

A BARRIER TO LEARNING: MENTAL HEALTH DISORDERS AMONG CANADIAN YOUTH

Canadian Council on Learning (CCL)

Significant numbers of Canadian adolescents become depressed every year. Even more suffer from various mental disorders, mainly anxiety. Young people's mental health represents a significant educational issue because of its impact on learning and because of the role that schools can play in promoting and maintaining the mental health of young people.

Depression – A worldwide burden

Depression is most common among middle-aged people, but individuals of any age, gender or background are susceptible¹. According to the World Health Organization² depression ranked as the world's leading single cause of disability in 2000, and currently ranks fourth of the 10 leading causes of the global burden of disease, calculated in Disability Adjusted Life Years (the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability). By 2030, depression is projected to become the leading contributor of disease burden in high-income countries³.

Depression in Canadian youth

Mental health has been identified as a major health issue for students. It is estimated that, at any given time, approximately 15% of children and youth in Canada experience mental disorders that inhibit healthy development⁴. Fewer than 20% of those children and youth receive treatment.

The final report of the Standing Senate Committee on Social Affairs, Science and Technology noted that the majority of mental health disorders affecting adults originate in childhood and adolescence⁵. Each year, over one million people in Canada experience a bout of major depression, putting it on par in prevalence with other chronic, widespread health conditions such as heart disease and diabetes⁶.

While Canada lacks up-to-date information on the rates of depression in children, in the 1980s the Ontario Child Health

Study showed that rates of major depression in children aged 6 to 16 ranged from 2.7% to 7.8%. Data from the 2006 Canadian Community Health Survey indicate that the prevalence rate for depression among teenagers aged 15–18 is 7.6% (4.3% for males and 11.1% for females)⁷.

Causes and symptoms

The exact causes of depression vary widely among individuals. However, it is clear that most mental disorders, including depression, are influenced by a combination of biological, psychological and social factors⁸. Depressive episodes in both young people and adults are triggered by a combination of environmental and genetic factors⁹. According to McMaster University's Offord Centre for Child Studies, signs of depression in children and youth arise from a depressive disorder with a genetic or familial component. Other major risk factors for depression in adolescence also include negative life events and stress, problematic peer relationships, low self-esteem and negative body image¹⁰.

Depressive disorders both in children and adults are diagnosed using the same criteria. To be diagnosed with major depression, individuals need to exhibit five or more of the following nine symptoms¹¹:

Symptom	Details
Depressed mood	Depressed mood most of the day, nearly every day
Anhedonia	Markedly diminished interest or pleasure in almost all activities
Weight change	Substantial unintentional weight loss or gain
Sleep disturbance	Insomnia or hypersomnia nearly every day
Psychomotor problems	Psychomotor agitation or retardation nearly every day
Lack of energy	Fatigue or loss of energy nearly every day
Excessive guilt	Feelings of worthlessness or excessive guilt nearly every day
Poor concentration	Diminished ability to think or concentrate nearly every day
Suicidal ideation	Recurrent thoughts of death or suicide

¹ World Health Organization, The World Health Report, 2001, *Mental Health: New Understanding, New Hope*, 2001. Accessed March 16, 2009. http://www.who.int/whr/2001/en/whro1_en.pdf

² World Health Organization. Accessed March 16, 2009. http://www.who.int/mental_health/management/depression/definition/en/

³ World Health Organization, The World Health Report, 2001, *Mental Health: New Understanding, New Hope*, 2001. Accessed March 16, 2009. http://www.who.int/whr/2001/en/whro1_en.pdf

⁴ Office of the Provincial Health Officer, Provincial Health Officer's Annual Report 2006, *An Ounce of Prevention Revisited: A review of health promotion and selected outcomes for children and youth in BC schools*, (2006). Accessed March 16, 2009. <http://www.health.gov.bc.ca/pho/redirect.html>

⁵ M.J.L. Kirby & W.J. Keon, *Out of the shadows at last: transforming mental health, mental illness and addiction services in Canada*, Standing Senate Committee on Social Affairs, Science and Technology, (2006). Accessed March 16, 2009. <http://www.parl.gc.ca/39/1/parlbus/commbus/senate/Com-e/SOCI-E/rep-e/rep02may06-e.htm>

⁶ S. Patten & H. Juby, "A Profile of Clinical Depression in Canada," *Research Data Network: Research Synthesis Series: #1*, (2008).

⁷ A. Cheung, "Canadian Community Health Survey: Major depressive disorder and suicidality in adolescents," *Health Care Policy*, 2(2), (2006).

