Teacher Preparedness for Identifying and Supporting Students with ADHD in the Classroom

By

Michelle Bader

A research paper submitted in conformity with the requirements
For the degree of Master of Teaching
Department of Curriculum, Teaching and Learning
Ontario Institute for Studies in Education of the University of Toronto

Copyright by Michelle Bader, April 2014
Abstract

Attention Deficit Hyperactivity Disorder (ADHD) is a common neurological disorder among children. It has diverse effects and implications in the classroom. Teachers are on the front lines as they engage with the students regularly. Therefore, teachers should be among the most knowledgeable due to their extremely important role; however, this research study has shown that there is a lack of proper preparation in the current pre-service teacher education programs across Ontario. About half of the Faculties of Education in Ontario that offer a one-year Bachelor of Education program provide a mandatory special education course as a part of the degree. Of those that do provide some form of course or input about special education, most do so from a vague and introductory perspective. This conclusion was developed after a review of Ontario universities’ websites which was conducted as an important part of this research study. By also conducting a relevant literature review and face-to-face interviews, this study identifies the demand for specific and relevant instruction in special education, with a particular focus on ADHD in pre-service teacher education programs, to better prepare teachers for what they will face in their classrooms.

Key Words: Attention Deficit Hyperactivity Disorder (ADHD), pre-service, special education, teacher training
Acknowledgements

I would like to acknowledge and thank a number of people who have guided and supported me throughout this process. First, I would like to express my deepest gratitude to my Research Advisor, Professor, Faculty Advisor and mentor, Dr. Susan Schwartz. Dr. Schwartz supported me through both my biggest achievements and biggest challenges. I am grateful for your constant guidance and the countless e-mails; I would have truly been lost without your support. Secondly; I send a heartfelt thank you to my interview participants who took time out of their busy schedules to aid me in my research. To all of the professors in the Master of Teaching program, and Associate Teachers who have inspired me to continuously pursue my passion; I thank you for your constant motivation and encouragement. And last but not least – to my family, friends and classmates; I am forever grateful for your unconditional love and unflawing support.
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>2</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>3</td>
</tr>
<tr>
<td><strong>CHAPTER 1: INTRODUCTION</strong></td>
<td>6</td>
</tr>
<tr>
<td>Introduction to the Research Study</td>
<td>6</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>8</td>
</tr>
<tr>
<td>Research Topic/Questions</td>
<td>8</td>
</tr>
<tr>
<td>Background of the Researcher</td>
<td>9</td>
</tr>
<tr>
<td>Summary</td>
<td>12</td>
</tr>
<tr>
<td>Overview</td>
<td>13</td>
</tr>
<tr>
<td><strong>CHAPTER 2: LITERATURE REVIEW</strong></td>
<td>14</td>
</tr>
<tr>
<td>The Significance of Special Education in Ontario</td>
<td>14</td>
</tr>
<tr>
<td>Attention Deficit Hyperactive Disorder (ADHD)</td>
<td>16</td>
</tr>
<tr>
<td>Teacher Attitudes and Knowledge about ADHD</td>
<td>16</td>
</tr>
<tr>
<td>Special Education Preparation in Pre-service Teaching Training</td>
<td>18</td>
</tr>
<tr>
<td>Summary</td>
<td>21</td>
</tr>
<tr>
<td><strong>CHAPTER 3: METHODOLOGY</strong></td>
<td>22</td>
</tr>
<tr>
<td>Procedure</td>
<td>22</td>
</tr>
<tr>
<td>Data Collection</td>
<td>22</td>
</tr>
<tr>
<td>Participants</td>
<td>24</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>26</td>
</tr>
<tr>
<td>Ethical Review Procedures</td>
<td>27</td>
</tr>
<tr>
<td>Limitations</td>
<td>28</td>
</tr>
</tbody>
</table>
CHAPTER 4: FINDINGS

Website Review of Ontario University Faculty of Education Websites Focusing on their Special Education Courses

Table 4.1

Background of Participants

Theme 1: New teachers have a very basic understanding of some characteristics of ADHD with little special education training.

- Understanding of academic implications of ADHD
- Understanding of social implications of ADHD
- Understanding of emotional implications of ADHD

Theme 2: Teachers, along with many other school faculty members, play a significant role in the extensive process of identifying exceptionalities such as ADHD.

Theme 3: There are various supports and accommodations available for students with ADHD.

Theme 4: There seems to be a lack of confidence in new teachers, attributed to a gap in the teacher training programs with regards to special education training.

Theme 5: A suggestion about how to improve teacher training and preparation include the implementation of a mandatory special education course during all pre-service teacher training programs.

CHAPTER 5: DISCUSSION

Current Knowledge about ADHD

The Role of Teachers in Identifying Students with ADHD

Accommodations and Interventions for Students with ADHD

Gaps in Pre-service Teacher Training Programs

Implications/Recommendations

Limitations

Further Study

REFERENCES

APPENDICES

Appendix A: Letter of Consent for Interview

Appendix B: Interview Questions
Teacher Preparedness for Identifying and Supporting Students with ADHD in the Classroom

CHAPTER 1: INTRODUCTION

Introduction to the Research Study

In the field of education, teachers and faculty members constantly come across varying types of students, abilities, exceptionalities, and intelligences. To obtain their teacher certification in Ontario, teacher candidates (TCs) typically spend ten months to one year in a Faculty of Education program, usually in a university setting, preparing to engage students, accept differences, and support various learning styles in a variety of subject areas. O’Shea, Hammitte, Mainzer and Crutchfield (2000) argue that the number of students with special needs is constantly rising, while the advances in technology, methodology, and pedagogy are rapidly advancing each passing year. As classrooms become increasingly more diverse and teachers encounter more and more children with exceptionalities, they have to adjust to accommodate these students in new ways. However, not all Faculties of Education (one year programs or less) across Ontario are requiring that TCs complete a course on special education for their degree (see Table 4.1). Due to Bill 82, implemented in 1980, it is required that “physical, mental, emotional, or learning disabilities be identified early so that remedial programs can be provided promptly” (Zegarac, 2008, p. 8). With this, it would seem that teacher graduates are expected to be able to move into a new school environment and begin detecting signs of learning disabilities such as Attention Deficit Hyperactivity Disorder (ADHD). However, with the lack of appropriate special education training in pre-service programs, this creates a disconnect between how teachers are being trained and what is required of teachers in Ontario (Harvey, Yssel, Bauserman, & Merbler, 2010; Perold, Louw &
Kleynhans, 2010). Furthermore, in 1995, “the Report of the Royal Commission on Learning, *For the Love of Learning* recommended the integration of students with special education needs into regular classrooms…” (Zegarac, 2008, p. 10). This, in addition to *Bill 82*, demonstrates an even stronger need for the proper training of general classroom teachers. If approximately 82% of students receiving special education in Ontario are placed in classrooms for more than half of the instructional day (Zegarac, 2008, p. 11), general classroom teachers must be aware of proper accommodations and modifications for those students. If classroom teachers are not properly trained to identify a potential disability, then this leaves room for these students with special needs to slip through the cracks and potentially go undiagnosed. The Ontario Ministry of Education (2013) website (http://news.ontario.ca/edu/en/2013/06/giving-new-teachers-the-tools-for-success.html) reports that on average, 9000 new teachers graduate in Ontario each year. Unidentified students may be showing signs and symptoms of an exceptionality, but an unprepared teacher may not recognize these as a need for formal assessment. Therefore, for every new teacher that graduates, there is a classroom of students at risk of slipping through the cracks. It is stated that “the lack of transdepartmental [general education and special education] training is an issue that researchers have focused on since the early years of inclusive education” (Harvey, et al., 2010, p. 25). The more concerning fact is that “more than a decade later, many of the same concerns are still a reality” (Harvey, et al., 2010, p. 25). There is a “failure to address perceived problems in inclusive education…and dual training in general and special education may indeed produce educators who are more willing and more capable to deal with their students’ diverse learning needs” (Harvey, et al., 2010, p. 25). In other words, beginning teachers may not be properly prepared to cope
with the various learners that will be in their classrooms and this is a fearful situation for all parties involved.

**Purpose of the Study**

The purpose of this study is to investigate how the current teacher training or Faculties of Education in Ontario prepare their TCs to identify, accommodate, and support their future students who might have ADHD or other behavioural and/or academic exceptionalities. This study is timely and extremely significant to the education community because it takes a critical look at the current pre-service teacher training programs and how they are embracing the changing culture and diversity of students in Ontario. Without the proper preparation, beginning teachers may be less effective in their role or feel anxiety and uneasiness about their abilities as a teacher. In addition, parents/guardians and administrators may feel less comfortable knowing that the teacher is unprepared to deal with circumstances that are likely to occur in a classroom. Ultimately, when a teacher is confident, knowledgeable, and prepared to identify and accommodate children with ADHD and other behavioural and/or academic exceptionalities, the student receives the most effective amount of care and attention.

**Research Questions**

My main research question is: How are teacher training programs preparing new teachers for the identification and support of students with ADHD in their general education classroom? My sub-questions are:

1. What steps do the one-year Bachelor of Education programs in Ontario take to prepare new teachers in regards to special education (identifying, programming, accommodating, etc.)?
2. What is the general comfort level of new teachers entering a new classroom in regards to special education?

3. What accommodations do teachers use to successfully meet the needs of students with ADHD in their classrooms?

4. What recommendations can be made to pre-service teacher training programs to prepare new teachers to meet the needs of students with exceptionalities, specifically those with ADHD?

