Walking Together: Supporting Indigenous Student Success in University

Cathy MacDonald and Lance Bright

Associate Dean Academic Affairs & Professor, Rankin School of Nursing, Saint Francis Xavier University, Antigonish, Nova Scotia, 320 Nicholson Tower, Canada.

RESEARCH

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*Corresponding Author:

Cathy MacDonald, Associate Dean Academic Affairs & Professor, Rankin School of Nursing

Saint Francis Xavier University

Antigonish, Nova Scotia

320 Nicholson Tower, Canada; Tel: 902-867-3653

E-mail: cdmacdon@stfx.ca

ABSTRACT

Success in higher education is crucial for capacity building and assisting Indigenous communities to meet selfdetermination and self-governance goals. This qualitative research study was guided by participatory action research (PAR) and Indigenous principles in a "Two-eyed Seeing" approach to explored Indigenous student success at university. This research captured the diverse stories of Indigenous students being educated in mainstream epistemology and worldviews, analyzed the facilitators and challenges that they confront, and the resources Indigenous students require for success at a primarily undergraduate Maritime university in Eastern Canada. This research complemented the Truth and Reconciliation Calls to Action (2015) related to closing identified educational achievement gaps and improving educational attainment levels and success. Fifteen individual in-depth interviews were conducted with Indigenous undergraduate students representing 9 First Nation communities in the Maritime provinces. From the Indigenous student's stories, three major themes with subthemes emerged. The themes are: 1). "A Mixture of Stress & Success": Indigenous Students University Experiences, 2). Supports for Indigenous Students: "We Need More", and 3). Walking Together: University Policies and Practices to Support Indigenous Student Success. It is critical that university policies and practices are developed to support Indigenous student success, including the decolonializing of university courses and curricula, mandatory cultural competency education for all professors and instructors, recruitment and hiring of Indigenous educators, residence, and foods policies reflective of Indigenous students and a mandatory Indigenous course requirement for all students regardless of program of study.

Key Words: Indigenous student success; undergraduate university; qualitative research; two-eyed seeing; PAR principles.

ABBREVIATIONS

CIHR- Canadian Institute of Health Research

OCAP- Ownership, Control, Access, and Possession

OECD- Organization for Economic Co-operation and Development

PAR- Participatory Action Research

RA- Research Assistant

SAGE- Supporting Aboriginal Graduate Enhancement

TRC- Truth and Reconciliation Commission

INTRODUCTION

To date, research involving Indigenous student success post-secondary institutions is minimal. Notably sparse in the research literature are the diverse voices of Indigenous university students, analysis of the unique

facilitators and challenges that they confront, and the resources Indigenous students require for being successful in university. This study builds upon a current body of literature by critically analyzing reasons for low Indigenous student's retention and success rates. This study also adds awareness and critical consciousness to issues related to culture, colonial and historical contexts, inequities in education, and economic and social conditions [1,2,3] that affects Indigenous student success. Indigenous communities and organizations may use these research findings to disseminate knowledge about Indigenous student successes, and to inform policies related to funding students attending university from their community. In addition, university administrators, educators, staff, and students will gain more knowledge about Indigenous student needs, which will inform culturally safe policy, teaching, curricula, and supports. This research complements the Truth and Reconciliation Committee (TRC) Calls to Action [4] related to closing identified educational achievement gaps for Indigenous students and improving educational attainment levels and success. This study generated recommendations to increase Indigenous student retention and success rates at an undergraduate Maritime university in Eastern Canada. Academics will benefit from this research by gaining knowledge about Indigenous student needs, so that they may implement teaching strategies and practices that fosters Indigenous student success.

Supporting Indigenous university students requires policies and procedures addressing their specific needs, such as cultural awareness and sensitivity training, access to Indigenous student services, financial aid including scholarships, decolonializing curriculum, recruitment and hiring of Indigenous educators, community engagement and outreach, and data collection and monitoring. These measures aim to foster a welcoming and culturally safe environment, remove barriers to access, incorporate Indigenous perspectives, build supportive community relationships, and track progress in supporting Indigenous student success.

