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Holding Our Ground: Indigenous Student Post-Secondary Persistence & Early Leaving

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About Indspire

Indspire is an Indigenous national registered charity that invests in the education of Indigenous people for the long-term benefit of these individuals, their families and communities, and Canada. With the support of its funding partners, Indspire disburses financial awards, delivers programs, and shares resources with the goal of improving educational outcomes for First Nations, Inuit, and Métis students. Through Indspire’s education offerings, we provide resources to students, educators, communities, and other stakeholders who are committed to improving success for Indigenous youth. In 2020-2021, Indspire awarded over \$20 million through 6,245 bursaries and scholarships to First Nations, Inuit, and Métis youth, making it the largest funder of Indigenous post-secondary education outside the federal government.

About Research Knowledge Nest

The Indspire *Research Knowledge Nest* is the first Indigenous research program of its kind in Canada. With data analysis skills rapidly becoming critical to economic success, the *Research Nest* is poised to seize this exciting opportunity to foster Indigenous engagement and leadership in quantitative research and data science roles. The program will be guided by an Advisory Committee of researchers, leaders, and key stakeholders who will provide direction and input on the development of this important initiative.

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Introduction

Despite high aspirations of attainment,¹⁻² Indigenous students are more likely to leave post-secondary education prematurely than their non-Indigenous peers in Canada and around the world.¹⁻¹⁴ Higher education is becoming increasingly critical for obtaining employment and economic security, as employees often require some form of certification, credential, or license to be hired.^{7,11,14} Part of Indspire’s commitment to students is to help guide them through school and into their careers. Thus, the need to discover why this disparity exists is pressing. Additionally, having a better understanding of Indigenous early leavers could help improve the retention rates of students engaging in Indspire’s programs, inform policymakers and leaders within the educational field on how to create supports for their Indigenous students, and potentially break cycles of unemployment and poverty in Indigenous communities by increasing graduation rates. As such, this literature review* will examine what causes Indigenous students to leave before the completion of their programs, within a post-secondary context.

Background Information: What You Need to Know

As Bernardo et al.¹⁵ states, early leaving is a complex topic, and the literature has evolved greatly over the decades. For instance, researchers are now using the term “early leavers”, rather than “dropouts”, in attempt to shift away from solely blaming the student for their educational outcomes and to instead highlight the accumulated effects of their circumstances.⁹ These circumstances can include social, economic, environmental, and political influences which affect early leaving. In fact, an American study found that only 8% of Indigenous students leave post-secondary studies due to actual academic failure.¹⁰ This is an important statistic, as it suggests that the education system is failing to meet the needs of Indigenous students, not vice versa. For future exploration, research should determine if this also holds true within the Canadian context.

While many theories have been proposed about early leavers, research looking specifically at Indigenous students is newer and less comprehensive. Past ideas have failed to account for their participation in and unique experiences at post-secondary institutions. Highly cited studies of persistence have even suggested students should assimilate entirely into the school environment,¹⁶ which disregards colonial history, the importance of home community, and a student’s ability to function in two cultures (Indigenous and Western) at once.¹⁷ However, some progress in knowledge has been made. Generally, there appears to be an “overlap effect”¹

* This literature review uses a combination of sources, but primarily references peer-reviewed journal articles from both the traditional and the Indigenous-specific educational literature. Additionally, while the findings apply predominantly to Indigenous students in Canada, studies within this review were conducted all around the world, including Canada, the United States, Australia, Peru, and Spain.

where many different factors (including social, cultural, and institutional determinants) accumulate and interact, pushing Indigenous students out of school.^{7,9,16}

Ultimately, three themes have emerged from the literature concerning why Indigenous students leave school early: (1) systemic influences; (2) sociocultural influences; and (3) individual influences.

The Elements of Early Leaving

Systemic Influences

Systemic influences on early leaving are those overarching, complex, and structure-level factors which impact how societies and groups of people function.¹⁸ Within this category, two subthemes have been identified: historical factors and institutional factors.

