Post-Secondary Student Barriers, Belongingness, and Well-being: Informing Campus Mental Health Strategy Through Student Perspectives[1]

Amalia Uliniuc and Star Clynes

Benefits of Post-Secondary

Among Western societies, Canada holds some of the highest attendance rates for post-secondary, and according to the 2016 consensus, 54.0% of Canadians aged 25 to 64 had either college or university qualifications (Statistics Canada, 2017). These numbers are perhaps influenced by the effects of ongoing globalization, which have shifted traditional workforce dynamics and skill requirements, with advanced education now being valued more highly than work experience in obtaining employment worldwide (Cassidy, 2015). Canadian employment data echoes this notion, as the most recent reports show a 43% increase in employment opportunities for post-secondary graduates as opposed to employees who do not have post-secondary qualifications (Statistics Canada, 2020). In addition to increased employability and job security, post-secondary graduates earn higher wages, report higher levels of life satisfaction, engage in healthier lifestyles, rear healthier children, show increased resiliency and adaptability to life stressors, and hold higher civic responsibilities to their communities (Frenette, 2014).

Despite these benefits, a substantial number of Canadians are without post-secondary education (Statistics Canada, 2017). Existing literature surrounding post-secondary trends involve a complex set of barriers which might impede access to post-secondary for prospective students. Barriers to attendance and retention in Canadian post-secondary have been identified in past studies as: (1) financial challenges; (2) socioeconomic status; (3) a lack of academic preparedness; (4) cultural fit; (5) familial obligations; (6) absence of professional goals; (7) connection to campus (Chen, 2012; Curtis et al., 2023; Hall, 2016; Mueller, 2008).

This written work is an executive summary of a larger thesis. For complete paper please see the digital publication in the RDP Library Repository.

Financial Challenges

Financial barriers represent one of the most significant obstacles that students face in accessing and completing post-secondary education (Mueller, 2008). These barriers not only influence the initial decision to pursue higher education but also impact students' ability to continue and complete their studies. Statistics show over 64.3% of undergraduate students had to borrow student loans at one point within a four-year degree (U.S. Department of Education, National Center for Education Statistics [NCES], 2014) but just over half, or 58.3%, of post-secondary students relying on loans and grants successfully earned a degree after their first year of enrollment (Shapiro et al., 2018), meaning a substantial number of students withdrew from their studies. Data from the National College Health Assessment (NCHA, 2019) demonstrates that 75% of students experienced moderate to high financial distress in the past 12 months. Insights into specific financial stressors highlighted by Moore et al., (2021) found cost of tuition, textbooks, student fees, and inability to purchase other essential academic material impacted students' academic performance (GPA), social functioning/belongingness, and academic self-confidence which are key indicators of student dropout.

Homelessness and Food Insecurity

Living expenses associated with attending post-secondary institutions such as housing, food, transportation, and healthcare require substantial financial resources, further exacerbating the financial strain on students (Robb, 2017). Data collected from a survey of over 1,000 Canadian postsecondary students revealed that over a quarter, or 28%, of students experienced homelessness during their post-secondary studies (Danis & Herlick, 2022). This most commonly took the form of provisionally accommodated living situations, such as temporarily living with friends or family (22%) or in a hotel, motel, or Airbnb (10%). Students also experienced unsheltered living situations, such as sleeping in a campus building that was not a living space (5%), in their vehicle (3%), or unsheltered (2%). When asked what led to their experience(s) of homelessness, students commonly shared that they were unable to find affordable or safe housing, and that financial aid did not adequately cover these expenses. Moreover, data collected by the Hope Center on students at over 100 colleges showed that almost half of the students (45%) experienced food insecurity within the past reported 30 days, with most of them (39%) having maximized the institutional foodbank support system (Goldrick-Rab et al., 2019). These students lacked both institutional and familial supports, reporting how the inadequate living situations tremendously impacted their academic

engagement, with some students leaving their programs in worse standing then prior to entering (Robb, 2017).

Socioeconomic Status

Amongst students experiencing financial constraints, individuals from low-income backgrounds are often disproportionately affected (Allan et al., 2019). Program completion surveys confirm that economically challenged youth are still four times less likely than their more affluent peers to earn a degree within 6 years (U.S. Department of Education, National Center for Education Statistics, 2014). Tompsett & Knoester (2023) highlight the plausible causes of this phenomenon by delving into how family socioeconomic status greatly influences children's life outcomes through the environments, availability of resources, neighborhood social contexts, and type of schools attended. Therefore, the challenges surrounding post-secondary for low-income students are apparent prior to attendance. Garriott (2019) explains how students from lower social class backgrounds may experience more challenges in attending post-secondary due to higher sentiments of disempowerment and marginalization. Past studies support this sentiment by revealing children from advantaged socioeconomic backgrounds have more opportunities, safeguards, and privileges as opposed to those of disadvantaged backgrounds for which research has seen increased risks of chronic stress, strains, and hardships (Britt et al., 2017; Joo et al., 2008). In addition to this, it has been consistently found that low-income students felt a strong social comparison to their colleagues and a class separation due to their additional stressors and often lack academic preparedness (Moore et al., 2021). Pratt et al., (2019) examined how socioeconomic status impacted first-generation and economically marginalized college students. His study found that economically marginalized first-generation students were significantly more concerned about money and expected to maintain employment throughout their college career at higher rates. This emphasis on work reduced the amount of time first-generation students engaged in college-related activities which hindered their opportunity, as opposed to their peers', to perform well academically, fit into the campus environment, and make new friends. A meta-analysis by Garriott (2019) confirms these findings as numerous studies found students of lower socioeconomic status to be more likely to struggle with financial stress, limited occupational attainment, and lower academic satisfaction which were often likely to force withdrawal from either classes or entire programs (Allan et al., 2016; Brown & Lent, 2016; Cattaneo et al., 2019).

