

## *Student Transitions and Mental Health: Literature Review and Synthesis*

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### **Abstract**

Waning mental health and resilience in the post-secondary student population is a growing concern across North American institutions, these concerns have only been compounded further by the added stressors associated with the Covid 19 pandemic. Transitioning into post-secondary brings with it a variety of interpersonal and intrapersonal challenges that often reciprocally influence each other. Successful adaptation to such challenges is equally influenced by demographic (e.g., impacts of gender, sexuality, ethnicity, and socioeconomic status) and institutional factors (e.g., the provision and efficacy of health-related services and programming on campus). A thorough literature review and synthesis was conducted examining post-secondary student mental health. Attention was given to post-secondary mental health, help seeking, demographic, and institutional characteristics. The scope of this literature review focused on the North American context. Future directions for research and practice are drawn from the findings. Institutions need to focus on initiatives intended to improve campus climate and service utilization amongst their students. Health care providers, administrators, and educators are challenged to provide evidence-based, health-related services that meet the unique needs of their student population.

Keywords: Post-Secondary Institutions, College Students, Mental Health, Resilience, Help-Seeking

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## **Introduction**

Mental health of post-secondary students is a growing concern (Eells, 2017; Marcotte et al., 2015; Walburg, 2014). There is speculation across multiple facets of the education system that students are failing to adjust to post-secondary on academic, social, and psychological levels (Eells, 2017; Hall, 2016; Marcotte et al., 2015; Walburg, 2014). Researchers emphasize a recent increase in anxiety, depression, eating disorders, substance abuse, and other mental health issues in college students, and the rising demand on counselling supports, which are often under-funded, under-staffed, etc. (e.g., Lattie, Ketchen Lipson, & Eisenberg, 2019). The Covid 19 pandemic has had progressive negative impacts on student mental health (e.g., attention and externalizing problems), which has exacerbated existing concerns (e.g., Copeland et al., 2021). Elharake, Akbar, Malik, Gilliam, & Omer (2022) conducted a review of studies examining the impact of the Covid 19 pandemic on mental health and found students are feeling even more anxious, depressed, fatigued, and depressed than prior to the pandemic.

A variety of interpersonal and intrapersonal challenges accompany the post-secondary experience (Eells, 2017; Walburg, 2014). Post-secondary students are challenged to adjust to new academic standards, regulate newfound personal and financial freedom, manage new responsibilities, form, and maintain new interpersonal relationships, deal with the loss of pre-existing social support networks, and navigate new and often complex environments (Hall, 2016; Marcotte et al., 2015; Walburg, 2014). These challenges are often compounded by a variety of factors such as personal safety, violence, financial stress, health resource awareness, stigma, and physical health (e.g., Hall, 2016; Marcotte et al., 2015; Walburg, 2014; Elharake et al., 2022). Successful adaptation to higher education is influenced by factors at both the individual and institutional levels (Chen, 2012). Post-secondary institutions are challenged to optimize students' academic success without compromising mental and physical health, as well as to provide evidence-based resources that are culturally, racially, and ideologically competent (Eells, 2017).

## **The Current Review**

The purpose of the current literature review was to highlight important trends in the research concerning post-secondary student transitions and mental health. Attention was given to prevalence of mental health disorders, individual characteristics, institutional factors, student help-seeking behaviors, screening tools, and campus mental health initiatives. Evidenced-based suggestions can assist counselling staff, administration, support staff, student associations, and faculty in better understanding and supporting post-secondary student mental health.

## **Methods**

An extensive literature search was conducted in 2019, with more recent literature added afterward. The following databases were accessed: PsychINFO; SocINDEX; Academic Search Complete (EBSCO); PsycARTICLES; EMBASE; InCites Journal Citation Reports; International Encyclopedia of the Social & Behavioral Sciences; Scopus (Elsevier); Web of science; Jstor. The search terms used to conduct this search included: college, university or post-secondary students AND mental health, resilience, transitions, help-seeking, programs.

## **Inclusion Criteria**

This review included peer reviewed academic articles that were published no earlier than 2005 with most articles included within this analysis being published more recently than 2010. The focus of much of the literature found was conducted within the North American context, although some international studies and statistics have also been included.

