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## Students' and Parents' Perspectives on the Social Inclusion of Secondary School Students with Learning Difficulties

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Graduate Program in Education  
A thesis submitted in partial fulfillment of the requirements for the degree in Doctor of Philosophy  
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## STUDENTS' AND PARENTS' PERSPECTIVES ON INCLUSION

### **Abstract**

For this integrated-article dissertation, I interviewed three groups of participants, one group for each of three studies, to elicit their perspectives on the social inclusion of secondary school students with learning difficulties in school. The three participant groups were (a) secondary school students without learning difficulties, (b) secondary school students with learning difficulties, and (c) parents of secondary school students with learning difficulties. All participants were asked the following focus prompt “Are high school students with learning difficulties sometimes left out at school? Why or why not?” Following Trochim’s (1989) concept mapping methodology, all unique statements that answered the focus prompt were extracted from interview transcripts, and participants were asked to sort the statements into meaningful categories based on their perspectives. Participants then individually rated each of the statements. The sorting data for each participant group were analyzed using multidimensional scaling, which creates a two-dimensional point map of the participants' sorts, and hierarchical cluster analysis, which groups together statements based on their proximity on the point map. For the first study, 16 grade 12 students sorted a list of 94 statements generated from interviews with 20 grade 12 students. Themes included: social inclusion and exclusion, teacher behaviour, learning environment, hard time relating, behaviour and ability level of students, self-exclusion, negative stigma and attitudes, and physical and social separation. For the second study, I interviewed 12 parents of secondary school students with learning difficulties and extracted a list of 103 statements. Themes included: individual differences, parent influence, the importance of friendships, role of teachers, school board and policy issues, indirect forms of exclusion, mental health, sadness

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due to exclusion, and social-relational difficulties. For the third study, I interviewed 12 secondary school students with learning difficulties and extracted a list of 55 statements. Themes included: experiences with exclusion and social isolation, social and academic reasons for exclusion, friendships and supportive people, and positive experiences of inclusion. The results of this dissertation demonstrate the importance of including multiple perspectives on inclusion. These participant groups provide varied insider perspectives, which taken together, create a picture of the current state of social inclusion at the secondary school level and ways in which students still need support.

**Keywords:** inclusion, learning difficulties, group concept mapping, inclusive education, disability, social relationships, parent perspectives, student perspectives, secondary school, social exclusion.

### **Co-Authorship Statement**

The three manuscripts included in this integrated article dissertation will be published separately with myself, Jennifer Richardson, as the first author, Dr. Elizabeth Nowicki as the second author, and Dr. Jason Brown as the third author.

As the first author, I, Jennifer Richardson, was primarily responsible for all of the research tasks outlined in this dissertation, including study design, revising and submitting ethics protocols, recruiting participants, conducting interviews, analyzing the data, interpreting the results, and writing the manuscripts. For the first study, two Master's students who were funded by the same SSHRC grant that supported this research assisted me with conducting and transcribing interviews.

The second author, Dr. Elizabeth Nowicki, provided research supervision of the primary author. She also contributed to the conception and design of the research project, provided intellectual support, assisted with the concept mapping analysis, and critically reviewed the manuscripts.

The third author, Dr. Jason Brown, contributed to the conception and design of the research project. He also read and approved all three manuscripts.

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Finally, I would like to thank my husband Josh. We started our education journey together six years ago, and now this chapter of our lives is coming to a close. Although we have endured many days of school-related stress, including late nights writing or composing and countless hours of revisions, I believe that we will look back at this time and cherish it. Thank you for always encouraging me to press on, celebrating the small victories with me, and supporting me in everything that I do. I am so excited for what the next stage of our lives will bring!

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## 1 Introduction

Positive social relationships are an important contributor to students' sense of belonging in the school setting (Juvonen, 2007), but the reality is that students with learning difficulties often experience social isolation and rejection from their peers, even in inclusive environments (McDougall et al., 2004; Symes & Humphrey, 2010). Children have also been found to hold less favourable attitudes towards students with learning difficulties compared to students without learning difficulties (Nowicki, 2012; Pijl & Frostad, 2010), and this lack of peer acceptance may lead to lower academic and social self-concept for students with learning difficulties (Pijl & Frostad, 2010). Further, experiences with peer victimization may lead to increases in anxiety, depression, poor self-esteem, as well as decreases in positive attitudes towards school, classroom attendance, and grades (Rueger & Jenkins, 2014). Unfortunately, educators rarely prioritize the fostering of peer relationships for students with learning difficulties (MacArthur & Kelly, 2004). Therefore, for my dissertation research, I chose to focus on the peer relationships and social inclusion of students with learning difficulties in secondary school. In this dissertation, the term 'learning difficulties' is used as a general term that includes a continuum of learning challenges, such as general intellectual deficiency, general and specific learning disabilities, intellectual disabilities, autism, exceptionalities, lower academic ability, and special needs (Nowicki, 2012). I utilized Trochim's (1989) concept mapping methodology to elicit group perspectives and to create a picture of the current state of social inclusion in secondary school.

## **1.1 Research Questions**

The overarching research question for this dissertation is, “How do secondary school students and parents view the social inclusion and exclusion of students with learning difficulties in school?” This dissertation is presented in integrated article format, and each article focuses on the perspectives of one of the three participant groups. The first article focuses on the perspectives of upper-year secondary school students, the second article focuses on the perspectives of parents of secondary school students with learning difficulties, and the third article focuses on the perspectives of secondary school students with learning difficulties. This integrated article dissertation is composed of the following research questions:

1. “According to upper-year secondary school students, are students with learning difficulties socially included or excluded by their classmates?”
2. “According to parents of secondary school students with learning difficulties, are students with learning difficulties socially included or excluded in secondary school?”
3. “According to secondary school students with learning difficulties, are students with learning difficulties socially included or excluded in school?” and the sub-question, “Is concept mapping methodology a viable research tool to use with secondary school students with learning difficulties?”

## **1.2 What is inclusion?**

Although there has been increased interest in inclusive education over the last few decades, there has been some confusion as to what it entails (Ainscow, 2007). While some researchers have become discouraged by the lack of a precise definition of

inclusion, others have pursued research to explore what inclusion means and how it should look in practice (Florian, 2014). Researchers and educators, many of who are established experts in the area of school inclusion, have provided informative definitions of inclusion based on their prior research and experience. According to Florian (2014), “inclusive pedagogy is an approach to teaching and learning that supports teachers to respond to individual differences between learners, but avoids the marginalization that can occur when some students are treated differently” (p. 289). Ainscow (2005) provided a definition that presents inclusion as a process that is concerned with the identification and removal of barriers, the participation and achievement of all students, and an emphasis on those students who are the most at-risk of marginalization and underachievement. Overall, inclusion is not a one size fits all approach; it is a complicated process requiring students, parents, and teachers to work together (Specht, 2013). Contrary to the special education mindset, which focuses on what is wrong with the student, the inclusive mindset focuses on what is wrong with the environment and the changes that need to be made to help the student learn (Specht, 2013). Inclusion is not only about valuing diversity and embracing difference (Specht, 2013), but is also about viewing difference as a catalyst for fostering learning for both children and adults (Ainscow, 2005).

### **1.3 Why does inclusion matter?**

Overall, the commitment to including all children within one single education system is part of a broader commitment to include all individuals in mainstream society (Oliver, 1996). When children with learning difficulties are excluded in school, they may remain isolated from mainstream society as adults. Kvalsund and Bele (2010) examined

the long-term consequences of being placed in inclusive classes versus special education classes and found that individuals who had been placed in inclusive classes in secondary school were more likely to be socially integrated in early adulthood, while those placed in special education classes faced greater social marginalization and isolation in adulthood. Creating inclusive schools is the first step to building an inclusive society since, after all, “children who learn together, learn to live together” (Isaac, Dharma Raja, & Ramanan, 2010, p. 629). Children who learn to celebrate diversity and embrace difference while in school carry these values with them throughout their adult lives. However, special education systems that segregate students with disabilities into separate classrooms not only exclude these students from the education process, but may lead to exclusion from mainstream social life as adults (Oliver, 1996). Therefore, to build inclusive societies wherein all individuals feel that they belong and are valued regardless of disability, we must commit to creating inclusive schools wherein all students feel a sense of belonging and acceptance.

#### **1.4 The Importance of School Belonging**

The belongingness hypothesis, proposed by Baumeister and Leary (1995), is that human beings have an innate and universal drive to form and maintain lasting and positive interpersonal relationships. Human beings are naturally driven to seek out and sustain a feeling of belongingness, which involves a need for frequent and pleasant interactions with other people that are both stable and enduring and include a concern for each other's wellbeing. People who share common experiences or who spend a significant amount of time together are likely to develop friendships with each other. Forming social attachments with others results in positive emotions, whereas an inability



to form social attachments or threats to existing friendships are likely to cause both psychological and physical health problems (Baumeister & Leary, 1995).

Having a sense of belonging is particularly important in school, since social isolation, alienation, and lack of support increase educational risks (Juvonen, 2006). Students who feel rejected or disconnected are more likely to withdraw from academic activities. According to Juvonen's (2006) model of belonging, it is through positive social relationships with both students and teachers that students develop a sense of belonging in school. Students are more likely to feel a sense of belonging in school if they perceive that their relationships with teachers are supportive, non-conflicting, and fair. Juvonen (2006) also proposed that a sense of belonging is particularly crucial for students experiencing distress, possibly from experiencing ongoing academic problems, or during stressful transitions such as the move from elementary to high school. For at-risk students, supportive relationships and a sense of belonging are critical protective factors, whereas a lack of connectedness may elevate student risk of school dropout or failure. Therefore, a sense of belonging in school that includes positive relationships with both students and teachers may be particularly important for students with learning difficulties who may experience more distress due to ongoing academic issues, such as falling behind in school work, struggling with tests, and not keeping pace with fellow classmates.

Cemacilar (2010) tested a conceptual model similar to that of Juvonen (2006), which posits that students' satisfaction with both the social relationships in the school and the school environment contribute to their sense of school belonging. The social relationships in the school included relationships with peers, teachers, and administrators, and the school environment component comprised the amenities, resources, and

perceived safety of the school. Cemacilar (2010) tested this model using a school social-contextual climate scale that was administered to 799 students attending seventh and eighth grades in Istanbul, Turkey. The results indicated that students' satisfaction with their social relationships in the school and the school environment were predictive of their sense of belonging in school. Further, perceived positive relationships with peers and the perceived safety of the school both had additional direct links to the development of a sense of school belonging. Therefore, Cemacilar (2010) concluded that the presence of positive, supportive relationships in the school, combined with a safe and stimulating school environment, contributed to students' sense of belonging and enhanced their school experiences. This research suggests that, when their peers socially include students with learning difficulties, and when they perceive that the school environment is safe and supportive, they are more likely to feel a sense of belonging in the school, which is likely to influence their achievement and their school satisfaction positively. Thus, when educators implement specifically designed interventions that address social-emotional functioning and peer victimization, they enable possible improvements in students' academic functioning (Rueger & Jenkins, 2014).

### **1.5 Situating the Present Study**

Since researchers and educators now know more about the process of inclusion, with many schools attempting to adopt inclusive practices, judgments about what inclusion is and whether it has occurred have been replaced with explorations of the extent to which inclusion has occurred (Florian, 2014). Many parents are told that their children will be included, and yet their experience of 'inclusion' is that it is still very much exclusive (Rogers, 2007). Therefore, explorations into the extent to which inclusion

is being enacted are necessary, since students still experience exclusion within 'inclusive' environments. According to Ainscow (2007), "becoming more inclusive is a matter of thinking and talking, reviewing and refining practice, and making attempts to develop a more inclusive culture" (p. 5). It also involves analyzing existing arrangements to identify good practices and also to draw attention to practices that may be creating barriers to learning or socialization. Further, the development of inclusive schools involves collecting and comparing perspectives from a variety of sources, including the voices of students, to develop improvements in policy and practice (Ainscow, 2005).

