



Public Health Nurse Perceptions of High School Dropout as a Public Health Issue

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ABSTRACT

Education is one of the strongest predictors of health. Early termination of education can negatively impact health, shorten life span, and increase stress on the healthcare system. Although improving overall high school graduation rates have been debated and discussed by the Toronto District School Board and the Ministry of Education, there is a paucity of research studies on increased graduation rates as they relate to public health in a Canadian context. The purpose of this phenomenological qualitative study was to explore the perceptions of liaison public health nurses, who worked directly with the Toronto District School Board, regarding influencing students in Toronto, Ontario to complete high school. Bronfenbrenner's ecological model was the underlying conceptual framework for the study. Purposive sampling was used to select 10 public health nurses who were interviewed regarding their role and involvement in high schools. Data were subjected to triangulation and were analyzed to identify commonalities and trends and patterns. The findings from this study indicated that liaison public health nurses believe that high school dropout out is a public health issue and that collaboration between the Ministry of Education and Public Health is needed to address the issue. The emergent recommendations from the analysis of data indicate the potential for greater to explore the connection between health and school achievements and the expanded role of public health nurses in Canadian high schools. With increased research and resources, improving graduation rates students may be expected.

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Introduction

The academic underachievement and dropout rates of high school students in Toronto, Ontario, Canada is a concern of educators, parents, and the community. Youth who drop out of high school are at a higher risk for public health concerns such as smoking, being overweight, and having a low level of physical activity (Allens worth et al., 2011; De Ridder et al., 2013). Early termination of education can also lead to health issues, shorter lifespan, and increase the stress on welfare and healthcare systems (De Ridder et al., 2013). Public Health researchers Leeves and Soyiri(2015) identified dropout as a key public health issue because as poverty increases, so do education and health disparities .Mirowsky (2017) asserted that education is the foundation of good health because it gives individuals the resources to control and shape their lives which further protects and promotes health. Educational achievement leads to better economic prospects(Mirowsky, 2017).Educational accomplishments also directly correlate to promoting a healthy environment and serve to lower eradicating racial disparities related to economic growth and well-being.

Background Setting: An Analytical Perspective

Although the Toronto District School Board has provided excellent public education, students of racial minorities are more likely to perform poorly in school and are at a higher risk of dropping out. Students who self-identify as Latin American, Black, or Mixed, have lower graduation rates of 76%, 77%, and 84% respectively, while students with the highest graduation rates identified themselves as East Asian,

South Asian, Southeast Asian, and White with graduation rates of 96%, 92%, 90% and 86.2% respectively in the Grade 9 cohort of 2011- 2016 (Brown & Tam, 2017). These statistics may indicate that there is a problem in the educational system with the way Black students are educated or how they internalize educational content in the curriculum. Although there are significant improvements, disparities continue to exist.

The Educational Reality

Education is essential for the success of almost any society. Education helps children discover who they are and set goals so that they can take their place in society (Dei, 1993). Education is a public investment that improves the economy directly and indirectly and can drastically change lives by developing the thinking skills and knowledge base of individuals(Dei, 1993). Without these skills and knowledge base, high school dropouts are often at a disadvantage in society.

A failure to graduate from high school has adverse health, economic, and financial consequences. DeRidder et al. (2013) noted that students who drop out of high school are more likely than their peers to be unemployed, live in poverty or on welfare, or be incarcerated. In addition, there is a strong correlation between educational attainment and adult health (De Ridder et al., 2013; Lansford et al., 2016). Likewise, Statistics Canada (2015) estimated that dropouts make \$23,000 or less per year. The increased volume of high school dropouts, especially among Black students, has become a major social problem with detrimental effects. Ontario's total

graduation rate has increased dramatically over the past 10 years; however, the dropout rates for Black Toronto students are particularly concerning as persistent achievement gaps continue to exist. Black students in Toronto have shown a dropout rate that is almost twice that of their White peers, and Black students' graduation rate is 15 percent below that of their White peers (James & Samaroo, 2017). These research findings indicate that academic disparities continue to exist in Toronto schools and will persist without strong advocacy, commitment, and outreach between the TDSB marginalized communities.