⁸ World Health Organization, The World Health Report, 2001, *Mental Health: New Understanding, New Hope*, (2001). Accessed March 16, 2009. http://www.who.int/whr/2001/en/whro1_en.pdf

⁹ N. Ryan, "Treatment of depression in adolescents and youth," *The Lancet*, 366, pp. 933-940.

¹⁰ J.W. Andrews & A. MacPhee, "Risk factors for depression in early adolescence," *Adolescence*, 41(163), (2006). Accessed March 16, 2009. http://findarticles.com/p/articles/mi_m2248/is_163_41/ai_n27077582/

¹¹ American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders* (4th Ed.), Washington, D.C., (1994).

In addition to these specific criteria, social withdrawal, excessive worrying, conduct problems and distress over negative body image (particularly in girls) are symptoms characteristic of depressed youth¹². These symptoms can make learning and achievement in school more difficult.

The effect of depression on academic achievement

A growing body of research shows that depressive symptoms in youth are related to learning difficulties, dropping out of school, substance abuse, and a greater likelihood of suicide and re-occurrence of depressive symptoms in adulthood. Once considered simply a part of teenage growing pains, depression is now recognized by the mental health community, parents, teachers, and young people as a threat to the well-being of students¹³.

A study of the typology of students at risk of dropping out in Quebec shows that many of these students display behavioural problems commonly associated with depression. This level of mental distress in at-risk students tends to be overlooked by school staff because it is not accompanied by disruptive behaviour¹⁴.

Depressed youth are at a significantly greater risk of academic failure than their non-depressed peers. A recent systematic review of evidence by the Canadian Council on Learning revealed that higher levels of depression in students are associated with lower scores on measures of academic achievement. Findings from a meta-analysis of 27 published studies showed that, on average, depressed students score approximately 6/10 of a standard deviation below students without depression. In other words, if a group of non-depressed students scores at the 50th percentile on an exam, their depressed counterparts will score at the 27th percentile¹⁵.

Co-occurrence rates between learning disability and depression are very high^{16,17}. Depression and anxiety are often a response

to the learning disability, especially among girls^{18,19}. In other instances, however, psychiatric disorders (particularly depression) can interfere with children's ability to concentrate on cognitive tasks and, consequently, can interfere with their ability to learn^{20,21}. As well, depression and memory impairment are significantly associated²². In other words, students with depression may have trouble learning school material or recalling material for exams.

Research also shows that being in a depressed state interferes with text comprehension ability²³. Some studies have also established links between depressive symptoms and impaired performance on laboratory tasks. This has led some researchers to conclude that, generally speaking, depressive symptoms may interfere with youngsters' ability to perform well in school²⁴.

Lessons in learning

Poor mental health in Canadian school children poses a significant risk to their academic development and puts them at greater risk of dropping out of school, substance abuse and suicide. Schools are well positioned to be at the vanguard of public health strategies designed to prevent and detect mental health disorders among young people.

Two types of school-based mental health strategies show promise of success: mental health awareness and education programs and mental health screening programs.

One example of a school-based mental health awareness program was recently tested in junior and senior high schools in Alberta. Students participated in workshops designed to increase their knowledge and understanding of mental health issues and to dispel negative stereotypes associated with severe mental illness. Follow-up surveys among participating students indicated that the program was successful on both fronts and is a promising approach to mental health promotion in schools²⁵.

¹² C. Hammen & K. Rudolph, "Childhood depression," in E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology*, (New York: Guilford Press, 1996), pp. 153-195.

¹³ T. Bushnik, *Youth depressive symptoms and changes in relationships with parents and peers*, (Ottawa: Statistics Canada, 2005), catalogue no. 89-599-MIE. Accessed March 19, 2009. <http://dsp-psd.tpsgc.gc.ca/Collection/Statcan/89-599-MIE/89-599-MIE2005002.pdf>

¹⁴ L. Fortin, D. Marcotte, P. Potvin, E. Royer & J. Joly, "Typology of students at risk of dropping out of school: description by personal, family and school factors," *European Journal of Psychology of Education*, 21(4), (2006), pp. 363-383.

¹⁵ E. Chan, Z. Zadeh, N. Jhang & M. Mak, "Depression and academic achievement: A meta-analysis," a poster presented at the Canadian Academy of Child and Adolescent Psychiatry, Vancouver, BC, (September, 2008).

¹⁶ R.L. Cleaver & R.D. Whitman, "Right hemisphere, white-matter learning disabilities associated with depression in adolescent and young adult psychiatric population," *Journal of Nervous and Mental Disease*, 186, (1998), pp. 561-565.