Therefore, for my dissertation research, I interviewed secondary school students, secondary school students with learning difficulties, and parents of secondary school students with learning difficulties to examine the current state of inclusion in southern Ontario from a variety of perspectives. My focus question, "Are secondary school students who have learning difficulties sometimes left out at school? Why do you think they are/are not left out?", which I asked of all three participant groups, was intentionally designed to be open-ended to elicit examples of both inclusion and exclusion based on participants' experiences. This open-ended questioning allows for identification of current good practices, as well as areas where students may still need support. Further investigation of inclusion and exclusion at the secondary level is particularly important, since, as children get older, inclusion becomes more difficult due to the challenges associated with teaching larger classes and differentiating increasingly difficult work (Rogers, 2007).

This study builds on the body of research by Nowicki and colleagues (Nowicki, Brown, & Dare, 2018; Dare, Nowicki, & Felimban, 2017; Nowicki, Brown, & Stepien,

2013a; Nowicki & Brown, 2013), which has examined elementary school students' perspectives on the social inclusion and exclusion of their classmates with learning difficulties. I utilized concept mapping methodology (Kane & Trochim, 2007) to elicit the perspectives of students and parents, a method also used by Nowicki, Brown, and Stepien (2013a) to elicit elementary students' perspectives on why their peers with learning difficulties were socially excluded, and by Nowicki, Brown, and Stepien (2013b) to explore elementary students' perspectives on the causes of learning difficulties. My dissertation research extends this body of research by focusing on the secondary school perspective, as well as by examining the perspectives of students with learning difficulties and those of their parents. Concept mapping methodology is beneficial to use when exploring the perspectives of multiple participant groups since it provides a visual representation of participants' perspectives, which allows for easy comparison across participant groups on the same topic. This visual representation allows for seamless triangulation of the data from multiple stakeholders. Since there has already been prior research conducted at the elementary level, by using the same methodology and similar focus questions, we can compare the perspectives of secondary school students collected in this dissertation to prior research with younger students. This will allow us to determine how social inclusion may differ at the elementary and secondary levels.

## **1.6 Theoretical Perspective**

The theoretical framework for this dissertation is the theory of planned behaviour (Ajzen, 1985), which was created as an expansion to the theory of reasoned action (Ajzen & Fishbein, 1980). According to this theory, people will consider the consequences of their actions when deciding whether or not to engage in a particular behaviour. Intentions

to perform a behaviour are the immediate antecedent to the performance of that behaviour, and these intentions are based on one's beliefs about performing a behaviour. A person's intention to engage in a particular behaviour is composed of the following three determinants (Ajzen & Fishbein, 2005):

1. Attitudes toward the behaviour, which includes evaluations of the likely positive or negative consequences of performing the behaviour.
2. Subjective norm, or perceptions of social pressures from important others to perform or not perform the behaviour.
3. Perceived behavioural control, or perceptions of how easy or difficult it will be to perform the behaviour.

The original theory of reasoned action (Ajzen & Fishbein, 1980) was developed under the assumption that the behaviours in question were under one's volitional control, and this theory included only attitudes and subjective norms as determinants of intentions. However, it was later determined that even basic activities might be subject to factors that are outside of one's control (Ajzen, 1985). Therefore, Ajzen (1985) developed the theory of planned behaviour to include the component of perceived behavioural control as an expansion of the theory of reasoned action. Overall, one is more likely to develop positive intentions to perform a behaviour if (a) one has positive attitudes toward that behaviour, (b) one perceives that important others have positive attitudes toward the behaviour, and (c) if one perceives that the behaviour will be easy or within one's capacity to perform.

The first determinant of intentions, attitudes toward the behaviour, is made up of one's behavioural beliefs (Ajzen & Fishbein, 2005). This is also considered the personal

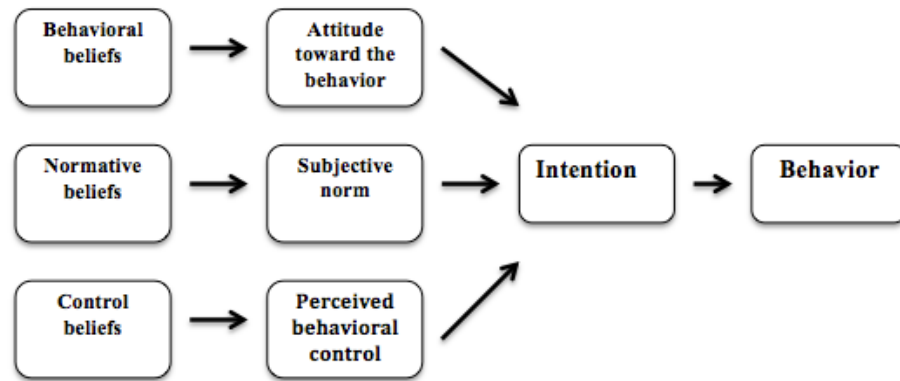


Figure 1. Illustration of the Theory of Planned Behaviour adapted from Azjen and Fishbein (2005, p. 194).

factor since it is composed of an individual's positive or negative evaluations of the behaviour. With this theory, the focus is on attitudes towards a behaviour, not attitudes towards individuals or objects. This is because attitudes towards individuals or objects can only aid in predicting a general pattern of behaviour, so to predict a specific behaviour, we must examine an individual's attitude towards that behaviour. Attitudes toward individuals, including their personality traits and personal characteristics, are considered external variables (Ajzen & Fishbein, 2005). For example, a student may have positive attitudes toward students with learning difficulties, but may not have positive attitudes toward forming a personal relationship with such students, possibly due to social pressures or perceived difficulty in doing so. Therefore, if we were to examine this student's attitudes towards students with learning difficulties, we may make an inaccurate prediction that this student is likely to include them socially. Thus, for my dissertation research, the focus behaviour is socially including students with learning difficulties in school.

The second determinant of one's intentions to perform a particular behaviour, called the subjective norm, is composed of one's normative beliefs, which includes one's perceptions of social pressures from important others to perform or not perform a behaviour (Ajzen, 1985). For secondary school students, important others may include parents, peers, siblings, teachers, school administrators, church leaders, employers and so on. The amount of perceived social pressure exerted by each of these important others may differ based on the context. For example, at school, a student may be more likely to be influenced by the social pressures of classmates, teachers, and school administrators compared to parents, siblings, or employers. Therefore, when examining social inclusion

in secondary school, it is essential to consider the possible social influence of these important others on a student's intentions to include students with learning difficulties.

Perceived behavioural control, the third determinant of one's intentions to perform a particular behaviour, is composed of one's control beliefs (Ajzen & Fishbein, 2005). Control beliefs are formed based on one's perceptions of how easy or difficult it will be to perform a behaviour. High behavioural control should strengthen one's intentions to perform a behaviour, and increase one's effort and perseverance (Ajzen, 2002). Both internal and external factors may influence perceived behavioural control. Internal factors may include the presence of the required information, skills, and abilities to perform a behaviour, as well as one's willpower and emotions. External factors may include time, opportunity or circumstances, and the behaviour of others (Ajzen, 1985). Overall, perceived behavioural control refers to the perceived ease or difficulty of performing a behaviour, one's evaluations of whether one is capable of performing a behaviour, and one's perception of whether one has the required resources and the ability to overcome potential obstacles (Ajzen, 2002). In the context of social inclusion, when children perceive that it will be easy to interact with a classmate with a physical disability, they express more intentions to do so compared to if they perceive that it will be difficult (Roberts & Smith, 1999), which lends support to the perceived behavioural control component of the theory of planned behaviour.

Campbell (2010) applied the theory of planned behaviour to investigate the influence of classroom inclusion on students without disabilities. They were interested in whether the level of inclusion influenced students' intentions to befriend their classmates with disabilities. Data was collected through surveys with a convenience sample of 936



third, fourth, and fifth-grade students. They found that students' attitudes, normative beliefs, and control beliefs were positively correlated with their intent to include students with disabilities. Also, both full-time and partial inclusion significantly predicted students' intentions to include peers with disabilities (Campbell, 2010). That study not only demonstrates the positive influence of inclusion on peer relationships for students with disabilities, but also demonstrates that the theory of planned behaviour (Ajzen, 1985) can be applied effectively to the area of social inclusion in schools.

## **1.7 Method**

### **1.7.1 Concept Mapping Methodology**

For my dissertation, I utilized Trochim's (1989) concept mapping methodology. Concept mapping is viewed as an integrated mixed methods approach since it applies quantitative data analysis techniques to qualitative data (Kane & Trochim, 2007). This process involves collecting qualitative data through individual interviews or focus groups, extracting statements that answer the focus prompt, compiling a list of unique statements, and then asking the participants to individually sort this list of statements into meaningful categories. By using original, intact statements from participants and enlisting the participants to sort these statements, concept mapping methodology reduces researcher bias and ensures that the results are an accurate reflection of participants' perspectives (Burke et al., 2005; Jackson & Trochim, 2002). Further, the concept mapping process results in a visual representation of the relationship between participants' ideas in the form of a map, which provides insight into group perspectives (Burke et al., 2005). This visual representation of group perspectives also allows for easy comparison between the perspectives of different participant groups on the same subject.

For this study, individual interviews were conducted with each participant. All three participant groups were asked the same focus prompt “Are high school students with learning difficulties sometimes left out at school? Why or why not?” Probes were used to elicit additional responses when necessary, such as “Can you tell me a bit more about that? Why do you think that is? Do you have any other thoughts on that? Do you have any other examples?” With concept mapping, it is important to use an open-ended prompt that will result in a wide variety of responses. For this study, it was also necessary to create a prompt that would be easily understood by both students with and without learning difficulties and adults since we were using the same prompt for all participant groups.

### **1.8 Data Collection Overview**

**Study one: Secondary school students’ perspectives on the social inclusion of students with learning difficulties.** This chapter focuses on the perspectives of a sample of grade 12 students from a mid-sized city in southern Ontario. In the Spring of 2016, with the assistance of two Masters students in counselling psychology, we conducted 20 face-to-face individual interviews with the participants in a private location at their school. Interviews were audio recorded, and all unique statements that answered the focus prompt were extracted from the interview transcripts. In the Fall of 2016, I recruited a separate group of 16 grade 12 students to sort and rate the 94 unique statements. The sorting and rating activities were completed at their school under my supervision.

**Study two: Parental perspectives on the social inclusion of students with learning difficulties.** This chapter focuses on the perspectives of a sample of 12 parents

of secondary school students with learning difficulties in southern Ontario. I individually interviewed all 12 participants and all but one of the interviews was conducted over the phone. Interviews took place between December 2016 and July 2017. Interviews were audio recorded and a total of 103 unique statements were extracted from the interview transcripts. Ten participants completed the sorting and rating activities online between September 2017 and December 2017.

**Study three: Perspectives of secondary school students with learning difficulties on social inclusion.** The third and final paper focuses on the perspectives of 12 secondary school students with learning difficulties in southern Ontario. These participants are the children of the parents from my second study. I conducted the interviews between December 2016 and August 2017. All but one of the interviews was conducted over the phone. Interviews were audio-recorded, and a total of 55 unique statements were extracted from the interview transcripts. Ten participants completed the sorting and rating tasks online between September 2017 and December 2017.

## 1.9 Summary

Overall, this dissertation provides insight into the perspectives of secondary school students and parents on the social inclusion and exclusion of students with learning difficulties. By utilizing Trochim's (1989) concept mapping methodology, the results were triangulated across all three participant groups. The theory of planned behaviour (Ajzen, 1985) provides one explanation for why students may socially exclude their classmates with learning difficulties, and the results of this dissertation are interpreted through this model.

This dissertation is presented in integrated article format and includes three separate papers followed by a conclusion chapter that summarizes and compares the data from all three studies. Since these papers will be published separately, it was necessary to provide an overview of the theory of planned behaviour (Ajzen, 1985) and Trochim's (1989) concept mapping methodology within each of the individual papers. Therefore, there is repetition in the theoretical framework and methodology sections across the three papers.

The results of this dissertation reveal several areas in which students with learning difficulties still need additional support in order to be included both socially and academically by their teachers and peers. The results also demonstrate the importance of including multiple perspectives on social inclusion in school. The views of secondary school students without learning difficulties, the views of secondary school students with learning difficulties, as well as the views of their parents, provide varied insider perspectives, which taken together, create a picture of the current state of social inclusion and ways in which students still need support.