A Critical Assessment of the Determined Problem

The problem is of the high school dropout rate in Toronto that are increasingly concentrated among low-income families. Although improving overall high school graduation rates have been debated and discussed by the TDSB and the Ministry of Education, there is a paucity of research on increased graduation rates as they relate to public health in the Canadian context. Since there are strong associations between education and health, administrators, researchers, and policymakers need to have a better understanding of how public health nurses can help to motivate and encourage students to complete high school. Historically, school nurses were responsible for educating high school students on matters of public health. The advantages of having the nurses physically present in schools were increased accessibility and improved student outcomes. Additionally, there was a connection between education and health, which fostered, physical, mental, and educational health.

Research Purpose

The purpose of this phenomenological qualitative study was to explore (a) the perceptions of liaison PHNs in Toronto regarding high school dropout as a public health issue, and (b) the involvement of liaison PHNs as a key component to possible interventions. This study took place in the Greater Toronto Area, Canada, where there is a high percentage of high school dropouts among minorities.

Research Questions

The following principal research questions were the basis for this study:

RQ1: What are the perceptions of liaison PHNs regarding barriers and facilitators that contribute to student's ability to complete high school in Toronto, Canada?

RQ2: What are the perceptions of liaison PHNs regarding the role of social networks and online media, and their influence on students' ability to complete high school?

The underpinning of the Theoretical Lens

The Bronfenbrenner ecological model was used to guide this phenomenological research, as it has relevance to the issues of individuals and the environment. Bronfenbrenner introduced the model in the 1970s, arguing that human development depends on complex reciprocal interactions between persons or objects in the immediate environment (Rosa & Tudge, 2013; Sallis et al., 2015). The ecological model emphasizes a multifaceted expanded realm of influences that shape social identity (Sallis, et al., 2015). These realms consist of the microsystem, which focuses on individuals who shape their identities through personal beliefs and behaviors gained from close contacts or associations (Sallis et al., 2015). The meso system incorporates institutional factors such as peers, family, school, and workplace interrelationships (Sallis, et al., 2015).

Racial minority groups, particularly Blacks and Latino students have higher rates of dropout compared to White students, and in areas where there is a large concentration of

poor ethnic minorities, the challenge is significant (Maynard et al., 2015). For the general population, high school dropout has been improving significantly but for young Canadian Blacks, completing high school continues to be a challenge. The survey revealed that for the year 2006-2007, suspension rates were highest for Aboriginal students, followed by Black and mixed students, and that one in every seven Black Grade 7 and 8 students reported being suspended at least once compared to everyone in every 20 White students in similar grades. The statistics were available from a human rights complaint settlement that required the TDSB to collect and analyze race-based suspensions in 2006-2007. Since that time, no other report was made available to the public.

When the above statistics were revealed, educators, researchers, parents, media, and the public expressed concern. In response to community requests, the TDSB approved the proposition to launch the first Afrocentric Alternative School in Grades K – 5 and expanded in 2012 to accommodate up to Grade 8 students. The TDSB hoped that this school would begin to bring about change in the education of Canadian Black children. The curriculum is focused and aims to address achievement disparities between whites and minorities, student disengagement, dropout issues, and approaches to empower Black youth. Various recommendations were implemented in Toronto schools and the TDSC Grade 9 cohort Fall 2006-11 showed a slight improvement of 35% dropout rate among Black students. Multiple factors are strongly related to underachievement and school dropouts. Some of these contributing factors will be addressed more extensively below.

Rationale for the Study Research Method and Design

This qualitative study included a phenomenological design in studying the phenomenon, and the focus was on the understanding of behaviors and attitudes regarding a phenomenon and sought to provide explanations. The liaison participants purposively selected were PHNs in this study, whose personal perceptions regarding high school dropout, education, the impact on health, and their views on public health involvement in addressing the issue. The interview questions were open-ended in nature to facilitate exploration and use words or actions to explain a phenomenon. Open-ended questions permit the researcher to understand meaning more clearly as seen by the respondents. Qualitative research also involves the analysis of direct quotations as the respondents express their thoughts, emotions, and experiences the way they see them and from their perspectives. It is the responsibility of the qualitative researcher to be thorough and accurate to capture and understand the raw data as the respondents present it and one way that this is done effectively is through open-ended questions in the form of intense interviews. Munhall (2012) stated qualitative research is flexible since it encourages the researcher to be innovative, but this quality has some critics frowning and viewing it as unscientific, too personal, and full of biases. Nevertheless, qualitative inquiry or research methods continue to contribute to the field of research in a significant way.

The Blending of Qualitative and Phenomenological Approaches

The phenomenological research design is conducive to identifying the meaning of human experiences (Merriam & Grenier, 2019; Polit & Beck, 2014). This method involves putting aside personal attitudes and beliefs and allowing the researcher to see the phenomenon from the perspectives of the persons who have experienced it. Its invocation is conducive to describing and understanding the lived experiences of the

individuals, rather than explaining them (Merriam & Grenier, 2019; Polit & Beck, 2014). This design is suitable when the aim is not to focus on specific steps but rather for study participants to share personal experiences and thereby contribute to the exploration of the phenomenon.

This study was undertaken in the Greater Toronto region, a region with the highest incidence of high school dropouts, and therefore gaining a better understanding of the liaison PHNs' perceptions concerning high suited to school dropout prevention will be important. Data collection for this qualitative phenomenological study was by conducting interviews. In qualitative studies, intensive interviews are considered the main method of data collection for qualitative study as they can uncover detailed, rich responses without contamination (Turner, 2010). The participants were liaison public health nurses who have worked with Toronto high schools. These liaison PHNs who are assigned to schools are knowledgeable in community development, health promotion, illness and injury prevention, and primary health care.

The research study participant request and solicitation were printed in English only and were distributed to PHNs through work email addresses. Participants who responded to the invitation, and who were willing to share personal experiences openly and honestly were contacted by email or phone to arrange the interview. Informed consent forms were signed and collected by me before the start of the interview. All participants were informed that they were under no obligation to complete the interview and could terminate the interview at any time. Liaison PHNs were given dates and times for the interview but were given the option and flexibility to choose other times and locations for their convenience.

Data Analysis

Once the data collection process and management techniques were completed, the data analysis process commenced. Microsoft Excel spreadsheet was used to assist me in coding and organizing my data in a manageable way. A number was assigned to each participant on the spreadsheet and responses to each question were inputted under the corresponding number that was assigned. The steps entailed appropriately categorizing and assembling the data by reading through each response and identifying descriptive words, themes, or new ideas. Coding can differ from one person to another since qualitative research is somewhat of an interpretive process. Taylor and Gibbs (2010) defined coding as the process of combining data for themes, ideas, and categories for comparison and analysis. This facilitates data search, and comparison as well as enables the identification of patterns requiring further investigation or analysis. The major themes throughout the interviews were manually categorized and coded for easier analysis, in keeping with Giorgi's stages of analysis, which were adopted for this study.

Research Question 1: "What are the perceptions of liaison PHNs regarding barriers and facilitators that contribute to student's ability to complete high school in Toronto, Canada?" The research question led to the emergence of the following themes, upon data analysis: Participants indicated that lack of resources, mental health, not feeling connected, deviant behaviors, hopelessness, stress at home and school, lack of parental involvement, no family support, lack of mentorship, poverty, and social media were some barriers that contributed to students' ability to complete high school. Participants indicated that stability, mentorship, decreased stress, family support, and a good school environment facilitate school

completion. The model avoids blaming the individual and highlights the complexities of certain behaviors.

Research Question 2: "What are the perceptions of liaison PHNs regarding the role of social networks and online media, and their influence on students' ability to complete high school?" Research question 2 led to the emergence of the following themes according to analysis: Improper use can lead to distraction from schoolwork, increased mental health issues, online bullying, false perception, and increased pressure on students to fit into different categories. Participants indicated that social media if used correctly can enhance learning and improve critical thinking. It is important to note that 9 participants mentioned that social media can influence high school completion, but one respondent did not feel that social media could affect high school completion. Although the usage of social media is a recent phenomenon, the association with the ecological model was noted as the model identifies that social environmental factors help shape adolescent problem behavior (Driessens, 2015). Analyzing the data with these constructs as a guide facilitated a more in-depth approach when identifying themes that emerged throughout the analysis process.

