



ELSEVIER

Contents lists available at ScienceDirect

Appetite

journal homepage: www.elsevier.com/locate/appet

Research report

Breakfast skipping is associated with cyberbullying and school bullying victimization. A school-based cross-sectional study



Hugues Sampasa-Kanyinga^{a,*}, Paul Roumeliotis^{a,b}, Claire V. Farrow^c, Yuanfeng F. Shi^a

^a Eastern Ontario Health Unit, Cornwall, Ontario, Canada

^b Department of Pediatrics, McGill University, Montreal, Quebec, Canada

^c Loughborough University Centre for Research into Eating Disorders, School of Sport, Exercise and Health Sciences, Loughborough University, Leicestershire, UK

ARTICLE INFO

Article history:

Received 24 October 2013

Received in revised form 26 January 2014

Accepted 9 April 2014

Available online 16 April 2014

Keywords:

Breakfast

Bullying

Victimization

Cyberbullying

Cyber-victimization

Adolescent

ABSTRACT

Breakfast skipping is a health concern that has well-known negative consequences physically and psychologically. It is therefore important to understand why children skip breakfast. The purpose of this study was to establish whether the experience of bullying and cyberbullying impacts upon breakfast skipping and to further evaluate whether the inability for youths to cope with bullying victimization affects their mental health (depression), and in turn predicts breakfast skipping. Data were obtained from the Eastern Ontario 2011 Youth Risk Behaviour Survey, a cross-sectional regional school-based survey of middle and high school students (11–20 years old) across the five counties of Eastern Ontario, Canada ($N = 3035$). Self-reported data about children's experiences of bullying victimization, breakfast eating habits, socio-economical status, depression, and other risk behaviours were analysed. Approximately half of the participants (50.4%) reported not eating breakfast on a regular basis: 26.3% and 24.1% reported often (usually eat breakfast three times or more per week) and frequent (usually eat breakfast twice a week or less) breakfast skipping behaviour, respectively. Victims of both cyberbullying and school bullying presented greater likelihood of often (adjusted relative risk ratio (RR) = 1.55; 95% confidence interval (CI) = 1.17–2.06) and frequent (RR = 1.97; 95% CI = 1.28–3.03) breakfast skipping. Mediation analysis further showed that depression fully mediated the relationship between school bullying victimization and frequent breakfast skipping. Moreover, depression partially mediated the associations between both cyberbullying and school bullying with frequent breakfast skipping. These findings highlight the potential interrelationships between cyberbullying, school bullying and depression in predicting unhealthy breakfast skipping behaviour in children.

© 2014 Elsevier Ltd. All rights reserved.

Introduction

Breakfast skipping has become increasingly widespread amongst children and adolescents (Siega-Riz, Popkin, & Carson, 1998; Storey et al., 2009; Vereecken et al., 2009; Woodruff, Hanning, Lambraki, Storey, & McCargar, 2008), and population-based research data are required to provide a clearer understanding of the possible underlying factors that contribute to and perpetuate breakfast skipping in children and adolescents. A body of research has shown that breakfast skipping in adolescents is associated with various health-risk behaviours, such as smoking, frequent alcohol consumption, marijuana use, infrequent exercise and behavioural disinhibition (Israelowitz & Trostler, 1996; Keski-Rahkonen, Kaprio, Rissanen, Virkkunen, & Rose, 2003). Studies also reported associations of breakfast skipping with socio-economic status (SES), family structure, and

the development of overweight and obesity (Levin, Kirby, & Currie, 2012; Niemeier, Raynor, Lloyd-Richardson, Rogers, & Wing, 2006; O'Dea & Caputi, 2001; Rampersaud, Pereira, Girard, Adams, & Metz, 2005; Timlin, Pereira, Story, & Neumark-Sztainer, 2008; Vereecken et al., 2009). Breakfast skipping has also been reported as a possible indicator of disordered eating (Rampersaud et al., 2005), both sub-clinically (Melve & Baerheim, 1994) and clinically (Fernandez-Aranda et al., 2007).

Body weight and body image concerns are not the only reasons students skip breakfast. While not being offered breakfast may be a reason for not eating breakfast in younger children, a body of research has reported a variety of other reasons amongst adolescents. In addition to dieting in order to lose weight, Shaw (1998) has reported in a follow-up telephone survey that common reasons given for skipping breakfast were lack of time and lack of appetite in the morning. This supports the need to investigate other determinants as they may offer new insights into how to prevent or reduce breakfast skipping. One such determinant is the experience of bullying. Children and adolescents spend a large amount of their time

* Corresponding author.

E-mail address: huguessampasa@gmail.com (H. Sampasa-Kanyinga).

with friends and peers and many children experience instances of bullying or victimization during their childhood years (Guerra, Williams, & Sadek, 2011). According to Coping Theory, adolescents engage in high risk behaviours to cope with increased negative effects, which may result from such victimization (Lazarus, 1993), one such behaviour may include breakfast skipping.

