Connectedness:
The Strategy to Combat Anxiety and Depression in Youth

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Abstract

Youth mental health is an emergent concern nationally and locally. Particular mental disorders, such as anxiety and depression are becoming increasingly prevalent and problematic among British Columbian youth. These disorders carry the potential for adverse life outcomes and economic resource depletion. Yet, locally we lack a broad preventative will to combat youth mental health resulting in mental disorder incidence, need for treatment services, and morbidity and mortality. The capital regions Child & Youth Health Network aims to improve health outcomes for children and youth, with a priority focus on tackling the local issue of child and youth mental health. The goal of this report is to support the Network's revised initial focus of addressing local youth anxiety and depression, while demonstrating a need for connectedness approaches and their connectedness index. Methodology for this report placed significance on understanding local context, local resources, and local expert opinions to define the youth mental health issue. Additionally, this information was supported by scholarly research. Key findings suggest several family and school connectedness strategies are evidence-based methods to prevent youth anxiety and depression. Future research will assist in truly understanding the impact of the connectedness phenomenon, and should gather comprehensive data from all stakeholders, study implications of community connectedness approaches on youth anxiety and depression, and focus on examining the experience and difference between youth anxiety and depression.

Introduction

Youth mental health is a growing concern globally, nationally, and locally. It is estimated that 15% of Canadian youth are affected by a mental disorder at any given time, placing mental illness as the top health issue facing Canadian youth (Kirby & Keon, 2004-11, and The Children's Healthy Policy Centre, 2014). The World Health Organization (2014) defines mental health as a state of well-being, where every individual can realize his or her own potential, allowing one to cope with normal life stresses and productively contribute to his or her community. Mental disorders and mental illness are used interchangeably, and are described as alterations in thinking, mood and/or behavior that can cause significant distress or impaired functioning when uncontrolled (Public Health Agency of Canada, 2015). Youth are a known vulnerable population who are often unable to control many of the mental health 'mechanisms of risk', inevitably making youth (aged 15-24 years) the mostly likely age group to experience a mental illness (Pearson, Janz and Ali, 2013).

Scholars support investment in comprehensive childhood mental health prevention initiatives, stating that "children who have mental health problems are more likely to become adolescents and then adults with mental health problems and illnesses" (Smetanin, Stiff, Briante, Adair, Ahmad, & Khan, 2011). Statistics from the Public Health Agency of Canada (2006) further support this investment, finding that at least 70% of young adults struggling with a mental illness report their symptoms beginning in childhood. Prevention of mental illness is crucial, as only an estimated 500,000 Canadian youth (aged 0-24 years) are receiving mental health services, leaving 1.5 Million youth struggling and without care (Canadian Mental Health Association (CMHA), 2014). The

Mental Health Commissions of Canada states that a reduction of the most common preventable disorders (anxiety, depression, substance use, and conduct disorders) among youth by 10% could save Canada an estimated $4 billion annually (n.d).

Locally, South Island youth (Grades 7-12) most frequently report mental ailments of: depression (10%), anxiety (10%), ADHD (7%), and substance disorders (2%) (McCreary Centre Society, 2013). The local intersectoral group, the Child and Youth Health Network (C&YHN), have a strong drive to improve mental health and well-being of children and youth in the capital region. The purpose of this report is to support the Network's focus on the local issue of youth anxiety and depression, while demonstrating the need for connectedness approaches to prevent and combat these disorders.

Methodology

The C&YHN is a community-led group, thus placing strong importance on the local context of issues affecting child and youth mental health. This was reflected upon while composing this *Case for Support*, and moved the direction of evidence collection to a more holistic approach. Although many literature reviews were completed in support of this culminating project and report, particular importance was placed on using local sources and data as well as local experts to define the youth mental health issue. These local data sources included Island Health incidence and prevalence of mental health disorders, local acute care cases of youth mental ailments, and South Island McCreary reports. Community experts then confirmed the presented area of focus (youth anxiety and depression) drawing on lived experience from working directly with the youth population in community centers.