Analysis of Responses to Research Question 1

The interview questions for research question 1 were: "In Toronto, what would you consider as some major barriers to completing high school?" and "In your opinion, what do you believe makes some students succeed in high school?". This relates to the ecological model that asserts that strong parent-adolescent relationships, supportive family, and positive social interactions lead to positive outcomes in high school students (Driessens, 2015). Similarly, Trach et al. (2019) review extensively outlined how poverty impacts academic and socio emotional functioning. Participants concurred with the above findings.

Perceived Barriers

Ten out of the 10 study participants stated that they believe poverty, mental health, poor role models, lack of parental involvement, lack of school support, defiant behaviors, and hopelessness were some of the main barriers to completing high school. Three of the participants mentioned language barriers and learning disabilities. One participant mentioned immigration status and teachers that might have their own biases and push the students to achieve. Participant 7 explained that "lack of mentorship in and out of the household, lack of high expectations, household strife, and low-income leads individuals to enter the workforce early to help the family with financial needs." Participant 1 explained that social media and culture are sometimes barriers to completing high school. She further explained that, for new immigrants, not knowing how to navigate the Canadian education system can be challenging for families. When addressing the second part of the question, ten out of ten participants believe that students need motivation, support at home, determination, good role models, parental partnership with the school, and good teachers to be successful in high school. Participant 4 provided this information:

Having engaging teachers/programs, strong social networks/support both at home and school, feeling connected to the school community, and having adequate nutrition, sleep, and physical activity are necessary to perform well in school. Also, having skills to cope with the stress of school and being a teenager, and resiliency are key to completing high school.

Participant 7 further stated, "Social support and mentorship, vision for future, valuing education beyond completing high school level, career goals or vision, in some instances, income support for transportation, food, school supplies are most important." Participant 5 agreed that "Parent involvement and taking interest in their child's success, and strong community support are needed for student success."

Analysis of Research Question 2

The interview question for research question 2 was: "How do you feel regarding the influence of social media and other online media outlets on the ability of students to complete high school?" "Do you feel that social media can hinder or enhance learning?" The following themes were evident: social media harms self-esteem, instant gratification, and cyber bullying. These themes were in close relation to the ecological model which asserts that microsystems such as family, peers, and schools can directly influence adolescents' development, however, some social interchanges can result in disruptive behavioral problems during secondary schools (Driessens, 2015).

Social Media

The results revealed the study participants thought that social media and other online media outlets could influence students to complete high school. Nine out of ten participants stated that social media could be positive or negative. Participant 1 explained, "If social media is used properly students can have the ability to get quick information, connect with learning groups and another educational system that can make learning convenient and improve learning needs."

Participant 2 also explained, "It could hurt self-esteem because social media tends to inflate things and students may think that they can do the same things to make fast money." Participant 4 also explained, "social media has glorified instant gratification, and some may choose to not complete high school in hopes of becoming rich/famous through social media platforms (i.e., becoming Instagram models or social media influencers), also social media has been shown to negatively impact student's mental health as there are constant images of 'perfect people living these perfect lives' and students may feel less than adequate."

Participant 6 explained, "I feel social media could be a distraction to students completing high because some students cannot regulate themselves and spend too much time engaging in online activities."

Four out of 10 participants mentioned that, with the rise of social media, cyberbullying can negatively impact students' mental health and that some students may feel unsafe, and unwelcomed, and this can impact academic performance and lead to school dropout issues. Participant 7 was the only participant that stated, "I do not view social media as a factor influencing high school completion. Social media is a communication medium." However, when asked about social media hindering or enhancing learning, she explained, "Social media platforms can be used as a means for social connection and finding networks of people you can relate with. It is also a tool that can be used to gain knowledge, thus enhancing learning." Ten out of 10 study participants stated that social media can hinder or enhance learning. Participant 1 referred to social media as a "double-edged sword" but was more concerned about the increase in cyberbullying and mental health issues that were associated with the impact of social media.