**Background of the Researcher**

There are two main reasons why I chose to research this topic: my personal experiences working with students with special needs, and my experiences with my brother.

First, I have worked with children with Autism for approximately eight years. As a 16-year-old camp counsellor, I experienced my first connection with a child with Autism. Seeing the challenges and successes firsthand made me reconsider my career path, and in turn, become an educator with a keen interest in special education.

After this camp experience, I became an Instructor Therapist for a grade eight student with Asperger’s Syndrome (now known as High Functioning Autism). As a shadow in his general classroom, I had the pleasure of observing his teacher and Special Education Resource Teacher (SERT) work together to accommodate his needs in the general classroom environment.

In addition to these experiences, I have worked with Autism Ontario, an organization which provides information and referrals on Autism Spectrum Disorders (ASD), and works to raise awareness across Ontario. Specifically, I worked at the Autism
Ontario Kids Camp, providing social skills and partaking in community activities to youth of all ages with ASD. I also continue to work as a private therapist, providing social skills therapy and therapy to children with ASD. These experiences have given me insight into the ways that educators can accommodate, support, and successfully educate these students.

Additionally, during my first practicum, I observed a teacher notably point out multiple children in the class who required formal assessment by the In-School Team. Considering that this was all within the first few days of school, I immediately wondered what it was about those students that stood out to the teacher. My next thought was whether or not I would be able to recognize those signs in my own students. At that time, I felt slightly more at ease knowing that in Year 2 of the Master of Teaching program at the University of Toronto (UT), Ontario Institute for Studies in Education (OISE), I had a full-year long Adaptive Instruction course in which many aspects of special education knowledge and information would be addressed. I personally know and can recognize Autism Spectrum Disorder quite well; however, with the other exceptionalities, I would have been less inclined to recognize initial signs. With a three-hour a week in-depth 12-week course during my program (36 face-to-face hours plus readings and assignments) about the various aspects of special education, exceptionalities, and accommodations, I knew that many of my concerns about special education would likely be addressed during my second year. However, this made me wonder about the majority of TCs across Ontario who were in a one-year (or eight-month or ten-month, rather) Bachelor of Education program. In my opinion, there could not possibly have been enough time to study all of the individual courses that were necessary, along with two or three in-school placements, in addition to an in-depth course on special education.
As I completed my second year special education course during my program, I reflected upon the great depth in which we learned about various exceptionalities, possible scenarios, and practical accommodations. Currently, if I were to enter a new classroom, I would feel relatively confident in my ability to pick up on a potential exceptionality in a student. My concern is mostly for the thousands of TCs about to graduate who have had a sub-par special education course, or in some cases, none at all. If the students with whom I have worked and continue to work had not been identified at a young age, they may not be at the level of success they are at now. I believe that this is credited to early identification and intervention, which was only possible because someone at some point recognized an irregularity. As a result, I strongly believe it is so important for beginning teachers in a teacher training program, as well as experienced teachers, to be exposed to important special education input.

My second reason for pursuing this topic for my Master of Teaching Research Project (MTRP) is because of my brother, currently a 27-year-old with ADHD. In Senior Kindergarten, his behaviour was typified as that of a “bad kid” who could not control himself. His teacher gave up on him and told my parents that there was nothing she could do to help him. His social interactions suffered, as did his academics. There was no support from the faculty or administration, and he was left to suffer without assistance. When reflecting upon his initial school experiences, now that I am a teacher candidate and doing this research, I am heartbroken to realize that he was mistreated in such a way, and that there were likely other students in the same situation. However, after switching schools for grade one, he was greeted by a caring, experienced teacher who immediately recognized signs of a behavioural exceptionality. After being brought to the school support team, he was formally assessed, identified as an exceptional student, and
provided with an action plan to meet his needs. After trying many options, which also
included seeing a physician, he was prescribed medication to help him focus his mind
and control his impulses. This process helped him to become more social, excel in
school, and successfully complete an undergraduate degree. Interestingly enough, many
years later, after taking himself off of the medication in secondary school, he explains
that he knows how to manage many things at once. To him, multi-tasking is how he is
most productive with work. The medication slowed his thoughts, presumably to help him
focus on one thing at a time; however, it felt unnatural and like a weight was holding him
down. There are definitely pros and cons to using medication to help individuals coping
with ADHD, but regardless, at the time, he was lucky to have ended up in the classroom
of that one teacher, who, with experience, was able to quickly identify an irregularity in
his behaviour and seek support for him.

The idea of children slipping through the cracks in early years, with potential
learning disabilities going unnoticed, is worrisome and highly concerning to me. For
every teacher with a lack of proper special education training, there is a class of
potentially 30 students at risk of going undiagnosed and their program and behaviour not
accommodated, which could affect their lives in a negative way. In my opinion, pre-
service teacher education programs should have a mandatory special education
component embedded into the standard curriculum to stop this situation from recurring.

**Summary**

This research study seeks to gain insights on how prepared beginning teachers
really feel when they enter their first classroom in regards to meeting the needs of
students with ADHD, and how experienced teachers recognize initial signs of
behavioural and/or academic exceptionalities. As well, this study explores the various types of accommodations and resources available to beginning and experienced teachers working with these students. This research also attempts to make some recommendations to pre-service teacher training programs about the important need for specific input about special education and how to meet the needs of students with ADHD.

**Overview**

Chapter 1 includes the introduction and purpose of the study, the research questions, as well as my experiences with individuals with ADHD and how I came to be involved in this topic and study. Chapter 2 contains a review of the literature regarding special education, pre-service teacher training, and ADHD. Chapter 3 provides the methodology and procedure that was used in this study including information about the sample participants, data collection, and process of data analysis. Chapter 4 outlines the findings, including a) a table and a discussion about it that illustrates the differences among the various Bachelor of Education programs in Ontario in regards to their special education course offerings, if any, collated by reviewing the universities’ websites and career centres; and b) the themes that emerged from the interviews and data collection and analysis, along with a discussion about each with connections to the literature. Chapter 5 discusses the implications of this research and recommendations for future research and study. References and a list of appendices follow at the end.
CHAPTER 2: LITERATURE REVIEW

The Significance of Special Education in Ontario

In the 1980s, Bill 82 or *An Act to Amend the Education Act* was put into place as a requirement for “all publicly funded schools to be responsible for the education of all Ontario students including those with special education needs…” (Zegarac, 2008, p. 8).

As written on the Ontario Ministry of Education website (http://www.edu.gov.on.ca/eng/general/elemsec/speced/ontario.html, 2014), The *Education Act* defines an “exceptional pupil” as “a pupil whose behavioural, communicational, intellectual, physical or multiple exceptionalities are such that he or she is considered to need placement in a special education program….”. A special education program is “based on and modified by the results of continuous assessment and evaluation; and includes a plan (called an Individual Education Plan or IEP) containing specific objectives and special education services that meet the needs of the exceptional pupil”. Special education services are defined as “the facilities and resources, including support personnel and equipment, necessary for developing and implementing a special education program”. The Ontario Ministry of Education recognizes the need for flexibility among educators due to the regular advancements in “instruction, assessment, demographics, technology…” (Ontario Ministry of Education, 2009, p. 5). With Bill 82 came the induction of the *Identification, Placement, and Review Committees* (IRPCs), which is a team of at least three persons, including a principal or supervisory officer of the board (Ontario Ministry of Education, http://www.edu.gov.on.ca/eng/general/elemsec/speced/ontario.html, 2014). The website explains that these committees are responsible for “identifying a student as ‘exceptional’,...
deciding the pupils’ placement, or appealing such decisions when the parent does not agree with the IPRC.

In addition, in 2000, O’Shea, Hammitte, Mainzer, and Crutchfield, recognized the drastic advancement and increase of students with exceptionalities in the classroom. They explained that “educators now teach an increasingly complex and diverse student population. Within special education, exceptional students continue to challenge educators” (p. 71). In regards to ADHD, it is “the most commonly studied and diagnosed psychiatric disorder in children, affecting about 3 to 5% of children globally with symptoms starting before seven years of age…” (Frank-Briggs, 2011, p. 291). This is significant because it means that teachers, during their careers, are quite likely to come across one, if not multiple students with ADHD or other behavioural disorders. To give that percentage a numerical value, Schnoes, Reid, Wagner, and Marder (2006) state that “ADHD is estimated to affect approximately two million school-age children” (p. 483).

Special education is a growing force and expanding trend within the education community. It is extremely significant that those who will be responsible for the care and education of students are also capable of identifying and coping with potential behaviour disorders in primary age children. In a study regarding attitudes and knowledge about ADHD, it was found that 99% of the Canadian teachers surveyed “reported a lack of opportunity to learn about ADHD at university” (Bekle, 2004, p. 153). This statistic demonstrates an undeniable need for specific and mandatory special education courses in Bachelor of Education programs across Ontario.
Attention Deficit Hyperactive Disorder (ADHD)

A common statement among the literature has been the definition of ADHD. Most literature pieces have defined ADHD as per The American Psychiatric Association. ADHD is defined as “a behaviour disorder that most often presents in childhood” and Richdale and Jackson (2004) state that between “4% and 7% of children will be diagnosed with ADHD” (p. 517). The statistics in different articles by Beckle (2004), Bussing, Zima, Perwien, Belin, & Widawski (1998), Frank-Briggs (2011), Schnoes, et al. (2006), and Wright (2006) range anywhere from 3% to 9% of children, but all remain consistently within that range. It is recognized as a “neurobehavioural developmental disorder” (Frank-Briggs, 2011, p. 293).