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## **2 Secondary School Students' Perspectives on the Social Inclusion of Students with Learning Difficulties**

### **2.1 Abstract**

Peer relationships and social interaction are rarely prioritized for secondary school students with learning difficulties. Few studies have examined how secondary school students view the social inclusion of students with learning difficulties. Therefore, this study used Trochim's (1989) concept mapping methodology to explore the perspectives of secondary school students regarding social inclusion. In individual interviews, 20 participants were asked, "Are high school students who have learning difficulties sometimes left out at school?" A list of 94 unique statements was extracted from interview transcripts. Sixteen students volunteered to sort, label, and rate these statements. Data were analyzed with multidimensional scaling and cluster analysis. A seven-cluster solution was selected as the best fit for the data and included the following themes: (a) social inclusion and exclusion, (b) teacher behaviour/learning environment/fitting in, (c) narrow-focus/different ways, (d) hard time relating, (e) behaviour and ability level of students, (f) self-exclusion and negative stigma/attitudes, and (g) physical and social separation. Based on participant statements, misconceptions and negative perceptions of students need to be addressed in order to facilitate the social inclusion of students with learning difficulties. In addition, teachers need to create more opportunities for meaningful interaction between students with and without learning difficulties.

Since the inception of the inclusion movement in the 1980's (Winzer, 2014), there has been an abundance of research conducted on how to include students with disabilities in general education classrooms with their same-age, typical peers. In contrast to special education classrooms where students with disabilities are grouped together in a separate classroom, general education classrooms often include students with disabilities to varying degrees, depending on the severity of their disability, for at least part of the school day. Regardless of whether students with disabilities are placed in special education or general education classrooms, peer relationships and positive social interactions for students with disabilities are rarely made a priority, and are often ignored entirely (MacArthur & Kelly, 2004). This is unfortunate since having positive social relationships with classmates is beneficial for students. Students who have positive relationships with classmates tend to feel more comfortable in school, and are more likely to actively explore the school environment and engage in the social and learning opportunities they encounter (Birch & Ladd, 1996). In addition, positive relationships and a sense of connectedness with classmates might be especially critical for the most vulnerable groups of students, including students with disabilities (Juvonen, 2007).

General education classrooms have the potential to nurture positive relationships between students with and without disabilities. However, the reality is that individuals with disabilities are at risk of isolation from and victimization by their peers in general education classrooms, despite full or partial inclusion (Symes & Humphrey, 2010). Social problems are an issue for students with disabilities in general education environments, including being bullied and teased, having difficulties interacting with peers, and making friends (McDougall et al., 2004). Norwich and Kelly (2004) reported a high level of

bullying experienced by students with learning difficulties, and about half of their participants reported that this 'bullying' was related to their learning difficulties. Being rejected by peers is stressful for students and can inhibit healthy school adjustment (Birch & Ladd, 1996). In fact, "rejection can threaten sense of belonging in school even more than lack of friends" (Juvonen, 2007, p. 202). Not being accepted socially at school may contribute to students developing negative feelings toward school, which may lead them to withdraw from academic and social learning situations (Birch & Ladd, 1996; Nowicki & Brown, 2013). Further, experiences with peer victimization can have a negative effect on anxiety, self-esteem, depression, school attitudes, attendance, and grades (Rueger & Jenkins, 2014). However, according to findings from Smithyman, Fireman, and Asher (2014), students who were victimized in elementary school, but no longer experienced peer victimization in high school, could once again develop healthy school adjustment. This means that developing inclusive strategies for fostering positive relationships between students with and without disabilities at the secondary level have the potential to undo the negative effects of experiencing peer victimization and isolation in elementary school.

Given the previous findings on the importance of positive peer relationships for students with disabilities, and the negative impact of peer rejection, it is imperative that researchers continue to conduct research in this field in order to determine strategies for supporting the social inclusion of students with disabilities – and that is the goal of the current study. In this study, the term 'learning difficulties' is used as a general term that includes a continuum of learning challenges, such as general intellectual deficiency, general and specific learning disabilities, intellectual disabilities, autism, exceptionalities,

lower academic ability, and special needs (Nowicki, 2012). However, when referring to the literature, we retained the language used in the original articles or used the term 'disability' when referencing multiple articles that included students with a range of abilities. The purpose of the present study was to explore the perspectives of secondary school students regarding the challenges faced by students with learning difficulties, including their perceptions on whether or not students with learning difficulties are socially included in school. For the present study, social inclusion refers to social participation, friendships/relationships, and positive social interactions between students with and without disabilities (Koster, Nakken, Pijl, & van Houten, 2009).

## **2.2 Theoretical Framework**

The theoretical framework for this study is the theory of planned behaviour (Ajzen, 1991). According to this theory, intentions determine behaviour based on (a) attitudes toward that behaviour, or more specifically the positive or negative views on performing that behaviour, (b) subjective norms, or the perception of social pressures imposed by important others to perform or not perform that behaviour, and (c) perceived behavioural control, which is the perception of the level of difficulty associated with engaging in that behaviour (Ajzen, 1991; Ajzen & Fishbein, 1980). Therefore, the more favourable the attitude and subjective norm, and the greater the perceived behavioural control towards a particular behaviour, the stronger an individual's intention to perform that behaviour will be (Ajzen, 1991). For the present study, we were interested in student perspectives on whether or not typical students engaged socially with students who had learning difficulties. Therefore, the behaviour of interest was the social interactions of students towards students with learning difficulties. The theory of planned behaviour

provides an explanation of why students with learning difficulties are often socially excluded by their peers. It is important to note that with this theory, the emphasis is on an individual's attitude towards the *behaviour*, not their attitudes towards *individuals or objects*. An individual's attitudes towards a target, including the target's personality traits and demographic characteristics, are external variables. These external variables can influence an individual's attitudinal and normative considerations towards the behaviour in question and thus influence the determinants of that behaviour (Ajzen & Fishbein, 1980). For example, Roberts and Smith (1999) examined the attitudes and behaviour of children without disabilities towards their classmates with physical disabilities in inclusive schools. They found that attitudes toward peers with disabilities significantly correlated with students' intentions to interact with and befriend students with disabilities.

A number of studies have reported negative attitudes of students towards students with disabilities (e.g., Copeland et al., 2004; McDougall et al., 2004; Nowicki, 2012; Nowicki, 2006; Ralli et al., 2011). Negative attitudes may influence the behavioural intentions of students to interact with students with disabilities. However, these attitudes may vary across situations. For example, Ralli et al. (2011) reported that children held positive attitudes towards playing with and doing a school project with a student who has learning difficulties, but had negative attitudes towards having a student with a learning difficulty in their school, in their classroom, or sitting next to them. The researchers suggested that although students appeared to hold positive attitudes towards students with learning difficulties on a superficial level, they were not willing to truly accept them into their schools or classrooms. These findings demonstrated that the attitudes of students

were situational. On the contrary, Siperstein et al. (2007) found that students had high behavioural intentions to interact with students with intellectual disabilities at school but were not willing to interact with students with intellectual disabilities outside of school, possibly due to the social norms and pressures of their peer groups.

According to the subjective norm aspect of the theory of planned behaviour, our intentions to perform a particular behaviour are influenced by respected individuals or groups (Ajzen & Fishbein, 2005). For students, this may include peers, teachers, parents, or school administrators. In support of this theory, Kalymon et al. (2010) found that students perceived that they would be looked down upon by their peers as a result of being friends with someone with a disability. Further, Roberts and Lindsell (1997) found that the attitudes of children, parents, and principals significantly predicted children's intentions to interact with classmates with disabilities. However, it was the attitudes of principals that were the most important in predicting the attitudes of students. It is interesting that the attitudes of school principals towards students with disabilities was the largest predictor of the attitudes of students given that most students likely had limited interactions with their principals. Roberts and Lindsell (1997) hypothesized that this was because principals were responsible for creating an inclusive school climate. Furthermore, research has indicated that students have a tendency to accept and internalize the educational approach of their schools. Bunch and Valeo (2004) found that students in schools following the special education model accepted this approach, and students in schools following an inclusion model accepted inclusion. Bunch and Valeo (2004) quoted social referencing theory as one possible explanation for this when they stated "we look to familiar and trusted figures for guidance in our actions" (p. 75). These

trusted figures can include teachers, principals, and parents. Fitch (2003) discovered that as students with disabilities moved in and out of segregated and inclusive classroom environments, they “presented a changing sense of themselves and social belonging that was closely tied to the structural and ideological elements of their school environment” (p. 239). These studies demonstrated that both students with and without disabilities internalized the ideologies accepted by their schools, which illustrated how the attitudes of school leaders predicted the attitudes of students.

As mentioned previously, perceived behavioural control refers to an individual's perception of whether it will be easy or difficult to perform a particular behaviour. In Kalymon et al. (2010), students indicated that they were required to take more responsibility and display more patience when they interacted with a student with a disability, and that they did not have the necessary knowledge or skills to react appropriately when a student behaved in a way that they were not accustomed to. The students in the study by Copeland et al. (2004) also identified difficulty with communication and challenging behaviour as barriers to inclusion. However, there may be some gender differences as de Boer et al. (2013) found that girls with disabilities were less likely to be accepted by other girls when they exhibited social issues or negative behaviours in class, but this was not the case for boys. These findings lend support to the theory of planned behaviour in that the participants in these studies perceived that interactions with students with disabilities were difficult, and therefore had fewer intentions to engage in this behaviour.

Another factor that makes it difficult to interact socially with students with disabilities is the structure of the school as it is difficult to engage socially with students

who are not present in the classroom. Research has indicated that many schools have not created opportunities for interaction to occur between students with and without disabilities (Copeland et al., 2004; Maras & Brown, 2000; Siperstein et al., 2007). For example, typical students in schools that followed an inclusion model were more likely to report having friends with disabilities (Bunch & Valeo, 2004) and were more likely to have positive attitudes towards students with disabilities (Roberts & Lindsell, 1997) compared to students from schools that followed a special education model. Providing opportunities for meaningful interaction between students with and without disabilities may make this interaction easier and reduce the negative effects of perceived behavioural control. Examples from previous research included creating opportunities for group work (Cambra & Silvestre, 2003; Carter, Cushing, Clark, & Kennedy, 2005) as well as peer support programs where typical students provide social and academic support to students with disabilities (Copeland et al., 2004; Saylor & Leach, 2009). Thus, based on these studies, it was hypothesized in the present study that themes related to attitudes, subjective norms, and perceived behavioural control would emerge in participants' discussions of the social inclusion of students with learning difficulties.

Although there have been advances in the inclusion movement over the last few decades, it is evident that there is still a long way to go before students with disabilities are fully accepted by their peers in inclusive environments. For this reason, it is important to continue to conduct research with students to determine the current state of inclusion because it is constantly evolving. There has been an abundance of research conducted at the elementary level, but only a handful of studies have examined the perspectives of typical upper year secondary school students towards students with disabilities (Bunch &



Valeo, 2004; Carter et al., 2005; Copeland et al., 2004; McDougall et al., 2004; Saylor & Leach, 2009). What is unclear is how senior secondary students view the current state of inclusion. From their perspectives, are students with learning difficulties socially included, and what is the likelihood of inclusive or non-inclusive behaviours or attitudes occurring at their school? What are the barriers to the social inclusion of students with learning difficulties, from the perspectives of upper-year secondary school students? This is an area that has not been thoroughly explored in educational research. When examining the social inclusion of students with disabilities, it is important to investigate the perspectives of students themselves, since students can provide unique insight as to how we can include students with learning difficulties, which may be informative for researchers and educators (Nowicki & Brown, 2013). MacArthur and Kelly (2004) stated that it is imperative to include the perspective of students with and without disabilities when examining what inclusion looks like, since student perspectives provide an alternative view of their experiences with inclusion compared to adults. They also argued that schools will not become truly inclusive until student views of the educational process are taken into consideration.

