Strategies for Supporting and Building Student Resilience in Canadian Secondary and Post-Secondary Educational Institutions

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Abstract

Communication, problem-solving skills, emotional intelligence, and mental health and well-being are key characteristics of a resilient student. These skills are also needed to navigate increasingly complex life and work environments in the 21st century. In addition, resilient students are dedicated to learning, are focused on academic success, and are better equipped to adapt to change and the evolving workplace. An interdisciplinary team from both secondary and post-secondary educational institutions situated at Ontario Tech University, Oshawa, Canada have collaborated to develop and implement strategies and curricula to support and enhance student resilience. The Mental Health Commission of Canada recommends "increase collaboration between (these) institutions - sharing best practices and processes for effective strategy development, and implementation" to better support student reliance and the successful transition from secondary to post-secondary education. We present the overall rationale and approach taken to support capacity building for student resilience in post-secondary institutions. As well as highlighting specific curricula and virtual strategies implemented (e.g., Graphic Novel, Mandalas, Resiliency Handbook) to engage students in building and maintaining resilience.

Keywords: Resiliency; Well-Being; Secondary and Post-Secondary Students; Academic Success.

1. Introduction

The number of Canadian post-secondary students reporting stress is increasing. A 2016 survey demonstrated that 18% reported stress, up from 12% in 2013 [1]. Similar trends have been reported in other countries [2, 3]. First year students are more at risk for experiencing symptoms of stress and anxiety due to the difficulty of transitioning from secondary to post-secondary schools [4, 5]. Many are not prepared for managing academic requirements (e.g., meeting assignment deadlines, attending class, etc.) and/or taking responsibility for many of the daily activities of living (e.g., Cooking And Eating, Money Management, Staying Healthy).

The Faculty of Health Sciences at Ontario Tech University in Ontario, Canada offers a variety of undergraduate health professional programs (i.e., Kinesiology, Nursing, Medical Laboratory Technology, and Public Health). The majority of students that are accepted into these programs are students who are transitioning directly from secondary schools. Students in the Faculty come from a variety of backgrounds. While differences do exist, similarities exist as well. Many of our students travel long distances on public transit (i.e., more than three hours a day) to attend classes, care part-time for a younger sibling and/or older relative, and/or work part-time or full time to sustain themselves or to contribute to the family household income. Additionally, other students are experiencing living away from home for the first time. Balancing the conflicting responsibilities of school and non-school activities can be challenging. A large

percentage of the students attending the University are first generation students. We define first generation students as students who are first in their families to attend University. The University also has a rich culturally diverse student body. Many of our students are either new Canadian citizens or are the first generation in their family to be born in Canada.

To support our students, the Faculty in collaboration with students, other faculties and departments within the university, and the community (e.g., secondary schools) partnered to develop strategies to enhance student resilience. Why? Student resilience is a key contributor to academic success [6-8].

2. Resilience

A number of different definitions of resilience exist in the peer review literature [9]. It is a complex concept (reference panel discussion). For example, individuals, groups, institutions and/or communities can all be viewed as being resilient. The ability to response to life's challenges can also vary due to the context in which challenges arise (e.g., workplace, home, school, etc.) [10]. Resilience overtime may also change due to past experiences and development over the life course (e.g., child, young adult, etc.) [11, 12] Resilience theory has evolved over time and recommends that rather than focusing solely on strategies to address anxiety and stress once exhibited, a more comprehensive approach includes the development and nurturing of skills to build and strengthen resiliency. In light of the above discussion on resilience, our work has been guided by the following definition of resilience: "the skills, abilities, knowledge, and insight that accumulate over time as people struggle to surmount adversity and meet challenges. It is an ongoing and developing fund of energy and skill that can be used in current struggles [13].

Further, we distinguish between mental illness and mental health (which is part of well-being). Everyone has mental health (just as we all have physical health). Mental health is simply our emotions, our thoughts, our ability to cope with problems and overcome difficulties, our social connections, and our understanding of the world around us. Some days our mental health is very good. Other days (or parts of days) our mental health is poor because of some event, or general stress, or our relationships. These are normal throughout our lives and are not a mental illness or disorder.