Historical

In the context of Indigenous students, retention must be viewed from not only a current perspective, but also from a historical one.¹⁴ Canada's long history of colonialism and assimilation has created a multitude of barriers for Indigenous students and is referenced frequently in the literature.^{5-11,13}

Education, through residential and boarding schools, was used against Indigenous Peoples as a means of genocide.^{7,10-11} As descendants of the survivors of this history, Indigenous students today experience the repercussions. This includes a loss of culture, disruption of family structure, intergenerational trauma, and social oppression, among other effects.^{7,10-11} As such, the research has indicated that a reason for the low retention and enrollment rates of Indigenous students in post-secondary is a strong distrust of Western educational systems and institutions.^{3,6,11}

This is consistent with past publications as well. The report of the Royal Commission on Aboriginal Peoples¹⁹ has documented the experiences of Indigenous Peoples in detail, recounting incidents of violence, discrimination, inequality, and betrayal by Canada. It recommended that to rebuild the trust between Indigenous Peoples and the Western world, there must be both an acknowledgement of the injustices that have occurred (in other words, truth telling) and a commitment to new relationships in the future. However, with similar recommendations still being made by more recent reports (for example, in the Truth and Reconciliation Commission of Canada's²⁰ 94 Calls to Action), limited progress has been made over the last few decades. Indeed, only 8 out of the 94 Calls to Action have been implemented as of December 2020, which is five years after the initial release of the TRC report.²¹ As such, many Indigenous students remain skeptical of Western academic institutions.

A specific consequence of colonization is that Western ways of knowing have predominated over Indigenous ways of knowing.^{7-8,11,13} Thus, these notions are also reflected within post-secondary education. For example, typical modes of assessment (e.g., essays and standardized tests) are not often relevant to Indigenous students. Indigenous cultures emphasize oral storytelling, sharing circles and hands-on learning, rather than formal writing and documentation.^{10-11,13} The concept of "Indigenizing" and reforming education can be done many ways, including increasing the number of Indigenous faculty and graduate students,

expanding on the number of courses that address Indigenous worldviews, and offering land-based learning activities.²² However, when the Western knowledge acquisition and translation framework is the only method used within schools, this can prevent Indigenous students from following through with their programs.

It is well documented that prior education and feeling unprepared for post-secondary can affect retention in higher education.^{2,16,23-24} Additionally, Indspire²⁵ found that feeling academically unprepared was a primary concern for Indigenous students. This may be due to several factors. First, it is likely that the placing of First Nations onto reserves and the limiting of all Indigenous Peoples' traditional ways of life has contributed to these feelings of unpreparedness for students. The legacy of residential schools in Canada has created intergenerational trauma for Indigenous Peoples.^{7,10-11,26} This means that the generations following the survivors (and the survivors themselves) are often left separated from cultural knowledge, community, family, and have difficulties coping as a result of colonial violence, mistreatment, and abuse.²⁶ While this can affect many social dimensions, it also has consequences for education. For instance, research has demonstrated that Indigenous students who have a parent who went to residential schools are more likely to struggle through their own education.²⁶ According to Cowan,²⁶ this is because the parent did not receive actual academic training while at these "schools," thus lowering their socioeconomic status and subsequent opportunities for their children to succeed in school. It also is a consequence of the cycle of violence, addiction, and mental health issues that colonialism imposed upon Indigenous families, leaving them with little resources or knowledge on how to resolve that trauma and progress towards the future.²⁶ As such, students may feel they are not prepared to pursue post-secondary studies because the only interaction their family has had with education is through residential schools.

Secondly, Indigenous students, from a young age, also endure racism, discrimination, stereotyping, and other negative messages because many Canadians still fail to acknowledge the disparities Indigenous communities face.^{7,9,11-14,21,26} This may create doubts for Indigenous students early on about their ability to succeed. Therefore, Indigenous students may feel unprepared to go to post-secondary because not only has history stacked the deck against them, but they are also forced to navigate two seemingly conflicting cultural worlds at once.^{6,8,10,12,19} Moreover, these realities would likely be exaggerated for students at post-secondary institutions, as academia primarily lives within the worlds of the Western, colonized, and privileged. Rather than celebrating the fact that Indigenous students have the ability to successfully manage both cultural environments, learners are left to feel deficient in academic landscapes and unable to recognize that it is possible for them to thrive in post-secondary education.^{1,3,7,10}