Background

The Issue

Mental illnesses can be truly debilitating. Currently, 1 in 5 Canadians suffer from a mental illness. The Mental Health Commissions of Canada projects a rise in mental illness rates, with 1 in 2 experiencing a mental ailment by 2041, as those aged 20-29 years are experiencing staggering rates of mental disorders (~28%) (n.d.). Currently, youth aged 15-19 in British Columbia have the largest rate of hospital presentation for mental health services, with a 73% increase in access of services from 2009-2013 (Select Standing Committee of Children and Youth, 2016). Nationally, in 2011 an estimated 537, 048 (12.1%) of youth aged 9-19 years were experiencing mood and anxiety disorders, making these the two most prevalent conditions (Mental Health Commissions of Canada, n.d.). Locally, it is estimated that the largest prevalence disorder on the Island is "Any [Problematic] Anxiety Disorder" affecting 3.8% of youth aged 4-17 years (Children's Healthy Policy Centre, 2014, p. 7). Anxiety and depression share many 'mechanisms of risk', such as: family history of mental illness (particularly parent or guardian), poverty, medications, changes in a person's body (puberty), newly immigrated populations (refugees), youth experiencing major life changes or events (new school, new city), traumatic events (abuse), LGBTQ, Indigenous populations, and youth struggling with substance abuse (Garber & Weersing, 2010). Mood disorders such as depression have typical onset during teenage years, and anxiety disorders are acknowledged within the literature as one of the most common childhood ailments (Mood Disorder Society of Canada, 2009).

Depressive characteristics are defined in the literature as feelings of

overwhelming hopelessness, sadness, loneliness, helplessness, or despair (CMHA, 2016). Anxiety disorder characteristics are feelings of unexpected and unhelpful anxiety, nervousness, or worry. Literature indicates that disorders become 'problematic' when they interfere with everyday activities (Children's Healthy Policy Centre, 2014). Highest rates of depressive symptoms are said to occur most frequently in those under 20 years of age, while youth aged 20-29 experience the highest rates of anxiety symptoms (Mood Disorder Society of Canada, 2009). There is a strong overlap in these disorders, as approximately 25-50% of youth with a depressive disorder will also experience a comorbid anxiety disorder (Garber et al, 2010, and The Children's Healthy Policy Centre, 2014).

Historically, females are three times more likely to report a mental or emotional condition, making females more likely to report depression and anxiety (McCreary Centre Society, 2013-2016). Yet, findings from Bellamy & Hardy (2014) state higher levels of depression and anxiety at younger ages predicted later life depression in both males and females, with emphasis on anxiety being a larger liability for later life depression in boys compared to girls. The above findings identify youth as a high-risk group for anxiety and depression. The astonishing rates and potential for disease overlap place importance on simultaneously tackling anxiety and depression among all youth.

Youth tend to experience many pressures and changes while growing up. This places them at greater risk for experiencing 'problematic' disorders, and increases the potential for compounding adverse life events, such as risky behavior (sexual, self-harming, and suicidal), substance abuse, reduced academia, impaired professional achievement, poverty, and social-isolation (CMHA 2016, Langille, Asbridge, Cragg, &

Rasic 2015, McCreary Centre Society 2013-2015, and Mood Disorder Society of Canada 2009). A recent study of Grade 12 students preparing for final exams found that over 10% of students reported levels of extreme stress and depression, and 20% reported damaging anxiety (normative adults rates are < 5% for each). Additionally, 20% of these youth reported thoughts of self-harming, which is known to place one at a heightened risk for suicide (McGraw, Moore, Fuller, & Bates 2008). McCreary Centre Society (2016) states that suicide is the second leading cause of death amongst British Columbian and Canadian youth, with 8% of local males and 17% of females having considered suicide in the past year. Again, females attempted rates are three times higher for suicide, but males are more likely to die by suicide. Statistics Canada (2015) states that mental illness plagues 90% of people who commit suicide, with the most common illness among those attempting suicide being depression (60%).

Depression is also associated with other risks. Local South Island students reporting symptoms of depression – such as feelings of 'hopelessness', being 'discouraged, or 'sad' – were more likely to miss school (55% vs. 38%) or skip class (43% vs. 15%) when compared to their peers not exhibiting indicators (McCreary Centre Society, 2016). McCreary Centre Society (2016) found marijuana use is higher among youth experiencing anxiety (49% vs. 23%) and depression (52% vs. 23%) when compared to their peers without mental ailments, suggesting self-medicating behaviors. The authors also found youth who used marijuana were less likely to graduate from high school and move onto post-secondary (79% who used marijuana vs. 85% who did not).

Although youth are classified as a vulnerable population, scholars recognize there are vulnerable populations within the youth population who are experiencing increased

incidence of anxiety and depression. For example, rates of depression are 58% higher among those living below the poverty line, and currently in British Columbia, 1 in 9 individuals live in poverty (Khowaja, 2014). Youth of depressed parents or guardians experience a higher risk of developing childhood anxiety and depression (Garber & Weersing, 2010). In 2014, 3.8% of Greater Victoria's population identified as Indigenous (Island Health, 2014), and First Nations populations experience approximately two times more episodes of depression when compared to the national average (Khan 2008). Another vulnerable population is the homeless and/or street-involved youth. British Columbia has a large homeless population, and rates of anxiety and depression among street-involved youth (aged 12-19 years) continue to climb. This was seen in McCreary's most recent 2014 survey, where 47% of street-involved youth reported depression (vs. 23% in 2006) and 27% reported an anxiety or panic disorder (vs. 10% in 2006). A staggering 45% of homeless or street-involved youth reported behaviors of cutting and/or injuring themselves, with 42% having 'seriously' contemplated suicide (McCreary Centre Society, 2015). Among the youth living in insecure housing, most reported the feeling of 'loneliness or depression' as the leading reason for recently self-harming (McCreary Centre Society, 2015).