Discussion Conclusions and Recommendations

Overall, the liaison PHNs appeared to believe that they are influencing the students positively but do not have any

impact on the school dropout rate as it is not within their role at this time. However, participants shared their experiences and concerns regarding the impact of lack of education on community health. Studies regarding student dropout and health indicated that lower education or lack of education may lead to poorer health because of higher occupational risks, riskier behavior, unemployment, and lack of economic resources (Andersen et. al., 2018). Based on the research, there is a clear need to reduce the high school dropout rate by examining how health and well-being may contribute to an increase in the graduation rate. PHNs believe that they are accessible in high schools in wellness initiatives within their scope of practice but believe that they are underutilized.

Interpretation of the Findings

The underpinning of the ecological model served to understand the individual interconnectedness to multiple environments and how these environments must be aligned to support the success of the students in their community. This study reinforced Miller et.al., (2019) conclusion that the constructs of the ecological model facilitated the exploration of the research questions by allowing for ease of organization of the data, identification of themes and ease of analysis. An interpretation of the findings as it relates to the data collected and the ecological framework that was used as a guide for this study are described below:

The first research question sought the perceptions of liaison PHNs regarding barriers and facilitators that contribute to student's ability to complete high school in Toronto, Canada. PHNs believed that some of the major barriers were poverty, stress and home, mental health, defiant behavior, poor grades, pregnancy, bullying, lack of drive, lack of mentorship, no support for students and lack of parental involvement were some of the major barriers. Two participants out of 10 mentioned learning disabilities and language barriers. The participants believed that some of the facilitators that contributed to school completion were parental involvement, strong support from guidance counselors, determination, parents' income, good mentors, strong self-esteem, partnership with school, parent, and child, strong support at home, and strong community support. One participant explained that valuing education beyond high school and personal desires can increase the drive for some students to complete school.

The results were interpreted within the ecological model which provided a broader understanding of social issues that affects students directly and indirectly such as school completion issues (Atilola, 2017). When I examined the data, participants stated that lack of support, lack of resources, social network, and the student's immediate surroundings have the most influence on the choices to complete high school. This falls within the microsystem of the ecological model.

The second research question asked what are the perceptions of liaison PHNs regarding the role of social networks and online media, and their influence on students' ability to complete high school. Participant 4 shared that with the rise of social media, cyberbullying can negatively impact students' mental health which might lead students to feel unsafe, and unwelcomed and can impact academic performance. She expressed that she believes social media has glorified instant gratification which might have some students trying to live up to unrealistic ideas with the hopes of becoming famous. Eight other participants shared similar sentiments. They argued that social media has its place in enhancing learning opportunities but if used incorrectly, can

influence students' ability to complete high school. Participant 5 mentioned that images on social media could be exceptionally difficult for students who are living in poverty. This is because they might see the elaborate lifestyle and compare their own life with those on social media. This could lead some students to feel that "their life sucks," resulting in depressive symptoms, feelings of hopelessness, school dropout, and even suicide. Participant 7 choose to view social media in a positive light and shared that social media is a tool that can be used to gain knowledge and enhance learning. I discovered that 9 out of 10 participants believed that social networks and online media can influence a student to complete high school, but negative influences were more forcefully explained.

Eight out of 10 participants mentioned cyberbullying and its negative impact on some students' lives. Bryne et al. (2018) expressed the necessity of being responsible for the health and safety of youths to become more aware of the pervasive problem of cyberbullying. The results were also similar to Carter and Wilson (2015) study which further cautioned that school nurses are sometimes the first to witness the consequences of cyberbullying in student's daily lives as sometimes students often approach school nurses or other healthcare settings with psychosocial or physical distress due to experiences of cyberbullying. Participants believed that since they were not in the school system on a full-time basis, this area of supporting students who are experiencing cyberbullying might be an area to explore as PHNs.

Perceived Study Limitations

One limitation of this study was that it was comprised of a purposeful sampling of Liaison PHNs who were all females. This sampling approach may have limited the study to a small group of participants that might share similar traits and characteristics which could lead to potential sampling bias. There was potential personal due to being also a nurse and familiar with the public health program. To address these biases, participants were recruited outside of my region, and a professional and unbiased relationship was established for the study. Thorough records were kept with clear, consistent, and transparent interpretations of data and followed all the guidelines from the university that helped to eliminate biases. Another limitation of this qualitative phenomenological approach is that the findings of this research study may not be generalizable to other PHNs populations.