Family Caregiving

One study of dual-income couples found that 40% of the sample continued their education at some point as a response to the rapidly changing job market (Hostetler et al., 2007). Furthermore, data shows women participating in adult education in greater numbers than their male counterparts (Compton et al., 2006; NCES, 2008). While mature students may seek educational opportunities to advance their career, the commitment and effort needed in the short-term when adopting a student role often comes in conflict with familial roles and work roles. Thus, mature students with caregiving responsibilities typically experience what is known as role strain, which is simply defined as experiencing difficulty in meeting the demands of separate life roles (Goode, 1960). Role strain is further subdivided into: (1) role conflict, which occurs when meeting the demands of multiple roles interfere with each other; (2) role overload, which occurs when there is a lack of resources to the demands of a role; and (3) role contagion, which occurs when preoccupation with one role while being engaged in another. Mature caregiving students' engagement with higher education is impacted by the intersection of role strain and life stressors, and conflicts between these roles have been found to be a significant predictor of psychological distress, disengagement with postsecondary education, and thoughts of withdrawal (Chartrand, 1990; Chen, 2017; Markle, 2015).

Institutional Factors

Most studies on student persistence or dropout rates within higher education have focused on student characteristics and behaviour, illustrating a "student-centered research tradition (Smart et al. 2006). Few studies examined what institutions can do to create conditions that promote student academic persistence (Berger, 2001). Titus (2004) found lack of institutional flexibility or accommodation can disproportionately impact students with physical or learning disabilities, limiting their ability to fully participate in post-secondary education. Moreover, the relationship between institutions' faculty and staff characteristics and student perceptions have been found to positively influence academic persistence and negatively influence dropout rates (Schuster 2003; Tinto & Pusser 2006). The importance of establishing good student and instructor rapport was further analyzed by Rumberger & Tomas (2002) who found that schools with higher student-teacher ratios tend to have lower retention rates. Furthermore, colleges placing higher priority and expenditures on student services had lower attrition, suggesting that what institutions "do" affects student outcomes more than what institutions "are" (Pascarella & Terenzini, 2005). Thus, it is

hypothesized that institutional characteristics, faculty cultures, financial resources, and internal structural or policy considerations are in varying capacity affecting academic persistence and student experiences, as well as an important area of study (Kim, 2007).

Student Help-Seeking

Goodwin and colleagues (2016) reported the most prominent barrier to the utilization of services provided on campus was an overall lack of student understanding. Additionally, factors such as a lack of familiarity, 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 et al., 2011; Ibrahim et al., 2013; Mowbray et al., 2006).

Gender and cultural differences may serve as barriers to help-seeking behaviour (Curtis et al., 2023). 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 et al., 2003). In terms of seeking mental health support, men consistently display more negative attitudes than women (Addis & Hahalik, 2003; Morgan et al., 2003; Vogel & Webster, 2003). Moreover, Morgan and colleagues (2003) found that students of Asian descent are less likely than students of European descent to seek counselling services, which they attributed largely to diverging cultural beliefs regarding mental illness. They further explained that for some students, pedagogical or cultural barriers can create a feeling of being 'different'. However, the stigma surrounding the disclosure of mental illness is emphasized as a barrier to service access regardless of gender, race, or ethnicity (Addis & Hahalik, 2003; Morgan et al., 2003; Vogel & Webster, 2003). Liu and colleagues (2022) highlighted two urgent priorities considering current post-secondary student mental health needs: (1) ensuring access and awareness of available mental health services, and (2) outreach to students with special circumstances (e.g., low-income, as well as racial, sexual, and gender minorities).

Post-secondary and Mental Health

Educational research found mental health and successful adaptation to post-secondary as crucial determinants in degree completion and student dropout (Auerbach et al., 2016; Marcotte et al., 2015). Based on past studies, a variety of interpersonal and intrapersonal challenges, often coinciding with one another, have been found to influence a student's transition into post-secondary on social, psychological, and academic levels (Curtis et al., 2023; Eells, 2017; Hall, 2016;

Walburg, 2014). Numerous studies have found that poorly adjusted post-secondary students experience a higher prevalence of anxiety, depression, eating disorders, substance abuse, and other mental health issues (Daddona, 2011; Ibrahim et al., 2013; Lattie et al., 2019; Marcotte et al., 2015). Youth and young adults are seen to be at an increased risk, as three out of every four mental health issues are first diagnosed between the ages of 16 and 24, many while attending or freshly out of post-secondary programs (Mental Health Commission of Canada, 2020). Uncertainties felt during the COVID-19 pandemic further exacerbated these issues, with students reporting feeling even more anxious, depressed, fatigued, and depressed than prior to the pandemic (Elharake et al., 2022; Patterson et al., 2021). Furthermore, many students had trouble adjusting to online learning (Verma et al., 2021) and could no longer turn to social activities as a form of socioemotional coping (Tasso et al., 2021).

Overall, these findings highlight the complexity of the post-secondary experience for students and the prevalence of adverse effects on well-being. The link between the age range and onset for young adults highlights the importance of learning how to best navigate this transitionary period. Other demographic considerations such as low-income and socio-cultural minorities should be paid careful consideration as they are often disproportionately impacted. Successful adaptation to higher education is thus influenced by individual and institutional factors, therefore, continuous assessment of student challenges is necessary to promote student resilience and quality of life while attending higher education (Chen, 2012; Heck et al., 2014; Webber et al., 2013).