Commonly recognized characteristics of ADHD include “inattention, hyperactivity and impulsivity” (Richdale, & Jackson, 2004, p. 517). It has been recognized that in a classroom, students with ADHD “are unable to stay focused on a task, cannot sit still, act without thinking and rarely finish projects they begin at home or school” (Snider, Busch, & Arrowood, 2003, p. 46). The literature provides consistent definitions of the disorder itself and the implications for children with ADHD.

Teacher Attitudes and Knowledge about ADHD

There is a plethora of research regarding teacher attitudes and knowledge about ADHD. It ranges from the knowledge about the disorder itself, to the educational implications as well as the interventions. Teachers are considered to be the front line of the intervention process, because they are among the few adults who spend consistent time with the students in a fixed setting. Snider, et al. (2003) found that “teachers were involved in making the initial referral nearly 40% of the time” (p. 46). This is a
significant statistic, because it represents the extremely important roles that teachers play in the identification process for students with ADHD. It is known that “children who are suspected of having ADHD are initially identified because of their behavioural and academic performance in the classroom.” (p. 48). If teachers lack adequate preparation, their ability to successfully identify and support students loses drastic effectiveness. A study of 200 teachers showed that they “had less knowledge about ADHD…than one would expect considering their pivotal role in the recognition and treatment of ADHD” (p. 50).

Bekle (2004) argues that “in the same way that teacher attitude relates to student success, teacher knowledge of the subject, as well as knowledge of teaching practices, influences teaching performance” (p. 153). As teachers, having a firm grasp on ADHD and a positive attitude towards all students is imperative to teaching performance and overall student success. Studies are showing that there is a general understanding of ADHD and its effect on students. Bekle’s study demonstrated that in regards to “biological and nonvolitional factors, family influences, causation, and medical and educational interventions”, the majority of the respondents had correct understanding of ADHD (p. 155).

A review of studies of overall knowledge of ADHD have shown that teachers scored “only 47.8% on the knowledge questionnaire” about ADHD (Kos, Richdale, & Jackson, 2004, p. 518). This demonstrates a large knowledge gap among teachers that needs to be filled in order to ensure success. Kos, et al. (2004) studied the knowledge and attitudes of in-service and pre-service teachers, and found that the more experienced teachers had more knowledge about ADHD (p. 524). This is likely attributed to gaining years of in-field experience or some type of professional development while in the
teacher role. However, it is imperative that beginning teachers go into the field with more knowledge than the studies are currently presenting. It is argued that “knowledge about ADHD is likely to improve if teacher education is increased” (p. 525). A suggestion provided by Kos et al. states that universities should “develop and implement core ADHD-specific units for education students” and “be exposed to ADHD students during their practical placements” (p. 525).

**Special Education Preparation in Pre-service Teaching Training**

According to Zegarac (2008), in the 1970’s, there were an estimated 120,000 students receiving some special education services, with 15,000 on waiting lists, and another 15,000 undiagnosed (p. 8). At the time of his presentation, Zegarac (2008) reported “290,000 or 14% of the population of students in publicly funded elementary and secondary education” receive special education services (p. 11).

Most recently, the Ontario Ministry of Education reports more than 191,600 students identified as “exceptional pupils” and a further 127,600 undiagnosed students who are still receiving special education services and programs totaling over 319,200 students (2014). In other words, the frequency of students in special education programs in Ontario was and is continuing to rise. Specifically to ADHD, it has been estimated that “prevalence rates [of children with ADHD] in general education classrooms are estimated to be as high as one to two students per classroom…” (Nowacek & Mamlin, 2007, p. 28). This, in theory, would mean that every teacher in a general classroom will teach at least one student with ADHD each year. Classroom norms are visibly and drastically changing, and expectations of educators are growing as a result. Integration is becoming a more frequent practice and it is extremely likely that a teacher will come across a
student with an exceptionality throughout their career. To accommodate this trend, “coursework in teacher preparation must be aligned with long-standing federal legislation” (Freytag, 2002, p. 57). It is argued that “the inclusion of students with disabilities in the general education curriculum and classrooms has been a goal of educational reformists for many years” (Harvey, et al., 2010, p. 24). This would require general teachers to have an in-depth understanding of special education and how to accommodate those students.

In 1995, it was determined that “pre-service general education teachers were not well prepared for working with students with exceptional needs…” (Harvey, et al., 2010, p. 25). Later, in 2005, another study concluded that “dual training in general and special education may indeed produce educators who are more willing and more capable to deal with their students’ diverse learning needs” (p. 25). Research suggests that “the majority of classroom teachers lack knowledge of what constitutes appropriate interventions and modifications” (Nowacek & Mamlin, 2007, p. 28). Regulation 347/02, Accreditation of Teacher Education Programs, “requires that a program of professional education includes the policies, assessments and practices involved in responding to the needs and strengths of all students, including students identified as requiring special education supports” (Ontario College of Teachers, 2014, p. 22). In a 2010 study, “respondents most often identified introduction courses in exceptional children or special needs and inclusion or inclusive classrooms” (p. 26). While this is a positive step in the right direction for special education, it is important to have detailed knowledge and an opportunity to practice these skills in the classroom. Freytag (2002) argues, “that all educators bear responsibility in serving exceptional students, future teachers must be afforded specific instruction regarding accommodations, inclusion and professional collaboration” (p. 57).
Special education courses should be specific and mandatory for all pre-service education programs if general teachers are expected to effectively identify and accommodate exceptionalities in their classrooms. As the front line to the students, “teachers must not only be familiar with different behavioural strategies and interventions, but also with the methods of academic instruction that are appropriate for students with ADHD” (Bekle, 2004, p. 152). Effective preparation is imperative to the overall success of teachers, and ultimately their students (Beckle, 2004).

In June of 2013, the Ontario Ministry of Education (http://news.ontario.ca/edu/en/2013/06/giving-new-teachers-the-tools-for-success.html) released a statement regarding the existing pre-service teacher training programs and much needed upcoming improvements to these programs. These changes will be enstated under Ontario Regulation 283/13 (http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_020347_e.htm, 2013). As it states on the website, by September 2015, the length of all teacher education programs across Ontario will extend from one year to two, which might mean that students will be in a program for at least four semesters in total instead of two or three. In addition to increasing the length of the academic program, the Ministry is recommending a minimum of 80 days of practical in-school experience in regular classrooms in comparison to the current minimum of 40 days. Lastly, and, in my opinion, most importantly, the curriculum for teacher education programs will be updated to provide teacher candidates with “additional experience in tailoring teaching methods to diverse student needs”. This implies a change to ensure that topics related to special education will be implemented in all pre-service teacher training programs across Ontario. These changes to the existing
teacher training programs by September 2015 further validate this timely research study and the need for improvements to the Bachelor of Education programs in Ontario.

**Summary**

This literature review has identified the level of preparation beginning teachers have and will need for the identification and support of students with ADHD. Additionally, it has demonstrated a need for an increased focus on special education content and/or courses within the one year Bachelor of Education programs in Ontario, and has recognized a demand for specific, detailed and practical special education courses for all pre-service teacher training programs.
CHAPTER 3: METHODOLOGY

Procedure

This qualitative research study on the preparedness of general educators for working with students with ADHD was conducted using and analyzing three types of data: a) a literature review on the topics of ADHD, special education, and general information about special education input in pre-service teacher education programs; b) a website review of the special education courses offered at universities across Ontario with the creation of a table illustrating the data (see Table 4.1); and c) face-to-face interviews with two teachers. The interview data was analyzed and the themes that emerged were presented and discussed in relation to the literature on this topic (see Chapter 4: Findings) and in relation to implications to the field (see Chapter 5: Discussion).

Data Collection

After completing and reviewing the literature about special education, ADHD, and teacher training related to special education and ADHD, I realized that many of the papers and research studies I had encountered were conducted by American authors. I therefore wanted to find out firsthand about the special education offerings in Canadian teacher education programs, and specifically in Ontario. I then decided to complete a website review of Bachelor of Education programs across Ontario and the special education courses, if any, that are offered here. I created a table (see Table 4.1) illustrating this data, and discussed it in light of the literature review (see Chapter 4).

My other important qualitative data collection consisted of two informal, face-to-face interviews. These interviews provided a firsthand look at how these two teachers
felt about their training and experiences with special education, and specifically with students with ADHD. This data was compared to the literature in this area and to the information I had collated in Table 4.1.

Before interviewing, I had my questions pre-approved by my research supervisor to ensure the quality of the questions and the proper flow of questions in connection with my main and sub-questions. I gathered information regarding my participants’ current practices, knowledge of ADHD and the accommodations available, as well as the degree to which the participants studied special education in their pre-service programs.

I believe the sequence of my questions flowed well. I started with background information, and moved into current knowledge regarding students with ADHD. From here, I transitioned into teacher education regarding ADHD and special education. Next, I moved into discussing the adequacy/inadequacy of the programs and recommendations to help improve the programs (see Appendix A for the interview questions).