Literature Review

It is reported that less than 10% of Canadian Indigenous adults aged 25 to 64 had university degrees compared to more than 26% of non-Indigenous people [5,6]. Higher education is crucial for capacity building and helping Indigenous communities to meet self-determination and self-governance goals. The TRC Calls to Action [4] maintains that the federal government draft new Aboriginal education legislation to improve education attainment levels and success rates for Indigenous peoples. Indigenous students are required to adapt to mainstream academic requirements, policies, procedures, values, and behaviors when attending post-secondary institutions [7,8]. The lower rates of Indigenous students graduating from university must be grounded in complex historical, political, and socioeconomic contexts that continue to influence Indigenous people's education, health, and lives. Indigenous students require an opportunity to communicate their stories and perspectives about being educated in mainstream epistemology and worldviews, their successes and challenges experienced, and the resources required to assist them to be successful in university.

Universities Canada identified education as a crucial tool for reconciliation and pointed out that universities are committed to helping Indigenous students achieve their potential through higher education [6]. Yet, Gray (2014) reported that Indigenous students who attend university may lack appropriate academic preparation and supports, experience isolation, tend to be older, and often require childcare [9]. Although, many educational postsecondary institutions are starting to undertake strategies to redress the education system, post-secondary institutions and their administrators have been slow to transform supportive environments with adequate resources for Indigenous students [10,4]. University curriculum is primarily devoid of Indigenous methodologies, epistemology, history, and language [7]; thus, universities have for the most part displaced Indigenous knowledge [11].

Increased numbers of Indigenous students envision success in post-secondary education as a pathway to

decolonization and transformation [10]. Indigenous success is holistic and interwoven in Indigenous worldviews and pedagogies; the whole person, their family and their community are included [12]. Indigenous student success in post-secondary institutions embodies the beliefs and actions of maintaining cultural integrity, finding one's gifts, and being responsible for reciprocity. Supporting Indigenous student success means promoting well-being, participation, engagement, and achievement [12,13]. Indigenous success includes an ability to give back to Indigenous communities and maintain Indigenous understandings and ways [8]. Yet, there are low rates of Indigenous students' enrollment and completion rates in universities, which is related to the historical impacts of colonization, assimilation and residential schools, discrimination, language and cultural differences, lack of funding and lack of culturally appropriate curricula [9,14,4]. In my roles as Associate Dean, Academic Affairs, Acting Director, and as a nursing faculty, the first author has worked with Indigenous students who require additional individual supports to ensure success at university. Indigenous students were leaving university for various personal and academic reasons, without receiving a degree. Research is needed to develop policies and procedures to assist Indigenous student retention and success. Nevertheless, it must be emphasized, that despite all the challenges confronted by Indigenous students, there are those who are resilient and who continue to successfully complete their university degrees in the face of adversity.

Student learning needs and supports required for success are as diverse as are Indigenous peoples and communities; consequently, a one-size approach to education is ineffective. Educational systems historically have been systems of oppression for Indigenous people, especially residential schools [7,15]. Education was intentionally and forcibly used as a tool for assimilation of Indigenous people by the Canadian government [2,16]. Battiste (2013) cited that "for more than a century, Indigenous students have been part of a forced assimilation plan — their heritage and knowledge rejected and suppressed and ignored by the education system" [17,

p.23]. However, Battiste also views education as a place of possibility and opportunity, whereby "teachers and students can confront and defeat the forces that prevent students from living more fully and more freely. Every school is either a site of reproduction or a site of change." [17, p. 175]. Research indicates that Indigenous students supported with activities and services connecting them to their identity, and fostering a sense of community, positively influences their successes in post-secondary education [9,17,18]. The TRC (2015) informs us that changes to Indigenous education requires the development of culturally appropriate curricula, providing adequate funding to Indigenous students in post-secondary education, and drafting legislation pertaining to education with Indigenous people [4]. Traditional teachings and Indigenous knowledge can work with mainstream knowledge systems, so both can benefit in reciprocal learning, with 'Two-eyed Seeing' being the guiding principle for learning in two worlds [19,20].