The present study focused specifically on students with learning difficulties, because school experiences can be somewhat different for students with physical disabilities. The term learning difficulty has been used successfully in previous research with students (Norwich & Kelly, 2004; Nowicki & Brown, 2013; Nowicki, 2012; Ralli et al., 2011) and for this study, it was used as a general term that included a continuum of learning challenges, including general intellectual deficiency, general and specific learning disabilities, intellectual disabilities, autism, exceptionalities, lower academic

ability, and special needs (Nowicki, 2012). The current study expanded on the study conducted by Nowicki et al. (2013), in which concept mapping was used to determine the thoughts of students in grades five and six on why their peers with intellectual or learning disabilities were sometimes left out in school. It is important to gather data on student perspectives across grade levels to determine whether older and younger students differ in how they perceive the experiences of their peers with learning difficulties in school. There are also several additional challenges to implementing inclusion at the secondary level, such as more advanced content knowledge, higher standards, the need for independent study skills, pace of instruction, teacher attitudes, and high-stakes testing (Dieker & Murawski, 2003; Mastropieri & Scruggs, 2001). Therefore, it is important to determine how upper year secondary school students view the social inclusion of students with learning difficulties, as it will likely differ from the perspectives of younger students. The purpose of the present study was to utilize Trochim's (1989) concept mapping methodology to explore how upper-year secondary school students perceive the social inclusion of their classmates with learning difficulties, including their evaluations of the likelihood of inclusive and non-inclusive behaviours occurring in their school.

### **2.3 Concept Mapping Methodology**

Concept mapping methodology is considered an integrated mixed method approach that uses a combination of qualitative and quantitative methods (Kane & Trochim, 2007). The application of quantitative data analysis techniques to qualitative data results in visual representations of the relationship between ideas in the form of a map, providing unique insight into group perspectives (Burke et al., 2005). With concept mapping, participants contribute directly to data analysis, which helps ensure that the

results are an accurate reflection of the thoughts and perceptions of your participants (Burke et al., 2005). One major strength of concept mapping methodology is that in comparison to more traditional qualitative methods, it uses original, intact statements from participants as units of analysis and enlists participants to sort the data, which avoids the issues with researcher-generated coding schemes (Jackson & Trochim, 2002).

There are several steps in the concept mapping process (Kane & Trochim, 2007). The first step is to formulate the focal question. This data is gathered either online or in person through focus groups or individual interviews. The next step is to derive units of analysis from the interview data, which consist of a single sentence or phrase containing only one concept (Jackson & Trochim, 2002). For the next step, the research team extracts a list of unique statements from the units of analysis. Following this, participants are asked to sort, label, and rate each statement. The sorting and rating phase can either be conducted in person with statements printed onto index cards or online using the Concept System Global MAX software (Concept Systems, 2013). The final step is to analyze the data using multidimensional scaling and cluster analysis (Kane & Trochim, 2007).

## **2.4 Method**

### **2.4.1 Participants**

All participants were from a mid-sized Canadian city in Southern Ontario. A total of 20 grade 12 students (11 male and 9 female) from two secondary schools within the same school board (16 from one school and four from another school) participated in the interview phase. This was within the acceptable number of participants, as Kane and Trochim (2007) recommended having between 10 and 20 participants for a concept

mapping study. Participants were between 17 to 19 years of age. None of these students self-disclosed any learning difficulties. According to the “Parent Guide to Special Education” provided by the school board, their approach to special education is the belief that regular classroom settings with same-age peers is the ideal learning environment for all students. The guide also states that they believe in providing a continuum of services and programs based on students’ needs, including the provision of appropriate learning environments.

For the second phase of the study, which included the sorting and rating activity, all students who participated in the interviews were asked to participate online via email. However, none of the students responded, likely since it was at the end of the school year and they were getting ready for summer break. Although it is ideal to have participants from the interview phase also complete the sorting activity, it is acceptable to use proxy sorters as long as they come from the same participant pool and have the same background and understanding of the topic as the original participants (Jackson & Trochim, 2002). Therefore, in the fall of the next school year we recruited an additional 17 grade 12 students from one of the original schools to complete the sorting and rating activity. One of the students who participated in the sorting task reported that they had a learning difficulty, and they sorted the data in a unique way based on their experience of having a disability. For example, one of her piles was labeled “Me and how I can relate to my learning struggles throughout life.” We decided not to include this student’s data in the analysis so that the final data would reflect the perspectives of students without learning difficulties. Of the remaining 16 participants, six were male and 10 were female and all were between 16 and 18 years of age.

### 2.4.2 Procedure

Before collecting data, the researchers obtained ethics approval from our University's research ethics review board and from the school board's ethics review committee. After obtaining ethics approval, the first author contacted secondary school principals to determine whether they were interested in allowing us to recruit students from their school. If interested, the principal then arranged a meeting between the vice-principal, members of the school staff, and the first two authors where we explained the purpose of our study and answered any questions that they had. Afterwards, the vice-principal sent out an email to all teachers with information about the study, asking them to respond if interested. Three teachers came forward saying that they would allow us to visit their classrooms to explain the study to their students and to hand out letters of information and consent forms. The first author and a graduate research assistant visited four grade 12 classes. One of the teachers also assisted us by recruiting students from other grade 12 classes. Students who were interested in participating returned signed consent forms to their teachers. We also contacted a second school to recruit additional participants. At this school, the principal contacted members of the student council directly to inquire as to whether any of them were interested in participating in our study. The principal then let us know which students were interested in participating and told us which day to come in and conduct the interviews. In the fall, we returned to the first school and visited the grade 12 classes of two of the original teachers from the spring term to recruit students for the sort phase. Once again, the first author explained the study to students, answered questions, and distributed letters of information and consent forms

to students. Students who were interested in participating returned signed consent forms to their teachers.

**Interview phase.** At both schools, individual interviews were conducted in a quiet location at the school by the first author and two graduate research assistants who were completing their Master's degrees in counseling psychology. These two graduate research assistants were funded by the same Social Sciences and Humanities Research Council grant that funded this study. To begin, participants were asked a few demographic questions which included grade, birth date, and gender (see Appendix A for interview protocol). In addition, participants were asked to self-disclose whether they had a learning difficulty. Following this, participants were asked a few warm-up questions to determine their interaction with and knowledge of individuals with learning difficulties. Participants were also asked to indicate whether they knew anyone with learning difficulties and whether they were their friends or relatives. Out of the 20 participants, 18 reported that they either knew or had contact with students with learning difficulties in their school, including students with learning disabilities, dyslexia, autism, ADHD, brain damage, Down syndrome, and reading disabilities. Finally, participants were asked the following focal question "Are high school students who have learning difficulties sometimes left out at school? Why do you think they are/are not left out?" Additionally, in order to elicit further responses, we used probes such as "Can you tell me more about that?" "Can you think of any other examples?" "Do you have any more thoughts about that?" "Why is that?" and so on. The interviews ranged in length from 5:07 to 13:47 minutes with the average interview length being 8:22 minutes.

**Data preparation.** To begin, all statements that answered the focal question “Are high school students who have learning difficulties sometimes left out at school?” and, “Why do you think they are/are not left out?” were extracted from the interview transcripts, which resulted in 147 statements. Following this, the first two authors and one of the graduate research assistants from the interview phase individually went through each of the 147 statements and coded them as either unique or redundant. The researchers then met as a group, compared codes, and compiled a final list of 94 unique statements. Each of these statements were printed onto individual cards and used for the sorting phase.

**Sorting phase.** For the sorting task, one teacher consented to have her students do the sorting activity during her class period. Students who brought in their consent forms completed the sorting/rating activity while students who were not interested in participating completed their own work silently at their desks. A second teacher consented to have students removed from her class in small groups to complete the sorting/rating task in the library.

At the start of the sorting task, the first author distributed packages to participants that included a checklist, instructions for the sorting task, a list of four demographic questions (age, grade, gender, and whether they have a learning difficulty), and individual statements printed out onto cue cards. The participants were asked to read the sorting instructions carefully before beginning, and they were reminded that there were no wrong answers. Participants were asked to sort the statements “in a way that makes sense to you” (Kane & Trochim, 2007, p. 72) and to create an appropriate label for each pile.

Once students were finished with the sorting activity, they were given the ratings sheet. The rating task was given to students after the sorting task to ensure that the ratings question did not influence how they sorted the statements (Kane & Trochim, 2007). Participants were asked to rate the likeliness of each of the behaviours or attitudes occurring in their school on a scale of 1 to 5 where 1 is relatively unlikely and 5 is extremely likely. It took an average of 30-60 minutes for students to complete both the sorting and rating tasks. Once the sorting and rating tasks were complete, the raw sorting and rating data for each participant was entered into the web-based Concept Systems Global MAX software (Concept Systems, 2013).

### **2.4.3 Data Analysis**

Concept System Global MAX software (Concept Systems, 2013) was used to conduct data analysis. Multidimensional scaling was used to create a two-dimensional map of the average distances between statements where each point on the map represented a statement and the proximity between these points represented how often these statements were sorted together by participants (Jackson & Trochim, 2002). The next step was to conduct hierarchical cluster analysis to determine a final cluster solution (Kane & Trochim, 2007). Hierarchical cluster analysis separated the statements/points from the two-dimensional map into groups/clusters (Kane & Trochim, 2007). The hierarchical cluster analysis can give as many clusters as there are statements. Therefore, the researchers must use their judgment and knowledge of the data to decide how many clusters should be included in the final solution (Trochim, 1989). The authors created 10 concept maps ranging from five clusters to 15 clusters per map. These maps were carefully examined and compared to determine which cluster solution had the best



statistical and thematic fit for the data. The goal was to select the number of clusters in which each cluster contained statements that conceptually belonged together and in which related statements were not broken up into separate clusters. The statistics that assisted in determining the final solution were the stress value and bridging values (Kane & Trochim, 2007). The stress value measures the degree to which the points on the map represent the input data. A high stress value indicates that there is a discrepancy between the two-dimensional map and the original input data, meaning that the map is not representative of the data. A low stress value means that there is a good fit between the two-dimensional point map and the input data (Kane & Trochim, 2007). The bridging value indicates the relative frequency that a statement is sorted with other statements in the same cluster. A low bridging value indicates a high frequency of inclusion, and a high bridging value indicates a low frequency of inclusion (Jackson & Trochim, 2002). Based on statistical results and the judgments of the authors, a 7-cluster solution was chosen as the best fit for the data. After deciding on the final cluster solution, the final step was to label the clusters. In order to determine labels for each of the clusters, the first author read through the statements in each cluster and came up with a label that appeared to be a good representation of the statements. These labels were then compared to the labels created by participants during the sorting task to determine whether they were similar. The final labels reflect the labels created by participants but were edited for clarity.

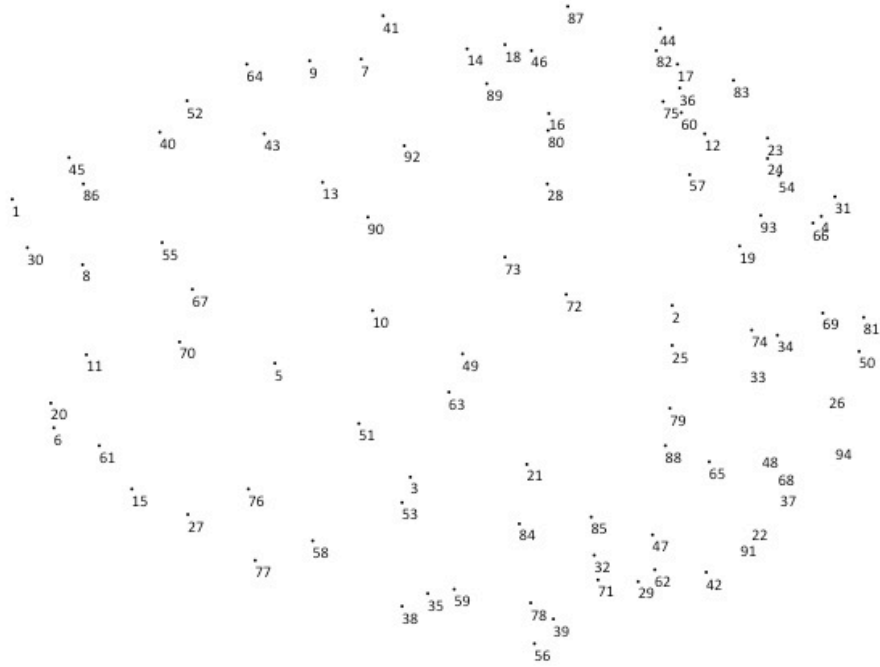
## **2.5 Results**

The final stress value for this study was 0.3360. In a meta-analytic review of 38 concept mapping studies, the average stress value across the projects was .285 with a standard deviation of .04 (Trochim, 1993). Thus, approximately 95% of concept mapping