Well-being

Singularly defining well-being is complex. Subjective well-being can be investigated in terms of life satisfaction, whereas psychological well-being focuses on development (Keyes et al., 2002). Psychological well-being focuses on Self-Determination Theory (SDT). SDT is composed of three main components: self-acceptance, positive relations with others, and environmental mastery (Deci & Ryan, 1980; Keyes et al., 2002). As stated by Kern and colleagues (2014), well-being is abstract and includes both feeling well and functioning well. This best represents Keyes and Lopez's classification of well-being. This two-dimensional model consists of levels of well-being and level of mental illness, resulting in four main categories: flourishing, struggling, floundering, and languishing. This model represents many aspects of defining well-being (Keyes & Lopez, 2002). Adding to this complexity, well-being is composed of many different components; for example, life satisfaction, quality of life, and prosperity can all impact well-being (Avic, 2023; Kern

et al., 2014; Seligman, 2011). Despite this finding, it is important to note that having positive subjective well-being is not just the presence of positive emotions such as happiness and optimism (Arslan, 2021; Arslan & Allen, 2020; Furlong et al., 2014; Keyes, 2003; Su et al., 2014; Yıldırım et al., 2021). It also states that there must be a lack of negative emotions or feelings such as depression and loneliness (Arslan, 2021; Arslan & Allen, 2020; Furlong et al., 2014; Keyes, 2003; Su et al., 2014; Yıldırım et al., 2021).

To further an understanding of well-being, Seligman developed the PERMA Model. This model is comprised of five main components. The first is positive emotions, meaning the pleasure-seeking feelings associated with happiness (Forgeard et al., 2011; Kern et al., 2014; Seligman, 2011). Next up is engagement, which represents an individual participating in genuinely enjoyable activities and being completely focused (Forgeard et al., 2011; Kern et al., 2014; Seligman, 2011). Next is relationships, this pillar is one of the most important aspects of well-being, more on this later (Forgeard et al., 2011; Reis & Gable, 2003). Relationships involve not just being socially connected but also the feeling that you are cared for and valued (Forgeard et al., 2011; Kern et al., 2014; Seligman, 2011). Meaning is achieved when an individual feels that their life has value, and that life has a greater purpose. (Forgeard et al., 2011; Kern et al., 2014, Seligman, 2011). Lastly, accomplishment is the ability to believe that something can be achieved by the self. This can range from day-to-day activities all the way to a mastery of a discipline (Ericsson, 2002; Forgeard et al., 2011; Kern et al., 2014; Seligman, 2011). The purpose of this model is that if you possess all of these aspects, you have achieved an overall positive well-being.

Due to the increase in mental health disorders among post-secondary students, many institutions have looked at ways of increasing well-being for students. One of these is looking at the effects of campus climate on well-being. Campus climate can be defined as an individual's "attitude about, perceptions of and experiences within a specified environment" (McGuirk & Frazer, 2021; Rankin and Reason, 2008). It has been found that a student's perception of their campus climate can either positively or negatively impact their mental health (Chen et al., 2016; McGuirk & Frazer, 2021; Negash, 2017). This suggests that a negative campus climate can negatively affect a student's mental health and has been shown to be a predictor of depression (Cress & Ikeda, 2003; McGuirk & Frazer, 2021). However, this can be counteracted by a supportive environment from professors and other staff, lessening the negative symptoms of mental health (McGuirk & Frazer,

2021; Mitchell et al., 2016; Potts, 2017). Additionally, encouraging students to find help through the institution can contribute to a positive well-being. (McGuirk & Frazer, 2021).

Belongingness and Connection to Campus

One form of mediating various barriers is social connection and belonging. As stated earlier, having positive relationships with others is one of the main pillars of positive well-being. Baumeister and Leary (1995) suggested the Need to Belong Theory, stating that humans are driven to form significant interpersonal relationships. Since then, many researchers have supported the idea that having a sense of belonging is a primary contributor to our overall well-being in various contexts, one of which is that belongingness and social support can act as a buffer or protective factor for students (Arslan, 2022; Moeller et al., 2020). Social support can be defined as the psychological support that one receives, such as emotional support (Chen et al., 2023; Song & Son, 2011)**.** When students have a high sense of belonging, they have an increased quality of life and experience lower levels of negative psychological symptoms such as depression and loneliness (Arslan, 2021; 2022; Avci, 2023).

Post-secondary students can achieve a subjective feeling of belonging through academic engagement. Academic engagement consists of students attending classes, participating in extracurricular activities, and talking with peers and professors, which is often necessary for the academic success of the student (Chen et al., 2023; Schoffstall et al., 2013). Marler and Colleagues (2021) found a positive relationship between academic motivation and belonging, stating that students who felt like they had a place in their institution and were accepted by their peers and instructors had an increased drive to learn (Marler et al., 2021). Additionally, if students felt a lack of belonging, their academic motivation and life satisfaction were at risk (Acvi, 2023; Suhlmann et al., 2018). Suhlmann and Colleagues (2018) found that having a low sense of belonging was a primary contributor to students leaving their post-secondary studies. Due to the importance of belongingness, Canadian post-secondary institutions must aim to increase student quality of life through the breakdown of physical and psychological barriers, and the promotion of well-being and belongingness to campus.

Present Study

A qualitative design was implemented to collect unique student perspectives and experiences on well-being and social connectedness on campus and to each other. Some topics of discussion

include: What is Red Deer Polytechnic (RDP) doing well to support student well-being? What challenges are students facing that impact their academic success and/or well-being? What can be done to improve student services/support? And how can the institution foster campus connections and social support to reinforce a sense of belonging? Through asking these questions, we hoped to uncover a multitude of barriers students may be facing, such as financial concerns, sociability on campus or amongst peers, academic motivation, stressors, and areas of institutional improvement. This research project works in conjunction with the Canadian Campus Well-being (CCWS) Survey, and combined, the findings of these two projects are to be shared and used in the formation of the new RDP Student Mental Health Strategy for the years 2024-2027.