Data Collection

Research Questions

In response to the recommendations from the TRC (2015), this study had four objectives: 1). To explore Indigenous student's experiences at an undergraduate Eastern Canadian University; 2). To examine the facilitators and challenges for success of Indigenous students; 3). To explore the supports Indigenous students, require for retention and degree attainment; and 4). To contribute to the current state of knowledge and knowledge translation related to practices and policies that inform Indigenous student success.

Research Design

In keeping with the Canadian Institutes of Health Research (CIHR) Guidelines (2013), [21] this study employed a qualitative research approach guided by participatory action research (PAR) principles and Indigenous principles in a 'Two-eyed Seeing' approach. This framework provided the theoretical and methodological underpinnings for the

research process. Employing PAR principles and Indigenous principles in a Two-eyed Seeing approach was beneficial to conducting reciprocal and respectful research, while eliminating hierarchical relationships during the research process. This qualitative study provided a means for analyzing and interpreting how the colonial past and the current sociopolitical and economic climate influence Indigenous student success. The blending of Indigenous principles, 'Two-eyed Seeing' and a western methodology (PAR) represented the multiple realities of Indigenous student experiences with success in university. 'Two-eyed Seeing' (Sesatu'k Etuaptmnkl) being an approach that brings together both Indigenous and western knowledge systems. 'Two-eyed Seeing' focuses on understanding and strengths of both western and Indigenous knowledge and ways of knowing [22]. Indigenous principles are fundamental to conducting honourable and respectful relationships and research with Indigenous people [23]. The Indigenous principles of equity, relationality, respect, reciprocity, responsibility, social justice, and democratic collective decision making are critical when conducting research with Indigenous communities [24,25,26,27]. These principles were upheld by enabling the participation of community members, acknowledging that the viewpoints of all participants are valued, using collaborative decision-making regarding the research process and dissemination of findings, and fostering open communication.

Data Collection

An Indigenous Research Assistant (RA) and second author was employed to assist in the research process after obtaining consent. Participants were selected through purposive and snowball sampling. The participant population included 15 self-identified undergraduate Indigenous students attending a university in Eastern Canada, 18 years or older, who were living in a First Nations community in Atlantic Canada. Participants who could read, write, and speak English were invited to participate. There were no years of study or undergraduate program specifications for inclusion criteria. There were 14 full-time

students and one part-time student representing 9 First Nation communities in the Canadian Maritime provinces. The students ranged in age from 19-27 years, attending university for 1-7 years and all had Band funding from their communities. Four students lived off campus, 2 lived in their community, while 9 lived on campus.

To obtain a purposive sample of participants for this study, the RA used recruitment posters inviting Indigenous students to participate. The recruitment poster specified inclusion criteria and included contact information for the principal investigator and the RA, so eligible participants could call or email to inquire about the study and/or indicate interest in participating. The participants interested in participating in the research signed a consent and completed a demographic data sheet. The interview guide was comprised of 14 broad and probe questions, to facilitate conversations pertaining to Indigenous student experiences at university including the facilitators and challenges for their success and the supports required for retention and degree attainment. The interviews were audiotaped, except for four that were handwritten at the request of the participants. A transcriptionist was also hired to transcribe all interviews, after consent was obtained. Following transcription of the data and preliminary analysis of findings, participants were invited to a follow-up meeting to provide feedback on data interpretation and to provide input, make changes or additions to their interviews. There was a back-and-forth open dialogue throughout the interview process. This research provided a platform for Indigenous students to give voice and validation to their experiences, challenges, and highlighted the various factors influencing their success.

Data Analysis

Data were examined using the Braun and Clarke (2006) six phases of thematic analysis method. Thematic analysis identifies, analyzes, and reports patterns within data, while minimally organizes and describes in rich details the data set [28]. In the first phase of thematic analysis, the researchers become familiarized with the data. Becoming

familiar was the data was achieved by reading, re-reading the transcripts, and listening to the audio-recorded interviews. Then, in Phase 2 initial codes were generated by collating relevant data to each code. The third phase involved searching for themes by collating codes into potential themes by collaborating all data relevant to each potential theme. Next, the fourth phase involved a reviewing of the themes, with the generation of a thematic map. Ongoing analysis generating clear names for themes and refining themes occurred in the fifth phase of thematic analysis. Finally, in the sixth phase a report was produced whereby discussion of analysis using vivid excerpts from data was related back to the research question and the current literature. This thematic analysis process captured the essence of unique, and at times similar Indigenous student experiences with success at university.