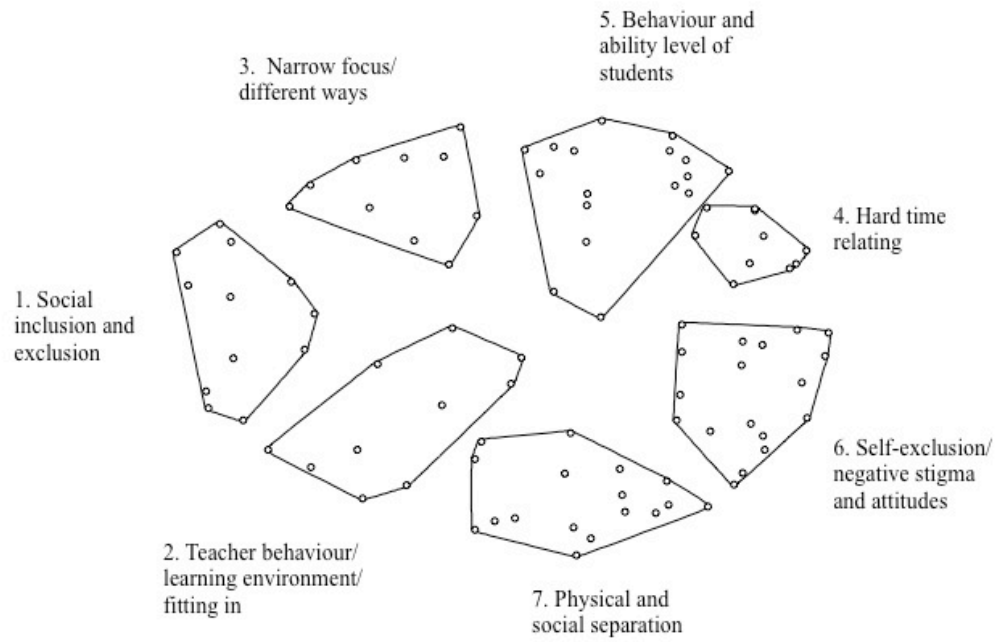
studies are likely to have stress values between 0.205 and 0.365 (Kane & Trochim, 2007), therefore, the stress value for this study was within the appropriate range and the point map (see Figure 2) was a good representation of the data. The 7-cluster solution is depicted in Figure 3. The cluster items as well as the bridging values for each statement and the average bridging values for each cluster are displayed in Table 1. Several statements in “Cluster four: Hard time relating” had low bridging values, such as the statement “People with learning difficulties are insecure” which had a bridging value of 0.00 and the statement “They can’t do certain things that others can do” which had a bridging value of 0.02 (see Table 1). This indicates that statements within this cluster were sorted together frequently by participants. Alternatively, several statements in “Cluster one: Social inclusion and exclusion” had rather high bridging values, such as the statement “People often use teasing to cover up something else that they’re bottling up, lashing it out on someone else” which had a bridging value of 1.00. This high bridging value demonstrates that this statement may have been difficult for participants to sort, possibly because it did not fit well with any of the other statements or perhaps participants were unclear on what the statement was referring to. Four of the seven clusters had low average bridging values, which demonstrated that this cluster solution was a good fit for the data. A description of each cluster is provided below.

### **2.5.1 Cluster One: Social Inclusion and Exclusion**

This cluster included 12 statements and had a bridging value of 0.69 (minimum = 0.41, maximum = 1.00,  $SD = 0.14$ ). As mentioned previously, the bridging values for statements within this cluster were rather high. This could be due to the fact that the statements in this cluster did not have the best thematic fit and represented a wide range



**Figure 2.** Point map of 94 statements in response to the question “Are high school students who have learning difficulties sometimes left out at school?”



**Figure 3.** Seven cluster map of 94 statements in response to the question “Are high school students who have learning difficulties sometimes left out at school?”

Table 1

*Cluster items, bridging values, and average ratings for concept map*

<b>Concept and statement</b>	<b>Bridging value</b>	<b>Average rating</b>
<b>Cluster one: Social inclusion and exclusion</b>	<b>0.69</b>	<b>3.72</b>
1. I feel like people always try to include them.	0.41	3.25
45. Everyone gets along pretty well.	0.58	3.44
86. I don't think that they're not included in events.	0.63	4.13
20. Teachers have one way of doing something and if a student needs some more, another way they're kind of hesitant to do it.	0.65	3.44
30. Sometimes people try to actually include them, to feel like, "oh, I'm doing a good thing," to feel good about themselves.	0.65	3.75
6. Most teachers they definitely try their best, but I'm just saying in some cases, teachers are kind of tunnel vision.	0.66	3.06
67. Depends on the level of disability.	0.70	3.56
11. Usually they have the teacher who helps them, so she is always with them.	0.73	4.25
8. If you have difficulty learning, but you are also really socially acceptable in school, you will be included.	0.74	4.19
70. Cause you're in your classes with kind of like your friends and kind of people that are almost the same as you.	0.76	4.06
55. Usually their teachers come in to the cafeteria and sit with them and they direct where they sit.	0.84	4.06
61. People often use teasing to cover up something else that they're bottling up, lashing it out on someone else.	1.00	3.44
<b>Cluster two: Teacher behaviour/learning environment/fitting in</b>	<b>0.56</b>	<b>3.70</b>
49. Maybe because they haven't really found a lot of friends in the classroom - it's difficult for them outside.	0.16	3.94
63. People can be ignorant towards that fact sometimes that if someone's different they can get neglected.	0.25	4.19
10. If you are like the majority of people, you don't stand out, so people don't gravitate their attention to you.	0.34	3.67
51. I don't think exclusion is an outward intentional thing.	0.53	3.56
5. They are always grouped.	0.60	4.27
77. A lot of times teachers have asked them to take their work to the resource class because they don't work well in the classroom.	0.61	3.50
15. Teachers are not sure that they can effectively explain it a different way and I think for some students that's hindering their	0.72	3.69

	ability.		
58.	When I'm studying for a test or something I usually go to one of the smarter people in the class to study with rather than somebody who has a learning difficulty.	0.75	3.75
76.	Not so much outside of school cause - in a sport or something you don't really talk about school and grades.	0.79	3.00
27.	Being in your classes you have something else to talk about.	0.88	3.50
<b>Cluster three: Narrow-focus/different ways</b>		<b>0.62</b>	<b>3.61</b>
90.	Friend groups have the same grade averages usually.	0.33	3.69
13.	I think some of us were selfish when it comes to school.	0.45	3.56
92.	Some people just, they focus on themselves.	0.50	3.88
43.	You kind of just go through high school seeing what your friends are up to.	0.52	3.88
41.	The people with learning disabilities have their own way of doing things and they learn their way.	0.52	4.06
52.	People learn in different ways.	0.72	4.25
7.	Could be that they have a learning disability themselves that other people don't know about.	0.74	2.69
64.	I don't see any major bullying going on.	0.78	3.31
9.	Some people act a certain way because everyone's behaviour and tolerance is different.	0.80	3.94
40.	It is difficult for me to explain something when I'm not used to learning by explaining.	0.81	2.80
<b>Cluster four: Hard time relating</b>		<b>0.09</b>	<b>3.40</b>
57.	People with learning difficulties are insecure.	0.00	2.44
12.	They can't do certain things that others can do.	0.02	3.88
93.	People with learning disabilities feel like they are not the same as other people.	0.03	3.25
19.	They're just different.	0.03	3.31
24.	Part of it too is kind of like their behavior.	0.04	3.63
54.	Maybe some people think people with learning difficulties don't really have anything to offer.	0.09	3.63
4.	We just don't relate I guess.	0.14	3.44
66.	Stigma I guess.	0.16	3.19
23.	People might get frustrated with them quickly.	0.17	3.44
31.	For certain things we just wouldn't be able to understand each other I guess.	0.28	3.81
<b>Cluster five: Behaviour and ability level of students</b>		<b>0.24</b>	<b>3.44</b>
60.	They're not athletic.	0.07	3.56
82.	If they're just kind of a bit slower at receiving a joke.	0.09	3.40
17.	Maybe they react to a joke in a different way than another friend would.	0.10	3.75
83.	Maybe when the others are talking, they are trying to join the	0.12	3.50

	conversation, but they don't follow their conversation that the other people have.		
73.	I feel like they all kind of like stick together as well cause they're all in the same boat.	0.12	3.63
75.	Because they're not learning the same things we're learning.	0.13	3.00
36.	I also feel like they'd be more comfortable if I didn't bring certain things up that sometimes pop up at a lunch table.	0.14	2.94
72.	People with learning difficulties don't have the social skills a lot of people would have, so it'd be kind of hard for them to get along with other people.	0.15	3.50
28.	If they try and help them it might disrupt their learning.	0.18	3.00
80.	Some people are immature.	0.20	4.19
16.	With everything going around in the school they might not catch what's going on.	0.29	3.31
18.	It might be harder for them to focus on the announcements.	0.33	3.19
44.	They wouldn't have the experience to understand what I was going through.	0.36	3.69
89.	Hard to understand why that person is treated the way they are.	0.37	2.88
46.	If they're just kind of a bit slower at receiving information in the classroom.	0.39	3.63
14.	Sometimes their workload isn't the same that everyone else has.	0.52	3.94
87.	If I brought up a topic that would be more mature or something like that they wouldn't be able to discuss that as well.	0.53	3.38
<b>Cluster six: Self-exclusion/negative stigma and attitudes</b>		<b>0.14</b>	<b>3.28</b>
34.	Students with learning difficulties feel like they wouldn't be good enough to hang out with us.	0.03	3.13
88.	I notice that every day they don't socialize with the "normal" people.	0.04	3.80
25.	They could just be really shy or something.	0.05	3.06
33.	If students with learning difficulties are left out, I think it's because they don't feel accepted.	0.05	3.44
74.	Maybe they are leaving themselves out.	0.06	2.63
65.	People with learning disabilities just hang out by themselves.	0.10	3.31
79.	You wouldn't spend as much time in class with them so maybe that's where they feel left out.	0.10	3.56
37.	They just don't fit in.	0.10	3.06
2.	They're just not smart enough to be around those guys even though that's wrong.	0.10	3.06
22.	Other students don't really want to hang out with people who have learning difficulties.	0.12	3.75
69.	Sometimes I feel like people don't want to be seen with them.	0.14	3.31
91.	There's no choice but to leave them out.	0.16	2.13
26.	They might not be able to just cause they're not as outgoing.	0.18	3.13

94.	Say you are going to play a sport; some people might want to exclude them because they don't have the same capacity like other people do.	0.23	3.13
68.	Other students are embarrassed that students with learning difficulties are their friends.	0.25	3.13
48.	People generally have a hard time accepting things or people that they don't understand.	0.25	4.00
81.	I think we just wouldn't share the same interests.	0.25	3.50
50.	You never really get out to people that you're not really comfortable with.	0.29	4.00
<b>Cluster seven: Physical and social separation</b>		<b>0.26</b>	<b>3.52</b>
47.	Even just the simple thing of not knowing English very well, some people put you apart.	0.07	4.07
85.	Because often they get forgotten just because others don't make an effort to want to get to know them.	0.08	3.50
29.	Most people see themselves as above them so they don't really try to include them as much.	0.13	3.56
42.	If their classmates are not accepting, students with learning difficulties are left out.	0.13	3.81
21.	They probably do feel like we forget about them sometimes cause they have their own little classroom.	0.16	3.69
32.	If a student with learning difficulties leaves the class, they can be left out because they are not present.	0.17	2.88
71.	Depending on how accepting their classmates are, or the school in general, how the school's attitude is to those students, students with learning difficulties don't feel like they belong.	0.17	3.69
62.	Students with learning difficulties get left behind in study groups or at lunch, if they are struggling in class.	0.18	3.44
84.	Some people put students with learning difficulties apart.	0.25	3.75
78.	Students with learning difficulties might get teased sometimes.	0.28	3.19
3.	Bringing them into the classroom, I don't really see that happen too much nowadays.	0.28	3.38
59.	We don't really see them in our classrooms.	0.31	4.31
53.	Sometimes I will ignore them and get my work done and then just show it to them and not really explain it.	0.42	2.88
39.	Other students are discriminating.	0.43	3.44
56.	They feel more excluded if there's only one group they stay in.	0.44	3.00
38.	Our school is pretty small and we all pretty well know each other, but that's just the people who don't have learning disabilities or are in ESL.	0.46	3.38
35.	In all high school there's a few people that don't fit in or mix well.	0.50	4.00

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of ideas. For example, although several statements in this cluster referred to inclusive behaviours, including the statements “I feel like people always try to include them”, “Everyone gets along pretty well”, “I don’t think that they’re not included in events”, and “If you have difficulty learning, but you are also really socially acceptable in school, you will be included”, several other statements referred to non-inclusive behaviours, particularly in regard to teachers. For example, the statements “Teachers have one way of doing something and if a student needs some more, another way they’re kind of hesitant to do it”, “Most teachers definitely try their best, but I’m just saying in some cases, teachers are kind of tunnel vision”, “Usually they have the teacher who helps them, so she is always with them”, and “Usually their teachers come in to the cafeteria and sit with them and they direct where people sit” all referred to non-inclusive behaviours of teachers. The participants perceived that regular classroom teachers needed to be more flexible in their teaching approach in order to be more inclusive of students with learning difficulties. In addition, the participants perceived that having a teacher or educational assistant with the students who have learning difficulties at all times was hindering their social interaction with other students.