Method

Participants and Recruitment

This project received ethics approval from Red Deer Polytechnic's Research Ethics Board on December 5th, 2023. Participants were students recruited from Red Deer Polytechnic (RDP), with inclusion criteria extended for all RDP students within credit, non-credit or trades programs, full- or part-time studies. Recruitment of participants was done through advertisement of flyers around campus, digitalized flyers containing QR codes on various platforms which included a specialized section on the RDP Research Common website.

A total of 69 students participated in the study; 40 students participated in focus groups and 29 participants provided written responses. Our sample primarily consisted of Caucasian and South Asian ethnicities, 38% (N = 24) and 35% (N = 22) respectively. The gender distribution was made up of 50.7% of participants identifying as female (N = 35), 40.6% male (N = 28), and 5.6% non-binary (N = 1). Lastly, 55.8% of our sample were first-year students (N = 38).

For their time and effort, participants within focus groups received a five-dollar Tim Hortons gift card, and their name was entered in a draw to win one of three well-being baskets, each valued at $50.00. Participants who provided written responses received a five-dollar Tim Hortons gift card for their participation in the study.

Materials and Procedure

Two separate audio recording devices were used to record focus group sessions, these were a digital recorder as well as Glean – a recording and transcription software. Recordings were saved for future analysis. Two laptops with SPSS software were also used for analysis and reporting of findings.

Focus Groups

Twelve in-person focus groups, lasting approximately 55 minutes each, were conducted in various RDP classrooms. Each focus group was comprised of a small number of participants, less than six at a time, which was consistent with previous studies (Synnot et al., 2014; Woodyatt et al., 2016), and recommended as a best practice (Krueger & Casey, 2014; Liamputtong, 2011). Prior to each recorded session, participants were instructed that all information was confidential and that personal identifiers would be removed from their shared experiences. Focus group ground rules were reviewed, and a package containing participant demographic information as well as informed consent was filled out by participants and collected by the researchers. Remaining documentation within the package included a contact sheet with resources and researcher information which participants had the choice in keeping or not. In addition to this package, participants were also given a small slip of paper to write their name and email to be entered into a draw box for a well-being basket. This draw box was kept in a locked cabinet, along with the consent and demographic sheets, for the duration of the project. To ensure fairness, participants were handed a sharing stone and instructed to only speak when they had the stone, as well as to keep their answers clear and concise. Recording stopped after all questions were answered, and researchers granted the incentive to participants along with a session debrief. At the end of data collection, the researchers drew three winners of the well-being baskets, The winners were asked to complete a skill-testing question to comply with Canadian lottery regulations prior to receiving their prize.

Written Response

Written response participants were recruited using tables which were set up in multiple areas of campus. Upon agreement of participation within the study, students were given the same instructions and documentation as focus group participants; however, since there was no recording, participants were asked to instead provide their responses on the questionnaire. Their responses were collected and stored in the same locked filing cabinet. All participant responses from either focus groups or written responses were transcribed and analyzed equally.

Analysis

All focus group audios were transcribed verbatim via Glean, and the correctness of transcription was verified by the researchers. The final coding scheme and all transcripts were reviewed by the researchers to ensure that they accurately captured the topics discussed in the focus groups. The purpose of coding independently was to increase interrater reliability. Upon

finalization of independent coding, the researchers compared themes to discuss discrepancies and mutual agreement. Thematic analysis was used to produce categories and concepts which were then organized hierarchically into themes and subthemes. Participants did not provide feedback on the findings. SPSS software was used to create descriptive statistics on participant demographics.

Preliminary Findings and Discussion[2]

Although analysis of findings remains in progress at the time of this submission, preliminary findings align with previous research in that it found that accessing support services effectively relies heavily on awareness. More specifically, these findings agree with previous notions that students need to know what resources are available and how to access them in order to address their needs adequately. Peer support was also found to play a significant role in not only academic success but also overall well-being. Having a supportive network of peers has been identified as an avenue for student emotional support, guidance, and encouragement, which are crucial for navigating the challenges of post-secondary life. Moreover, faculty members were reported to play a pivotal role in fostering academic self-efficacy and student motivation at RDP. Their encouragement, guidance, and belief in students' abilities have been identified to significantly impact students' confidence in their academic pursuits. However, financial concerns and work commitments have also been described to often overshadow academic goals for many students. According to these students, balancing the need to work to support themselves financially with the demands of academic life can be a significant barrier to success. The pressure to succeed academically and secure a promising career were mentioned as contributing factors of heightened stress among students, with anticipated future employment prospects being one of the main contributors of stress, alongside accumulated debt throughout their studies. Additionally, programs like "pay what you can" intended to aid financial stress were found to lack clarity, primarily within who qualifies and what the pay expectancy is, which ultimately deterred students from participating and potentially benefitting from these services.

While mental health services were generally viewed positively, lengthy wait times for counselling services were found to hinder students' well-being. Students mentioned how prompt access to mental health support was crucial for addressing issues such as anxiety, depression, and stress. Other self-care and student resilience strategies were also reported, which included: (1) time

---

[2] This written portion is a brief overview of results and discussion. Please see the digitized Agora Journal for a finalized report.

management, (2) therapy via a counsellor or psychologist outside of campus, and (3) support networks. All of these were identified as playing a vital role in helping students cope with academic and personal challenges.