The Child and Youth Health Network

The Child and Youth Health Network (C&YHN) is an intersectoral collaboration of community organizations, municipal and provincial representatives, the Capital Regional District (CRD), and Island Health. The Network aims to improve health outcomes for children and youth in the capital region, with a focus on 'upstream,' all-inclusive and targeted initiatives. The C&YHN vision is *"communities supporting*

healthy kids growing into healthy adults raising healthy kids" (Child & Youth Health Network (C&YHN), 2017). The C&YHN believe child and youth mental health is a priority in the capital region, making this a deeply embedded foundation Network focus. Currently, the Network is developing an Index of Connectedness (i.e., a tool to measure connectedness). This tool will support further development of local data and begin to fill the gap in Canadian mental health information (The Children's Health Policy Centre, 2014). The Index of Connectedness will (i) raise knowledge within the wider community of the importance of connectedness for mental health of children and youth; (ii) build community partnerships to create grassroots strategies to increase opportunities for children and youth connectedness; and (iii) measure and track connectedness levels for children and youth in four domain areas – family, school, community and peers (C&YHN, 2017).

In 2017, the C&YHN began renewing their vision and mission, with a focus on concretely defining their theory of change to begin tackling the growing issue of child and youth mental health. As a first step, the group hopes to narrow their focus in order to generate targeted population initiatives. As seen above, locally 'problematic' anxiety and depression are common ailments among youth, and therefore an appropriate area of Network focus. Below, I will speak to the strategy of connectedness, identifying its role in addressing youth anxiety and depression.

The Strategy

Connectedness

McCreary Centre Society (2015) suggests that connections to family, school, friends, and community are particularly important for youth resilience. Connectedness

has evolved from the theoretical underpinnings of attachment theory, social capital, and resilience frameworks (Whitlock, Wyman, & Barreira, 2012). Connectedness is difficult to define, as it is a subjective experience focusing on one's feelings or perceptions about their social environments (peers, family, community, and school), and overall sense of attachment to others (McCreary Centre Society, 2015). However, there is growing literature linking connectedness to a person's mental health and well-being.

For the purpose of this paper, and C&YHN documents, connectedness is defined as:

> A psychological state of belonging in which individuals perceive that they are valued, cared for, trusted, and respected by individuals and communities with whom they are in regular contact (e.g., peers, family, romantic relationships, groups) or in which they are socially or geographically embedded. (Whitlock et al, 2012, p. 5).

Scholarly research supports connectedness as a protective factor, as it allows individuals to cope with and overcome negative experiences, life events, and circumstances (McCreary Centre Society, 2015). This supports the theory that connectedness could be an ideal primary preventative initiative.

Current research has strongly linked high levels of connectedness to reduced youth experiences of anxiety and depression. Although most current studies focus on symptoms of depression and anxiety as opposed to a true psychiatric diagnosis, most scholars support the theory that displaying symptoms is associated on a continuum with psychiatric diagnosis. This is a recent phenomenon primarily seen in those experiencing depression symptoms and the increased rates they experienced of developing clinical

depression in the future (Boutelle. Eisenberg, Gregory, & Neumark-Sztainer, 2009). Research by Glover, Burns, Butler, and Patton (1998) found that youth reporting low connectedness (to peers, family, and teachers) were two to three times more likely to describe symptoms of depression when compared to their connected peers. A study by McGraw, et al (2008) also found that a lower perceived connectedness to school, family, and peers was associated with higher levels of depression, stress, anxiety and overall negative affects among Grade 12 students. Also, rates of connectedness (family, peer, school) were lower for all youth expressing self-harm ideation.

Family-Connectedness

Throughout the literature, family connectedness is identified as a leading protective factor against emotional distress and a wide range of risk behaviours. Family connectedness shapes children's future functioning by influencing their social, intellectual, and emotional development. With positive connectedness, an individual can cope and deal with stressful life events (Boutelle et al, 2009). Family connectedness measures study youth's perceptions around the family environment: does their family pay attention to them, do they have fun together, and do they feel understood? (McCreary Centre Society, 2013-2016).