¹⁷ S. Sundheim & K. Voeller, "Psychiatric implications of language disorders and learning disabilities: Risks and management," *Journal of Child Neurology*, 19(10), (2004), pp. 814-826.

¹⁸ J. W. Maag & J. T. Behrens, "Depression and cognitive self-statements of learning disabled and seriously emotionally disturbed adolescents," *Journal of Special Education*, 23, (1989), pp. 17-27.

¹⁹ E. G. Willcutt & B. F. Pennington, "Psychiatric comorbidity in children and adolescents with reading disability," *Journal of Child Psychology and Psychiatry*, 41, (2000), pp.1039-1048.

²⁰ P. Colbert, B. Newman, P. Ney & J. Young, "Learning disabilities as a symptom of depression in children," *Journal of Learning Disabilities*, 15, (1982), pp. 333-336.

²¹ D. Goldstein & W.D. Dundon, "Affect and cognition in learning disabilities," in S.J. Ceci (Ed.), *Handbook of Cognitive, Social, and Neuropsychological Aspects of Learning Disabilities*, Vol. 2, Hilldale, NJ: Lawrence Erlbaum Associates, (1986), pp 233-250.

²² D. Burt, G. Niderhe & M.J. Zembar, "Depression and memory impairment: A Meta-analysis of the association, its pattern, and specificity," *Psychological Bulletin*, 117(2), (1995), pp. 285-305.

²³ S.A. Becker, C.H. Ellis, J.L. Varner & A.B. Moore, "Emotion, motivation, and text comprehension: the detection of contradictions in passages," *Journal of Experimental Psychology: General*, 126(2), (1997), pp. 131-146.

²⁴ C. Hammen & K. Rudolph, "Childhood depression," in E. J. Mash and R. A. Barkley (Eds.), *Child Psychopathology*, (New York: The Guilford Press, 1996), pp. 153-195.

In the United States, a mental health screening program called TeenScreen was developed by researchers at Columbia University and has been implemented at over 460 sites in 42 states²⁶. Participation is voluntary and students complete a questionnaire that screens for depression, anxiety and substance abuse. Participants whose results indicate they are at risk for a mental health concern are given on-site counselling and their parents are notified and offered assistance in accessing mental health services. Evaluations of the program indicate that it is effective in identifying young people suffering from mental illness that would otherwise go undetected²⁷.

The most promising school-based approach involves a combination of both education and screening. The Signs of Suicide (SOS) prevention program incorporates an educational component designed to raise awareness of suicide and related mental health issues and a screening component that screens for depression and other suicide risk factors. Program evaluations indicate that SOS reduces the reported incidence of suicide attempts and fosters more adaptive attitudes toward depression and suicide²⁸.

Along with families and community agencies, schools play an important role in promoting the psychological well-being of children and reducing the stigma associated with mental health disorders. Schools can help reduce the numbers of Canadian students affected by challenges to their mental health through well-designed mental health education and screening programs.

About the author

The Canadian Council on Learning (CCL) is an independent, non-profit corporation that promotes and supports research to improve all aspects of learning—across the country and across all walks of life.

Source

Canadian Council on Learning, *A barrier to learning: Mental health disorders among Canadian youth*, April 15, 2009, www.ccl-cca.ca/CCL/Reports/LessonsInLearning/LinL200900415MentalhealthBarrier.htm

²⁵ W. Pinfold, H. Stuart, G. Thornicroft & J. Arboleda-Florez, "Working with young people: The impact of mental health awareness programmes in schools in the UK and Canada," *World Psychiatry*, 4(51), (2005), pp. 48-50.

²⁶ P.A. Guild & V.A. Freeman, *Promising Practices to Prevent Adolescent Suicide: What can we Learn from Florida?* Cecil B. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, (2006). Accessed March 13, 2009. <http://www.shepscenter.unc.edu/publications/suicidepreventionFLA.pdf>

²⁷ D. Shaffer, M. Scott, H. Wilcox, C. Maslow, C. Lucas, R. Garfinkel & S. Greenwald, "The Columbia Suicide Screen: validity and reliability of a screen for youth suicide and depression," *The Journal of the American Academy of Child and Adolescent Psychiatry*, 43, (2004), pp. 71-79.

²⁸ R.H. Aseltine & R. DeMartino, "An outcome evaluation of the SOS suicide prevention program," *American Journal of Public Health*, 94(3), (2004), pp. 446-451.