A final issue that is commonly brought up in this discussion of preparedness is that of on-reserve education funding. While there is not a consensus on whether elementary and high schools on reserves in Canada receive adequate federal funds,^{21,27-30} Bains²⁸ noted that

increasing funding does not necessarily produce higher graduation rates or greater education quality in preparation for post-secondary studies. However, funding is still extremely important for financing elementary and secondary school teachers' salaries, curriculum development, textbooks, labs, libraries, and gyms, to name a few examples.²⁷⁻²⁸ Additionally, some on-reserve schools have struggled with obtaining the necessary resources to return to school safely during the COVID-19 pandemic, with barriers including limited classroom space and inadequate ventilation systems.²¹ The Canadian Human Rights Tribunal³¹ outlines that inequitable access to programming, services, and supports for First Nations children often stems from discrimination, and thus can be generalized to educational circumstances such as this. The funding discrepancy between on- and off-reserve education for children is also included within Call to Action #8 of the TRC.²⁰ According to Jewell and Mosby,²¹ there has been progress made on this since 2015, but the Call to Action has not yet been fully met. As such, these funding issues could be the root of some First Nations students' feelings of unpreparedness for post-secondary education. However, in relation to funding, it is also important to note the differences between on-reserve and provincial schools in terms of curriculum, functioning, and reporting.^{21,28-29} For example, when First Nations students graduate high school, their diploma is not always recognized by post-secondary institutions because of variations in operating.²⁸ Furthermore, some communities do not even have their own elementary or secondary schools,²⁸ which may create barriers to basic education due to proximity and travel.^{1,3,8-9,11,13-14}

These points raise two primary concerns: a) students on and off reserves are receiving two separate standards or ideas of an education, which may leave students feeling unprepared for post-secondary studies; and b) a notion arises that Indigenous youth are undeserving of elementary and high school educations, which leaves them forgotten in pursuits of post-secondary education. This is not to say that on-reserve schooling should change to suit provincial schooling expectations, as neither is necessarily superior to the other. Rather, there is something to be said about how others, outside of First Nations communities, may devalue the possible traditional education that students are receiving on-reserve. Referring to the previous matter of Western vs. Indigenous ways of knowing,^{7-8,11,13} such teachings are not recognized by or reflected within provincial post-secondary institutions.²⁸ This widens the existing gap between on-reserve and provincial schooling,⁹ which could put First Nations students on-reserve at a greater risk for prematurely leaving post-secondary education. However, it should be noted that this topic of comparing on- and off-reserve education is extremely complex and should be investigated further to identify additional intricacies.

While it is important to note these direct influences of history on Indigenous education, many of the barriers for early leavers that will be discussed in this review can also be indirectly attributed to colonization.

Institutional

Universities and colleges are complex systems made up of various processes and structures.¹⁸ However, the climate of these systems and how they are organized often makes Indigenous students vulnerable to early leaving. Institutional factors that will be discussed include systemic racism, cultural awareness, curriculum content, Indigenous representation, false narratives, finances, and supports.

Many articles in this review mentioned racism and discrimination on campus as a factor that pushes students to leave school. In fact, Indspire's past research indicated this as well,³² and thus the *Rivers to Success: Indigenous Student Mentorship Program* (R2S) was created to address the effects of discrimination on students. Jewell & Mosby²¹ stated that structural anti-Indigenous racism was also one of the main barriers to implementing the Truth and Reconciliation Commission of Canada's²⁰ 94 Calls to Action. Although instances of overt racism have decreased,¹⁰ microaggressions, stereotyping, labelling, and resentment from other students, faculty, and teachers are still common.^{7,9,11-14} While one study found no reference to racism, the authors speculated that this was likely due to participants being enrolled in Indigenous-specific programs.¹ The resulting narrative is that many institutions exhibit low cultural intelligence and insensitivity,^{4,14} which contributes to a negative learning environment for Indigenous students.¹¹ This manifests on campus in the form of "Indian" mascots,⁷ in pan-Indigenous perspectives (e.g., not understanding how the Métis and Inuit differ from First Nations, or the diversity within each group),³² and in a lack of acknowledgement of the struggles and racism Indigenous Peoples face.^{10,12} There becomes a burdensome expectation that Indigenous students are responsible for educating and correcting their non-Indigenous teachers and peers on Indigenous topics, within and outside of class, which is an emotionally exhausting weight to carry.³² As such, institutional change, in the form of policies and practices, is needed to address issues of equity and accountability. This is supported by Jewell,³³ whose work states that many Indigenous reports over the last 30 years have echoed the same message: systemic bias can only be addressed by eliminating harmful colonial practices at a structural level. Specifically, they reference Call to Action #47 as one of these supporting recommendations,²⁰ as well as various Calls for Justice within the National Inquiry into Missing and Murdered Indigenous Women and Girls.³⁴

