FISEVIER

#### Contents lists available at ScienceDirect

#### SSM - Population Health

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



## Associations between household educational attainment and adolescent positive mental health in Canada



Kimberly C. Thomson<sup>a,\*</sup>, Martin Guhn<sup>a</sup>, Chris G. Richardson<sup>b,c</sup>, Jean A. Shoveller<sup>b</sup>

- <sup>a</sup> Human Early Learning Partnership, School of Population and Public Health, University of British Columbia, Suite 440 2206 East Mall, Vancouver, BC, Canada V6T 173
- <sup>b</sup> School of Population and Public Health, University of British Columbia, 2206 East Mall, Vancouver, BC, Canada V6T 1Z3
- <sup>c</sup> Centre for Health Evaluation and Outcome Sciences, 588 1081 Burrard Street, Vancouver, BC, Canada, V6Z 1Y6

#### ARTICLE INFO

# Keywords: Positive mental health Household educational attainment Adolescents Logistic regression Survey methods Canada

#### ABSTRACT

Investigating the determinants of positive mental health, as opposed to focusing on mental illness, is a new research direction with important implications for population health promotion. Past research suggests that mental health develops in early childhood and that social factors including highest household educational attainment may play an important role. The current study examined the association between household educational attainment and adolescent self-reported positive mental health in a nationally representative Canadian sample using data from the 2011-12 Canadian Community Health Survey. The sample included 10,091 adolescents aged 12 to19 living at home with at least one parent. Household educational attainment was obtained from a Statistics Canada derived variable documenting the highest level of education in the household. Adolescent positive mental health was assessed using the Mental Health Continuum scale. Multivariable logistic regression analyses showed that after adjusting for household income, single parent status, and household size, adolescents had lower odds of experiencing positive mental health in households in which attempted but not completed post-secondary was the highest education level compared to completed post-secondary education (OR = 0.64, 95% CI = 0.44, 0.95). This association was strongest in adolescents aged 12 to 14 (OR = 0.43, 95% CI = 0.21, 0.84) and females (OR = 0.50, 95% CI = 0.29, 0.88). Contrary to expectations, we did not find an incremental increasing association between adolescent positive mental health and household educational attainment. Instead, results suggested that common underlying factors may have contributed both to uncompleted post-secondary education in the household and adolescents' diminished positive mental health.

#### 1. Introduction

Positive mental health is a key component of overall health that profoundly affects individuals' functioning in life and subjective wellbeing (Keyes, 2009a). Distinct from merely the absence of mental disorder, the World Health Organization characterizes mental health as the ability to realize one's full potential, cope effectively with stress, work productively, and contribute to community (World Health Organization, 2016). Yet despite this distinction, the promotion of positive mental health is not well understood, particularly during early life. Studies of mental health problems suggest that the foundations of mental health are established from a young age, as it is estimated that half of all lifetime mental health disorders emerge before age 14 and that 14–20% of children under age 17 are affected by a current mental health disorder (Kessler, Berglund, Demler, Jin, Merikangas & Walters, 2005). Within Canada, mental illness is estimated to affect 10–20% of

youth aged 12 to 19, with females being disproportionately affected by depressive episodes (Canadian Mental Health Association, 2016; Statistics Canada, 2013). In order to improve upon these outcomes, a recent review of children's mental health in Canada called for a national public health strategy that addresses underlying socio-economic determinants of mental health (e.g., household income, educational attainment, and available social support) in order to reduce the development of current and future mental health problems in children (Reiss, 2013; Waddell, McEwan, Shepherd, Offord, & Hua, 2005).

Low household income and educational attainment are associated with material deprivation and reduced opportunities for children that in turn predict the onset and severity of childhood mental health problems (Evans, 2004; McLaughlin et al., 2011; Reiss, 2013). However beyond material disadvantage, lower educational attainment within the home environment has been identified as a social disadvantage that can limit opportunities for children's own educational attainment, career

E-mail addresses: kimberly.thomson@ubc.ca (K.C. Thomson), martin.guhn@ubc.ca (M. Guhn), chris.richardson@ubc.ca (C.G. Richardson), jean.shoveller@ubc.ca (J.A. Shoveller).

<sup>\*</sup> Corresponding author.

prospects, and hopes for upward social mobility (Elffers, 2012; Reiss, 2013; Sheikh, Abelsen, & Olsen, 2016). Furthermore, low educational attainment of parents has been shown to be independently associated with reduced utilization of child mental health resources, and relatedly, increased severity and duration of child mental health problems (McLaughlin et al., 2011; Reiss, 2013). As such, identifying and understanding how early social inequalities affect the development of children's positive mental health is an important research question. And while past research has often examined education as a parent-level variable (Goldfeld, Kvalsvig, Incledon, O'Connor, & Mensah, 2014; Park, Fuhrer, & Quesnel-Vallée, 2013), other research suggests that educational attainment is often similar within families, with social and economic resources shared at a household level (Schwartz, 2013). Drawing from a national population-based data source, we sought to examine how household educational attainment was related to adolescent positive mental health, recognizing that in the majority of cases the highest education level would belong to a parent/caregiver or another adult in the household.