Overall, findings of this study suggest that RDP students express satisfaction with their institution and programs but suggest some areas for improvement. Addressing barriers such as financial concerns, improving access to mental health services, and providing clearer information about support programs can enhance students' overall well-being and academic success.

Considerations

The conclusions drawn from the study highlight several important considerations that could impact the validity and interpretation of the findings. Firstly, the restricted sample size composed of only RDP students may limit generalizability, which could raise questions about the applicability of the findings to other contexts, demographics, or institutions. Moreover, the potential presence of social desirability bias and groupthink within focus groups could have influenced participant responses. Participants may have felt inclined to provide socially acceptable answers or conform to the opinions expressed by the group, potentially skewing the data and leading to biased conclusions. The timing and location of focus group sessions were also noted as potential factors influencing participant attendance, even though efforts were made to provide various sessions during different times of the day. It is important to know that this project had no accommodations for online responses, which limited participation to students physically present on campus. This could have affected the diversity and representativeness of the sample and possibly impacted the data since no online student experiences were included. Lastly, discussing sensitive topics during focus group sessions may have had psychological impacts on participants. Delving into emotionally charged or personal subjects could have evoked feelings of discomfort or distress, potentially harming participants even though careful considerations and steps were taken to ensure limited or no psychological distress was felt during the study.

These conclusions underscore the importance of carefully considering the methodological limitations of qualitative designs and potential biases inherent in the research process. Addressing these issues is essential for ensuring the integrity and reliability of the study findings and for drawing accurate conclusions about the topic under investigation, although for the purpose of this study, researchers agreed this was the most effective and ethical approach for everyone involved.

Benefits & Outcomes

The primary objective of this study was to obtain a comprehensive understanding of the student experience at RDP and to explore the diverse range of experiences among the student body. By gathering insights from various perspectives, the study aimed to provide a holistic view of the challenges, needs, and strengths of students at RDP. Through in-depth exploration and analysis, the study sought to uncover underlying themes and patterns that could shed light on the factors influencing student well-being and academic success. The findings of this study hold significant implications for the development of the new student Mental Health Strategy for the years 2024-2027. By identifying key issues and areas of concern, the study outcomes can inform the strategic planning and future implementation of initiatives aimed at supporting student mental health and promoting academic success, as well as enhancing the overall well-being and academic outcomes of RDP students to come.

Since participant experiences were not tied to their demographics, future research should focus on examining individualized cohorts within RDP. By exploring potential differences in experiences among distinct groups of students, such as different academic programs, demographic characteristics, or levels of engagement, future studies can provide deeper insights into the factors shaping the student experience at RDP. This personalized approach to research can help to uncover nuanced differences and tailor interventions to better meet the unique needs of specific student populations, ultimately contributing to the creation of a more inclusive and supportive learning environment at RDP.

References

Addis, M. E., & Mahalik, J. R. (2003). Men, masculinity, and the contexts of help seeking. *American Psychologist, 58*(1), 5–14. https://doi.org/10.1037/0003-066X.58.1.5

Allan, B. A., Garriott, P. O., & Keene, C. N. (2016). Outcomes of social class and classism in first- and continuing-generation college students. *Journal of Counseling Psychology, 63*(4), 487–496. https://doi.org/10.1037/cou0000160

Arslan, G. (2021). Psychological well-being in college students: psychometric properties of the Brief Inventory of Thriving (BIT) and the Comprehensive Inventory of Thriving (CIT). *Journal of School and Educational Psychology, 1*(1), 6-16. https://doi.org/47602/josep.v1i1.6

Arslan, G., & Allen, K. A. (2020). Complete mental health in elementary school children: understanding youth school functioning and adjustment. Current Psychology. https://doi.org/10.1007/s12144-020-00628-0

Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., Hwang, I., Kessler, R. C., Liu, H., Mortier, P., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Aguilar-Gaxiola, S., Al-Hamzawi, A., Andrade, L. H., Benjet, C., Caldas-de-Almeida, J. M., Demyttenaere, K., Bruffaerts, R. (2016). Mental disorders among college students in the World Health Organization World Mental Health Surveys. *Psychological Medicine, 46*(14), 29552970. Cambridge University Press. https://doi.org/10.1017/S0033291716001665

Avci, M. (2023). Belongingness, social connectedness, and life satisfaction in college students after COVID-19 pandemic. *Journal of Happiness and Health, 3*(2), 23-36. https://doi.org/10.47602/johah.v3i2.43

Berger, J. B. (2001). Understanding the organizational nature of student persistence: empirically-based recommendations for practice. *Journal of College Student Retention: Research, Theory & Practice*, *3*(1), 3-21. https://doi.org/10.2190/3K6A-2REC-GJU5-8280

Britt, S., Ammerman. D. A., Barrett. S. F., Jones. S. (2017). Student loans, financial stress, and college student retention. *Journal of Student Financial Aid*: Vol. 47(3). https://doi.org/10.55504/0884-9153.1605

Brown, S. D., & Lent, R. W. (2016). Social cognitive career theory in a diverse world: closing thoughts. *Journal of Career Assessment, 25*(1), 173–180. https://doi.org/10.1177/1069072716660061

Cassidy, K. (2015). *Barriers to post-secondary education perspectives from Niagara. Niagara Community Observatory.* https://brocku.ca/niagara-community-observatory/wp-content/uploads/sites/117/Barriers-to-Post-Secondary-Education.pdf

Cattaneo, L. B., Chan, W. Y., Shor, R., Gebhard, K. T., & Elshabassi, N. H. (2019). *Elaborating the connection between social class and classism in college.* American Journal of Community Psychology. Advance online publication. https://doi.org/10.1002/ajcp.12322

Chartrand, J. M. (1990). A causal analysis to predict the personal and academic adjustment of nontraditional students. *Journal of Counseling Psychology, (37),* 65-73.