## **Student Mental Health and Transition to Post-Secondary**

Mental health is one of the most comprehensively studied indicators of student adjustment in higher education (Marcotte et al., 2015). Research consistently finds that depression is a significant indicator of student dropout (Auerbach et al., 2016; Marcotte et al., 2015). The 2013 National College Health Assessment survey revealed, for example, that 31% of students sampled ( $N = 131,000$ ) reported feeling “so depressed that it was difficult to function”, an increase from 28.4% since the 2011 NCHA survey (American College Health Association, 2013, p.14). Various studies have reported an increase in post-secondary student depression and anxiety, and some suggest an increased incidence of depression in comparison to the general population (e.g., Daddona, 2011; Ibrahim, Kelly, Adams, & Glazebrook, 2013; Marcotte et al., 2015; Lattie, et al., 2019). The Covid 19 pandemic has had negative impacts on student mental health, which has only exacerbated existing concerns (e.g., Copeland et al., 2021).

A large-scale study by the World Health Organization (WHO) in 2016 investigated the prevalence of mental health disorders in post-secondary students across 21 different countries. When averaged, the overall proportion of students meeting the criteria for a DSM-IV disorder was 20.3% (one-fifth) (Auerbach et al., 2016). Of the many disorders identified, anxiety was found to be the most prevalent (11.7%), followed by mood disorders (6.0%), and substance disorders (4.5%; Auerbach et al., 2016). Results indicated that the majority students (83.1%) reported pre-matriculation onsets of their disorders, meaning that their symptoms or disorders began prior to entry into post-secondary (Auerbach et al., 2016). Pre-matriculation onsets were found to be a more reliable predictor of student dropout than were post-matriculation onsets.

## **Individual Characteristics**

Although college student mental health is a rising public health concern, there is research pertaining to protective factors against mental health disorders in this population. Marcotte and colleagues (2015) assessed factors associated with depressive symptoms and student resilience. Of the students surveyed ( $N = 389$ ), approximately 13.4% were classified as depressed and 59.6% were classified as non-depressed, as determined by the Beck Depression Inventory (Marcotte et al., 2015). In the non-depressed group, 42% were considered exceptionally resilient despite having some factors that were characteristic of the depressed sample; four main factors were associated with the enhanced resilience of these students: (1) the presence of personal goals; (2) absence of dysfunctional thoughts; (3) emotional adaptation to post-secondary; and (4) presence of a professional goal (Marcotte et al., 2015). Risk factors have been identified for poorer mental health outcomes during the Covid 19 pandemic including being of lower socioeconomic status, living in rural areas, and having a family member who works in healthcare (Elharake et al., 2022).

Hall (2016) found maladjusted students were those who lacked familial support, were academically underprepared, and failed to adjust to the institution on a social level. Other factors that have been found to influence student dropout are: (1) familial obligations; (2) a lack of academic persistence; (3) a lack of financial aid; (4) low commitment to the institution; (5) absence of professional goals; (6) the presence of a disability; and (7) poverty (Hall, 2016).

Chen's (2012) revealed risk factors for first year dropout including: (1) low SES; (2) low first year GPA; (3) poor academic and social on-campus integration; (4) insufficient financial aid; and (5) lack of an educational plan. Notably, Chen (2012) found that low SES racial minority students were found to have particularly high rates of dropout, however, when these students were awarded financial aid, their dropout rates were lower than racial majority students.

### **Institutional Characteristics**

Structural characteristics of institutions such as control, selectivity, and size have found to be associated with student dropout. Chen also (2012) found that institutions that devote more resources to availability of student services and cocurricular activities have significantly lower dropout rates than those who devote less. Similar studies have found that student engagement in curricular and cocurricular activities on campus is associated with higher GPA and a positive academic experience (Webber, Krylow, & Zhang, 2013). Course work with an emphasis on building cognitive skills, establishing positive relationships with faculty and peers, effective time management, and application of course material is shown to increase students' ratings of academic satisfaction (Webber et al., 2013). Students consistently rate positive experiences with faculty members as one of the most significant contributors to enhancing their overall academic experience (Umbach & Wawrzynski, 2005; Kalkbrenner, Jolley, & Hays, 2019). Students who engage in academic and social learning activities both on and off campus rate their academic experience as more rewarding and report a higher cumulative GPA in comparison to those who do not participate in co-curricular and extracurricular activities (Webber et al., 2013).