Boutelle et al (2009) found that parent-child connectedness in middle and high school students was associated with current and long-term (5 years later) reduction in depressive symptoms for both boys and girls. The authors concluded that these results support the influence that a parent-child relationship can have on future emotional functioning. Scholars are also beginning to identify variables associated with family connectedness and depressive or anxiety symptoms. For example, deeper family rituals in

youth are associated with higher levels of social connectedness and lower levels of depressive symptoms:

> Families' investing in rituals can provide adolescents with a set of skills that are essential for building relationships outside of the family realm. When adolescents successfully establish a sense of connection with their peers and the overall social world, they are also less prone to developing depression and anxiety symptoms. (Malaquias, Crespo, & Franisco, 2015, p. 3015).

McCreary Centre Society (2015) found that youth who ate meals with their parents or guardians 'most days' or 'always' reported higher levels of positive mental health (86% vs. 68%), and voiced feelings of being understood by their family, and having gone to their family for help, within the past year. A 2006 study by Ackard, Neumark-Sztainer, Story, & Perry echoed the value of parent-child connectedness, with findings of increased prevalence of depression (63.5% girls, 33.35% boys) among youth who reported 'their mother cared very little' or 'not at all about them'. Their study also found a link between youth valuing parental opinions for serious decisions and youth perceiving their parents truly cared about them. Youth who placed greater value in peer's opinions and conveyed 'low parental caring' were found to experience greater prevalence of health risk behaviors, such as unhealthy weight control, substance use, suicide attempts, body dissatisfaction, low self-esteem, and depression (Ackard et al, 2006).

Skrove, Romundstad & Indredavik (2013) found that youth aged 13-18 years who reported 'good/very good' relationships with their mother had reduced rates of depression and anxiety symptoms, while rates were three times higher among girls and close to four times higher for boys reporting 'not so good/bad relationships' with their mothers.

Protective relationships such as those experienced in the family connectedness context have been found to make the experience of social anxiety easier on adolescents. A study on youth in grades 4-12 found that their parental connectedness directly predicted a lower probability of growing social anxiety over time (Van Zalk & Van Zalk, 2015).

With family-connectedness yielding promising potential as a protective factor, it is important to study the implications for prevention and intervention efforts. Ott, Rosenberger, McBride, & Woodcox (2011) argue that current mental health initiatives fail to address the adolescent lived experience, and fail to position youth health within their environments where families and communities influence one's health. The findings above support preventative initiatives that nurture and allow parents and youth to develop supportive 'connected' relationships. Strategies should be focused on enhancing the parent-child relationship, and Ackard et al (2006) suggest creating public awareness and parental uptake by sharing study results. If parents become aware of the value youth place in parental connectedness, and the potential for decreased mental ailments, they would feel encouraged and empowered to pursue family connectedness. Another strategy is educating and promoting families to practice positive interventions, such as the intervention and benefit of family ritual activities (Malaquias et al, 2015). Educational campaigns could have a population level impact. For families seeking guidance for anxiety and depression in youth, clinicians have a primary role to support and educate on the importance of connected environments (Skrove et al, 2013).

School Connectedness

Young people spend a lot of their time in a school setting. High school students, for example, spend 40% of their waking time in school during a regular school week,

highlighting the significant role the school environment can play in youth health (Ernestus, Prelow, Ramrattan, & Wilson, 2014). School connectedness is measured by students' perceptions on school safety, their belonging, and fairness and support from teachers (McCreary Centre Society, 2013). A prospective study conducted by Shochet, Dadds, Ham, & Montague (2006) found that school connectedness is a potentially underemphasized factor influencing youth depression. The authors found a strong correlation between school connectedness and mental health symptoms of anxiety and depression. Low school connectedness predicted 1-year later depressive symptoms in boys and girls aged 12-14 years, and anxiety symptoms for girls.

McGraw et al (2008) found school connectedness in Grade 12 youth was an independent predictor of depression when controlling for family and peer connectedness. Within the study, approximately 30% of youth 'felt they did not belong at the school', and 21% reported they 'wished they were at a different school'. The authors noted that future research must consider the significant overlap between peer connectedness and school connectedness, as youth relate their experiences with school friends to their overall feelings of school. A rural Canadian study by Langille, Rasic, Kisely, Glowerdew, & Cobbett (2012) found increased levels of school connectedness was protective against risk of depression in both boys and girls with moderate to high risk of depression. Further Canadian research of high school youth (Grades 10-12) found higher school connectedness was a protective factor for suicidality (ideation and attempt), for all adolescents including those at risk of depression (Langille, Asbridge, Cragg, & Rasic 2015).