Ethical Considerations

The OCAP (Ownership, Control, Access, and Possession) principles (1998), guidelines, and community protocols were respected, acknowledging the standards on how research is to be conducted with the Indigenous community [29]. Also, the CIHR Guidelines for Health Research Involving Aboriginal People (2013) were followed, and ethical approval was obtained from the university research ethics board and Mi'kmaq Ethics Watch, Cape Breton University, prior to commencing the study. Informed consent from participants was obtained, as well as anonymity maintained by participants choosing a pseudonym.

Findings

Themes from Indigenous Student's Stories

Theme 1: "A Mixture of Stress and Success": Indigenous Students **University Experiences**

Sub-theme: Stressful Experiences: "Finding My Fit in University" "Culture Shock Transitioning to University" "Experiencing Racism in Class, Residence, and Meal Hall"

Sub-theme: Success Experiences at University: "We are Still Here" "Measuring Our own Success" "University Supports Contributing to Our Success" "Community Supports Contributing to Our Success"

Three major themes and sub-themes emerged from the data. The first theme, "A Mixture of Stress and Success": Indigenous Students University Experiences, highlights the mixture of positive and challenging experiences of Indigenous students at university. This theme has two subthemes, Stressful Experiences: "Finding My Fit in University" and Success Experiences at University: "We are Still Here." In the subtheme Stressful Experiences: "Finding My Fit in University" students communicated that they are challenged to find their fit or way at university. Many of them mentioned experiencing "culture shock when transitioning to university." They expressed being separated from their community, language, foods, traditions and entering a new place where some mentioned feeling alone and "feeling scared to go to a new place where you don't know anyone." One student described it was being like "taken away from my home" and another described "feeling like being pushed in a corner." Attempts to maintain their Indigenous identity were also expressed. For many the transition to university was not easy or smooth, and some articulated that they did not feel like they were prepared for the volume of coursework or high expectations of faculty and instructors. A few even communicated they did not even understand the expectations of the professors and lab instructors, while some others said that "there are too many courses at once." A few others described "more study spaces are needed" at the university for Indigenous students. While students were grateful for funding, they felt the university should assist them more with "financial challenges" they were experiencing. Further, a few spoke about having "no access to Indigenous foods" on campus, as well as "not knowing about available resources for Indigenous students." Experiencing culture shock while transitioning to university was highlighted by the participants not learning about Indigenous people in their courses and by having little to no Indigenous content in courses. One student communicated the need for "Indigenizing course curricula", while others mentioned a need for more Indigenous faculty and instructors on campus.

The second sub-theme is "Experiencing Racism in Class, Residence, and Meal Hall." Three participants spoke of experiences with racism in the classroom and in the residences. The racism was overt in all three cases. It was mentioned that one professor "had some comments about Indigenous history that were overwhelming to deal with" and made the student extremely uncomfortable to return to that environment in the classroom. Others hinted at subtle racism in the lack of Indigenous course content and programming, lack of access to Indigenous foods, lack of Indigenous educators and generally the lack of knowledge about Indigenous people, which all contributed to hindering inclusion and equity for Indigenous students. One stated, "they don't live far from our community, and they know nothing about us."

The second sub-theme, Success Experiences at University: "We are Still Here" specified that Indigenous students are experiencing successes at university. However, some either stated or insinuated that the successes they are experiencing at university are being measured by them, and not solely by the university. For example, one student provided an example whereby the student left for personal reasons the first time at university, but returned later and stated, "I have enjoyed my time ever since." Returning to university is success as measured by this student. Another student communicated that it matters "how you measure success", recommending that is not just with grades. It also includes "how you feel about how you are doing in school and what you are doing at school." She went on to communicate that this was the first time living away from home. Some students commented that just remaining at university in classes, even taking a reduced course load was viewed as success, as they had to confront difficult financial and overcome various personal issues. Having earned a school ring was communicated as being a measure of success for one Indigenous student, while receiving entrance scholarships was an important indicator of success for another student. Another two students talked about not being successful in one program at university, but by changing to a different program, contributed to their success.