Mental illness is an illness (or combination of illnesses) that affects how people think, feel, interact with others, and behave over a long period. People may experience these as temporary, occasional, or all the time. For example, grieving the loss of a parent, sibling or dear friend can take many months, and for some, a few years. Their grief does not prevent them, for the most part, with interacting with others, continuing their studies or work, or their general enjoyment of life. However, grief after the initial shock that does prevent people from getting out of bed, doing their work or studies, interacting with family and friends, or leading to long-term substance abuse or violence may well require professional help. This form of grief would be diagnosed as a mental illness. The work we have done is to support mental health by nurturing resilience.

Ontario Tech University's Department of Student Life offers a variety of services that include resources to address mental illness. However, 59% of students who access Student Life [14] come with anxiety issues including: low or moderate stress, homesickness, peer pressure, high or unrealistic academic expectations, relationship issues, a developmental crisis, coping and validation issues. We recognized that students need help in understanding that from time to time we all experience some degree of anxiety and stress in response to certain events (e.g., keeping appointments, meeting deadlines, etc.) in our lives. In fact, experiencing low levels of stress and anxiety can be seen as beneficial. For example, stress and anxiety can be a motivating factor when writing an examination. Once students recognized this, it becomes easier for them to know what type of techniques and strategies would best serve them. Our overall purpose was to enhance the students' learning and lived experiences at the University in part by nurturing resilience. We focus on first year University students transitioning from secondary to post-secondary education. In the following section of this paper we share the strategies we have developed and implemented to support students.

3. Strategies to Support Resiliency

The results of a systematic review of the peer review literature demonstrated that little evidence exists to inform the development and implementation of strategies to support resilience [15]. A review of the grey literature (i.e., books, articles, meeting notes, social media and websites) resulted in the identification of a number of strategies undertaken by other institutions and groups to support resilience across a number of different populations. Both reviews were conducted between 2016 and 2017. During this same timeframe we interviewed representatives from across the University's Faculties and Departments (e.g., academic advising, student life, Baagwating Indigenous student centre, etc.) and from the community to gain different perspectives. We engaged students at both the graduate and undergraduate level in story-telling of their lived experiences and in the development and implementation of the resilience strategies. The information collected resulted in the initial identification of four strategies to support resilience: graphic novels, Mandala drawings, a resilience handbook and a workshop.

3.1. Graphic Novel

There has been a proliferation of graphic novels since becoming popular in the 1990s [16, 17]. The graphic novel is similar to a comic book. It is a culturally specific form of storytelling that provides an alternative way to present information on a variety of topics (e.g., post-traumatic stress, cancer, eating disorders, spousal grief, etc.) [18]. The format of the graphic novel provides the opportunity for students to engage in a topic within a visual and text-based format that is action-oriented. We designed, produced and implemented the graphic novel, *Are You OK?* [19].

Content for the graphic novel was based on interviews with Ontario Tech University Academic Advisors responsible for providing student support. Thematic analysis of the interview data resulted in the identification of a set of common themes. This information was then used to develop the content for the graphic novel. The 40-page graphic novel tells the story of four students who meet during September orientation at the University. The story reveals how first year students can learn ways to reduce their anxiety during their first semester at post-secondary school through engagement with peer mentors (e.g., fourth year students), making new acquittances, and access existing university resources (e.g., academic advising). The graphic novel was distributed to first year students during the Fall 2018 and 2019 orientation for first year students. The feedback from the students was positive. Students viewed the graphic novel as a unique tool to communicate experiences and learn about resources available at the university.
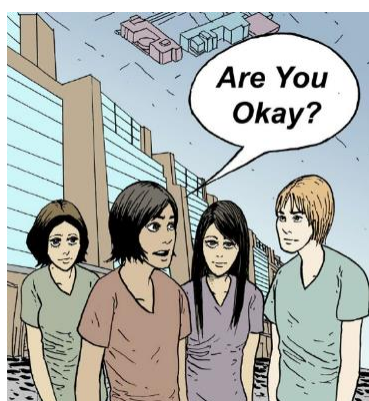

Figure 1. Front Cover of Are You Ok?

3.2. Mandala Drawings

We developed an activity based on the use of Mandalas to facilitate self-awareness and well-being. Mandalas are a form of art therapy. Creating a mandala is a creative process which helps students to visualize and make sense of complex experiences and emotions, and engage in meaningful self-reflection [20, 21]. The activity was called *Drawing with the Dean.*

Figure 2. Drawing with the Dean

This activity was also implemented during fall orientation for first year students. Students were prepared with pens and paper and were asked to create a diagram in reference to a circle. A circular form is inherently meditative and helps centre people and promotes a sense of wholeness. Next, we asked students to reflect on the activities they undertook to prepare for first year university. Based on their reflections, we asked that students graphically illustrate whatever came to mind on the paper either inside and/or outside the circle. After the drawing activity was completed we asked students to share their drawing with other students in attendance.