Strategic Recommendations

There appears to be a deficit of empirical studies conducted in Canada that drew correlations in this regard. The research findings from this study have revealed that further Canadian research is needed that explores the connection between health and school achievements.

It is recommended that future qualitative and quantitative research is undertaken, with a focus on adults who have not completed high school. These studies should explore issues such as involvement in crimes, using illicit drugs, and health status. The research findings of this study revealed that PHNs believe that adults who have not completed high school are at higher risks for being involved in crimes, gun violence welfare, and poor health, therefore desire further research in this area. In addition to these studies, completing studies that address improving graduation rates could provide insights to health professionals and educators to improve the lives of young people.

A recommendation for further research into addressing school dropout as a public health issue in Canada is warranted, as may serve to develop a team approach to address the

decrease in graduation rates in areas of lower socioeconomic status. The findings of this study may contribute to the strategies for educating educate and policymakers vis-à-vis the long-term benefits of education, in respect of its potential and positive role in the health of the community.

Conclusion

The research entailed exploring (a) the perceptions of liaison public health nurses (PHNs) in Toronto regarding high school dropout as a public health issue, and (b) the involvement of liaison PHNs as a key component to possible interventions. Bronfenbrenner's ecological model guided the creation of the research questions, and the interview data were coded to the constructs of the ecological model. The construct was used to support participants' belief that students were connected to the environment directly or indirectly, and that lack of education, overtime, influences an individual's development and health.

The findings from this qualitative research study with a descriptive phenomenological design revealed that liaison PHNs believed that there is a strong link between education and health and that promoting health in schools is significant for a healthy community. The efforts in this research also highlighted various gaps as well as interventions that could have liaison PHNs more involved in capacities where they would be able to affect policy changes.

Several researchers have shown a correlation between education and health. The studies have confirmed that students who do not complete high school are more likely to have higher rates of illnesses, have employment problems, die prematurely, engage in high-risk behaviors, and are more likely to depend on social assistance programs. The participants have concurred with several studies that improving high school graduation rates could indirectly improve the health of the community and reduce health disparities. Although Ontario has universal health care and homecare, PHNs in schools work in multidisciplinary teams with other community partners, schools, and public health departments to address the health concerns of students, families, and community members. Liaison PHNs have also expressed interest in a more expanded role that would see PHNs in schools on a full-time basis consistently supporting mental, physical, social, and emotional health as well as addressing factors that prevent a student from completing high school.

The findings of this study have indicated that all participants believe that social media can be a positive force in learning but the negative impact in the form of cyberbullying can affect students' ability to learn which and eventually lead to failure to complete high school. The findings substantiate research previously conducted by Espelage and Hong (2017) that are increasingly exposed to other forms of bullying, specifically cyberbullying which is associated with depression, anxiety, high-risk behavior, suicide, and other health issues. The findings of this study validate previous findings that identified bullying as a barrier to learning which can lead to absenteeism which can be addressed by having public health nurses in schools.

Canada has recognized cyberbullying as a social problem which Espelage and Hong (2017) concur and added that it is also a public health issue. Liaison PHNs have not only expressed concern regarding this trend but have expressed the need for liaison PHNs to take a more active role in addressing health issues associated with cyberbullying in schools. To be more effective, participants believe that The Ministry of Health needs more collaborate with the Ministry of Education

to discuss policy changes that specifically address the above issues.

Liaison PHNs in Toronto have provided the school community with exceptional care, leadership, and service however, having PHNs assigned to every school in Toronto would ensure that counseling, assessment, and support of high-risk students would be addressed promptly. Through expanded roles, PHNs in schools could help to build therapeutic relationships with students, build trust and advocate for comprehensive action plans to improve health and reduce disparities. The findings of this study revealed that liaison PHNs indicated clearly, that collaboration between health and education professionals is necessary to address high school dropout as a public health issue. A concerted effort to improve the graduation rate will not only benefit students directly but will have the ability to move beyond high schools and contribute to promoting population health which is a cost-effective means of reducing disparities and improving the individual health of school-going and other populations.

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