Relatedly, the curriculum in post-secondary institutions often portrays Indigenous Peoples in a historically inaccurate and ignorant way.^{2,7,9-11} For example, Indigenous cultures are represented as a thing of the past, thus rendering Indigenous students, their realities, their experiences, and their accomplishments, invisible.^{7,10-11} This depiction strongly relates to the notion of erasure politics, as to remove Indigenous Peoples and their perspectives from public awareness.³⁵ From a colonial perspective, the lack of acknowledgement within post-secondary institutions regarding Indigenous culture and students is part of a larger issue, which seeks to erase Indigenous Peoples from Canadian history.^{7,11,35} Overall, this sends the message to

Indigenous students that they are unimportant and insignificant within the institution and society, which harms mental health and persistence.⁷ The Truth and Reconciliation Commission of Canada²⁰ also recognizes that reforming curriculum to be culturally relevant and accurate to Indigenous Peoples can be a means of reconciliation within Canadian education systems, which demonstrates the importance of this matter. The concerns with curriculum highlight another issue: having few Indigenous faculty and staff is also related to early leaving, as there is no one to accurately teach curriculum or to act as role models for Indigenous students.^{4,9,10-11,13-14} Not only this, but students were more likely to approach staff if they were also Indigenous, which is important for building student-faculty relationships that help facilitate persistence.¹³ Fortunately, Indspire's *Teach for Tomorrow: Indigenous Educator Apprenticeship Program* is an initiative which is helping to address this underrepresentation of Indigenous teachers by providing opportunities for youth to become educators. However, the culturally neutral nature of post-secondary still continues to contribute to the low retention rates of Indigenous students by belittling their existence at an institutional level.

Furthermore, an Australian study found that Indigenous students were just as engaged in school as their non-Indigenous counterparts, despite lower retention rates.¹ This was especially true for first-generation students, who were excited to bring knowledge back to their communities. Even so, there still exists a false narrative at many post-secondary institutions that Indigenous students are inferior, unmotivated, and that leaving school early is entirely of their own accord.^{1,3,7,10} Climates like these create unsuitable learning environments, which is a major barrier to educational attainment.^{2,7}

Other prominent institutional barriers identified in the literature include financial issues and stress (e.g., inadequate Indigenous-specific financial aid, scholarship and bursary programs),^{1,3-4,9,11-15,25,32} a lack of flexibility and/or accommodations available,^{3,11,13} few transition programs for new Indigenous students (e.g., rites of passage ceremonies),^{4,14-15} and little support for non-traditional students and non-academic matters (i.e., mental health and personal growth).^{1-3,12-14} Indigenous students tend to share similar characteristics with other non-traditional students, in that they tend to be older, returners, and do not always start post-secondary studies immediately following high school.³

Socio-Cultural Influences

Within this next theme, social and cultural influences on early leaving will be examined. This encompasses topics that are of high value to Indigenous students, such as community, relationships, culturally-centered resources, and the self-in-relation to Indigeneity. As such, two subthemes have emerged: community and cultural connection, and identity.

Community and Cultural Connection

The relationships which students build during post-secondary education are extremely important for increasing retention because they establish an academic community and feelings of connectedness. Indspire's *Truth and Reconciliation in Post-Secondary Settings: Student Experience* report³² indicated that wanting a sense of community and support at school was a primary need for Indigenous students and significantly impacted their success. This was also what drove the development of Indspire's R2S mentorship program, since a goal of the program is to foster those positive feelings of connection for students. Additionally, some studies even noted that students start to refer to their post-secondary community as an extended family.^{8,12} For instance, getting to know faculty members and teachers (both Indigenous and non-Indigenous) on a more personal level is referenced frequently as a good indicator of student success.^{1,4,13-15,17} Student-faculty relationships were even helpful for pulling Indigenous students back into school after previously leaving early.¹³ Similarly, creating strong relationships with peers (both Indigenous and non-Indigenous) helps increase retention.^{1,4,12-15,17} Mentorship programs and having role models on campus (both peer and faculty) are also effective strategies for mitigating the number of Indigenous early leavers.^{2,4,10-12,14} Finally, it should be noted that Indigenous resource centers and lounges act as facilitators of these various types of social relationships and networks, which demonstrates the need for these supports on campuses.^{1,12-14}

While the post-secondary community is important, the ongoing relationships Indigenous students have within their home, away from school, are equally vital for success. Community is very important to Indigenous students for personal and cultural wellness, as it helps them deal with the struggles of university and college.¹⁷ The support and encouragement that family and community members provide towards a student's educational goals positively affects persistence.^{8,12} Thus, positive relations all around act as a protective factor against leaving early.