The activity was well received by the students and served as an ice breaker activity. It initiated communication between the students, resulted in the making of new acquaintances, and the realization by the students that they were not the only one to experience uncertainty transitioning to university life. Figure 3 illustrates one example of a student mandala.
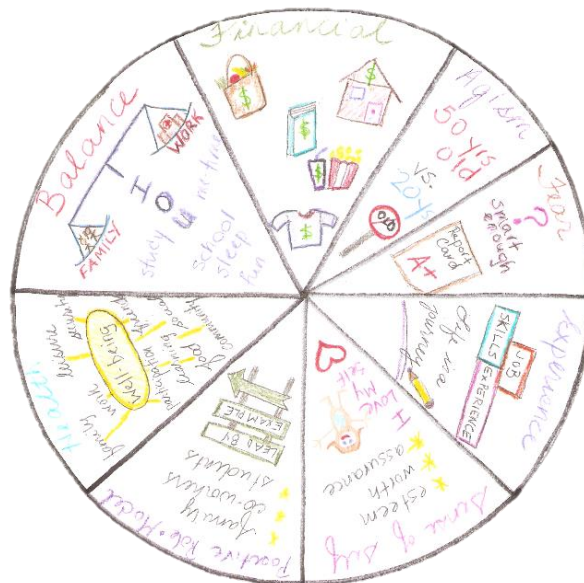

Figure 3. Example of a student mandala drawing

3.3. Resilience Handbook

The information we gathered from the peer review and grey literature, and from interviews with key stakeholders from across the University resulted in the publication of the handbook, *Resilience 101: recover faster, feel better and push forward* [22]. The handbook provides simple strategies that students can use to nurture their resilience (e.g., exercise, eating healthy, building relationships, etc.). A list of resources available at the university and in the surrounding community was also be found in the handbook. The content of the handbook includes:

- How to self-assess one's anxiety level and identify what help you might need.

- Understand what is resilience and how it applies to helping you be successful.

- Understand the Circle of Five and how it relates to student anxiety and success.

- Learn how to apply the Circle of Five and its 30 strategies to help meet the day-to-day and longer-term resiliency needs of students

The circle of five illustrated in Figure 4 is circle of five key concepts that remain us about the interconnection between the 30 different strategies identified in the book.
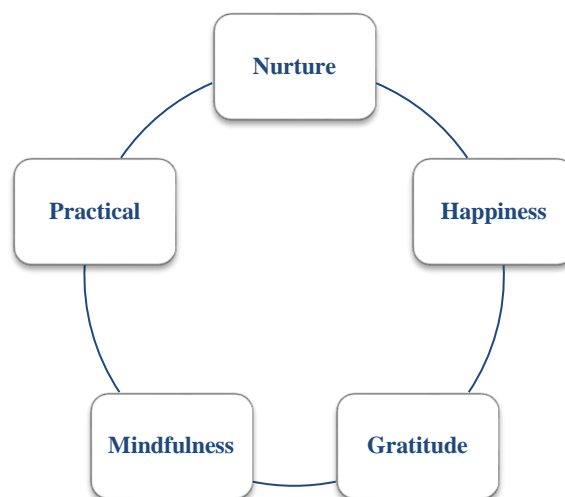

Figure 4. Circle of five concepts

The Table 1 provides an overview of each of the concepts.

Table 1. Description of the circle of five concepts

Concept	Description
Nurture	"We need to take care of ourselves; nurture our physical and mental health." (84)
Happiness	"Finding ways to be happier, you will change your life story. You will change how you matter to others. Happiness doesn't preclude difficult times — it just helps you get through them." (141)
Gratitude	"Every day write, pray, meditate or say the things for which you are grateful." (104)
Mindfulness	"Form of mediation that …the requires the person to be fully in the moment and return to being aware of your body sensations, behaviours, emotions and thought, you return to a place of more confidence and comfort."(114)
Practical	The 30 strategies suggested within the circle of five are simple and straight forward – "practical." Easy to integrate into everyday life. To be useful the strategies are to be practiced on a routine basis.

A paper copy of the handbook was published. However, an electronic copy of the handbook was made available through the on the FHSc' Academic Advising website. We are able to update the electronic version as information on resources at the university and community evolves. The content of the book was used to develop a student workshop and workshops for post-secondary educators. Section 3.4. provides details on the workshop, the fourth strategy shared in this paper.