Past studies have identified linear associations between household educational attainment and negative mental health outcomes for young children. For example, two studies which measured parents' highest level of completed schooling found that household educational attainment and income were independently associated with young children's social, emotional, conduct, and hyperactivity problems (Davis, Sawyer, Lo, Priest, & Wake, 2010; Sonego, Llácer, Galán, & Simón, 2013). Similarly, research by Park et al. (2013) identified the educational attainment of mothers, in particular, to be a strong predictor of depression among adolescent offspring (aged 12 to 24) even after adjusting for household income, single parent status, maternal age, adverse life events, and parents' depression. Related research on psychological resources suggests that adolescents living within lower education households perceive higher stress and that this is at least partially explained by lower dispositional optimism (Finkelstein, Kubzansky, Capitman, & Goodman, 2007). Other research investigating the association of childhood socioeconomic status (parents' education and financial conditions) on adult mental health has found that a lack of instrumental support (i.e., someone able to help in times of need) explained most of the variation in offspring mental health outcomes, more than emotional support or offspring health behaviours (Sheikh et al., 2016).

In comparison, associations between household educational attainment and offspring *positive* mental health remain relatively underresearched (McLaughlin et al., 2011; Sonego et al., 2013). One recent Australian study found that children at school-entry were rated to have higher positive mental health if their mother had completed high school (Goldfeld et al., 2014). However, we know of no studies that have empirically assessed the association between household educational attainment and positive mental health outcomes amongst adolescent offspring. Furthermore, existing studies on child and adolescent mental health outcomes have generally relied on teacher and parent reports of mental health, rather than measuring experiences of mental health directly from adolescents themselves (e.g., Davis et al., 2010; Goldfeld et al., 2014; Sonego et al., 2013).

Hone et al. (Hone, Jarden, Schofield, & Duncan, 2014) contend that policy-makers are increasingly interested in assessments of health that include measures of positive mental health and well-being, with an emphasis on strengths-based approaches as opposed to an illness-focus. Positive mental health typically includes "hedonic" components, such as enjoying life, but also commonly measures components such as level of engagement in society and positive functioning, which benefit productivity and population health outcomes (Hone et al., 2014). In this way, well-being and ill-being are no longer regarded as opposite ends of the same spectrum; population level data on positive mental health are valued in their ability to provide distinct information from rates of mental illness. The addition of a positive mental health measure in the Canadian Community Health Survey (CCHS) in 2011 reflects this

shift in perspective and presents unique opportunities to investigate underlying determinants of positive mental health at a national level. The current study aimed to address an important knowledge gap by investigating the association between household educational attainment and adolescent self-reported positive mental health in a representative national sample.

#### 2. Methods

#### 2.1. Data source

This study was conducted using data collected in the 2011–2012 CCHS. The CCHS is an annual cross-sectional survey that collects data using a multi-stage cluster sampling procedure described in detail by Statistics Canada (Statistics Canada, 2014a). Each year, participants aged 12 and older are selected across Canada's ten provinces and three territories. Responses are weighted by participants' demographic and geographic information to obtain population-based estimates. The CCHS excludes persons living on First Nations reserves, full-time members of the Canadian Forces, persons living in institutions, and persons living in remote Northern areas. Interviews are conducted by telephone by highly trained interviewers employed by Statistics Canada; one member within each selected household is interviewed. In 2011–2012, the overall household response rate was 78.4%. The person-level response rate within participating households was 87.3% (Statistics Canada, 2014b).

#### 2.2. Study sample

A total of 13,753 adolescent respondents (aged 12 to 19 years) participated in the 2011–2012 survey. For the purposes of the current analysis, we restricted the sample to adolescents currently living at home with at least one parent (including a stepparent or adoptive parent). This resulted in excluding 1,735 adolescents (12%) who did not fit the inclusion criteria. An additional 1,915 participants (16%) were excluded for having missing or 'don't know' responses for any of the explanatory variables (highest level of education of a household member, household income, single parent status, and household size). The final analytical sample included 10,091 participants, representing 73% of adolescents who completed the CCHS.

#### 2.3. Study variables

#### 2.3.1. Primary outcome: adolescent positive mental health

Adolescents' positive mental health status was assessed using the Mental Health Continuum Short-Form (MHC-SF) component of the CCHS (Keyes, 2009b). The scale consisted of 14 items measuring emotional well-being (3 items) and positive functioning (11 items). Questions included, "In the past month, how often did you feel satisfied with your life?" and "...how often did you feel good at managing the responsibilities of your daily life?" Response options ranged from 1 (every day) to 6 (never). As has been done in previous research (Keyes & Simoes, 2012), dichotomous response categories were then created by collapsing three categories of mental health status defined by Keyes (2009b) and derived by Statistics Canada (Statistics Canada, 2014c). Participants were considered to be "flourishing" if they reported frequent positive experiences ("every day" or "almost every day") on at least one of the three measures of emotional well-being and at least six of the eleven measures of positive functioning. Scores in the lower two sub-categories (languishing and moderate positive mental health) were collapsed into a new category, "moderate to low mental health," to attain adequate statistical power and provide easier interpretation. The resulting dichotomous variable ("flourishing" and "moderate to low" positive mental health) was then used as the outcome variable in a logistic regression analysis.

## دريافت فورى ب متن كامل مقاله

### ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان 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