After completing two interviews, I was excited by the outcome and genuinely wanted to pursue this research on a larger scale. I think that as an interviewer, I succeeded at making my participants feel comfortable and even open up more than they would have, had I not done so. In terms of my role as an interviewer, I chose to guide the conversation in a relaxed and natural way – a “go-with-the-flow” mentality. I went with the rhythm of the participant. If they were stuck or gave a very succinct answer, I probed a bit further for more detail or rephrased the question to see if it might spark a bit more of a response and in many cases, it did. I typically did not interject my thoughts as I did not want the participant to get distracted mid-thought and forget where they were going with their ideas. At times, I asked some pertinent follow-up questions to probe further.
Informal interviews are effective because, as Turner (2010) states, informal interviews provide an environment where the researcher can “ask follow-up questions or probing questions based on their responses to pre-constructed questions” (p. 755). Follow up questions are extremely important during informal interviews because “respondents in an interview will not necessarily answer the question being asked by the researcher” (p. 758); therefore, to have the flexibility to ask follow-up questions can help to guide the respondent and ensure that the correct information is being collected. Researchers can have more control over the information gained from the participants due to the flexible nature of an informal interview.

Some of the questions asked in the interviews for this study were:

1. If any, describe the special education courses you took as a part of your mandatory Bachelor of Education program.

2. Describe your degree of confidence going into your first year teaching, in regards to supporting students with exceptionalities.

3. In your experiences, what are some of the academic or social characteristics displayed by a student who may have ADHD?

4. What would be a way to improve the current knowledge base among teachers regarding meeting the needs of students with ADHD?

(See Appendix A for the full list of interview questions.)

Participants

For my interviews, I acquired two participants from varied backgrounds, lengths of time in the field, teaching boards and education history. The teachers I interviewed were chosen based on the following criteria:
a) They must have at least one year of teaching experience in a general, mainstream classroom (preferably primary or junior grades).

b) They must have graduated with a Bachelor of Education from an accredited Ontario Faculty of Education.

c) They must have graduated recently, within the last five years.

These criteria were imperative to my research study because I asked questions regarding how the participants identified possible exceptionalities when meeting a new group of students in September. They must have been teaching long enough (at least one year) to have experienced a range of students and reflect upon their experiences identifying potential exceptionalities in their students. It was imperative that they were teachers in a general mainstream classroom because teachers in a special education classroom will usually have had more extensive training with students with special needs or have at least one part of an additional qualification (AQ) course, (e.g., Special Education Additional Qualification, Part 1). I was looking to see how regular classroom teachers are prepared to identify and accommodate students in a mainstream classroom; therefore they had to be teachers in a general classroom. The participants must have graduated from an Ontario Faculty of Education with a Bachelor of Education (preferably a standard one-year program). This was extremely important because, as part of this research, I reviewed the various Ontario Faculties of Education and their course calendars regarding the one-year Bachelor of Education programs (see Table 4.1). I also wanted to know whether they were in a pre-service teacher training program recently, within the last five years, since this would reflect any changes made to the program or demands for further special education instruction.
Data Analysis

For my interview data, each participant was given a pseudonym to protect their anonymity. I began by reading and rereading the transcribed interviews, focusing on the common words, phrases, and emerging ideas and relevant information. The data was compared to retrieve common themes and beliefs among the participants as related to the literature review. All information pertaining to the topic of Teacher Preparedness and ADHD were considered relevant and added to the collection.

I coded my transcriptions based on a number of things, due to the variance in topics of questions asked. As Wellington (2000) suggests, I began with the first stage, “data reduction” (p. 134) where I started to code based on things such as behaviours, strategies/practices, states/feelings, etc. I tried to find similarities between the responses given, whether these are similar things stated or similar things left out. For example, both participants did not talk about academic characteristics or behaviours exhibited by children with ADHD. Alternatively, I was also coinciding with Seidel’s (1998) notion of “noticing things” as I “produced a record of the things I have noticed” (p. 3). I did so through collecting and reviewing the literature about this topic and recording and transcribing the two interviews, in addition to coding them.

By following the second step, “data display”, in Wellington’s (2000) article, I displayed my information in a visual format (p.134), or rather, a chart with four columns. The first column contained the interview questions; the second and third columns contained the transcribed data for each of the two interviewees; and the fourth column contained the possible themes that emerged. The questions and responses in the chart were lined up side-by-side to better help me visually see the connections between
answers. I colour-coded the similarities and created a code for those similarities. Some of them overlapped in other responses, but most were specific to the question asked.

Lastly, I began to follow the third step mentioned by Wellington (2000), “conclusion drawing” (p. 134), which I placed into the Themes column of my chart. This coincides with Seidel’s (1998) second notion of “collecting things”, as “the next step is to collect and sort [data]” (p. 3). By then using this research and data collection to further guide my MTRP, I led into Seidel’s (1998) third notion of “thinking about things” where I “make sense of out of each collection, look for patterns and relationships...and make general discoveries...” (p. 4). As I discovered emergent themes, I separated the data accordingly and compiled it by the themes. Keeping my main research question and sub-questions in mind, I identified five major themes that appeared to be consistent throughout the interview data and literature review.

**Ethical Review Procedures**

I followed the ethical review approval procedures for the Master of Teaching program. I approached potential participants with respect and awareness of the current political climate. I provided each participant with a letter of consent that they read and signed after participation was agreed upon (see Appendix B for Letter of Informed Consent). Participants were given all necessary information regarding the study, the Master of Teaching program Ethical Review process, and the use of the information. Confidentiality, anonymity and honesty of the responses and information collected were thoroughly enforced. The comfort and understanding of the participants were priorities of mine and I intended on doing whatever possible to ensure this throughout the process. Participants had the opportunity to change or revise their answers, opt out of answering
any questions, ask for clarification, or speak to or connect via email with my research supervisor at any time.

The raw data which I analyzed were kept anonymous throughout the research process and write-up. As made aware in the letter of consent, the information was shared with my research supervisor and the participants had given consent for this (see Appendix B for Letter of Consent). All information collected was stored on my private computer with password access.

**Limitations**

A limitation of this research was the small sample size. After interviewing two teachers, I realized that it would have been a stronger study had I had the time and opportunity to interview ten, 20 or even 50 new teachers. From a larger perspective, it may be more effective to interview or even survey multiple teachers from different universities across Ontario and those who graduated in different years to provide a clearer picture about their preparation for supporting students with exceptionalities.

Another limitation of this study is that there is limited research regarding teacher preparation specifically combined with ADHD. In addition, most research I found was outside of Canada, and almost all was outside of Ontario. Therefore, this research study is relevant, current, and important to education in Ontario, and the findings represent new information added to this topic area. It is also a timely study in light of the new legislation coming from the Ontario Ministry of Education regarding the change in length and content of teacher education programs by September 2015.

CHAPTER 4: FINDINGS

My main objective in this qualitative research study was to determine how pre-service teacher training programs are preparing new teachers for the identification and support of students with ADHD in their general education classrooms. This chapter includes the findings based on: a) the website review of the special education courses offered at universities across Ontario; and b) face-to-face interviews with two teachers along with connections to the literature about pre-service teacher training, special education, and ADHD. The answers I received from my face-to-face interviews were in line with what I expected in my research – my participants were not happy with the special education components of their Bachelor of Education programs, and felt unsure, nervous and at times even frustrated when dealing with students with ADHD and/or special education issues. The literature reviewed supported the participants’ responses, arguing that Bachelor of Education programs are not properly preparing teachers for the identification and accommodation of students with ADHD.

Website Review of Ontario University Faculty of Education Programs Focusing on their Special Education Courses

As a current student in a Faculty of Education program and in light of my research questions, I was interested in comparing the various Bachelor of Education pre-service programs that exist in Ontario. As seen in Table 4.1 which follows in this chapter, I created a comparative chart that reviewed the current curriculum (with a focus on the special education offerings) for each of these programs. The chart examines the website information on each Ontario Faculty of Education program in regards to the special education courses offered, if any. The programs are organized in the chart alphabetically.
The name of each program is stated clearly as written on the faculty website. This chart mainly observes the consecutive (post-graduate studies) one-year (or less) Bachelor of Education options offered at each faculty. In the event that the school did not offer a one-year program, but offered a concurrent program (a Bachelor’s degree in Arts or Science combined with a Bachelor of Education degree in five years), then this concurrent program was included in the chart. If a school offered both consecutive and concurrent programs, only the consecutive program was included. For the purpose of clarification, Lakehead University’s “Concurrent/One Year” program is in fact, a consecutive-style program, despite the program name.

The websites of 12 one-year (or less) Bachelor of Education pre-service programs were reviewed, and in one case, a four to five year Concurrent Teacher Education program was also reviewed due to a lack of a one-year option in that university (Laurentian). In total, the websites of 13 Ontario pre-service teacher education programs were reviewed and compared in terms of the special education courses offered (see Table 4.1).