### **2.5.2 Cluster Two: Teacher Behaviour/Learning Environment/Fitting In**

This cluster included 10 statements and had a bridging value of 0.56 (minimum = 0.16, maximum = 0.88, *SD* = 0.23). There were three themes that emerged in this cluster, which could explain the higher bridging values of statements within this cluster. The first theme was the behaviour of teachers, which was also reflected in the previous cluster. This was demonstrated by the statements “A lot of times teachers have asked them to take their work to the resource class because they don’t work well in the

classroom”, and “Teachers are not sure that they can effectively explain it a different way and I think for some students that’s hindering their ability.” Another theme that emerged in this cluster was the effect of learning environment on the social inclusion of students with learning difficulties. For example, the statements “Maybe because they haven’t really found a lot of friends in the classroom-it’s difficult for them outside”, “They are always grouped”, “Not so much outside of school cause- in a sport or something you don’t really talk about school and grades”, and “Being in your classes you have something else to talk about” referred to the influence that environment had on the social inclusion of students with learning difficulties. As one participant mentioned, it can be difficult for social interactions to occur between students with and without learning difficulties when students with learning difficulties were grouped together in separate classrooms. The third theme that emerged in this cluster was the notion of fitting in, which was reflected in the statements “People can be ignorant towards the fact sometimes that if someone’s different they can get neglected”, and “If you are like the majority of people, you don’t stand out, so people don’t gravitate their attention towards you.”

### **2.5.3 Cluster Three: Narrow-Focus/Different Ways**

This cluster included 10 statements and had an average bridging value of 0.62 (minimum = 0.33, maximum = 0.81,  $SD = 0.16$ ), which was in the upper-middle range. There were two main themes that emerged in this cluster. The first theme referred to the narrow self-focus of students as they went through school, which was illustrated by the statements “I think some of us were selfish when it comes to school”, “Some people just, they focus on themselves”, “You kind of just go through high school seeing what your friends are up to”, and “I don’t see any major bullying going on.” These statements

alluded to the notion that students were not necessarily excluding other students on purpose; they were just focused on their own education and their own friends, and didn't pay much attention to what else was going on at their school. The other statements in this cluster referred to how students learn in different ways, which was illustrated by the statements "The people with learning disabilities have their own way of doing things and they learn their way", "People learn in different ways", and "It is difficult for me to explain something when I'm not used to learning by explaining."

#### **2.5.4 Cluster Four: Hard Time Relating**

This cluster included 10 statements and had a low average bridging value of 0.09 (minimum = 0.00, maximum = 0.28,  $SD = 0.08$ ), which indicated that statements in this cluster were sorted together frequently by participants. Statements in this cluster referred to perceived differences within students with learning difficulties and to how students with and without learning difficulties had a hard time relating to one another. This was best illustrated by the statements "They can't do certain things that others can do", "Maybe some people think people with learning difficulties don't really have anything to offer", "We just don't relate I guess", "People might get frustrated with them quickly", and "For certain things we just wouldn't be able to understand each other I guess."

#### **2.5.5 Cluster Five: Behaviour and Ability Level of Students**

This cluster included 17 statements and had a low average bridging value of 0.24 (minimum = 0.07, maximum = 0.53,  $SD = 0.15$ ). Statements in this cluster referred to the behaviour and abilities of students with learning difficulties. Participants perceived that students with learning difficulties may have a difficult time understanding some

jokes, and that they may have a difficult time joining or understanding some conversations. Several statements referred to a lack of social skills, such as the statement “People with learning difficulties don’t have the social skills a lot of people would have, so it’d be kind of hard for them to get along with other people.” Other statements referred to having different experiences or levels of maturity, such as the statements “They wouldn’t have the experience to understand what I was going through”, “I also feel like they’d be more comfortable if I didn’t bring certain things up that sometimes pop up at a lunch table”, and “If I brought up a topic that would be more mature or something like that they wouldn’t be able to discuss that as well.” Other statements referred to the ability of students with learning difficulties to receive information and pay attention to what was going on around the school and also to how they were often working on different things in the classroom.

### **2.5.6 Cluster Six: Self-Exclusion/Negative Stigma and Attitudes**

This cluster included 18 statements and had a low average bridging value of 0.14 (minimum = 0.03, maximum = 0.29,  $SD = 0.08$ ). There were two main themes in this cluster, including the self-exclusion of students with learning difficulties and the negative stigma and attitudes of students in the school. Several statements referred to how students with learning difficulties may have excluded themselves, perhaps because they were shy, they did not feel accepted, they felt left out, they were not outgoing, or because they spent most of their time with other students with learning difficulties. Participants stated, “Maybe they are leaving themselves out”, “I notice every day they don’t socialize with the ‘normal’ people”, and “You wouldn’t spend as much time in class with them so maybe that’s where they feel left out.” Other statements illustrated the negative stigma

and attitudes that students had towards students with learning difficulties, such as the statements “Other students don’t really want to hang out with people who have learning difficulties”, “Sometimes I feel like people don’t want to be seen with them”, “Other students are embarrassed that students with learning difficulties are their friends”, and “People generally have a hard time accepting things or people that they don’t understand.”

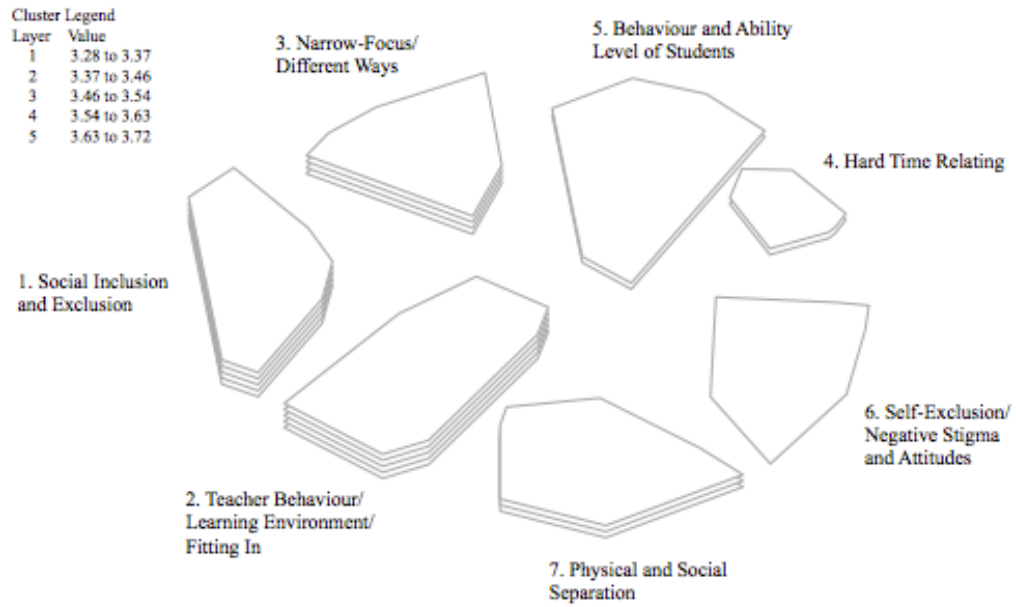
### **2.5.7 Cluster Seven: Physical and Social Separation**

This cluster included 17 statements and had an average bridging value of 0.26 (minimum = 0.07, maximum = 0.50, *SD* = 0.14). The first theme in this cluster referred to how students with learning difficulties were often physically separated from other students. This was illustrated by the statements “They probably do feel like we forget about them sometimes ‘cause they have their own little classroom”, “If a student with learning difficulties leaves the class, they can be left out because they are not present”, “Bringing them into the classroom, I don’t really see that happen too much nowadays”, and “We don’t really see them in our classrooms.” The second theme in this cluster referred to how students with learning difficulties were often socially separated or left out by their peers, which was illustrated by the statements “Because often they get forgotten just because others don’t make an effort to want to get to know them”, “Students with learning difficulties get left behind in study groups or at lunch, if they are struggling in class”, and “Some people put students with learning difficulties apart.” The statement “Depending on how accepting their classmates are, or the school in general, how the school’s attitude is to those students, students with learning difficulties don’t feel like

they belong” acknowledged that both student and school attitudes influenced whether students with learning difficulties felt socially accepted at school.

### **2.5.8 Rating Data**

In addition to sorting the statements, participants were also asked to rate each of the statements based on the likeliness of each behaviour or attitude occurring in their school. Table 1 depicts the average rating value for each statement. Statements 89, 32, 53, 40, 7, 74, 57, and 91 received the lowest ratings from participants and therefore were the statements that participants perceived were the least likely to occur. Statements with the highest ratings by participants included statements 59, 5, 11, 52, 8, 63, 80, and 86. Figure 4 depicts the average rating across statements for each cluster. Statements in Cluster Six received the lowest ratings overall and statements in Cluster One and Cluster Two received the highest ratings. However, the average ratings for each cluster range from 3.28 to 3.72 (see Table 2), which indicated that there was not a substantial difference between average ratings between clusters.



**Figure 4.** Cluster rating map in response to the following rating prompt “On a 1 to 5 scale, please rate the likelihood of each behaviour or attitude occurring in your school.”

Table 2

*Mean cluster ratings*

Cluster Name	Overall Cluster Rating Mean (SD)	Number of Statements in Cluster	Minimum Statement Rating	Maximum Statement Rating
Cluster one: Social inclusion and exclusion	3.72 (0.39)	12	3.06	4.25
Cluster two: Teacher behaviour/learning environment/fitting in	3.71 (0.35)	10	3.00	4.27
Cluster three: Narrow-focus/different ways	3.60 (0.50)	10	2.69	4.25
Cluster four: Hard time relating	3.40 (0.39)	10	2.44	3.88
Cluster five: Behaviour and ability level of students	3.44 (0.35)	17	2.88	4.19
Cluster six: Self-exclusion/negative stigma and attitudes	3.28 (0.45)	18	2.13	4.00
Cluster seven: Physical and social separation	3.53 (0.39)	17	2.88	4.31



## 2.6 Discussion

The purpose of this study was to explore the perspectives of upper year secondary school students regarding the social inclusion of students with learning difficulties. Between the interview and sorting phases, a total of 36 grade 12 students participated in this study. Based on the statistical results and the author's judgments, the 7-cluster solution was a good fit for the data and the concept map was representative of participant's perceptions. The main themes that emerged in the concept mapping data included: the physical and social separation of students with learning difficulties, the behaviour of teachers, the behaviour and ability level of students with learning difficulties, negative stigma and attitudes, and self-exclusion or the idea that students with learning difficulties are leaving themselves out.