Bullying is usually defined as aggression that is intentionally carried out by one or more individuals and repeatedly targeted towards a person who cannot easily defend him or herself (Olweus, 1993). School bullying (bullying on school property) is a major public health concern. Despite the efforts of schools to prevent or stop bullying, bullying is still highly prevalent worldwide (Perren, Dooley, Shaw, & Cross, 2010; Schneider, O'Donnell, Stueve, & Coulter, 2012). Beyond the school property, a new form of bullying has rapidly emerged with the advent of technology. Cyberbullying is defined as the use of email, cell phones, text messages, and Internet sites to threaten, harass, embarrass, or socially exclude (Hinduja & Patchin, 2009). Like school bullying, cyberbullying has also been associated with mental health problems. Several negative consequences have been identified amongst victims of cyberbullying, including increased anxiety and emotional distress (Juvonen & Gross, 2008; Ybarra, Mitchell, Wolak, & Finkelhor, 2006), feelings of loneliness, insecurity and humiliation (Breguet, 2007). Victims of cyberbullying may also suffer from low self-esteem, frustration and sadness, and serious distress, including major depression, self-harm, and suicide (Hay & Meldrum, 2010; Patchin & Hinduja, 2010; Schneider et al., 2012).

Previous research has mostly focused on the association between bullying and eating disorders, or unhealthy eating psychopathology (Farrow & Fox, 2011; Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000; Libbey, Story, Neumark-Sztainer, & Boutelle, 2008). To the best of our knowledge, there have been no previous reports of a specific association between breakfast skipping and bullying victimization. The objective of this study was to begin to explore the prevalence and associations between cyberbullying and school bullying victimization with breakfast skipping. By doing so we seek to gain a better understanding of the links that may exist between these public health issues. Using a large and diverse sample of Canadian middle and high school students, we sought to establish whether the experience of bullying may impact upon breakfast skipping and to further evaluate whether bullying victimization might impact mental health (depression), and in turn lead to breakfast skipping. Indeed, bullying victimization is deemed to increase children's depressive symptoms (Hawker & Boulton, 2000; Perren et al., 2010; Schneider et al., 2012), and depression is often related to eating behaviour (Frost, Goolkasian, Ely, & Blanchard, 1982), particularly breakfast skipping (Lien, 2007). We therefore sought to establish whether elevated levels of depression might be the means through which bullying may impact upon breakfast intake. Understanding how bullying impacts upon nutritional behaviour will allow for more targeted interventions to help protect children who are subjected to bullying. It was hypothesized that cyberbullying and school bullying victimization would predict a higher likelihood of breakfast skipping and that depression would mediate these relationships.

Methods

This study incorporates data from the Eastern Ontario (Canada) 2011 Youth Risk Behaviour Survey (YRBS), a regional school-based survey conducted by the Eastern Ontario Health Unit (EOHU) between November 2010 and March 2011. The EOHU has been monitoring youth health-risk behaviour in the population of this region for several years with the YRBS. The survey was modelled after the Centers for Disease Control's (CDC) YRBS which monitors health-risk behaviours that contribute to death and disability amongst youths and adults (Centers for Disease Control and Prevention, 2009).

The study protocol was reviewed for ethical compliance by the Queen's University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board.

Participants

Youths in grades 7–12 (11- to 20-year-olds) were the target population of the survey. All school boards were invited to join in the survey, and all schools within the boards that accepted the invitation were eligible for participation. Written consent forms from school principals and parents were verified prior to administering survey questionnaires.

For each school that participated, a list of classes taking place during a certain time of the day was generated. The time period selected varied by school and staff schedule. A random sample of two classes from each grade was selected in each school, unless only one grade was available for the administration of the survey to all students who provided consent. In this way, all students in grades 7–12 had the same opportunity to be selected for participation and were not at risk of being selected to participate twice. The only exception was that students who had spare periods during the selected time slots were not eligible for participation. In the event of teacher refusal to participate ($N = 1$), a second class for that grade was selected from the same time period. Students in selected classes were eligible to participate voluntarily and anonymously. A School Liaison person (Public Health Nurse or Health Educator/Promoter) remained in the classroom while students completed the survey to address any questionnaire-related issues. If students did not understand a question, the Liaison person would re-read the question without leading them in any particular direction. Otherwise, students were asked to complete the questionnaires in silence so that they could not confer with each other. Students who did not participate were given another activity to do. The school response rate was 62%, the student response rate was 68%, and the overall response rate was 42% ($62\% \times 68\%$). The total sample consisted of 3509 students aged 11–20, with 54.9% being girls.

Measures

The frequency of eating breakfast was measured with the following question: "How many times a week do you usually eat breakfast?" (Never or almost never, one to two times per week, three to four times per week, five or more times per week, every day) (Berkey, Rockett, Gillman, Field, & Colditz, 2003; Lien, 2007). Experience of school bullying victimization was measured with the following question: "During the past 12 months, have you ever been bullied or threatened by someone while at school?" (Yes or no). Cyberbullying victimization was measured with the following question: "During the past 12 months, have you ever experienced cyberbullying, that is, being bullied by email, text messaging, instant messaging, social networking or another website?" (Yes or no).

Depression was assessed by the question: "During the past 12 months, did you ever feel so sad or hopeless almost every day for 2 weeks or more in a row that you stopped doing some usual activities?" (Yes or no). Body weight perception was measured with the item: "How would you describe your current weight?" (Very underweight, underweight, about the right weight, overweight, and very overweight). Tobacco and alcohol use were measured by the following questions: "Have you ever smoked a whole cigarette?" (Yes or no) and "Have you ever had at least one drink of alcohol, other than a few sips?" (Yes or no). Socio-economic status (SES) was measured by assessing the educational levels of fathers and mothers using the following items: "How far did your father go in school? (graduated university, attended university, graduated college, attended college, graduated high school, attended high school, did not attend high school, I don't know, no father) and "How far did your

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات