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Mental well-being trends and protective factors among adolescents in British Columbia from 2014-2022: A population-based repeated cross-sectional study — Eva Oberle

Introduction/background:

Youth mental well-being has declined in the past decade (Wiens et al., 2020), a trend further exacerbated by the COVID-19 pandemic. Much research relies on administrative data (e.g., mental health services access). Large-scale research incorporating youth voices and exploring modifiable protective factors is scarce. Our objectives were to examine trends in youth mental well-being over 8 years in BC, differences based on gender and SES, and to examine if supportive experiences in school protect well-being.

Methods:

We used self-report data from eight annual waves (2014-2022) from the Middle Years Development Instrument (MDI; Schonert-Reichl et al., 2013), implemented at a population-level with grade 7 students in schools in BC (N=69,391; 49% female). We examined positive (satisfaction with life; SWL) and negative (depressive symptoms; DS) well-being indicators, and protective factors (adult support at school, peer belonging, school connectedness). We used a repeated-cross-sectional design (Yee & Niemeier, 1996). Conditional models included collection year as a categorical time indicator. Gender and protective factors were covariates. Analyses were stratified by low/medium/high SES (Forer et al., 2022).

Results and analysis:

Analyses revealed significant declines in SWL and increases in DS for almost all eight neighbouring time points. Well-being was significantly lower for girls than boys and girls had a steeper decline. Well-being was lowest in the lowest SES tertile. Patterns of decline were consistent across tertiles. Protective factors predicted better well-being for all youth. When all protective factors were present, the gender gap was significantly reduced and the decline in well-being was attenuated but not eliminated.

Conclusions and implications for policy, practice or additional research:

The decline in well-being and the protective nature of supportive school experiences highlight the need for population-level mental health strategies (e.g., school-based interventions). Future research needs to examine differences in well-being among sub-populations.

What influences student mental health beyond individual factors: a scoping review — Justine Pineault**Introduction/background:**

The proportion of anxious or depressive symptoms among higher education students greatly varies between institutions (from 25% up to 62%, Abelson et al., 2022), meaning that factors which influence student mental health go beyond solely individual factors. When promoting mental health, it is important to adopt an ecological systems approach which comprises the environmental context and social determinants of health (e.g., Compton et Shim, 2015). However, little attention has yet been given to environmental factors influence' on student mental health compared to individual factors. In this scoping review, we asked: what environmental factors are associated with student mental health?

Methods:

Our scoping review methodology is based on the Arksey and O'Malley (2005) methodological framework, enhanced by Levac et al. (2010) and Pham et al. (2014). Scientific documentation through database searches were identified. We defined environmental factors as social, physical or natural environmental characteristics measured with objective and subjective indicators. Guided by Levac, Colquhoun & O'Brien (2010), we will also conduct nine interviews with key informants (student representatives, professionals and managers from three institutions) to validate preliminary scoping review findings.

Results and analysis:

We will first describe study characteristics. Then, environmental factors and outcomes will be presented according to the ecological systems approach (individual, interpersonal, institutional or social). We will pay particular attention to social inequities in health. We will highlight the most important environmental factors to consider and how they can be measured. We will also discuss how they can be integrated in mental health action plans.

Conclusions and implications for policy, practice or additional research:

The environmental factors identified in this scoping review can inform the development of guidelines for higher education institutions who wish to promote student mental health through systemic change (Calhoun, 2019). As an interdisciplinary field, public health is particularly well positioned to guide collaborative efforts in this area. Evidence gaps remaining for future research will also be discussed.

Associations between gender identity and mental health in early adolescents: A cross-sectional population-based study in British Columbia, Canada - Maram Alkawaja**Introduction/background:**

An atmosphere of inclusivity and acceptance is linked to better mental health outcomes for all children and youth. There is concern that students who identify outside the gender binary may experience detrimental mental health outcomes compared to cisgender youth with gender conforming identity. Research indicates that gender diverse youth report higher levels of depressive symptoms and anxiety, and lower levels of school belonging. However, research considering the experience of gender diverse youth in the school setting using large sample sizes remains limited.

Methods:

Data from 26,984 early adolescents from British Columbia, Canada, who completed the Middle Years Development Instrument survey in the 2022-23 academic year during grade 6, 7 and 8 was used. Students reported on their gender (boy, girl, or identification outside the binary), positive (e.g., life satisfaction) and negative (e.g., depressive symptoms) mental wellbeing, and connectedness with adults and peers at school. ANCOVA was used to examine differences in wellbeing outcomes between the three gender groups. Linear regression models explored protective factors (e.g., school connectedness)

as predictors of wellbeing outcomes for the gender diverse group. Models controlled for socioeconomic status and age.

Results and analysis:

3.7 % of early adolescents identified outside of the binary. There were significant group differences with well-being indicators being lowest for gender diverse, followed by girls, followed by boys with significant differences between all three groups. Results of the regression models showed that school belonging and connection to adults predicted higher wellbeing for the gender diverse group

Conclusions and implications for policy, practice or additional research:

Results of this study indicate that gender diverse youth are more likely to experience lower levels of wellbeing than cisgender youth. These findings add to the growing body of literature in this relatively new area of exploration and point to the need for further research to understand factors that can affect the mental health and wellbeing of gender non-conforming youth.

Examining sport participation by gender identity among Canadian youth: A cross-sectional analysis using COMPASS data — McKenna Szczepanowski**Introduction/background:**

Sports participation is known to be positively associated with physical activity (PA). Youth PA is decreasing and organized sports may be an avenue to increase adherence through adolescence and into adulthood; however, there is paucity in the research surrounding participation rates for a marginalized group, known as gender-minority youth (GMY). The objective of this research was to determine the prevalence of sport participation based on gender identity and identify potential protective and risk factors.

Methods:

Data from Year 10 (2020-2021) of the COMPASS study was used to assess prevalence of sport participation (intramural, varsity and community-based) and relevant covariates by gender identity in youth 12 to 18 years of age (n=62,761). Generalized estimating equations were used to build logistic regression models of the associations between gender and participation in organized sports. All models were controlled for demographic covariates and social support constructs.

Results and analysis:

GMY, including transgender, non-binary, and youth who described their gender differently, participated in significantly less sport across all three domains. The largest disparities were among non-binary youth, where 22.2% participated in intramurals, 12.0% participated in varsity sports, and 15.7% participated in community-based sports compared to their cisgender counterparts at 35.6%, 31.5%, and 35.4%, respectively. GMY had significantly lower perceived happy home life and openness to talk about their problems to their family; however, they had significantly higher beliefs their parents expect too much of them. After controlling for demographic characteristics and social support variables, all GMY were significantly less likely to participate in sports than cisgender youth.

Conclusions and implications for policy, practice or additional research:

This research is among the first in Canada to demonstrate the disparities in sport participation among GMY, which is alarming based on the physical, mental, and social health benefits of sport. Efforts to alleviate barriers to sport participation for GMY may be in the form of social support, education, awareness or policy.

What is child positive mental health? A scoping review to inform the development of a Canadian Child Positive Mental Health Surveillance Indicator Framework**Introduction/background:**

In 2016, the Public Health Agency of Canada (PHAC) developed a conceptual framework to inform the development of the Positive Mental Health Surveillance Indicator Framework (PMHSIF), which is used to monitor positive mental health (PMH) and its determinants in Canada. While adult and youth versions of the PMHSIF were released in 2016 and 2017 respectively, additional research is needed to identify relevant and age-appropriate concepts of PMH among children before developing a child PMHSIF.

Methods:

A scoping review of peer-reviewed and grey literature was conducted to examine how PMH is conceptualized and measured among children (< 12 years). The search strategy was developed with a health librarian. Online academic databases (Ovid MEDLINE, PsycINFO, Embase) were searched up until December 31, 2022. Grey literature sources such as Google, Google Scholar, and site-specific searches were conducted up until October 3, 2023. Data on study characteristics were extracted and summarized.

Results and analysis:

A total of 637 documents were identified through the search strategies. Of these, 100 documents from the grey literature and 45 peer-reviewed papers were included in the review. Many of the articles used theory as a basis and a subset included specific scales to measure child PMH. Some of the themes/concepts that emerged for child PMH included happiness (overall; with school, family, and friendships), life satisfaction, play, optimism, prosocial behaviours, curiosity, affection, positivity, self-esteem, and emotion regulation.

Conclusions and implications for policy, practice or additional research:

This scoping review identified relevant concepts and measures of PMH in children. Next steps include comparing these results against the existing PMHSIF conceptual framework, identifying indicators and measures to include in a child PMHSIF, seeking input from experts and partners, and conducting validation studies on identified measures. This work will address a gap in the Canadian literature, encourage routine reporting of child PMH across Canada, and better inform public health policy.