Finally, the presence of on-campus cultural initiatives and resources is a promoter of persistence. When schools embrace Indigenous ways of knowing and tradition, this actively combats the culturally neutral nature of institutions, as was previously discussed.^{6,13} A suggestion is to provide opportunities for ceremony and spirituality (for example, rites of passage, drumming, sweat lodges, or feasts).¹³⁻¹⁴ Visiting Elders can facilitate these activities and provide cultural and personal support to students.¹²⁻¹⁴ There is also a need for Indigenous counsellors at post-secondary institutions who can give culturally informed support.^{6,12,14} Additionally, the literature stresses the importance of Indigenous resource centers which act as a hub for community gatherings and cultural initiatives.^{1,12-14} Some articles also pointed out that language revitalization efforts on campus can be extremely helpful for keeping students culturally engaged.^{10,14} All in all, cultural supports are critical when discussing Indigenous early leavers.

While this section has highlighted factors which encourage staying in school, it should be noted that there is a major social barrier to attainment that has yet to be discussed: leaving community. Students may experience culture shock when entering the unfamiliar environment that is post-secondary education, especially if they live on reserve or are from remote or rural areas.^{2,12-13} Some schools encourage a “culture-free zone,” in which students are implicitly or explicitly receiving messages to not “act Native.”^{2,10} Another example is that Indigenous students and institutions may perceive success and failure differently, as they are not universal concepts; both are culturally defined.⁸ For instance, Indigenous success has been described as connection, culture, and community,⁸ which is not the prevailing definition in post-secondary or larger society. This discussion also intersects with motivation, which will be addressed later in this report. Ultimately, if Indigenous students are leaving their families and communities behind for a place where their values are not reflected in the social environment, it may push students to return home.

Identity

Interestingly, a strong sense of Indigenous identity has been identified as a protective factor against early leaving.^{5,7-8,10,12} Identity for Indigenous Peoples is an extremely complex topic, given a history that comprises a widespread loss of Indigenous cultures.⁵

Unfortunately, the literature indicates that it is common for Indigenous students to feel alienated and isolated on campus.^{6,12,14} A study by Huffman⁶ demonstrated that Indigenous students often encounter cultural conflict at school, which is in turn linked to low persistence. They stated that students often fall into one of two categories or “cultural masks”: 1) estranged (i.e., those who leave school early); and 2) transcultured (i.e., those who persist). However, these masks are characterized by differences in identity. Estranged students in the study had a sense of traditional culture, but also a strong mistrust of education systems; many of them believed their identity as an Indigenous person was at risk while pursuing post-secondary education. From the estranged student’s perspective, their only options were to assimilate or leave. On the other hand, transcultured students also had a sense of traditional culture and a rejection of assimilation, but they were confident that they would not lose their identities. Instead, they drew strength and emotional security from being Indigenous, which allowed them to operate in two cultural contexts simultaneously. Therefore, both students begin the same (feeling alienated), but the point at which they began to progress down a specific identity path (called the transculturation threshold) determined if they were more likely to leave school or to stay.

Joseph and Windchief⁸ suggest that for Indigenous students, going to post-secondary institutions involves a constant negotiation between the student’s at-home community (which provides primary cultural resources) and post-secondary community (which provides secondary cultural resources). This interaction causes questioning and identity work to occur.^{4,8} In order to promote student success, students need to feel empowered through their Indigenous identity.

It is also important to note that the definition of “self” is different for Indigenous students than those who are non-Indigenous, as there is more emphasis placed on community.⁸ Thus, both communities must facilitate this development and help students foster a sense of belonging to increase their persistence.^{2,4,12}

Self-discovery appears to be a common experience for Indigenous students during post-secondary studies, where students fluctuate on a continuum of identity from more immersed in Western culture to more immersed in Indigenous culture.⁸ Hallett et al.⁵ further support this idea that identity is not fixed; it is an ever-changing entity over the course of the human lifespan. In their study they found that Indigenous students fluctuate greatly in their Indigenous identity, and the nature of their identity was correlated to early leaving. Specifically, those who had always declared their Indigenous identity were more likely to leave early. Oppositely, students who previously did not declare Indigenous identity, but recently started to consistently identify as Indigenous, had the lowest rates of leaving. While the authors could not explain these results, most of the students who had always declared their Indigeneity were from reserves, whereas living off-reserve was strongly related to changing Indigenous identity at some point.