Many of the students pointed out that "University Supports are Contributing to Our Success." They relayed that the Coordinator of Indigenous Student Affairs, the Indigenous

Student Centre, the Elder-in Residence, an Indigenous clinical therapist, Indigenous tutors, notetakers, scholarships and bursaries certainly assisted with their success. Also, professors that understood Indigenous students, the Success Centre, the Associate Dean, Deans, Health and Counselling, the Indigenous Society at the university, and the Centre for Accessible Learning were all described as being supportive. Almost every student communicated that "Community Supports are Contributing to Our Success." Band funding, the Education Director in their community, tutors and notetakers paid by the community, Indigenous health supports and some receiving regular check-ins from their community were reported as being vitally important to their success at university. Many articulated that without the funding from their communities, they could not financially be able to attend university and gratitude was expressed for this funding.

Theme 2: Supports for Indigenous Students: "We Need More"

Sub-theme: "Needing More University Supports"

Sub-theme: "More Community Resources Needed"

Although Indigenous students referred to the many supports, they were receiving from the university and their communities, the second theme "Supports for Indigenous Students: "We Need More" emerged. Students included in their stories how they required additional supports from the university and their communities to be successful at university. There are two subthemes entitled, "Needing More University Supports" and "More Community Resources Needed." The subtheme, "Needing More University Supports" represents what the students believed they required from the university to be successful. They disclosed addressing racism, clear expectations from professors and instructors in courses, Indigenizing courses and course curricula, and "just having more Indigenous content in courses," as being important to their success. Further, some students went on to communicate that they thought there should be a mandatory Indigenous course requirement for every student regardless of their undergraduate program.

They also revealed that they university should offer more health and counselling services for Indigenous students, more financial supports, more access to Indigenous foods, offer more study spaces and assist with the transition from community to university. Two students mentioned that the university could even hire Indigenous students to assist and mentor with transition from the community to the university. There should also be opportunities for Indigenous students to take a decrease course load, have Indigenous tutors and notetakers, and be able to take courses from Indigenous faculty and instructors. Two pointed out that there should be courses offered in their communities by the university, while another mentioned some sort of bridging program would help with the transition from high school to university.

The Sub-theme, "More Community Resources Needed" discussed the community resources students needed to be successful at university. They told stories about not having study spaces in the community or access to computers when they went home for weekends or holidays. Some students chose not to go home to their communities for this very reason. Some spoke about the need for having check-ins from the Education Director in their communities to update them on how they were doing and to communicate any needs. Also, they said encouragement from the community Education Directors and other community member check-ins would offer them connection, support, and encouragement for their success. More financial supports from the Bands, as well as university preparation courses in the community were also viewed to be helpful for them.

Theme 3: Walking Together: University Policies and Practices to Support Indigenous Student Success

Sub-theme: Cultural Policies: "Respecting Indigenous Students"

inaigenous students

Sub-Theme: Educational Practices to Support Indigenous Students

Sub-theme: "Recruitment and Hiring Policies for

Indigenous Educators"

Sub-theme: Residence and Food Policies

The third theme is "Walking Together: University Policies and Practices to Support Indigenous Student

Success" has four sub-themes. In this theme, students highlighted university policies and procedures that would assist in their success. In the first sub-theme entitled "Cultural Policies: "Respecting Indigenous Students," participants told stories about the need for cultural policies that respect Indigenous students at the university. One participant commented "it is really important to include Indigenous knowledge in any form in policies and procedures." Two other mentioned about "having policies for smudging on campus and more artwork", while another stated "having more Indigenous culturally relevant practices" was needed. Many students were unaware of any current university policies and procedures pertaining to Indigenous students. Some also mentioned that policies and procedures must be developed collaboratively to help Indigenous students feel more comfortable on campus. One student pointed out that the university needs to adopt a policy of "Two-eyed seeing" at the university in teaching and structures, which would increase retention and graduation of Indigenous students. Students highlighted that polices should include "time-off for funerals in the community", "authentic Indigenous land acknowledgements in classes and meetings", and the commitment of policies and procedures related to "cultural and traditional ceremonies at the university." One student commented on having a policy related to keeping the Mi'kmaq flag flying all year round. She was elated to see that this is indeed the case and that it helps Indigenous students feel a sense of belonging.