It is important to note that although institutional expenditure on improving quality and availability of student services is significantly associated with retention (Chen, 2012), the extent to which students access such services plays a fundamental role in their ability to mitigate rising mental health concerns (e.g., Liu, Pinder-Amaker, Hahm, & Chen, 2022).

### **Student Help Seeking**

The American College Health Association (2009) reported only 24% of students who experience depression in the United States receive treatment. A longitudinal study in Ireland found that college students with low-to-average well-being scores were less inclined to seek formal mental health services than students with higher well-being scores (Goodwin et al., 2016). The proportion of students who accessed services provided on campus was only 3.77%, despite such services being free of charge (Goodwin et al., 2016). Goodwin and colleagues (2016) reported that barriers to utilization of services such as a lack of familiarity with services, mistrust of healthcare providers, lack of communication, lack of perceived urgency, skepticism, and stigma, have all been recognized as barriers to both service delivery and access on campus (Eisenberg, Hunt, Speer, & Zivin, 2011; Ibrahim et al., 2013; Mowbray et al., 2006).

In North America, research indicates that women are overall more likely than men to seek professional help in response to both mental and physical health concerns (Morgan, Ness, Robinson, 2003). Differences in help-seeking behaviors also exist between individuals of diverse cultural backgrounds. Morgan and colleagues (2003) found that students of Asian descent are less likely than Caucasian students to seek counselling services, which they attributed largely to diverging cultural beliefs regarding mental illness. For these reasons, cultural and ideological differences regarding mental health is an anticipated barrier to both service delivery and service access in post-secondary institutions (Addis & Hahalik, 2003; Morgan et al., 2003; Vogel & Webster, 2003). Given the barriers to help-seeking on post-secondary campuses, some institutions are employing screening tools to help identify at risk students.

## Screening Tools

**Outcome Questionnaire (OQ 45.2).** The Outcome Questionnaire is growing in use amongst mental health professionals in school systems across North America and consists of three main subscales: (1) symptom distress; (2) interpersonal relations; and (3) social role (Boswell, White, Sims, Harrist, & Romans, 2013).

**College Student Adaptation Questionnaire (SACQ).** The College Student Adaptation Questionnaire (SACQ) seems to be the most frequently used self-report scale in assessing college students' level of adjustment to post-secondary (Campbell, Palmieri, & Lasch, 2006). The SACQ covers four main areas of adjustment: (1) academic; (2) personal-emotional; (3) social; and (4) attachment (to the institution; Campbell et al., 2006).

**NCHA II Survey.** The NCHA II survey was developed by the ACHA and consists of 300 questions (ACHA, 2013) and includes nine different sections: (A) General Health; (B) Disease and Injury Prevention; (C) academic impacts; (D) violence, abusive relationships, and personal safety; (5) tobacco, alcohol, and marijuana Use; (E) sexual behavior; (F) nutrition and exercise; (G) mental health; and (H) sleep.

**Mental Health Continuum Short Form (MHC-SF).** The mental health section of the NCHA survey includes the MHC-SF, consisting of 14 items representing facets of well-being, including emotional, psychological, and social well-being (Keyes, 2009). Scores indicate if an individual is: (1) *flourishing*; (2) *moderate*; and (3) *languishing*.

**Clifton StrengthsFinder.** The Clifton StrengthsFinder is one of the most used tools to assess individuals' strengths (Soria & Stubblefield, 2015). This tool identifies individuals' five most salient strengths based on a list of 34 themes of natural talent (Soria & Stubblefield, 2015).

## Existing Post-Secondary Mental Health Initiatives

**Strengths-Based Campus Framework.** A study at the University of Minnesota compared retention rates of first-year students who took the Clifton StrengthsFinder with those who did not take the StrengthsFinder (Soria & Stubblefield, 2015). Results indicated significantly higher retention rates among students who completed the Clifton StrengthsFinder compared to students who did not take the StrengthsFinder (Soria & Stubblefield, 2015).

**The SAVES Model.** Eells (2017) developed a comprehensive model to bolster resilience in students. The saves model is conceptualized by the acronym ‘SAVES’ (S- Social Connection, A- Attitude, V- Values, E- Emotional Acceptance, S- Silliness/ Humor).