Thus, the way in which schools promote and encourage cultural identity is extremely important. This is also another reason to have culturally relevant content in school curricula, as students feel that some classes demean their identity as an Indigenous person.⁷ Additionally, finding a sense of academic identity as a student is also necessary for success.¹⁰ While more research needs to be conducted on the topic, the way in which students identify will likely affect their educational outcomes in some way. It is integral that Indigenous students foster a sense of confidence, pride, strength, and purpose in their identity, and that people do not underestimate their abilities to exist in two cultural worlds.^{6,8,10,12}

Individual Influences

Finally, there are some individual and person-level factors which may affect early leaving. However, it is important to note that the points mentioned below are often influenced by the external factors mentioned above and that blame should not be placed on the student. Early leaving is highly complex. Therefore, avoiding a deficit-focused perspective is necessary, as it has been traditionally applied to this topic¹⁶ and failed to explain the intricate nature of early leaving.¹⁷ This category also includes two subthemes: cognition and personal characteristics.

Cognition

When discussing individual thinking patterns, a primary topic in the literature is student motivation. Tinto¹⁶ theorized that the decision to leave school early is informed by a student's commitments to their goals and to the institution they attend—in other words, how much the student wants to achieve their qualification and how much they want to complete it at that specific school. Students weigh the pros and cons of being at post-secondary and are more likely to leave if the costs outweigh the benefits.¹⁶ However, Guiffrida¹⁷ argued that what classic explanations of early leaving fail to consider is how the source of motivation can differ between ethnic minority and majority students and subsequently affect their commitments. They propose that institutions are created with more individualistic and extrinsic values in mind (e.g., independence, competition, external validation, grades), even though Indigenous cultures tend to value collectivism and intrinsic needs (e.g., interdependence, harmony, attachment, personal validation and overall competency).^{4,8,17} Thus, Indigenous students' motivations may contradict the school's definitions of success and competency. When institutions are not oriented towards Indigenous students' motivational needs, this may put them at risk for early leaving.

A common collectivist-oriented motivation to stay in school for Indigenous students is the desire to give back to their community.^{1,8,12} For example, giving back can mean bringing home new knowledge or becoming role models for others in the community.^{2,12} Mentoring programs can help facilitate this development of leadership skills too.^{2,11} Overall, Joseph and Windchief⁸ explained the concept of Indigenous student motivation, stating that "... to do well in school is to respect one's Elders." ^{8(p85)}

Moreover, a second concept to consider regarding cognition is a student's perception(s) of themselves. Self-efficacy, or believing in one's own capabilities,⁴ is important for post-secondary retention. Students need to have positive beliefs about how they might perform in school and about what they may achieve.¹⁰ Relatedly, Walton et al.¹³ found that when students learned how to effectively study and work on their own, they were more likely to persist. Therefore, it is critical that students are given the information to develop independent learning and academic skills, as these can improve self-efficacy and retention.

Personal Characteristics

Specific demographic characteristics also make early leaving more likely for an individual. For instance, Indigenous students who are caregivers or parents (particularly those who are both single and female) have many more obstacles to face in their educational attainment.^{3,13} This is primarily due to institutions not providing students who are parents with adequate resources, such as childcare centres on campus, support groups, scheduling flexibility, or additional financial aid, to name a few.³ However, outside of having children, Walton et al.¹³ stated that gender did not significantly affect Indigenous persistence. The conversation surrounding dependents is especially relevant because the percentage of Indigenous post-secondary

students who have children is triple that of non-Indigenous students.³ Additionally, mature students also face unique barriers (e.g., more time spent outside of the school system following high school completion) and tend to have greater familial responsibilities than younger students.^{1,11,14} This is significant because Indigenous learners are enrolling at increasingly older ages.¹¹ Shankar and Khalema¹¹ defined a mature student as someone who is 25 years of age or older. Looking at Indspire's data (see Appendix A), 49% of funded students met this criterion.³⁶ Not only this, but 51% of these mature students had at least one dependent to care for, compared to 7% of non-mature Indigenous students.³⁶ This signifies that a high proportion of Indigenous students are likely experiencing the additional challenges that come along with being mature-aged and/or a caregiver while pursuing post-secondary.

Parental education has mixed outcomes as an indicator of persistence, as some studies found it correlated with early leaving but others did not.^{9,11,13} First-generation Indigenous post-secondary students were not found to be at any bigger risk; however, additional targeted supports did help to ensure their success.¹⁴ With this being said, having a disability,¹ not getting into one's first program of choice,¹⁵ and specific fields of study¹⁵ all had negative impacts on persistence. Speaking an Indigenous language is also associated with early leaving, which suggests that knowing a traditional language may come at the cost of not knowing the predominant language as proficiently (e.g., English).⁹ This ties back into systemic influences on early leaving, as there is a dissonance between Indigenous and Western ways of knowing and being. Speaking and saving their languages is one of the great strengths of Indigenous Peoples; it is not a weakness. However, this perspective is not reflected within institutions. Finally, geography was also a major indicator of education completion, as students from remote, rural, and on-reserve areas face more physical barriers to education because they usually live farther away from schools.^{1,3,8-9,11,13-14}

The last individual-related factor from the literature that affects early leaving is academic characteristics. Tinto¹⁶ cites that a student's intellectual development while pursuing post-secondary studies is related to retention. Intellectual development would be the intrinsic evaluation of learning, while grades or GPA would be the extrinsic evaluation of learning. While Tinto¹⁶ states that high grades mean high intellectual achievement, it is important to recall the previous conversations of motivation and needs of Indigenous students,^{1-2,4,8,12,16-17} as well as cultural incongruence of standard assessments.^{10-11,13} While grades during and prior to post-secondary education have been found as an adequate indicator of persistence,^{13,15-16} intellectual development should be considered in terms of Indigenous values and ways of learning and knowing. Additionally, a student's ability to organize for and navigate university (e.g., creating schedules, setting goals),⁴ their study habits and skills,^{1,15} and class attendance¹⁵ all impacted early leaving.

Prevailing & Persisting: Looking Towards the Future

Overall, this literature review identified three themes related to Indigenous early leaving: (1) systemic influences; (2) sociocultural influences; (3) individual influences. While some factors may play a greater role in pushing Indigenous students to leave school than others do, an overlap of barriers in all three categories often has the biggest impact on retention. Persistence is not determined by one isolated experience or struggle. A positive Indigenous student experience is achieved through a well-rounded, holistic student life that promotes physical, mental, cultural and spiritual wellbeing.^{7-8,11,14,37} Therefore, early leaving should be viewed with this same holistic lens, to attain a comprehensive understanding of the topic. Even so, despite the challenges discussed within this review, Indigenous students are continuing to enroll and persist at greater numbers than has been observed in previous decades.³⁸ Looking towards the future, there is still much work that needs to be done. However, there are also many reasons to be optimistic about the continued pursuit of Indigenous post-secondary success.

Gaps and Limitations

While the literature provided useful insights on Indigenous early leavers, there are many gaps which need to be addressed:

1. There is little research on early school leavers who eventually return to school later. Post-secondary institutions tend to highlight enrollment and graduation rates, but not the data on attrition and retention. What makes students come back? How many come back? How long does it take them to return to school after leaving? These are all questions that need to be investigated.
2. The literature needs to expand on intersectionality and other aspects of the Indigenous student experience (e.g., sexuality, gender identity, being of mixed ethnicity, having a disability).
3. It could be helpful to conduct research on which post-secondary institutions in Canada have made commitments to the TRC²⁰ and have Indigenous achievement plans in place. This is important for measuring the “Indigenization” of academia and may assist students in choosing an institution that will best meet their needs and make success more likely.
4. There is a need for more research on Indigenous post-secondary leavers, as most of the literature reports on high school students.
5. Research should distinguish between types of early leaving (e.g., transfers, temporary leavers, returning leavers, first-year versus fourth-year leavers, etc.), older and younger cohorts, and specific field of study.
6. There needs to be more research on the educational outcomes related to the nature of self-identification and why it affects early leaving. For example, how does distinguishing between Indigenous group, tribe, band, and the use of different terminology (e.g., Aboriginal, Native, Indigenous, Indian) correlate to early leaving?
7. There needs to be more investigation on the long-term processes of early leaving (before and after post-secondary).
8. With COVID-19 resulting in increased online schooling, research should examine whether this change has affected Indigenous early leaving.
9. The review found that mentoring (whether formal or informal) is an under-researched topic, despite being integral to increasing Indigenous retention rates.⁴ Thus, further investigation is needed.

Future Directions and Implications

From this literature review, there are some future steps that can be taken by researchers, educators, institutions and Indspire as an organization. First, this review has provided valuable insights for Indspire's *Research and Impact Unit (RIU)*. As such, a critical next step for the RIU is to use these findings to undertake its own research project on early leavers. This way, we may be able to help students at Indspire better, particularly those who have or have considered leaving post-secondary studies early. The need for developing and hiring more Indigenous teachers and faculty at the post-secondary level also cannot be stressed enough.^{9,11,13-14} Indspire's *Teach for Tomorrow: Indigenous Educator Apprenticeship Program* will be able to use these findings as evidence of the importance of the program and to guide their efforts in cultivating future generations of Indigenous teachers. Indspire's *Rivers to Success: Indigenous Student Mentorship Program* can also play a key role in providing role models and mentors for Indigenous learners, while educational institutions seek ways to increase the recruitment and retention of Indigenous staff. Finally, there is also a need for more Indigenous content, history, and ways of knowing to be incorporated within curriculum and learning spaces in order to encourage persistence (e.g., bringing in Indigenous guest lecturers, reading Indigenous-authored texts, etc.).^{7,9,11-12,14} However, even if none of these steps are taken, teachers, faculty, and students at post-secondary institutions need to be taught cultural intelligence, at the very least. This would hopefully mitigate the amount of racism and stereotypes Indigenous students experience on campus.^{7,10-11,13-14}

Furthermore, increased attention on fostering positive Indigenous student-faculty relationships^{2,4,15} and providing more non-academic supports^{1-3,6} will help students feel better adapted to the school environment. Improving financial assistance was also highly cited, indicating that more organizations and institutions should implement Indigenous-specific bursary and scholarship programs, as a start.^{1,3,11-12,13-14}

Indigenous students need to be encouraged to explore their culture, identity, and community while pursuing post-secondary studies.^{5-8,10} This can be done by implementing more cultural programming on campus and providing more accommodations for non-traditional students.^{2-3,10-14} As well, Indigenous-specific mentorship, role model, and leadership development programs^{2,4,11-15} would be beneficial for current students and aspiring youth. This has implications for Indspire's *Rivers to Success: Indigenous Student Mentorship Program*, as this report shows not only the need for Indigenous-specific mentorship, but also gives insight into what students are struggling with and may require mentorship advice on. Mentors can discuss these possible educational barriers with their mentees and hopefully help students overcome them. Finally, supports related to navigating self-efficacy,^{4,10,13} transculturation,^{2,4,6,8,10,12,17} motivations,^{1-2,4,8,12,16-17} and transitions,^{14-15,17} are also needed.

All in all, this review indicates that the future of education must make space for different worldviews and adjust according to student needs. Not everyone fits into one model of

learning, and post-secondary education comes with a variety of challenges that can be greatly affected by culture and ethnicity. Moving forward, a new direction might be to implement measures of student success that are not solely based on program completion. Since Indigenous students have unique motivations,^{1-2,4,8,12,16-17} needs,^{4,8,17} and perspectives on education, early leaving might not necessarily indicate failure in the post-secondary system. The Canadian Council on Learning³⁷ states that for Indigenous Peoples success exists in many forms, and learning is perceived as a lifelong journey. If Indigenous early leavers are able to fulfill some of their motivations for going to school in the time that they are there (e.g., giving back to community,^{1,8,12} increasing personal competency dimensions^{4,8,17}), then success may look different in their eyes than in that of the institution.

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Appendix A

Building Brighter Futures Demographic Information

Age	Number of Students	Percentage
Non-Mature (17-24 years)	3202	51%
Mature (25+ years)	3029	49%
Total	6231	100 %

Table A1. BBF Students by Age (Indspire, 2021). Please note that 9 BBF students did not specify their age and thus were not included within these calculations.

Age	Number of Students with Dependents	Percentage*
Non-Mature (17-24 years)	210	7%
Mature (25+ years)	1548	51%
Total	1758	28%

Table A2. BBF Students with Dependents by Age (Indspire, 2021). *Please note that percentage is calculated as the number of students with dependents divided by the total number of students in each age group (see Table A1).