In conducting this website review, I realize that my reporting about the special education offerings by each institution was a cursory overview of what was reported on the specific websites, and the findings might not accurately portray the exact information taught to the teacher candidates in each program, but it did provide a good comparison of what each program deemed important enough to post on their websites.
Table 4.1: Ontario Faculty of Education Research Findings

<table>
<thead>
<tr>
<th>Name of School and Website</th>
<th>Name and Length of Program</th>
<th>Mandatory Special Education Course? (Y/N) If yes, course name and course description if applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brock University</td>
<td>Initial (Consecutive) Teacher Education (B.Ed) (1 year)</td>
<td>Y EDUC 8Y40 - Current Trends and Issues in Special Education - Primary/Junior/Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current legislation and recent developments related to the education of exceptional students.</td>
</tr>
<tr>
<td>Lakehead University</td>
<td>B.Ed (Professional) (Concurrent/ 1 Year )</td>
<td>N</td>
</tr>
<tr>
<td>Laurentian University</td>
<td>Education, English Concurrent (4-5 years)</td>
<td>Y EDUC-3006E – Educational Psychology/Special Education</td>
</tr>
</tbody>
</table>

B.Ed. students will study the impact of significant psychological theories on teaching and learning in the classroom. They will investigate topics such as human development, cognition, learning theory, motivation and psychological and educational assessment. The special education component will enable teacher candidates to develop competence and confidence in dealing with pupils in the regular classroom who have special needs. To this end, they will examine special education services in Ontario, types of exceptionalities, the process used for identifying and placing students with exceptionalities in programs (IPRC) and the preparation of individual education plans (IEPs)....cont’d.
<table>
<thead>
<tr>
<th>Institution</th>
<th>Program Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nippissing University</strong>&lt;br&gt;<a href="http://www.nipissingu.ca/academics/faculties/schulich-school-of-education/bed-programs/bed-consecutive/Pages/default.aspx">http://www.nipissingu.ca/academics/faculties/schulich-school-of-education/bed-programs/bed-consecutive/Pages/default.aspx</a></td>
<td><strong>Consecutive Bachelor of Education Degree Program (B.Ed)</strong>&lt;br&gt;(1 Year)</td>
<td><strong>Y</strong>&lt;br&gt;<strong>EDUC 4103 Educational Psychology and Special Education</strong>&lt;br&gt;In this course, candidates are introduced to the fields of Educational Psychology and Special Education. Topics will be selected from guidance and counselling, human development, theories of learning, cognition in children and adolescents, motivation, and psychological and educational assessment in school settings. An overview of special education services in Canada will be provided, with a focus on Ontario. Candidates will receive an overview of the types of exceptionalities that students may present. An introduction will be provided to the processes used to identify students with exceptionalities and plan individual programs. The range of special education services typically available in school systems will be discussed.</td>
</tr>
<tr>
<td><strong>Queen’s University</strong>&lt;br&gt;<a href="http://www.educqueensu.ca/teachereducation/programs/consecutive.html">http://www.educqueensu.ca/teachereducation/programs/consecutive.html</a></td>
<td><strong>Consecutive Education (B.Ed)</strong>&lt;br&gt;(1 year)</td>
<td><strong>N</strong></td>
</tr>
<tr>
<td><strong>Trent University</strong>&lt;br&gt;<a href="http://www.trentu.ca/education/consecutive/program_courses.php">http://www.trentu.ca/education/consecutive/program_courses.php</a></td>
<td><strong>Consecutive Bachelor of Education program (B.Ed)</strong>&lt;br&gt;(1 year)</td>
<td><strong>Y</strong>&lt;br&gt;<strong>EDUC 4133H Supporting Literacy and Learners with Special Needs</strong>&lt;br&gt;Introduction to current educational research, theory and sound practices regarding reading instruction and students with learning disabilities. Models of inclusion and individualized instruction are explored with emphasis on legal responsibilities, program modification, and classroom accommodation. This course is accompanied by a practicum placement.</td>
</tr>
<tr>
<td><strong>University of Ontario Institute of Technology (UOIT)</strong>&lt;br&gt;<a href="http://www.peqab.ca/Publications/Consents/UOITConsecEdPJWeb.pdf">http://www.peqab.ca/Publications/Consents/UOITConsecEdPJWeb.pdf</a></td>
<td><strong>Consecutive Bachelor of Education (B.Ed)</strong>&lt;br&gt;(1 year)</td>
<td><strong>Y</strong>&lt;br&gt;<strong>EDUC 3800U P/J Individual Needs and Diversity</strong>&lt;br&gt;This 18-hour course focuses on strategies to address special needs of students within the regular classroom. It introduces different types of special needs encountered in the elementary and secondary schools and examines the instructional and assessment strategies most likely to succeed with these learners.</td>
</tr>
<tr>
<td>University of Ottawa</td>
<td>Bachelor of Education (B.Ed) (1 Year)</td>
<td>Only accessible through login/password by UO students</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>University of Toronto (OISE)</td>
<td>Consecutive Bachelor of Education (B.Ed) (1 year)</td>
<td>N</td>
</tr>
<tr>
<td>University of Western Ontario</td>
<td>Bachelor of Education (B.Ed) (1 year)</td>
<td>Educational Psychology and Special Education 5005</td>
</tr>
<tr>
<td>University of Windsor</td>
<td>Bachelor of Education Consecutive Program (B.Ed) (1 year)</td>
<td>80-204. Differentiated Instruction for Students with Special Needs</td>
</tr>
<tr>
<td>York University</td>
<td>Consecutive Bachelor of Education (B.Ed) (1 year)</td>
<td>N</td>
</tr>
</tbody>
</table>
Specifically, the data in Table 4.1 illustrates whether or not each program included a mandatory special education course, and if so, what the course entailed. I found that of the 13 Faculties of Education in Ontario, only seven programs clearly offer a special education course as a part of the regular curriculum. After reviewing the course descriptions of those seven special education courses, I discovered that many of them were introductions about special education. Many of the programs offered an introductory course that was vague and more of an overview without a practical learning experience aspect. After further review, it was determined that only one program (Laurentian University’s four to five year Concurrent Education) offered extremely specific and practical strategies and resources for identifying exceptionalities. None of the faculties reported providing courses that were specific or detailed in nature (e.g., learning about ADHD). This recurring issue seems to reinforce the information in the literature that sees more teachers graduating with their teaching certification without the proper knowledge necessary for complete success in the classroom (Bekle, 2004; Harvey et al., 2010; Kos et al., 2004; Perold et al., 2010).

Background of the Participants

Participant 1: Shayla (pseudonym)

The first interviewee, Participant 1, Shayla, is a grade 6, 7, 8 teacher in a school district in the Greater Toronto Area (GTA). She currently teaches literacy, French
Immersion, and is also a Special Education Resource Teacher (SERT) for the Junior/Intermediate division of her school. She has been teaching for four years. After obtaining an undergraduate degree in French Studies from an Ontario university, she graduated from a one-year Ontario Faculty of Education. Her pre-service teacher education program did include a special education course as a part of the regular curriculum. In addition to these qualifications, Shayla has a French as a Second Language teaching specialist additional qualification (FSL), as well as the Special Education Part 1, Additional Qualification.

Participant 2: Dominique (pseudonym)

The second interviewee, Participant 2, Dominique, is a Junior/Senior Kindergarten and grade 6 French teacher in a school district in the GTA. This is her first year teaching. After completing an undergraduate degree at an Ontario university, she completed a one-year Bachelor of Education program with an Ontario Faculty of Education. Her pre-service teacher education program did not offer a special education course as a part of the regular curriculum. Dominique’s additional qualifications include French as a Second Language (FSL), Part 1, and English as a Second Language (ESL), Part 1.

Key Findings from Analysis of the Interview Data

The rest of this chapter is organized by the themes that emerged from the interview data. Within each theme, each case study is discussed in regards to that theme with connections to the literature, and at times, with connections to the information in Table 4.1. After coding and analysis of the interview data for these two teachers, five key findings or themes were identified:
1. New teachers have a basic understanding of some characteristics of ADHD with little special education training.

2. Teachers, along with many other school faculty members, play a significant role in the process of identifying exceptionalities, such as ADHD.

3. There are various supports and accommodations available for students with ADHD.

4. There seems to be a lack of confidence in new teachers, attributed to a gap in the teacher training programs with regards to special education training.

5. A suggestion about how to improve teacher training and preparation includes the implementation of a mandatory special education course during all pre-service teacher training programs.

**Theme 1: New teachers have a basic understanding of some characteristics of ADHD with little special education training.**

Both interview participants are relatively new teachers with less than five years of teaching experience: Participant #1, Shayla has been a teacher for the last four years, and Participant #2, Dominique, is a teacher in her first year. Their responses regarding questions dealing with knowledge of the characteristics of students with ADHD uncovered a basic knowledge of the disorder. They both had experienced very little special education training during their pre-service year. Shayla, who has been teaching for five years, has taken the Additional Qualifications, Part 1 course in special education. Dominique, a first year teacher, had Additional Qualifications in FSL and ESL, but she does not have these qualifications in special education.

**Understanding of academic implications of ADHD.**

When asked about the academic, social and emotional characteristics displayed by a child with ADHD, neither teacher discussed academic characteristics as an implication when, in fact, it can lead to academic underachievement as it causes a reduced working memory (Wright, 2006). In addition, students with ADHD may have difficulty with
organization, focus, completing tasks and learning new concepts (Frank-Briggs, 2011). These are significant academic implications of which the participants seemed unaware. However, the two participants were cognisant of some behavioural and social characteristics exhibited by children with ADHD. Participants both mentioned behaviours such as being hyper and a lack of focus. Shayla listed some initial signs as “Being easily distracted, not staying on task, and losing focus, things like that”. Dominique responded to the same question with a similar answer, stating,

I look for students’ behaviour in terms of what they are doing while at their desk; whether they are listening attentively; if they’re taking notes, playing with things in their desk, looking around the room, not focusing on what we’re doing as a class.

This illustrates initial understanding of “exceptional behaviour” and some understanding of the characteristics exhibited by a student with ADHD.

**Understanding of social implications of ADHD.**

In regards to social characteristics, Shayla explained,

You’ll tend to see a lot of students not want to necessarily socialize with the student with ADHD for fear of, you know, missing out on instructions or getting in trouble because they are associated with the student who is not focusing.

This participant recognizes that there are some social implications that are associated with ADHD.