**Social Connection (S)** Human beings’ have an inherent nature to be social (Eells, 2017). Social scientists, through exhaustive research on the topic, have been able to conclude with great confidence that social connectedness is one of the most important protectors against illness, both mental and physical (Barlow, Durand, Hofman, & Lalumiere, 2018). Eells (2017) recommends first year students find senior students or faculty members as mentors, provided that mentors are willing to display a degree of vulnerability to encourage relatability. Forms of mentoring may also take place outside of the post-secondary institution, such as in the community (Eells, 2015).

**Attitude (A)** Composed of two elements: (1) learned optimism; and (2) mindset. Learned optimism is a term developed American psychologist, Martin Seligman (1990) and is the rival to learned helplessness, and it is broken down into three main components, the first of which is impermanence (Eells, 2017). Eells (2017) bases the mindset component on research conducted by Carol Dweck. Dweck (2007) examined individuals with a fixed mindset; she found that individuals with this mindset are more likely to view success as innate potential. In contrast people with a growth mindset are more likely to seek out and persevere through challenges because of their realization that growth is a process, and that success takes time (Dweck, 2007).

**Values (V)** The third part of Eells’ model is values. Eells (2017) recommends that it is important to develop a value system that will guide individuals through challenges. The general basis of gratitude is the recognition that everything in life is a gift to be cherished, and that we are in no way entitled to the gifts we are given in life (Eells, 2017).

**Emotional Acceptance (E)** The ‘E’ in the saves model stands for emotional acceptance. Eells (2017) derived this part of the model from acceptance and emotional commitment therapy (ACT). Emotional acceptance is the ability to accept what one cannot or should not change. Mindfulness, as mentioned in the values component of this model, is a strategy to develop emotional acceptance that has been widely researched and accepted as an effective strategy. Eells (2017) recommends mindfulness training be offered at post-secondary institutions.

**Silliness (S)** Laughter allows us to make light of situations and it is an important part of our ability to bounce back from adversity (Eells, 2017). Ultimately, laughter encourages us not to take ourselves or situations too seriously (Eells, 2017).

**The Inquiring Mind Post-Secondary.** A three- hour training session developed by the Mental Health Commission of Canada that is offered at post-secondary institutions across Canada. The program teaches students to conceptualize mental health as resting upon a continuum; the Mental Health Continuum Model ranges from: (1) health; (2) reacting; (3) injured; and (4) ill. The objective of this program is to teach students how to identify mental health signs and symptoms in themselves and others (The Inquiring Minds Post-secondary, 2019).

**Mental Health First Aid (MHFA).** An evidence-based international harm prevention initiative aimed at reducing mental health stigma, increasing mental health knowledge,

decreasing social distance between individuals struggling with mental health, and developing effective mental health support (Hadlaczky, Hokby, Mkrtchian, Carli, & Wasserman, 2014). Massey and colleagues (2014) delivered MHFA to staff at a university in Ontario, Canada and found significant increases mental health knowledge, greater sensitivity to mental health issues, and increases in confidence in addressing mental health concerns (Massey, Brooks, Burrow, 2014).

## **Discussion**

Mental health has been highlighted throughout the literature as one of the largest concerns among post-secondary students (Auerbach et al., 2016; Eells, 2017; Malla et al., 2018; Marcotte et al., 2015; Lattie et al., 2019). Based on a large-scale study conducted by WHO in 2016 investigating the prevalence of mental health disorders in the post-secondary population, anxiety and mood disorders were found to be the two most common when averaged across 21 different countries (Auerbach et al., 2016). It may be in the best interest of students for post-secondary institutions to focus on programming that targets these disorders.

Research consistently reveals that certain demographics of students have significantly more mental health concerns and a higher degree of psychological distress. For example, Chen (2012) found that student retention was significantly associated with ethnic minorities; ethnic and racial minority students have higher rates of dropout when compared to racial majority students. Interestingly, however, Chen (2012) notes that dropout rates subside when racial minority students are awarded financial aid, suggesting a link between race and financial stability. Focus could be dedicated to programming or increased financial assistance for racial minority students.