Chen, R. (2012). Institutional characteristics and college student dropout risks: a multilevel event history analysis. *Research in Higher Education, 53*(5), 487–505. https://doi.org/10.1007/s11162-011-9241-4

Chen, J. C. (2017). Nontraditional Adult Learners: The Neglected Diversity in Postsecondary Education. *SAGE Open, 7*(1), 1-12. https://doi.org/10.1177/2158244017697161

Chen, C., Bian, F., & Zhu, Y. (2023). The relationship between social support and academic engagement among university students: the chain mediating effects of life satisfaction and academic motivation. *BMC Public Health, 23*(1), 1-13. https://rdpolytech.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edssjs&AN=edssjs.A931A8D3&site=eds-live

Chen, J. I., Romero, G. D. and Karver, M. S. (2016). The relationship of perceived campus culture to mental health help-seeking intentions. *Journal of Counseling Psychology, 63*(6), 677-684. https://doi.org/10.1037/cou0000095

Compton, J. I., Cox, E., & Laanan, F. S. (2006). Adult learners in transition. *New Directions for Student Services, 114*(6), 73–80. San Francisco: Jossey-Bass.

Cress, C. M. and Ikeda, E. K. (2003). Distress under duress: the relationship between campus climate and depression in Asian American college students. NASPA Journal, 40(2), 74-9. https://doi.org/10.2202/1949-6605.1224.

Curtis, A., Bearden, A., Prowse Turner, J. (2023). Post-secondary student transitions and mental health: literature review and synthesis. *New Directions for Higher Education, 1-24,* 63-86. https://doi.org/10.1002/he.20466

Daddona, M. F. (2011). Peer educators responding to students with mental health issues. *New Directions for Student Services, 2011*(133), 29–39. https://doi.org/10.1002/ss.382

Danis, J., & Herlick, K. (2022). *Housing Instability & Homelessness in the Student Population*. Academica Forum. https://forum.academica.ca/forum/housing-instability-amp-homelessness-in-the-student-population

Deci, E. L., & Ryan, R. M. (1980). Self-determination theory: when mind mediates behavior. *The Journal of Mind and Behavior*, *1*(1), 33–43. http://www.jstor.org/stable/43852807

Eells, G. T. (2017). Hyper-achievement, perfection, and college student resilience. *Journal of College and Character, 18*(2), 77–82. https://doi.org/10.1080/2194587x.2017.1300096

Eisenberg, D., Hunt, J., Speer, N., & Zivin, K. (2011). Mental health service utilization among college students in the United States. *Journal of Nervous and Mental Disease, 199*(5), 301–308. https://doi.org/10.1097/NMD. 0b013e3182175123

Elharake, J. A., Akbar, F., Malik, A. A., Gilliam, W., & Omer, S. B. (2022). Mental health impact of COVID-19 among children and college students: a systematic review. *Child Psychiatry and Human Development,* 1–13. https:// doi.org/10.1007/s10578-021-01297-1

Ericsson, K. A. (2002). Attaining excellence through deliberate practice: insights from the study of expert performance. In M. Ferrari (Ed.), The pursuit of excellence through education (pp. 21-55). Mahwah, NJ: Lawrence Erlbaum Associates.

Frenette, M. (2014). *An investment of a lifetime? The long-term labour market premiums associated with a postsecondary education.* (Analytical Studies Branch Research Paper Series No. 359). Ottawa: Canada: Statistics Canada. https://www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2014359-eng.htm

Forgeard, M. J. C., Jayawickreme, E., Kern, M. L., Seligman, M. E. P. (2011). Doing the right thing: measuring wellbeing for public policy. *International Journal of Wellbeing, 1*(1), 79-106. https://www.internationaljournalofwellbeing.org/index.php/ijow/article/view/15

Furlong, M., Dowdy, E., Carnazzo, K., Bovery, B. L., & Kim, E. (2014). Covitality: fostering the building blocks of complete mental health. *Communique, 42*(8), 1–28.

https://www.researchgate.net/publication/270571062_Covitality_Fostering_the_building-ing_blocks_of_complete_mental_health

Garriott, P. O. (2020). A critical cultural wealth model of first-generation and economically marginalized college students' academic and career development. *Journal of Career Development*, *47*(1), 80-95. https://doi.org/10.1177/0894845319826266

Goldrick-Rab S, Baker-Smith C, Coca V, et al. (2019). College and university basic needs insecurity: a national #realcollege survey report. *The Hope Center for College, Community, and Justice.* https://hope4college.com/ college-and-university-basic-needs-insecurity-a-national-realcollege-survey-report

Goode, W. J. (1960). A theory of role strain. *American Sociological Review, (25),* 483-496.

Goodwin, J., Behan, L., Kelly, P., Mccarthy, K., & Horgan, A. (2016). Help-seeking behaviors and mental well-being of first year undergraduate university students. *Psychiatry Research, 246*(4), 129–135. https://doi.org/10.1016/j. psychres.2016.09.015

Hall, J. W. (2016). A study of factors that inhibit and enhance at-risk student retention at a community college: multiple case study. *ProQuest Dissertations and Theses*, Retrieved from https://www.proquest.com/openview/d80afb1d3eb19a619626a4052839acc5/1?pq-origsite=gscholar&cbl=18750&diss=y

Heck, E., Jaworska, N., Desomma, E., Dhoopar, A. S., Macmaster, F. P., Dewey, D., & Macqueen, G. (2014). A survey of mental health services at post-secondary institutions in Alberta. *The Canadian Journal of Psychiatry, 59*(5), 250–258. https://doi.org/10.1177/070674371405900504

Hostetler, A. J., Sweet, S., & Moen, P. (2007). Gendered career paths: a life course perspective on returning to school. *Sex Roles, 56*(1–2), 85–103.