Many scholars have suggested that research surrounding school-based initiatives often lacks data from high-risk groups (i.e., street involved youth). However a recent study exploring social connectedness among homeless youth found 71% of youth aged 14-18 attended school (Dang, 2014). The study also found that youth with higher social connectedness and self-esteem are resilient, reporting lower levels of psychological concerns. Scholars have linked low self-esteem to anxiety, depression, and suicide (Dang, 2014).

Given the amount of time youth spend in school, and the wide population attending school (i.e., including a large amount of homeless youth), the strategy of improving school connectedness for all students is an evidence-supported approach to tackle mental health in youth. It would appear that connectedness in school environments is essential, especially if youth are not connected at home, detaching from parents, or are relying more on 'connections' in the school environment (McCreary Centre Society, 2013-2016).

Shochet et al (2010) states that schools should have routine assessments surrounding connectedness, as this evaluation would allow consultants to educate staff on strategies that promote school connectedness. Suggested strategies are: involving students with choice and classroom decisions, rewarding student effort over achievement, preventing classroom discrimination and bullying, assisting in student development of support networks, teaching students how to cope and ask for help, and the importance of building strong teacher-student relationships with all (Shochet et al, 2010). McGraw et al (2008) suggests that no single intervention will be successful, however teachers set the school environment, and a caring climate could be another protective pathway against

mental ailments. The authors conclude by suggesting implementation of interdisciplinary school care teams that would focus on connecting with youth, arguing that the more protective resources are available, the lower the probability of youth slipping through the cracks.

Langille et al (2015) suggests focusing on four school-associated factors to improve school connectedness: administrative structure (smaller school and/or smaller classes), school operational aspects (wide awareness of institutional expectations), school built environment (maintained and welcoming facility), and relational support (positive school relationships across the school community). School connectedness will require a complex holistic approach as other forms of connectedness (i.e., peer) overlap with youth school experiences (McGraw et al, 2008). Therefore, all stakeholders (students, parents and teachers) should be consulted and involved in school connectedness strategies.

Limitations

A primary limitation of the above references is that all studies are based on self-reported evidence, creating room for sample bias. Also, there are only two Canadian studies included, so results and strategies must be investigated for local context applicability. Ackard et al (2006) discuss the difficulty in identifying causation within this phenomenon, since there are many variables to control for. It is difficult to truly conclude that mental ailments are shaped by low connectedness, when mental disorders may impact one's ability to have connected relationships. Most scholars stress the importance of future research directions to explain the relationship between school connectedness across different racial groups and cultures. These findings may be relevant for targeted school and/or community interventions. Future research should take a

comprehensive approach using multiple sources of data from teachers, parents, students, and clinicians, as this information would strengthen findings (Shochet et al, 2010). Also, the comorbid nature of anxiety and depression has resulted in frequent researching of the ailments together, however above findings identified connectedness (family and school) may impact experiences, symptoms, and/or onset differently, suggesting the need for separation of the two syndromes for future examination. Future research should also examine how the broader determinants of health impact connectedness and strategies to improve connectedness. If families are struggling with poverty, they may not have the luxury to eat regular meals with their children or create solid family rituals, and therefore a campaign on family rituals may not produce the intended change.

Finally, it is fundamental to gather further research and data on the relationship between community connectedness and youth mental disorders of anxiety and depression. This report did not generate any findings of scholarly research between community connectedness and youth anxiety and depression, except that youth feeling 'quite a bit or very much a part of their community' were more likely to declare better mental health (McCreary Centre Society, 2015). This could be due to the new nature of community connectedness phenomenon, difficulty in measuring and surveying community connectedness due to confounding variables and extensive overlap within this population (i.e., school could be community for youth), or an overall lack of evidence base and piloted strategies. The broad nature of community connectedness may make it too large to link to youth anxiety and depression.

Conclusion

There is strong value in family and school connectedness as an approach to address anxiety and depression among youth. To successfully reduce rates of youth mental illness, we must begin to fill the gap in Canadian mental health information. The Child and Youth Health Network's Index of Connectedness could begin to fill the data gap locally, allowing for a true local context of child and youth connectedness and locally informed, targeted strategies. As seen above, there are many connectedness strategies that can be employed immediately, such as increasing frequency of family meals or creating a safe classroom environment were students feel as sense of support and belonging. In my opinion, immediate action can be taken to increase connectedness, as this is not a strategy that requires great explanation or evaluation. The human need to feel connections is an experience everyone can relate to and therefore everyone can understand and employ. This makes it a strategy with good potential to improve mental health outcomes among Greater Victoria's youth population.

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