Most estimates of mental health disorders among the LGBTQ community are comparatively higher than the heterosexual population (Cochran, Sullivan, & Mays, 2003; Bostwick, Boyd, Hughes, & McCabe, 2010; Conron, Mimiaga, & Landers, 2010). Conron and colleagues (2010) noted that more LGBTQ participants reported more barriers to health services in comparison to heterosexual participants, which may partially account for the increased mental health morbidity in this population. Increased mental health concerns in the LGBTQ community may also be compounded by discrimination and victimization (Birkett, Newcomb, & Mustanski, 2015; Sutter & Perrin, 2016). Birkett and colleagues (2015) found that psychological problems in LGBTQ individuals tend to subside when they experience less victimization. Considering these results, programs focused on reducing stigma and discrimination may be advantageous.

A positive campus climate that includes on campus activities can help students explore new friendships because this way students do not have to venture off campus, which is especially important if they have no mode of transportation (Smiley, 2015). On-campus programs may also inspire the student to feel more emotionally connected to their institution, which has been shown to help with student retention (Webber et al., 2013). Investments in student services and programming seems to be an effective way to improve student well-being and enhance student retention (Liu et al., 2022).

Existing literature has drawn attention to the low prevalence of students seeking mental health help (Eisenberg et al., 2011; Goodwin et al., 2016; Ibrahim et al., 2013; Mowbray et al., 2006). Students' lack of awareness is consistently cited as a barrier to student help-

seeking (Eisenberg et al., 2011; Goodwin et al., 2016; Ibrahim et al., 2013; Mowbray et al., 2006). Colleges and universities could implement programs aimed at reducing stigma associated with mental health, as this has been cited consistently as a barrier to help-seeking among all populations of students (Addis & Hahalik, 2003; Morgan et al., 2003; Vogel & Webster, 2003).

### **Limitations and Future Directions for Research and Practice**

Currently, mental health services in post-secondary institutions are relying predominantly on students to seek out help. The literature suggests, however, that students who are the most in need of support are the ones who are least likely to seek out treatment (Goodwin et al., 2016). Jaworska and colleagues (2016) found that less than half of the institutions in Alberta reported having policies in place to monitor their own mental health services and initiatives, and very few institutions follow up with students who have accessed support services at their institutions. A need for targeted interventions based on population-specific data has been highlighted as a potential solution to some of these barriers (Heck et al., 2014; Goodwin et al., 2016; Jaworska et al., 2016; Liu et al., 2022).

Research is suggesting that internet-based and technology-enabled mental health interventions (e.g., mindfulness, stress management) seem to be effective for improving student mental health outcomes including decreasing distress, anxiety, and depression (Nguyen-Feng, Greer, & Frazier, 2017; Lattie et al., 2019). Internet-based delivery of mental health programming is a promising future direction for both research and practice, as it appears that this recently emerging trend is here to stay.

### **Conclusions**

Researchers have identified an increase in mental health concerns and diagnoses in post-secondary students over time (Daddona, 2011; Marcotte et al., 2015; Zivin, Eisenberg, Gollust, & Golberstein, 2009; Lattie et al., 2019; Copeland et al., 2021; Elharake et al., 2022). Specifically, there has been a steady increase in anxiety, depression, eating disorders, substance abuse, and other mental health issues in college students, and the rising demand on counselling supports, which are often under-funded, under-staffed, etc. (e.g., Lattie et al., 2019).

Post-secondary institutions are comprised of racially, culturally, and ideologically diverse students who do not necessarily share the same needs. These institutions are challenged to provide evidence-based, health-related services to students that are both racially and culturally appropriate. This challenge is often further compounded by issues with funding, barriers in student-help seeking, inadequate methods to identify at-risk students, and inconsistent (or nonexistent) methodology to evaluate existing health-related services on campus (Chen, 2012; Hall, 2016; Malla et al., 2018; Webber et al., 2013). Liu and associates (2022) highlight two urgent priorities considering current mental health needs: 1) ensuring access to mental health services, and 2) outreach to students with special circumstances (e.g., low-income, as well as racial, sexual, and gender minorities).

All post-secondary institutions experience and anticipate barriers to service delivery on campus, regardless of size and funding, therefore, they may benefit substantially by obtaining data that is unique to their student population (American Health Association [ACHA], 2013).



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