Several participants in this study reported that students with learning difficulties were not fully included in their school and were often socially excluded by their peers. It was suggested that very little contact occurred between students with and without disabilities, similar to the studies conducted by Siperstein et al. (2007) and Copeland et al. (2004). The two statements with the highest average ratings were "We don't really see them in our classrooms" and "They are always grouped." The physical and social segregation of students with learning difficulties was a significant theme that emerged in this study. The participants suggested that not being present in the regular classroom was hindering the social inclusion of students with learning difficulties. Participants also discussed the impact that teachers and educational assistants had on the social inclusion of students with learning difficulties. In agreement with previous studies (Carter et al., 2005; de Boer et al, 2013), several participants reported that teacher

assistance negatively impacted the social inclusion of students with learning difficulties since it limited social contact with other students. For example, one of the statements with the highest average rating was “Usually they have a teacher who helps them, so she is always with them.” According to the theory of planned behaviour, “the more resources and opportunities individuals think they possess, and the fewer obstacles or impediments they anticipate, the greater should be their perceived control over the behavior” (Ajzen & Madden, 1986, p. 457). Based on the data presented in this study, participants reported several perceived obstacles to socially including students with learning difficulties including a lack of opportunities for social interaction. One method found to be beneficial for facilitating social interaction between students is group work (Cambra & Silvestre, 2003; Carter et al., 2005). If implemented properly with support from teachers and educational assistants, group work can help create opportunities for positive social interaction between students with and without learning difficulties and help improve the perceived behavioural control of students.

Several misconceptions about students with learning difficulties emerged in the data, for example, the idea that students with learning difficulties were not able to understand jokes. Participants also perceived that students with learning difficulties did not share common interests with them. This finding reflects results from Kalymon et al. (2010), which found that students were reluctant to develop friendships with students with disabilities because they perceived that they had different interests and found it difficult to communicate with them. Participants in Copeland et al.'s (2004) study also reported difficulty with communicating and challenging behaviours as barriers to inclusion. In Nowicki et al. (2014), the main finding as to why children with learning

difficulties were socially excluded was the notion of difference, including negative perceptions of physical characteristics, behaviours, learning abilities, and resource allocation. Individual differences in behaviour and ability were also seen as barriers to inclusion in the present study. Furthermore, participants discussed negative attitudes towards students with learning difficulties and suggested that other students may be embarrassed to be friends with them. Kalymon et al. (2010) found that students believed that they would be looked down upon by their peers as a result of being friends with someone with a disability. As with previous studies (Kalymon et al., 2010; Roberts & Lindsell, 1997; Siperstein et al., 2007), this finding supported the theory of planned behaviour in that students were perceived to be less likely to engage in the target behaviour (interacting with a student with a learning difficulty) as a result of the subjective norm (how they thought their peers would perceive them). In order to facilitate the social inclusion of students with learning difficulties these misconceptions and negative attitudes need to be addressed, as they are significant barriers to inclusion (Copeland et al., 2004).

An emergent theme was the notion that students with learning difficulties might be excluding themselves. Many participants observed that students with learning difficulties appeared to spend time by themselves or with other students with learning difficulties. Participants hypothesized that it was either because they were shy, or because they did not feel accepted by the other students. However, it is possible that the notion of self-exclusion was a justification by the typical students for not including them. Perhaps putting the blame on students with learning difficulties helps the typical students feel less

guilty for not including them. Further research needs to be conducted to explore the notion of self-exclusion and why it occurs.

### **2.6.1 Limitations**

The primary limitations for this study were sample size and generalizability. The results of this study reflect the perspectives of a relatively small group of grade 12 students from a city in Southern Ontario. Due to the small sample size, these results may not be generalizable to other grade 12 students. Further, since participants were recruited through convenience sampling, this may not be a representative sample. In addition, the way in which inclusion is implemented varies across different schools, school boards, and provinces, therefore students from contexts which practice inclusion differently would have varying perspectives on the social inclusion of students with learning difficulties in their schools. Caution should be taken when generalizing the results of this data to other contexts or age groups.

In the concept map, several of the clusters contained multiple themes and although it would be ideal for each cluster to contain one coherent theme, the clusters reflect how participants chose to sort the statements. Therefore, individual clusters will sometimes contain multiple themes, since participants have varying justifications for sorting certain statements together. In addition, it can be a difficult task for participants to sort a list of 94 statements that reflect a wide range of ideas, particularly when some of the statements do not fit neatly into categories. Although it is beneficial to have participants sort the statements so that the resulting clusters reflect the perspectives of the participants, this is more labour intensive for participants compared to other qualitative methods where the researcher conducts the analysis.

## 2.7 Implications and Conclusions

In order to facilitate the social inclusion of students with learning difficulties, the misconceptions and negative perceptions of students without learning difficulties need to be addressed. Teachers can help students realize their similarities and common interests in order to change these misconceptions. Overall, there needs to be less of a focus on changing the behaviour of students with learning difficulties and more focus on changing the perceptions and attitudes of students without learning difficulties. Teaching social skills to students with disabilities will not be effective if other students continue to hold negative attitudes towards them. Instead of suggesting that students with learning difficulties need to change their behaviour in order for other students to accept them, it would be beneficial to teach other students to be more accepting of individual differences. In addition, several participants in this study suggested that students did not exclude students with learning difficulties intentionally they were just focused on their own work and getting through high school. Thus, it would be beneficial to help students realize how their behaviour affects other students and that by doing nothing, they are still being exclusive, even if it is not intentional. In addition to teaching students to be accepting of differences, schools need to create more opportunities for meaningful interaction between students with and without learning difficulties. In order for social inclusion to be successful, teachers and educational assistants need to work together to create opportunities for social interaction for students with learning difficulties. Future research should focus on additional strategies for facilitating social interaction between students with and without learning difficulties.

The results of this study provided insight into the perspectives of secondary school students regarding the social inclusion of their classmates with learning difficulties. Participants discussed teacher behaviour, the learning environment, different learning styles, differences in behaviour and ability level, self-exclusion, negative stigma and attitudes, and physical and social separation as barriers to inclusion. These results indicated that students with learning difficulties were not fully accepted by their classmates in general education classrooms. The results of this study can be used to assist policy makers and educators in creating more inclusive schools. As mentioned previously, it is important to obtain the perspectives of students since schools will not become truly inclusive until the views of students are taken into consideration (MacArthur & Kelly, 2004). These results provide important insight into student perspectives that can be used to aide future inclusive policies and practices.

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### **3 Parental Perspectives on the Social Inclusion of Students with Learning Difficulties**

#### **3.1 Abstract**

The purpose of this study was to explore parental perspectives on the social inclusion of secondary school students with learning difficulties using Trochim's (1989) concept mapping methodology. Twelve parents of secondary school students with learning difficulties participated in individual interviews in which they were asked the following focus prompt: "Are high school students with learning difficulties sometimes left out at school? Why or why not?" Participants' statements were extracted from interview transcripts and coded as either unique or redundant. Following this, 10 participants sorted the list of 103 unique statements into meaningful categories and then rated them based on degree of agreement. Data were analyzed using multidimensional scaling and cluster analysis. Based on the statistical results and the judgment of the authors, a nine-cluster solution was selected as the best fit for the data. The nine cluster themes were: being excluded due to individual differences; parent influence, involvement and perspectives; disability, labels, inclusion and the importance of friendships; role of teachers and school; school, board and policy issues and effects; inclusion and indirect forms of exclusion; disability, mental health and social inclusion; underlying sadness due to exclusion; and social-relational difficulties and exclusion. The results of this study were discussed in relation to the theory of planned behaviour (Ajzen & Madden, 1986).

Over the last few decades, our education system has evolved to become more inclusive of students with learning difficulties (Winzer, 2014). Inclusive schools contribute to reducing discriminatory attitudes toward individuals with learning difficulties, create welcoming communities, and ultimately create an inclusive society (UNESCO, 1994, page ix). Further, when schools create a learning environment in which students with learning difficulties can succeed, they create an environment that serves the needs of all students (Brigharm et al., 2006). However, since students with learning difficulties have such diverse needs, including all students in general education classes has been a complicated process. Therefore, there has been a significant body of research in the area of inclusive education in an attempt to find the best strategies for including students with learning difficulties (Florian, 2014). Within the ever-evolving educational climate, it is important to continue researching in the area of inclusive education to determine which strategies have proven to be effective and which have not. According to Bennett, Deluca, and Bruns (1997), it is essential to include the perspectives of parents when investigating inclusion because it is parents and their children who are affected the most by the outcomes of the inclusion process. Further, with an understanding of parental perspectives, parents and school personnel in inclusive settings can work together to achieve the best possible outcomes for students (Soodak & Erwin, 2000). For the present study, we were interested in parental views on the social inclusion of secondary school students with learning difficulties in the school setting. We chose to focus on students with learning difficulties because the school experiences for students with physical disabilities can be somewhat different. For example, in Elkins et al. (2003), it was discovered that adolescents with physical disabilities were more likely to be included in

secondary school compared to students with autism or students with multiple disabilities. Secondary school parents are the focus of this study since prior research has found that these parents tend to be less satisfied with their child's education compared to parents of elementary school students (Kasari et al., 1999; Leyser & Kirk, 2004; Lutfi, 2009; Starr, Foy, Cramer, & Singh, 2006). Further research with parents of students at the secondary level is necessary to meet the social and academic needs of students with learning difficulties, and ultimately to improve parental satisfaction with the education of their children.

The term 'learning difficulties' was used in this study as a general term that included a continuum of learning challenges, such as general intellectual deficiency, general and specific learning disabilities, intellectual disabilities, autism, exceptionalities, lower academic ability, and special needs (Nowicki, 2012). One justification for using this term is that "if individuals with learning difficulties use a label to describe their disability, they often prefer to use the term 'learning difficulties'" (Chappell, Goodley, & Lawthorn, 2001). For the remainder of this paper, the term learning difficulties will be used unless referring to a previous study or a body of research, in which case we will retain the labels used by those studies.

In previous studies conducted with parents of students with disabilities of all ages, parents reported many perceived benefits of inclusion. These included: improved social skills, social interaction, and socialization (Bennett & Gallagher, 2013; Bennett et al., 1997; Fisher, Pumpian, & Sax, 1998; Frederickson, Dunsmuir, Lang, & Monsen, 2004; Leyser & Kirk, 2011; Leyser & Kirk, 2004; Lutfi, 2009; Elkins, Van Kraayenoord, & Jobling, 2003); greater acceptance and tolerance by peers (Bennett et al., 1997; Fisher et



al., 1998; Leyser & Kirk, 2011; Leyser & Kirk, 2004; Elkins et al., 2003); the presence of appropriate role models and improved behaviour (Bennett et al., 1997; Fisher et al., 1998; Garrick Duhaney & Salend, 2000; Elkins et al., 2003); improved academics (Bennett et al., 1997; Frederickson et al., 2004; Lutfi, 2009); and improved self-esteem, self-image, and confidence (Fisher et al., 1998; Garrick Duhaney & Salend, 2000). Also, parents perceived that inclusion supported the development of friendships outside of school (Bennett et al., 1997). Gasteiger-Klicpera, Klicpera, Gebhardt, and Schwab (2013), found that meeting classmates outside of school hours was reported to be more frequent by the parents of students in inclusive schools compared to the parents of students in special schools. Parents also perceived that inclusive classrooms gave their children greater independence (Fisher et al., 1998; Elkins et al., 2003) and better prepared their children for the real world (Garrick Duhaney & Salend, 2000).

In addition to acknowledging the benefits of inclusion, previous research has also reported that parents of students with disabilities generally hold positive views toward inclusive education (Bennett & Gallagher, 2013; Chmiliar, 2009; Fisher, Pumpian, & Sax, 1998; Garrick Duhaney & Salend, 2000; Leyser & Kirk, 2011; Reupert, Deppeler, & Sharma, 2015). However, parental attitudes toward inclusion may differ based on the type of disability. For example, Kasari, Freeman, Bauminger, and Alkin (1999) claimed that parents of children with Down syndrome were significantly more likely to support inclusion whereas parents of children with autism were more likely to promote mainstreaming or only part-time placement in general education classrooms. Further, in Palmer, Fuller, Arora, and Nelson (2001), parents reported that their children's medical needs, lack of self-help skills, lack of language, and sensory impairments prevented them

from being included in general education classrooms. Also, Leyser and Kirk (2004) found that parents of children with mild disabilities were more supportive of inclusion compared to parents of children with severe disabilities. These findings also demonstrated the complicated nature of the inclusion process due to the varying needs of diverse groups of students.