The second sub-theme, "Educational Practices to Support Indigenous Students" encompasses what Indigenous students reported to foster their success at university. These included having courses offered in their communities, mandatory cultural competency education for professors and instructors, a mandatory Indigenous course for all students regardless of what program, orientation to the university for Indigenous youth and implementing a mentorship program for Indigenous university students. They reported that there could be a faculty assigned to each Indigenous student and a student mentor to follow them through their years while at university. The next sub-theme "Recruitment and Hiring Policies for Indigenous Educators" which included

participants talking about the need for Indigenous professors and instructors to be actively recruited and hired by the university. One spoke about having Indigenous students being supported throughout their education, so that they could teach here at the university in the future. This is a grow your own philosophy, for recruitment and retention. In addition, a few mentioned that Indigenous faculty and instructors need a mentorship program and supports for development from hire. The last sub-theme is entitled "Residence and Food Policies". In this sub-theme, some participants communicated that they felt isolated in residence, particularly if there are no other Indigenous students in the residence or on the floor where they lived. One disclosed that there should be a policy whereby some residences and floors should be specifically designated for Indigenous students, so that they can be kept together to support each other. This was a strategy identified to assisting Indigenous students to be successful at university. A few students reported about the lack of access Indigenous foods on campus and how overwhelming it is to go to meal hall. They recommended that there should be a policy related to having Indigenous foods on campus. A few other participants also mentioned that the Indigenous Centre should have access to food all the time and be open 24/7 as a support for Indigenous students.

DISCUSSION

The purpose of this study was to critically analyze the reasons for low Indigenous student retention and success rates at an undergraduate university in Eastern Canada, and to identify recommendations for increasing Indigenous student success. The study found that Indigenous students face unique challenges related to culture, colonial and historical contexts, and inequities in education, and economic and social conditions that impact their success. The study also found that Indigenous students reported experiences with racism in the classroom and in the residences. Similarly, Bailey (2016) notes that subtle racism is prevalent among Indigenous university students, affecting their academic and personal success [30]. Indigenous

students are facing racism in classes, socially systemically. Further, Indigenous students are consistently confronted with barriers, such as interpersonal discrimination, feelings of isolation and frustration with the university. These challenges are compounded by the lack of Indigenous methodologies, epistemology, history, and language in university curricula, as well as a lack of supportive environments and resources for Indigenous students at post-secondary institutions. To help address challenges, Gallop and Bastien (2016), recommend that Canadian post-secondary institutions must foster positive and supportive relationships between Indigenous students and their peers and educators to retain Indigenous students [7]. Further, these relationships require formalization, and incorporated into institutional planning and faculty instructional support. Positive peer support is important for Indigenous student success, as well as clear expectations and feedback from professors and instructors.

According to Pidgeon, Archibald and Hawkey (2014), there exists a lack mentorship or guidance from Indigenous faculty or allies who support Indigenous knowledge. Institutions need to focus on culturally relevant strategies to recruit and retain Indigenous students. The authors communicated that SAGE (Supporting Aboriginal Graduate Enhancement), is a culturally relevant peer and faculty mentoring initiative in British Columbia, aimed at guiding institutional change for Indigenous graduate student success. Findings indicate that SAGE creates a sense of belonging and fosters self-accountability to academic studies and develops leadership skills, thus positively impacting Indigenous success at university [10].

RECOMMENDATIONS

Based on the findings of this study, several recommendations can be made to increase Indigenous student retention and success at the university. First, there is a need for university curricula to be more inclusive of Indigenous knowledge, methodologies, epistemology, history, and language. This can be achieved through the incorporation of Indigenous content into course offerings, the hiring of Indigenous faculty, and the development of

courses specifically focused on Indigenous knowledge and perspectives. Additionally, university policies and procedures should be reviewed and revised to ensure they are culturally sensitive and responsive to the needs of Indigenous students. This may include the provision of childcare and other support services, as well as the development of Indigenous student centers or other spaces where Indigenous students can connect with their community and find support.

