. D., & Salmivalli, C. (2013). Effects of the KiVa antibullying program on cyberbullying and cybervictimization frequency among Finnish youth. *Journal of Clinical Child and Adolescent Psychology*, *42*(6), 820-833.

Yeager, D. S., Fong, C. J., Lee, H. Y., & Espelage, D. (2015, online first). Declines in efficacy of anti-bullying programs among older adolescents: Theory and meta-analysis. *Journal of Applied Developmental Psychology*.

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ROLES AND RESPONSIBILITIES

Please give a brief description of content and methodological expertise within the review team. It is recommended to have at least one person on the review team who has content expertise, at least one person who has methodological expertise and at least one person who has statistical expertise. It is also recommended to have one person with information retrieval expertise. Please note that this is the *recommended optimal* review team composition.

- Content: Dorothy L. Espelage

- Systematic review methods: Carlton J. Fong

- Statistical analysis: Carlton J. Fong

- Information retrieval: Carlton J. Fong

FUNDING

Date	Milestones
6/1/2015	• Submit and Revise Title Registration Form
7/1/2015	• Submit Protocol for peer review by Campbell Collaboration
9/1/2015 – 10/1/2015	• Revise and resubmit Protocol based on peer and editor reviews • Train consultant for systematic literature search and information retrieval

	• Literature search electronic databases, hand search journals, meta-analyses, and literature reviews for potentially included published and unpublished literature (and grey literature).
10/1/2015 – 2/1/2016	• Train consultant for citation and abstract eligibility screen and full-text screen • Obtain inter-rater reliability for citation and abstract eligibility • Eligibility screen research report citations and abstracts • Eligibility screen full-text reports eligible at the citation and abstract screening phase • Additional search for potentially relevant research reports (ancestry and descendancy searches)
2/1/16 – 4/1/2016	• Train consultant on study coding procedures • Obtain inter-rater reliability for study coding • Extraction of data from research reports (all double-coded)
4/1/2016 – 5/1/2016	• Data cleaning and statistical analysis
5/1/2016 – 7/1/2016	• Preparation of report
7/1/2016	• Submit Review to Campbell Collaboration
9/1/2016 – 10/1/2016	• Revise and resubmit Review based on peer and editor reviews
11/1/2016	• Publish Review in Campbell Library

POTENTIAL CONFLICTS OF INTEREST

There are no conflicts of interest regarding the evaluation of cyberbullying interventions. Espelage (second author) has evaluated other anti-bullying programs but none dealing specifically with cyberbullying. Fong (first author) is a managing editor at Campbell, but will not handle the editorial processing of this particular review.

PRELIMINARY TIMEFRAME

Note, if the protocol or review are not submitted within 6 months and 18 months of title registration, respectively, the review area is opened up for other authors.

• Date you plan to submit a draft protocol: July 2015

• Date you plan to submit a draft review: November 2016

AUTHOR DECLARATION

Authors' responsibilities

By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

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