Alternatively, Dominique stated,

I haven’t really had any ADHD students yet. I would definitely say social because with the ‘hyperness’. A lot of times in my experience, they want to be like the class clown. So they want everyone to love them basically.

A student who is a class clown certainly does imply some social implications such as the need for attention and love. Dominique, as a first year teacher with little special education training, did not mention other possible social implications of ADHD for a child such as
not listening when spoken to, and blurting out inappropriate comments (Frank-Briggs, 2011). Staikova, et al. (2013) argue that “social problems have been reported in 52%-82% of children with ADHD and are increasingly seen as an important associated feature of the disorder” (p.1275). They are “rated lower on social preference, have fewer reciprocated friendships and are more often disliked by their peers, as soon as the first day or even within 20 minutes of the social interaction” (p. 1275). According to research, there are some heavy social implications for a child with ADHD that new teachers are not being educated about (Bekle, 2004; Frank-Briggs, 2011; Staikova, et al., 2013; Wright, 2006).

Understanding of emotional implications of ADHD.

When asked about the emotional characteristics exhibited by a child with ADHD, neither participant spoke to the emotion implications of ADHD. This lack of knowledge can be connected to the lack of specific and practical special education training that was reported by the participants. Research shows that ADHD causes “reduced self-regulation of emotion/motivation” (Wright, 2006, p. 4). This is a significant implication for the classroom because students with ADHD are impaired in their “ability to regulate emotion…and sustain motivation” (Wright, 2006, p. 4). Emotions such as “frustration, impatience, and anger in particular, are impulsively expressed in ADHD…” (Barkley, 2010, p. 1). This does not mean that emotions are felt more strongly than those without ADHD, but they “are more quickly displayed and hence more evident at the point of display” (Barkley, 2010, p. 1).

Overall, the participants had a very basic, but limited understanding of ADHD and the academic, social and emotional implications of the disorder. As Perold, Louw and
Kleynhans (2010) suggest, “being familiar with ADHD, therefore, cannot be seen as having adequate knowledge of the disorder” (p. 460).

The participants are not the only teachers lacking knowledge regarding ADHD. Research has shown that “teachers have provided inaccurate and inappropriate advice to parents of children with ADHD…” (Kos, et al., 2004, p. 518). A study by Sciutto, et al. (2000) showed that “on average, teachers scored only 47.8% on the knowledge questionnaire” (p. 518).

Another study done by Perold et al. (2010) determined that “there is a substantial lack of knowledge about ADHD among teachers in primary schools…” (p. 464). Their study about knowledge of ADHD showed that 42.6% of teacher’s responses were correct, and 35.4% were “I don’t know” responses (Perold, et al., 2010). These studies demonstrate a need for increased ADHD training in pre-service teacher education.

**Theme 2: Teachers, along with many other school faculty members, play a significant role in the process of identifying exceptionalities such as ADHD.**

When discussing the process of identifying a child as an exceptional pupil, both participants acknowledged that observations and meeting with other faculty were important stages in the identification process. Shayla stated that she begins by observing students’ behaviour in the classroom. She explained, “I would watch the student, observe them in class, see where and during what times of the day and what periods and what subjects they’re having the most trouble focusing”. After significant observation, she “would discuss these concerns with the child’s/student’s other teachers to see if we’re noticing patterns in terms of whether this is happening right before recess or at the end of the day or things like that”. The next steps, according to Shayla, are “bringing it to team,
discussing with the SERT and then possibly bringing in a special education consultant to come observe the student”.

Similarly, Dominique noted the importance of other school faculty as well as parents when she stated,

If I find that it [the behaviour] is big enough to have an assessment, I bring it up to the learning strategist, and then there’s a form I have to fill out based on what I saw and what I observed and why I think this needs to be done. And then the parents have to consent to it.

Due to different school districts, the terms of the staff are different (e.g., “Learning Strategist vs. SERT”); however, both participants in this research rely on the expertise of other individuals in the school in the process of identifying a student and recommending them for further assessment, and neither participant mentioned the IPRC in the identification process, a requirement after the implementation of Bill 82.

The research tells us that teachers have a high level of decision making power in regards to the identification process (Anderson, et al., 2012). After observing certain behaviours exhibited by a student, they must then decide if it is significant enough to be recorded and even more so, brought to an in-school team for assessment. This level of power means that teachers play a largely significant role in the identification process. Teachers “play central roles in reporting symptoms, advising parents to seek assessment, and assisting children with ADHD to achieve academically and socially” (Anderson, et al., 2012, p. 511). Researchers “identify teachers as the most frequent initial referral source by recommending to parents that their child receive assessment” (Anderson, et al., 2012, p. 511).
Perold, et al. (2010) also argue that “the teacher is most often the first person to make a referral for assessment for ADHD…” (p. 458). This is significant because it demonstrates that teachers are on the front lines and most frequently are the ones to initially recognize behaviours. Additionally, “teacher’s observations about the child’s functioning in task-oriented and social situations are used in classification and treatment decisions” (Anderson, et al., 2012, p. 511).

Similarly argued by Perold, et al. (2010), they explain that “teachers also play an important role in the assessment process, providing information on academic history and performance, social relations and general everyday functioning…” (p. 459). As mentioned by both participants, observations noted by teachers help begin and support the process of identification and hold considerable value.

Lastly, “teachers are also often responsible for implementing and evaluating interventions for ADHD in the classroom” (Anderson, et al., 2012, p. 511). After identification as an exceptional pupil with ADHD, teachers are then responsible for the implementation of proper accommodations and interventions.

**Theme 3: There are various supports and accommodations available for students with ADHD.**

When asked about accommodations for students with ADHD, both participants mentioned more than one possible accommodation for a student with ADHD. Shayla said,

I allow more frequent breaks in terms of their work, leaving, going to the washroom for a few minutes, walking around the class, giving them a stress ball or something to play with at their desk. If we are doing math, I’ll give them manipulatives....
Dominique explained,

…constant check-ins with the student. So like (I) give them small blocks and say, ‘Okay, you have to do this and then I’m going to come back and check up on you’. Having them near the front of the class...

In other words, common accommodations may be things such as frequent breaks, fidget toys, manipulatives, chunking and relocation. The participants had a strong initial understanding of potential accommodations that can be used in the classroom for students with ADHD.

DuPaul, Weyandt and Janusis (2011) explain that interventions and accommodations can be organized into categories such as behavioural interventions, self-regulation interventions, academic interventions, home-school communication programs, among many others. Some strategies that were not mentioned by the participants include “peer tutoring, strategies instruction, and computer-assisted instruction” (Nowacek & Mamlin, 2007, p. 28). These suggestions offer benefits such as “individualized pace, continuous prompting and immediate feedback” (Nowacek & Mamlin, 2007, p. 28).

DuPaul, et al. (2011) contend that behaviour interventions may include antecedent and consequence-based strategies (p. 36). Antecedent strategies are used to prevent “inattentive and disruptive behaviours” and precede the “occurrence of a specific behaviour” (p. 36). An example of this may be posting and reviewing the classroom rules, which should be few in number and phrased positively (telling students what to do, as opposed to focusing on what not to do). Alternatively, consequence-based strategies require “manipulating environmental events following a specific behaviour to alter the frequency of that behaviour” (p. 37). The most common behavioural intervention used for ADHD is the use of “contingent positive reinforcement in the form of teacher praise or...
token reinforcement when they exhibit specific target behaviours” (p. 37). Even though this is the most commonly used intervention, it was not mentioned by either participant.

Self-regulation interventions “encourage students with ADHD to monitor, evaluate, and/or reinforce their own behaviours…” (DuPaul, et al., 2011, p. 37-8). An example of this may be having the student “evaluate their classroom behaviour and work performance at regular intervals…” (DuPaul, et al., 2011, p. 38).

Academic interventions directly address the impairments in academic skills that often exist for students with ADHD (DuPaul, et al., 2011). One example of this is “teacher-mediated direct instruction in relevant skills that require remediation” (DuPaul, et al., 2011, p. 38).

Lastly, home-school programs are an important part of “a comprehensive treatment plan” because difficulties typically span across settings (DuPaul, et al., 2011). An example of a home-school program can be a daily report card including feedback regarding “work completion, academic performance, participation in class, getting along with classmates, etc.” (DuPaul, et al., 2011, p. 38-9).

Participants had a strong initial understanding of potential accommodations to use in the classroom for any learning difficulty; however, did not acknowledge those that would specifically help solve the implications caused by ADHD such as the ones mentioned above.

Theme 4: There seems to be a lack of confidence in new teachers, attributed to a gap in the teacher training programs with regards to special education training.

When asked about their level of confidence regarding teaching children with exceptionalities, both participants described a lack of confidence and both attributed this low confidence to a lack of proper training in their Bachelor of Education programs.
When asked about her degree of confidence going into her first year teaching, Shayla explained, “Zero. I was not prepared at all”.

In regards to the special education course in her program, Shayla stated that “we took Special Education course once a week for 45 minutes. We discussed what an IEP is and really, that’s all.” Shayla had a relatively negative viewpoint of her special education course because she still felt unprepared for the classroom when she began teaching.

While explaining her course, she said,

> We would spend time looking through the IEP planner purple book. We would be given cases of students who are displaying X, Y or Z problems in the classroom and we would have to diagnose them. I don’t think seeing on the piece of paper five or six traits is enough to adequately be able to diagnose a student with ADHD. So, a lot of our preparation was the textbook, in theory views on special ed. But, in practice, it was not helpful at all.