Furthermore, it is important for university administrators, educators, and staff to be aware of and actively address the unique challenges confronted by Indigenous students. This may involve providing additional support and resources to help Indigenous students succeed academically, such as tutoring and mentorship programs, as well as addressing issues related to isolation and a lack of belonging on campus. Kulig et al. (2010) recommends support programs to assist Indigenous students with successful transition to university, mentors for Indigenous students, the inclusion of Indigenous knowledge and Elders in educational programs across the university is needed [31]. Additionally, universities should work with Indigenous communities and organizations to ensure that Indigenous students have access to the resources and support they need to be successful in their studies.

LIMITATIONS OF THE STUDY

The sample size of 15 participants is considered small and may limit the generalizability of the findings to a larger population. Additionally, the imbalance in gender representation, with 80% of Indigenous students identifying as female, may limit the ability to generalize the findings to a broader population that includes individuals of different genders. This gender imbalance may also hinder the examination of potential gender-based differences in the study outcomes and conclusions about the experiences of non-female participants. To improve the generalizability of the findings, it is recommended that future studies aim for a more representative sample with a balanced representation of individuals from various genders.

Another limitation of the study was the study was

conducted during the COVID 19 pandemic. The COVID 19 pandemic impacted Indigenous university students and may have negatively affected their academic success. Remote learning, the loss of social networks and support systems, financial stress, and reduced access to health resources are among the factors that may have contributed to the difficulties experienced by Indigenous students in university. These challenges highlight the urgency of providing targeted support to Indigenous university students during the pandemic to mitigate its effects on academic success and ensure their continued success in their studies.

CONCLUSION

In conclusion, this study highlights the need for greater awareness and understanding of the unique challenges experienced by Indigenous students in postsecondary education. By addressing these challenges and implementing recommendations for increasing Indigenous student success, universities can contribute to the reconciliation process and help address the educational achievement gap for Indigenous peoples. It is hoped that this research will inform policies and practices at the university and beyond, while contributing to the development of a more inclusive and supportive postsecondary educational svstem for Indigenous undergraduate university students.

REFERENCES

- 1. Browne, A.J. Moving beyond description: Closing the health equity gap by redressing racism impacting Indigenous populations. Social Sciences & Medicine 2017; 184: 23-27.
- 2. Dion Stout, M. Ascribed health and wellness, Atikowisi miýw-¯ay¯awin, to achieved health and wellness, Kaskitamasowin miýw-a¯ay¯awin: Shifting the paradigm. Canadian Journal of Nursing Research 2012; 44(2): 11–14.
- 3. Reading, C. Structural determinants of aboriginal people's health. In M. Greenwood, S. de Leeuw, & N. M. Lindsay (Eds.), Determinants of Indigenous people's health: Beyond the social. Canadian Scholars; 2018.p. 3-17.

- 4. Truth and Reconciliation Commission of Canada. Honouring the truth, reconciling for the future: Summary of the final report of the truth and reconciliation commission of Canada. 2015. http://caid.ca/TRCFinExeSum2015.pdf
- 5. Statistics Canada. The educational attainment of Aboriginal peoples in Canada. 2018.

https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012- $x/99-012-x2011003_3eng.cfm$.

6. Universities Canada. Enhancing Indigenous Student Success at Canada's Universities. 2016.

https://www.univcan.ca/wp-

- content/uploads/2016/06/enhancing indigenous student-access-at-canadian-universities-june-2016accessible-1.pdf
- 7. Gallop CJ & Bastien N. Supporting success: Aboriginal students in higher education. Canadian Journal of Higher Education 2016; 46(2): 206-224.
- 8. Pidgeon M. Pushing against the margins: Indigenous theorizing of "success" and retention in higher education. Journal of College Student Retention: Research, Theory & Practice 2008; 10(3): 339-360.
- 9. Gray, J. Supporting Canada's Aboriginal students. Therapy Today, 2014; 26-29.
- 10. Pidgeon M, Archibald JA, & Hawkey C. Relationships matter: Supporting Aboriginal graduate students in British Columbia, Canada. Canadian Journal of Higher Education, 2014; 44(1): 1 21.
- Battiste M. Indigenous Knowledge and Pedagogy in First
 Nations Education: A literature Review with
 Recommendations. 2002.