3.4. Resiliency Workshop for Students

The purpose of the student workshop, From Surviving to Thriving at Ontario Tech University was to:

- Help students assess their own anxiety level and learn what university services might be available to them to help manage their anxiety.

- Provide practical strategies over to reduce a student's anxiety, increase a student's confidence, improve a student's sleep, and enhance a student's ability to study as they prepare for exams.

We established five learning objectives:

- How to self-assess one's anxiety level and identify what help you might need.

- Understand what is resilience and how it applies to panic attacks, depression, and suicide prevention.

- Understand the Circle of Five and how it relates to student anxiety and success.

- Learn how to apply the Circle of Five and its 30 strategies to help meet the day-to-day and longer-term resiliency needs of students.

The three-hour workshop was held on a Saturday and was attended by students from each of the FHSc' health professional programs. The session started with a story-telling activity. The lived experiences of seemingly two individuals were shared with the workshop participants. Individual A was very happy with their achievements in life having established a career and harmonious family relationships. Individual B had a series of disappointments, not becoming a commercial pilot and difficulty establishing relationships. While it would appear that Individual A and B where two different people, in reality it was the same individual over their life course. The message to the workshop participants was that we all experience challenges in our life. The goal is not to avoid all negative experiences — that's not possible. The goal is to get through them quicker and more effectively. Building resilience can help meet this goal.

The workshop was divided into three parts:

1. Self-assessment and understanding of resiliency, panic attacks, depression, suicide prevention and the need to schedule.

2. Going through the Circle of Five concepts and related strategies: i) Nurturing Relationships, ii) Being Happier More Often, iii) Gratitude, iv) Mindfulness, and v) Practical ways to achieve the necessary balance in one's life.

3. Incorporating exercises with a final self-assessment of one's anxiety level and which strategies the participants find personally most helpful.

The activities integrated into the workshop included the use of story-telling, music, exercise, group activities and activities that fostered communication amongst the participants. The feedback on the workshop was excellent. Participants found the information useful, practical and dealt with real life situations. The strategies presented were seen as helpful for everyday stress and anxiety. Constructive feedback was given on the logistics of the workshop in relation to the room, seating arrangement, the length of the workshop (participants recommended lengthening the workshop). It was suggested that workshops be made available throughout the academic year so participants could "refresh."

4. Conclusion (What Are the Next Steps?)

There is still much work to be done. We are building on and expanding the four strategies identified above to reach a wider audience and to make all materials accessible on the website created to house materials (e.g., graphic novel, handbook, additional resources, etc.)

We will build on the success of the graphic novel to develop the Resilient Hero series. A contest will be initialed to challenge individual students and/or teams to develop a story based on their lived experiences. Story-telling is a powerful too. We can adjust our paradigms by re-creating narratives we tell ourselves. We can get stuck in re-playing the same stories, which may not be helpful or productive. By creating a healthier storyline, we foster our sense of control and how we interpret events. A study conducted by Pennebaker and Susman (1998) [23] indicated that individuals who engaged in therapeutic writing experienced more well-being and happiness (i.e. resilience) months later.

Not only will our students have an opportunity to tell their story through the graphic novel format, we will also support the creation of student video clips. Student can then share their experiences with other students on how to deal with anxiety and stress, and cope with the demands of being a university student. We will encourage students to share their successes. We will post the videos on our website and share at student events.

We aim to integrate the content of the handbook into the curriculum throughout the four-year program. This will be achieved by inserting the materials into existing courses. This way we can provide information and materials to support resilience throughout each of the four-year program rather than once in first year.

As noted previously, a website has been developed to make the materials more accessible to the students. In addition, we are members of the Frayme global network for "gathering knowledge, connecting people and supporting practice and policy change to transform youth mental health and substance use care systems."[24] The purpose of this network is to ensure young people have access to relative, useful, cutting-edge information on mental and substance abuse. We have shared our materials with this network.

In conclusion, we strive to offer strategies that support resilience through the development and nurturing of a set of skills (e.g. taking care of physical health and well-being; optimistic thinking; keeping things in perspective; focusing on what one can control; reaching out for help). Resilience is not only related to academic success but also to success in life.

5. Funding

6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

7. Ethical Approval

The manuscript does not contain experiments on animals and humans; hence ethical permission not required.

8. References

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