Throughout Shayla’s teaching experiences, she encountered frustration and misunderstanding firsthand. She explained,

> I was not prepared at all. When I had students who were showing signs of not being able to focus at any given time, I got frustrated and then got frustrated with the student, and it ended up in more of a screaming match than what it should have. I didn’t realize that there was some sort of behaviour or learning disability there.

Eventually, Shayla discovered the growth plan after looking in a student’s Ontario Student Record (OSR). She explained that “even though the student may not necessarily be diagnosed with a learning disability or any type of issue, there will usually be some sort of growth plan, which was not mentioned at all in teacher’s college”.

Alternatively, Dominique’s program did not offer a special education course at all. In one of her other classes, there were inserts of special education on occasion. For example, she reflected, “I remember there was one lesson with like different levels of Autism and things like that. But it was one lesson. And that was it”. In another lesson,
Dominique explained that they were given a worksheet, which “had all these characteristics on it and we were told ‘Okay you need to figure out what exceptionality it is.’ And that was just one lesson one day”. When asked how confident she would be teaching a student with an exceptionality, she responded, “I would say it definitely makes me nervous when I find that out”.

Both participants acknowledged their programs as “inadequate” in regards to preparing new teachers for teaching special education. The information they did receive was deemed non-helpful and impractical, and in turn, left them feeling non-confident and at times, nervous and frustrated when teaching in the classroom.

In regards to feeling unprepared and lacking confidence, these participants are not alone. Reed and Monda-Amaya (1995) found that “pre-service general education teachers were not well prepared for working with students with exceptional needs” (as cited in Harvey, et al., 2010, p. 25).

A study done on the knowledge and attitudes of teachers working with students with special needs reported that “82 percent of the new teachers said their preparation program covered this, but only 47% said the training was very helpful” (Anonymous, 2008, p. 7). Although this came from an American study, the large number of teacher candidates receiving some form of special education training is a positive step in the right direction. However, less than half of those interviewed felt that the material covered in those courses was practical or useful for the classroom. Another study expressed that “the majority of practicing teachers had no opportunity (77%) to learn about ADHD in their courses at the university” (Bekle, 2004, p. 156).

Alternatively, “95% of the current education students received some form of training regarding ADHD (Bekle, 2004, p. 156). However, Bekle (2004) explains that
“for the majority of these students, the topic was covered only briefly as part of their overall teaching training” (p. 158). This tells us that the courses that are being offered are not sufficient in depth or materials used. There is “inadequate coursework in special education and little experience in mainstreamed classroom settings” (Harvey, et al., 2010, p. 25).

Another study by Perold, et al. (2010) reported that “teachers indicated that they had very little or no training in ADHD and the management thereof in the classroom…” (p. 470). This research demonstrates that there are still many gaps in special education training for pre-service teachers. The study found that “large numbers of new teachers still enter the classroom feeling unprepared” (Anonymous, 2008, p. 7).

**Theme 5: A suggestion about how to improve teacher training and preparation include the implementation of a mandatory special education course during all pre-service teacher training programs.**

When asked to give recommendations to improve the current level of knowledge about ADHD to teachers, both participants recommended the implementation of a mandatory special education course for teacher training programs. Shayla even went so far as to say that “I think Special Ed Part 1, not just the special ed course we had to take, should be mandatory for all teachers coming out of teacher’s college”. In other words, every teacher should be trained with the equivalent to the Part 1 of the Special Education Additional Qualification course.

Additionally, Dominique expressed a similar opinion when she said,

I think that the teachers need to, in training, have more at their disposal. So whether it’s an AQ or a mandatory course or a few courses or something, it should almost be a mandatory course in teacher’s college! to help students! So that’s what I think. Cause now, unless I take the AQ, I don’t really know how to deal with any of that.
These recommendations are similarly expressed in a variety of literature. Harvey, et al. (2010) explain that “teacher training institutions thus have a responsibility to ensure that all teacher educators, especially pre-service teachers, are well prepared to meet the challenges of inclusion…” (p. 25). They express that “successful inclusive schools have a unified educational system with general and special educators collaborating to provide effective programs and services for all students…This collaborative partnership should start with preservice teacher education” (p. 25). It is argued that “teachers must not only be familiar with different behavioural strategies and interventions, but also with the methods of academic instruction that are appropriate for students with ADHD” (Bekle, 2004, p. 152). Furthermore, it is argued that “Given the high likelihood of new graduates teaching a child with ADHD, coupled with the central roles played by teachers who teach children with ADHD, it is important that pre-service and in-service teachers have a sound knowledge of ADHD…” (Anderson, Watt, & Noble, 2012, p. 524). Anderson et al. (2012) also argue that “teacher-training institutes need to provide accurate and comprehensive information about ADHD and its treatment” (p. 524). In addition, Kos, et al. (2004) recommended “that universities develop and implement core ADHD-specific units for education students” (p. 525). Lastly, when asked about the benefit of extra training regarding ADHD, 65% of education students “firmly believed that they would benefit from extra training” (Bekle, 2004, p. 156). Therefore, “it is important that this information be incorporated into the training of undergraduate education students, so that they may more effectively address the needs of ADHD students in their future classrooms” (Bekle, 2004, p. 156-7).
Conclusion

The findings in this chapter support the need for the implementation of a mandatory special education course for all teacher training programs. With the current level of training, teachers are entering the workforce feeling non-confident, nervous and unprepared to teach children with exceptionalities, specifically, ADHD. This also supports the need for a longer more sustained teacher education program in which a special education course would be required, such as is possible in a two-year program, and which is currently being recommended by the Ontario Ministry of Education, to be implemented by September 2015 in all teacher education programs. A longer program with a detailed special education course as a part of the mandatory curriculum for teachers will ensure that students are receiving the highest level of education in the ways that work best for them.
CHAPTER 5: DISCUSSION

Current Knowledge about ADHD

With the literature review and face-to-face interviews, it seemed that the level of teacher knowledge of ADHD was mostly basic. It seems that there is a gap in the training for pre-service teachers regarding the specific behaviours associated with ADHD. The fundamental concept of “hyperactivity” was mentioned by both interview participants. However, there were many implications for learning that went un-discussed. Firstly, as mentioned in the literature review, there are common academic implications such as difficulty with organization, focus, completing tasks and learning new concepts (Frank-Briggs, 2011). These issues may mean serious implications for the classroom, as students who are not properly supported may fall behind and experience frustration, stress, and poor self-esteem. In addition, emotional implications include “reduced self-regulation of emotion/motivation” (Wright, 2006, p. 4). This causes implications in the classroom because if a student cannot produce their self-motivation, teachers must aid them in this process. By using any of the interventions mentioned in the Findings section, teachers can assist students with ADHD to become and remain motivated for the duration of the required task. Lastly, the social implications as presented by Staikova, et al. (2013) tell us that “social problems have been reported in 52-82% of children with ADHD” (p. 1275). They can be attributed to “impulsivity (e.g. interrupting, difficulty waiting turn) and inattention (e.g. not listening)...” (p. 1275). When students have difficulty in the social aspect of their lives, it may lead to “negative long-term outcomes including substance abuse, school dropout, delinquency, academic problems and higher rates of psychopathology” (Staikova, et al., 2013, p. 1275). This lack of detailed knowledge about the behaviours and implications associated with ADHD is an issue for Faculties of
Education to address because teachers need to be able to a) recognize the behaviours and b) effectively accommodate and support these behaviours. All around, teachers play a significant role in the lives of a student with ADHD. Whether they are noticing a specific behaviour and observing it, referring the student for assessment, or accommodating and supporting a student with ADHD, they need to be aware of all of the behaviours and implications that may affect the students in the classroom. This can and should be done within the parameters of the pre-service teacher education program.

The Role of Teachers in Identifying Students with ADHD

As the interviews and literature demonstrated, teachers play a substantial role in the identification process for children with ADHD. They are on the front lines and are typically the first to observe and track a behaviour and recommend the student for further assessment (Anderson, et al., 2012; Perold, et al., 2010). This tells us that all teachers should be thoroughly educated, during pre-service training, regarding the identification process. It is important that teachers know what to look for and how to respond appropriately to other faculty, administration and parents. If they are not educated properly on this topic in pre-service training, they may excuse behaviours unknowingly once in a classroom of their own. This would mean that a child would fall through the cracks and potentially lose out on support that would be greatly beneficial to their success in the classroom, on the playground and at home. Therefore, because teachers hold so much decision making power, I believe that they should have in-depth training on ADHD and the correct process for identifying a student as an “exceptional pupil”. 
Accommodations and Interventions for Students with ADHD

As the data presented, there are many types of accommodations and interventions that are beneficial to a student with ADHD. The participants mentioned multiple accommodations that would help a student better succeed in the classroom, such as changing seating, allowing frequent breaks and chunking tasks. However, the literature provided extremely in-depth interventions that specifically targeted the areas of impairment for a child with ADHD. For example, DuPaul, et al. (2011) explained that interventions can be organized into behavioural interventions, self-regulation interventions, academic interventions, home-school communication programs, and many others. Each accommodation has a specific purpose that targets the challenges of those with ADHD. Perhaps with greater detailed special education training, teachers will gain a deeper understanding of the types of interventions that can be used in and out of the classroom to better support students with ADHD.