https://www.afn.ca/uploads/files/education/24._ 2002_oct_marie_battiste_indigenouskn

 $wledge and pedagogy_lit_review_for_min_working_group.pdf$

- 12. Organisation for Economic Co-operation and Development. Supporting Success for Indigenous Students. 2017. http://www.oecd.org/education/Supporting-Success for Indigenous-Students.pdf
- 13. Restoule, J.P. Aboriginal education and self-government: Assessing success and identifying the Indigenous Student Success 109 challenges to restoring Aboriginal jurisdiction for education. In Y.D. Belanger (Ed.). Aboriginal self-

- government in Canada: Current trends and issues, 3rd Ed. Saskatoon, SK: Purich; 2008. p.373-394.
- 14. MacDonald, C. & Steenbeek, A. The Impact of Colonization and Western Assimilation on Health and Wellbeing of Canadian Aboriginal People. International Journal of Regional and Local History 2015; 10(1): 32-48.
- 15. Smith, L. T. Decolonizing methodologies: Research and Indigenous peoples (2nd ed.). London: Zed Books; 2015.
- 16. Warry, W. Ending denial: Understanding Aboriginal issues. Peterborough, ON, Canada: Broadview Press; 2007.
- 17. Battiste, M. Decolonizing education: Nurturing the learning spirit. Saskatoon, SK: Purich; 2013.
- 18. Martin D. & Seguire M. Creating a path for Indigenous student success in Baccalaureate Nursing Education. Journal of Nursing Education 2013; 52(4):205-209.
- 19. Marshall M, Marshall A, & Bartlett C. Two-eyed seeing in medicine. In M. Greenwood, S. de Leeuw, & N. M. Lindsay (Eds.). Determinants of Indigenous people's health: Beyond the social. Canadian Scholars; 2018. p.3-17.
- 20. Martin DH. Two-eyed seeing: A framework for understanding indigenous and non-Indigenous approaches to indigenous health research. Canadian Journal of Nursing Research, 2012; 44(2): 20–42.
- 21. Canadian Institutes of Health Research- Institute of Aboriginal Peoples' Health. CIHR guidelines for health research involving Aboriginal people. Ottawa, ON: Author; 2013.
- 22. Hovey J, Delormier T, McComber A, Levesque L, & Martin G. Enhancing Indigenous Health Promotion Research Through Two-Eyed Seeing: A Hermeneutic Relational Process. Qualitative Health Research 2017; 27(9): 1278-1287.
- 23. Weber-Pillwax C. Indigenous Researchers and Indigenous research methods: Cultural influences or cultural determinants of research. Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health 2004; 2(1): 77-90.
- 24. Loppie C. (2007). Learning from the grandmothers: Incorporating Indigenous principles into qualitative research. Qualitative Health Research 2007; 17(2): 276–284.

- 25. MacDonald C. Understanding Participatory Action Research: A Qualitative Research Methodology Option. The Canadian Journal of Action Research 2012; 13(2): 35-40.
- 26. Vukic A, Gregory D, & Martin-Misener R. Indigenous health research: Theoretical and methodological perspectives. Canadian Journal of Nursing Research 2012; 44(2): 146-161.
- 27. Whitty-Rogers J. Cameron B. & Caine V. An Indigenous and Western paradigm to understand gestational diabetes mellitus: Reflections and insights. Action Research 2020; 0(0): 1-22.
- 28. Braun, V. & Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology 2006; 3(2):77-101.
- 29. Schnarch. B. (2005). Ownership, control, access, and possession (OCAP) or self-determination applied research: A critical analysis of contemporary First Nation research and some options for First Nation communities.

- http://www.research.utoronto.ca/ethics/pdf/human/nonsp ecific/ OCAP%20principles.pdf
- 30. Bailey, K. A. Racism within Canadian university: Indigenous student's experiences. Ethnic and Racial Studies 2016; 39(7):1261-1279.
- 31. Kulig JC, Duke M, Solowoniuk J, Weaselfat R, Shade C, Lamb M, et al. Aboriginal Science symposium: Enabling Aboriginal student success in post0secondary institutions. Rural and Remote Health 2010; 10:1-7.

PEER REVIEW

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