Ibrahim, A. K., Kelly, S. J., Adams, C. E., & Glazebrook, C. (2013). A systematic review of studies of depression prevalence in university students. Journal of Psychiatric Research, 47(3), 391–400. Elsevier Ltd. https://doi.org/10.1016/j.jpsychires.2012.11.015

Joo, S.-H., Durband, D. B., & Grable, J. (2008). The academic impact of financial stress on college students. *Journal of College Student Retention: Research, Theory & Practice*, *10*(3), 287-305. https://doi.org/10.2190/CS.10.3.c

Keyes, C. L. M. (2003). Complete mental health: an agenda for the 21st century. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 293–312). American Psychological Association. https://doi.org/10.1037/10594-013

Keyes, C. L. M., & Lopez, S. J. (2002). Toward a science of mental health: positive directions in diagnosis and interventions. In C. R. Snyder & S. J. Lopez (Eds.), Handbook of positive psychology (pp. 45–59). New York: Oxford University Press.

Kern, M. L., Waters, L. E., Alder, A., White, M. A. (2014). A multidimensional approach to measuring well-being in students: application of the PERMA framework. *The Journal of Positive Psychology, 10*(3), 262-271. https://doi.org/ 10.1080/17439760.2014.936962.

Kim, D. (2007). The effect of loans on students' degree attainment: differences by student and institutional characteristics. *Harvard Educational Review*, *77*(1), 64–97. https://doi-org.rdpolytech.idm.oclc.org/10.17763/haer.77.1.n14t69l0q8292784

Krueger, R. A., & Casey, M. A. (2014). Focus groups: a practical guide for applied research. SAGE.

Lattie, E. G., Kethcen Lipson, S., & Eisenberg, D. (2019). Technology and college student mental health: challenges and opportunities. *Frontiers in Psychiatry, 10,*1–5. https://doi.org/10.3389/fpsyt.2019.00246

Liamputtong, P. (2011). Focus group methodology: principle and practice. SAGE.

Liu, C. H., Pinder-Amaker, S., Hahm, H. C., & Chen, J. (2022). Priorities for addressing the impact of the COVID-19 pandemic on college student mental health. *Journal of American College Health, 70*(5), 1356–1358. https://doi. org/10.1080/07448481.2020.1803882

Marcotte, D., Villatte, A., & Potvin, A. (2015). Resilience factors in students presenting depressive symptoms during the post-secondary school transition. *Procedia - Social and Behavioral Sciences, 159,* 91–95. https://doi.org/10. 1016/j.sbspro.2014.12.335

Markle, G. (2015). Factors influencing persistence among nontraditional university students. *Adult Education Quarterly*, *65*(3), 267–285. https://doi-org.rdpolytech.idm.oclc.org/10.1177/0741713615583085

McGuirk, E., & Frazer, P. (2021). The impact of the campus climate and mental health literacy on students' wellbeing. *The Journal of Mental Health Training, Education, and Practice, 16*(3), 245-256. https://doi.org/10.1108/JMHTEP-12-2020-0088

Mental Health Commission of Canada. (2020). *Starter kit: for the national standard of canada for mental health and well-being for post-secondary students - mental health commission of canada.* https://mentalhealthcommission.ca/resource/starter-kit-for-the-national-standard-of-canada-for-mental-health-and-well-being-for-post-secondary-students/

Mitchell, J.J., Reason, R.D., Hemer, K.M. and Finley, A. (2016). Perceptions of campus climates for civic learning as predictors of college students' mental health. *Journal of College and Character, 17*(1) 40-52. https://doi.org/10.1080/2194587X.2015.1125367

Moore, A., Nguyen, A., Rivas, S., Bany-Mohammed, A., Majeika, J., & Martinez, L. (2021). A qualitative examination of the impacts of financial stress on college students' well-being: insights from a large, private institution. *SAGE open medicine, 9,* 20503121211018122. https://doi.org/10.1177/20503121211018122

Morgan, T., Ness, D., & Robinson, M. (2003). Students' help-seeking behaviors by gender, racial background, and student status. *Canadian Journal of Counselling I, 37*(2), 151–166.

Mowbray, C. T., Megivern, D., Mandiberg, J. M., Strauss, S., Stein, C. H., Collins, K., Kopels, S., Curlin, C., & Lett, R. (2006). Campus mental health services: recommendations for change. *American Journal of Orthopsychiatry, 6*(2), 226–237. https://doi.org/10.1037/0002-9432.76.2.226

Mueller, R. E. (2008). *Access and persistence of students from low-income backgrounds in Canadian post-secondary education: a review of the literature* http://dx.doi.org/10.2139/ssrn.2256110

National Center for Education Statistics. (2014). *Education longitudinal study of 2002: Base Year and Third Follow-up*. U.S. Department of Education. http://nces.ed.gov/TCE/

Negash, T. (2017). The role of campus climate and sense of belonging on the use of behavioural health services by college students: a longitudinal examination of the healthy minds study. *Injury Prevention, 23*(1). https://doi.org/10.1136/injuryprev-2017-042560.146

Patterson, Z. R., Gabrys, R. L., Prowse, R. K., Abizaid, A. B., Hellemans, K. G. C., & McQuaid, R. J. (2021). The influence of COVID-19 on stress, substance use, and mental health among postsecondary students. *Emerging Adulthood, 9*(5), 516–530. https://doi.org/10.1177/21676968211014080

Pascarella, E., Terenzini, P. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.

Potts, E. M. (2017). The relationship between campus climate, perceived stigma, perceived so-
cial support, and students' decisions to disclose their mental-health problems on campus.
PCOM Psychology Dissertations. 407. Retrieved from: http://digitalcom-
mons.pcom.edu/psychologydissertations/407

Rankin, S., & Reason, R. (2008). Transformational tapestry model: A comprehensive approach to
transforming campus climate. *Journal of Diversity in Higher Education, 1*(4), 262-274.
https://doi.org/10.1037/ a0014018

Reis, H., & Gable, S. (2003). Toward a positive psychology of relationships. In C. L. M. Keyes
& J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived*. Washington,
D.C.: American Psychological Association. http://dx.doi.org/10.1037/10594-006

Robb, C. (2017). College student financial stress: are the kids alright? *J Fam Econ Issues, 38*(4),
514–527.

Rumberger, R. W., Tomas, S. L. (2002). Institutional climate and student departure: a multidi-
mensional multilevel modeling approach. *The review of Higher Education, 21*(2), 161-183

Seligman, M. E. P. (2011). Flourish. New York, NY: Simon & Schuster.

Schuster, J. H. (2003). The faculty makeover: what does it mean for students? *Exploring the role
of contingent* instructional *staff in undergraduate learning, 20*(3), 15-22.
https://doi.org/10.1002/he.116

Shapiro, D., Dundar, A., Huie, F., Wakhungu, P. K., Bhimdiwala, A., & Wilson, S. E. (2018).
Completing college: a national view of student completion rates—Fall 2012 cohort (Signa-
ture Report No. 16). National Student Clearinghouse Research Center.

Smart. J. C., Feldman, K. A., Ethington, C. A. (2006). Holland's theory and patterns of college
student success. *Journal of College Student Development, 48*(3), 183-195

Statistics Canada. (2017). *Education in Canada: key results from the 2016 census.* Ottawa, ON.
https://www150.statcan.gc.ca/n1/daily-quotidien/171129/dq171129a-eng.htm

Statistics Canada. (2020). *Labour market outcomes of postsecondary graduates, class of 2015.*
(No. 81-595-M). Ottawa, ON. https://www150.statcan.gc.ca/n1/pub/81-595-m/81-595-
m2020002-eng.htm

Suhlmann, M., Sassenberg, K., Nagengast, B., & Trautwein, U. (2018). Belonging mediates ef-
fects of student-university fit on well-being, motivation, and dropout intention. *Social Psy-
chology, 49*(1), 16-28. https://doi.org/10.1027/1864-9335/a000325

Su, R., Tay, L., & Diener, E. (2014). The development and validation of the Comprehensive Inventory of Thriving (CIT) and the Brief Inventory of Thriving (BIT). *Applied Psychology: Health and Well-Being, 6*(3), 251–279. https://doi.org/10.1111/aphw.12027

Synnot, A., Hill, S., Summers, M., & Taylor, M. (2014). Comparing face-to-face and online qualitative research with people with multiple sclerosis. *Qualitative Health Research, 24*(3), 431–438.

Tasso, A. F., Hisli Sahin, N., & San Roman, G. J. (2021). COVID-19 disruption on college students: academic and socioemotional implications. *Psychological Trauma: Theory, Research, Practice, and Policy, 13(*1), 9–15. https:// doi.org/10.1037/tra0000996

Tinto V., Pusser B. (2006). *Moving from theory to action: building a model of institutional action for student success*. National Postsecondary Education Cooperative, 1–51.

Titus, M. A. (2004). An examination of the influence of institutional context on student persistence at 4-year colleges and universities: a multilevel approach. *Research in Higher Education, 45*(7). 673-699.

Tompsett, J., & Knoester, C. (2023). Family socioeconomic status and college attendance: a consideration of individual-level and school-level pathways. *PloS one*, *18*(4), e0284188. https://doi.org/10.1371/journal.pone.0284188

Verma, S., Kumar, B., Chandra, S., Singh, N., Kumari, P., & Verma, A. (2021). Knowledge, attitude, and psychological effect on undergraduate/postgraduate students in lockdown COVID-19 situation. *Journal of Pharmacy and Bioallied Sciences, 13*(5), S696–S698. https://doi.org/10.4103/jpbs.JPBS_829_20

Vogel, D. L., & Wester, S. R. (2003). To seek help or not to seek help: the risks of self-disclosure. *Journal of Counseling Psychology, 50*(3), 351–361. https://doi.org/10.1037/0022-0167.50.3.351

Walburg, V. (2014). Burnout among high school students: a literature review. *Children and Youth Services Review, 42,* 28–33. https://doi.org/10.1016/j.childyouth.2014.03.020

Webber, K. L., Krylow, R. B., & Zhang, Q. (2013). Does involvement really matter? Indicators of college student success and satisfaction. *Journal of College Student Development, 54*(6), 591–611. https://doi.org/10.1353/csd. 2013.0090

Woodyatt, C. R., Finneran, C. A., & Stephenson, R. (2016). In-person versus online focus group discussions: a comparative analysis of data quality. *Qualitative health research*, *26*(6), 741–749. https://doi.org/10.1177/1049732316631510

Yıldırım, M., Arslan, G., & Wong, P. T. P. (2022). Meaningful living, resilience, affective balance, and psychological health problems among Turkish young adults during coronavirus pandemic. *Current psychology (New Brunswick, N.J.)*, *41*(11), 7812–7823. https://doi.org/10.1007/s12144-020-01244-8