Gaps in Pre-service Teacher Training Programs

When entering a new classroom, teachers should feel confident in their abilities in all aspects of teaching and the curriculum. With a modern, diverse and dynamic classroom, this surely includes children with learning disabilities, in particular ADHD. Nowacek et al. (2007) explained that there may be as many as one to two students with ADHD per classroom. In theory, new teachers should graduate feeling fully prepared to identify behaviours and accommodate for them, because of the intensive training done to certify them as a teacher in Ontario. However, the data demonstrates the urgent need for increased special education training, with practical and useful resources and activities for teacher candidates.
Both participants explained feelings of nervousness, frustration and lack of preparation for teaching students with exceptionalities. Research tells us that teachers are feeling unprepared due to the gaps in the pre-service training programs (Anonymous, 2008; Harvey, et al., 2010; Kos et al., 2004; Perold et al., 2010). This situation becomes stressful for the teachers, faculty, administration, parents and most importantly, the students involved. When a teacher graduates from a teacher training program, they should feel fully competent and prepared in each area of teaching, including special education.

Implications/Recommendations:

A major implication of this research is that teachers who are graduating from one-year (or less) Bachelor of Education programs may be entering the field unprepared. Based on this research, they feel non-confident, nervous, and believe that they still have much to learn about special education and ADHD. This presents a significant gap in the pre-service teacher training programs that currently exist. This gap means a lack of fundamental knowledge for new teachers, and therefore an area of missing skills. Teachers will struggle when knowing how to identify and recognize behaviours in the classroom that may indicate exceptionalities such as ADHD. Beyond this, teachers will further struggle with accommodating those behaviours in the classroom due to a lack of detailed knowledge on the disorders themselves.

Currently, there are a handful of alternative programs that currently exist that provide in-depth special education training, in addition to adequate practical experience in the classroom. For example, my program, the Master of Teaching (MT) program at the University of Toronto, Ontario Institute for Studies in Education, is a two-year program.
that certifies graduates to teach in Ontario as well as provides them with a Master degree. It is unique in its nature due to its length, number of in-school placements (four overall), as well as duration, quality, and number of courses, including one full course on special education. The *Adaptive Instruction* course provides detailed, practical information about special education including a focus on a variety of exceptionalities. It takes place over the course of one year, during the second year of our program, through three-hour classes once per week, and includes interactive instruction, relevant readings, and access to pertinent documents and practical exercises about special education.

We also have the opportunity for alternative in-school placement opportunities in special education classrooms, or special school environments such as the *Ronald McDonald House*, Toronto, my most recent placement location. This option of having at least one placement in a special education classroom or special school site (out of the mandatory number of 80 practicum days in schools), as I experienced, was an extremely valuable and important aspect of my teacher education program. After this placement, I felt much better qualified to meet the needs of students with special needs. The MT program prepares its graduates for the classroom and for meeting the needs of all students in a comprehensive and supportive way, ensuring the confidence levels of each new teacher when facing students who are ‘different’. The MT faculty are consistently making improvements to the program each year in order to better provide a quality teacher education to its teacher candidates. I believe that teacher candidates in all Bachelor of Education programs in Ontario would benefit from a program design modelled after this two-year Master of Teaching program.

The upcoming changes to the existing Bachelor of Education programs, as outlined by the Ontario Ministry of Education...
PRE-SERVICE TEACHER TRAINING AND ADHD

(http://news.ontario.ca/edu/en/2013/06/modernizing-teacher-education-in-ontario.html, 2013), is consistent with the findings in this research study. According to the Ontario Ministry’s recent information, by September 2015, revised pre-service programs will need to emulate the many features of the two-year MT program, including more specific input in the area of special education. Hopefully, with this change, as well as others such as increased in-class teaching time (80 days) interacting with, planning for, and differentiating their instruction for students with special needs, new teachers across the province will have more confidence in regards to identifying behaviours that may need formal assessment, and accommodating students with exceptionalities such as ADHD.

Due to my previous work experience and my extensive special education training, which included practical experience in a special education classroom, during my two-year Master of Teaching program, I feel well-prepared to enter the classroom. In addition to this training, I will be pursuing my Special Education Part 1 Additional Qualification soon after I graduate. I recognize the significance and prevalence of exceptionalities in the classroom, and understand my responsibilities as a teacher to be able to recognize and support my students in the best way that I can.

The most important recommendation that I have as an educator and researcher is the implementation of a mandatory special education course for all teacher training programs. This would be a significant improvement to the current curriculum and caliber of new teachers entering the field. In addition, a special education placement should be considered as an important and mandatory expectation for all teachers within a teacher education program to provide that practical experience so important for learning. Perhaps, a minimum number of days out of the total required practice teaching (80, as of September 2015) should be devoted to a practice teaching experience in a special
education environment. New teachers will benefit from in-depth special education training, with a practical approach and relevant resources.

In addition, pre-service training programs may consider additional workshops outside of regular class time to provide a more detailed focus on a specific exceptionality. This would be supplemental, and not in replacement of the information provided in the course.

Lastly, for in-service teachers, I recommend that school boards and administrations provide mandatory workshops on the recognition of behaviours, the process of identifying students, and how to implement effective interventions. This will ensure that all teachers, regardless of their Faculty of Education will be up-to-date and current.

Limitations

The most significant limitation of this research was the small sample size. My recommendations and data collection came mainly from the literature review because two participants were not enough to have a big-picture idea of the general knowledge and confidence levels of new teachers. As mentioned earlier, the opportunity to interview a large number of new teachers with different years of experience and from different faculties of education would have greatly benefitted this research project.

I also realize that a limitation of my website review was the information I gleaned was taken directly and only from the websites, and it might be that a pre-service program offered more in terms of special education than what was reported on the website. There might be a course, for example, offered within a program that included a focus on special education.
Other limitations included limited research regarding teacher preparation specifically combined with ADHD, and the location base of the research. Most of the research I found was done outside of Canada, and almost all was outside of Ontario.

**Further Study**

With more time and more resources, a greater study could have been done and revealed more information specific to the opinions of Ontario teacher education graduates from different faculties of education. I hope to be able to extend this research to accomplish that goal, and in turn, provide more specific recommendations to the Ontario Ministry of Education, and to the Ontario Ministry of Training, Colleges and Universities. I believe that this research study is timely, important, and right on tune with current thinking about special education and pre-service teacher education.
REFERENCES


APPENDICES

Appendix A: Interview Questions
Hi, my name is Michelle Bader - Thank you for participating in this interview today. Do you have any questions before we begin?

As you know, the topic we are going to discuss today is Pre-service Preparation for ADHD.

Interview Questions:

Background Information:
1. What grade do you teach and for how long have you been teaching?

2. What is your educational background including the schools/universities you attended (E.g., undergraduate, teacher’s college, master’s degree, etc)?

3. Did your Bachelor of Education degree include a mandatory Special Education course? If yes, please describe it.

4. If any, what Additional Qualifications or specialist qualifications do you have?

Identifying students with ADHD:
5. When beginning with a new group of students, what are the signs that you look for that may indicate a need for formal assessment by the Special Education team?

6. In your experiences, what are the academic/social/emotional characteristics or behaviours exhibited by a student with ADHD?

7. If any, what process have you used to identify students with ADHD? Please explain.

Strategies to use with students with ADHD:
8. What accommodations have you made for students with ADHD?

Confidence as a first year teacher in supporting students with ADHD:
9. Describe your degree of confidence going into your first year teaching, in regards to supporting students with exceptionalities.
10. What challenges do you or did you have?
11. What supports helped you or would you recommend?

Comments re: teacher training re: ADHD students:
12. Explain how your Bachelor of Education program adequately or inadequately prepared you to identify and support students with ADHD.

Advice/Recommendations for teachers in supporting students with ADHD:
13. What would be a way to improve the current knowledge base among teachers regarding meeting the needs of students with ADHD?
Appendix B: Letter of Consent for Interview

Date: ________________

Dear ___________________,

I am a graduate student at OISE, University of Toronto, and am currently enrolled as a Master of Teaching candidate. I am studying pre-service teacher training and ADHD for the purposes of investigating an educational topic as a major assignment for our program. I think that your knowledge and experience will provide insights into this topic.

I am writing a report on this study as a requirement of the Master of Teaching Program. My course instructor and research supervisor who is providing support for the process this year is Dr. Susan Schwartz. The purpose of this requirement is to allow us to become familiar with a variety of ways to do research. My data collection consists of a 40 minute interview that will be tape-recorded. I would be grateful if you would allow me to interview you at a place and time convenient to you. I can conduct the interview at your office or workplace, in a public place, or anywhere else that you might prefer.

The contents of this interview will be used for my assignment, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a conference or publication. I will not use your name or anything else that might identify you in my written work, oral presentations, or publications. This information remains confidential. The only people who will have access to my assignment work will be my research supervisor and my course instructor. You are free to change your mind at any time, and to withdraw even after you have consented to participate. You may decline to answer any specific questions. I will destroy the tape recording after the paper has been presented and/or published which may take up to five years after the data has been collected. There are no known risks or benefits to you for assisting in the project, and I will share with you a copy of my notes to ensure accuracy.

Please sign the attached form, if you agree to be interviewed. The second copy is for your records. Thank you very much for your help.

Yours sincerely,

Michelle Bader
Phone #: (647)463-7179 Email: michelle.bader@mail.utoronto.ca

Instructor and Research Supervisor’s Name: Susan Schwartz
Email: susan.schwartz@utoronto.ca
Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw at any time without penalty.

I have read the letter provided to me by Michelle Bader and agree to participate in an interview for the purposes described.

Signature: ________________________________

Name (printed): __________________________

Date: ________________________________