Previous research has identified that parents of students with disabilities had positive attitudes towards the idea of inclusion, however they still hold several concerns and reservations. One prominent concern was that other children who do not have disabilities might isolate, ridicule, or reject their children (Garrick Duhaney & Salend, 2000). In Leyser and Kirk (2004), responses from parents of 437 students with disabilities of all ages revealed that they were concerned about the emotional well being of their child and the possible social isolation of their child in inclusive environments. Leyser and Kirk (2011) later reported that one-fourth of parents of children with Angelman syndrome felt that their children were more likely to be socially isolated in an inclusive school. Further, in a study of 140 parents of students with severe disabilities in special education classrooms, parents feared that their children would be mistreated, ridiculed, or even harmed by other students without disabilities in inclusive settings (Palmer et al., 2001). For parents, the struggle for inclusion is about more than having their children physically present in the classroom; it is about having their children included in the social aspects of the school, to be valued members of the classroom, and for teachers to promote social interaction between students with and without disabilities (Bennett et al., 1997; Resch et al., 2010). For inclusion to be successful, students with learning difficulties need to feel accepted by students and teachers. By creating inclusive

schools, we can work towards building an inclusive society, in which we integrate individuals with learning difficulties into all aspects of the community. This process includes identifying the areas in which students are not fully included or accepted by their peers to provide them with additional support.

### **3.2 The Theory of Planned Behaviour**

The theory of planned behaviour (Ajzen & Madden, 1986) provides one explanation of why students may socially exclude their peers with learning difficulties. Based on this theory, an individual's behavioural intentions follow from his or her beliefs about performing a particular behaviour. These beliefs are not necessarily based on facts and may be inaccurate or biased, may be affected by one's environment, exposure to new information, as well as values and prejudices (Ajzen & Fishbein, 2005). The three types of beliefs that influence an individual's intentions to perform a particular behaviour are behavioural beliefs, normative beliefs, and control beliefs. Behavioural beliefs influence an individual's attitudes toward performing the behaviour. The emphasis is on an individual's attitude toward the *behaviour*, not their attitudes toward *individuals or objects*. An individual's normative beliefs form the subjective norm, which encompasses their appraisal of whether important others in their life will approve or disapprove of them performing the behaviour. Important others may include friends, classmates, parents, teachers, principals etc. Control beliefs contribute to an individual's sense of perceived behavioural control, which is their appraisal of whether or not a behaviour will be easy or difficult, or whether they have the resources necessary to perform the behaviour. According to Ajzen and Fishbein (2005), when an individual believes that they have the skills needed to carry out the behaviour and can overcome any barriers,

they are likely to develop a strong sense of perceived behavioural control. Overall, the more favourable the attitude toward the behaviour, the more positive the perceived subjective norm is, and the greater the perceived behavioural control towards a particular behaviour, the stronger an individual's intention to perform that behaviour will be (Ajzen, 1991).

In prior studies with parents of students with disabilities, the theme of subjective norms emerged repeatedly. Important others that make up the subjective norm component of the theory of planned behaviour may include other students, teachers, principals, parents, and so on. Bennett et al. (1997) found that teachers held less favourable attitudes toward inclusion compared to parents. If teachers hold less than favourable attitudes toward inclusion, it is likely that the students will pick up on this, which will in turn influence how they behave towards students with learning difficulties. Elkins et al. (2003) reported that the positive attitudes of teachers and principals were the most important facilitators of successful inclusion according to parents. Further, in Soodak and Erwin (2000), parents of children with significant disabilities claimed that the principal was instrumental in creating an inclusive school environment for students and their families. The policies and practices of the school implemented by the principal sent a message to parents about how school personnel viewed their children. Difficulties arose for parents when schools sent contradictory messages by saying that they supported inclusion but then imposed restrictions on the inclusion of their child. These three studies demonstrated the importance that attitudes of school personnel and the school principal had on the inclusion of students with learning difficulties. Based on the subjective norm component of the theory of planned behaviour, when school personnel hold negative attitudes toward

inclusion, this is likely to impact how students behave towards students with learning difficulties. Further, in Leyser and Kirk (2011), parents expressed concern over parents of students without disabilities resenting the inclusion of their child. If parents of students without learning difficulties hold negative views towards inclusion, this is likely to influence the attitudes of their children toward students with learning difficulties.

The themes of attitudes and perceived behavioural control are evident in studies with students. For example, some issues that may make it difficult for students to interact with students with learning difficulties may include difficulties with communication or challenging behaviour (Copeland et al., 2004), as well as a school structure that physically separates students with learning difficulties from other students (Copeland et al., 2004; Maras & Brown, 2000; Siperstein et al., 2007). As for the attitudinal component of the theory of planned behaviour, several studies have indicated that many students hold negative attitudes toward students with disabilities (e.g., Copeland et al., 2004; McDougall et al., 2004; Nowicki, 2012; Nowicki, 2006; Ralli et al., 2011). According to this theory, negative attitudes may influence students' intentions toward interacting with students who have learning difficulties.

Overall, prior research has demonstrated that parents are supportive of the inclusion of their children with disabilities in general education classrooms. However, they are concerned about their children being rejected or victimized by their peers in inclusive environments. Given that inclusion has increasingly been the trend over the last few decades, we were interested in asking parents whether their high-school aged children with learning difficulties were, in fact, being excluded by their peers. The purpose of this study was to determine parents' perspectives on whether or not other

students socially excluded their adolescent children with learning difficulties at school, as well as their perceptions on why. To do this, we utilized Trochim's (1989) concept mapping methodology to ensure that the data reflected parents' perspectives since this methodology utilizes intact statements from participants that retain their original meaning as units of analysis. Discussed below is a brief discussion of concept mapping methodology and the steps involved in the process. We hypothesized that parents' statements would reflect issues related to attitudes, subjective norms, and perceived behavioural control based on the theory of planned behaviour (Ajzen & Madden, 1986).

### **3.3 Concept Mapping Methodology**

There are several stages in the concept mapping process. The first step is to create units of analysis, which consist of a single phrase that contains only one concept (Jackson & Trochim, 2002). These phrases can be extracted from participants' responses from focus groups, surveys, or interviews. For the present study, the authors chose to conduct individual interviews. All unique statements are then extracted from interview transcripts, which participants are later asked to sort into piles in a way that is meaningful to them. By asking participants to sort the statements, each participant individually conducts a thematic analysis of the data set, which reduces researcher bias. Following the sorting task, the participants are asked to rate the statements. The data is then analyzed using multidimensional scaling, which results in a point map in which each point represents a participant's statement, and hierarchical cluster analysis, which groups the points into clusters (Kane & Trochim, 2007). This process results in a visual representation of participants' perspectives and the relationship between their ideas, providing insight into

group perspectives (Burke et al., 2005). How the authors' utilized concept mapping methodology for the present study is discussed in more detail below.

### 3.4 Method

#### 3.4.1 Participants

**Interview phase.** Twelve parents from southern Ontario (10 female, 2 male) participated in the interview phase of this study. Kane and Trochim (2007) recommend having between 10 and 20 participants for a concept mapping study, so this was within the acceptable range. Participants had between one and six children ( $M = 2.6$ ,  $SD = 1.30$ ) and had at least one child with a diagnosed learning difficulty attending secondary school at the time of the study. Types of learning difficulties listed by participants included: autism (6), attention deficit hyperactivity disorder (ADHD, 5), Asperger's (2), developmental disability (1), selective mutism (1), Tourette's (1), and learning disabilities (6). Several of these were comorbid; ADHD was frequently listed as a second diagnosis. The participants' children with learning difficulties experienced a range of educational placements, but all of them spent at least part of their day in general education classrooms.

**Sort phase.** Nine participants from the interview phase also completed the sorting phase. An additional three parents of secondary school students with learning difficulties were recruited to bring the total number of sorters to 12. However, two participants did not follow the instructions and sorted the statements based on agreement. Therefore, the sort data from these two participants were excluded from the analysis. The final data includes the sorts from the remaining 10 participants. It was not possible to extract the

demographic information for the additional three participants since the sorting and rating tasks were anonymous, so the demographic information for all participants is provided. Participants were from Southern Ontario (1 male, 9 female,  $M_{age} = 47.5$  years, age range: 39-54 years), and had at least one child with a learning difficulty attending secondary school at the time of the study. Types of learning difficulties listed by participants who completed the sort phase were: Autism (4), Asperger's (1), ADHD (5), learning disabilities (6), dual diagnosis gifted with a learning disability (2), Tourette's (1), and obsessive-compulsive disorder (OCD, 2). Several of these were comorbid, and ADHD was frequently listed as a second diagnosis.

**Rating phase.** Twelve participants from Southern Ontario completed the rating task (2 male, 10 female,  $M_{age} = 48.9$  years, age range: 39-60 years). As before, nine of these participants were from the interview phase, and an additional three were recruited to bring the number to 12. Participants had at least one child with a learning difficulty attending secondary school at the time of the study. Types of learning difficulties listed by participants who completed the rating phase included: Autism (6), Asperger's (2), ADHD (5), learning disabilities (6), OCD (2), and Tourette's (1). Once again, the majority of these were comorbid, meaning that participant's children had one or more of the learning difficulties listed above.

### 3.4.2 Procedure

Before commencing data collection, ethics approval was obtained from our university ethics review board and the local Catholic school board's ethics review committee. Several methods were utilized for participant recruitment, including sending letters of information home with secondary school students, and posters displayed on



school websites. Also, notices were posted on websites, social media pages, and newsletters for local disability awareness groups, including Autism Ontario and the Learning Disability Association of Ontario. Permission was obtained from each organization by either email or phone. Posters were also placed in public spaces including libraries, churches, and businesses, and were uploaded to the social media sites Facebook and Twitter. Participants were also recruited via word of mouth and convenience sampling. Convenience sampling methods were used for this study to try and reach as many interested participants as possible. Interested participants were asked to contact the first author via email and were then sent a copy of the letter of information. Verbal consent was obtained from all participants. Once all 12 interviews were complete, participants who expressed interest in participating in the sorting and rating phases of the study were once again contacted by email and phone and provided with instructions for completing the sorting and rating tasks online. Due to attrition from the interview phase to the sorting and rating phase, an additional three participants were recruited via word of mouth and referral. These participants were also sent letters of information, consent forms, and instructions for completing the sorting and rating tasks online by email.

**Interview phase.** All of the interviews were conducted over the phone except for one interview, which was conducted in person at the participant's home at their request. Interviews were scheduled at a date and time that was convenient to the participant. All participants consented to be recorded, and these audio-recordings were later transcribed. Interviews were between 13:33 and 28:02 minutes in length with the average interview being 20:38 minutes. First, participants were asked a few demographic questions about their children including how many children, grade, age, gender, and whether or not they

had a child with a learning difficulty. They were also asked to name the learning difficulty. Following this, participants were asked a few warm-up questions about students with learning difficulties, such as “Can you give me some examples of the kinds of things that high school students who have learning difficulties would find difficult at school?” Finally, the focal question, “Are high school students with learning difficulties sometimes left out at school? Why or why not?” was asked.

**Data preparation.** All responses that answered the focal question were extracted from interview transcripts. The responses were broken down so that each statement included a single coherent thought. For example, the following statement contains descriptions of both inclusion and exclusion: “There are sometimes when they come home and they tell us these wonderful stories of inclusion and the other kids in the school but lots of times they come home and they'll tell you stories about being bullied and the other kids actually saying to them you're different I don't like you.” Therefore, this response was divided into the statements “There are sometimes when they come home and they tell us these wonderful stories of inclusion” and “Lots of times they come home and they'll tell you stories about being bullied and the other kids actually saying to them you're different I don't like you.” This process resulted in 252 statements. The first two authors then individually coded each of the statements as unique, redundant, or irrelevant. Following this, the authors compared each of their codes. For any statement for which there was a discrepancy between each author's codes, a discussion took place about whether or not the statement should be included with each author providing their rationale. This process resulted in a final list of 103 unique statements. The statements

were then edited as needed for clarity and entered into the web-based Concept Systems Global MAX software (Concept Systems, 2013) for the sorting and rating phase.

**Sorting and rating phase.** All participants completed the sorting and rating tasks online at a time of their choosing. Participants were asked to sort the list of 103 statements into piles according to their view of their meaning or theme “in a way that makes sense to you”. They were asked not to sort the statements according to priority or value, such as 'important', 'hard to do', or 'agree'. They were also asked to give each pile a label that described its theme or contents. The average number of piles created by participants was 11.7 (minimum = 6, maximum = 24,  $SD = 5.94$ ). For the rating phase, participants were asked “On a scale of 1 to 5, please rate how strongly you agree or disagree with each of the following statements where 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree.”

### 3.5 Results

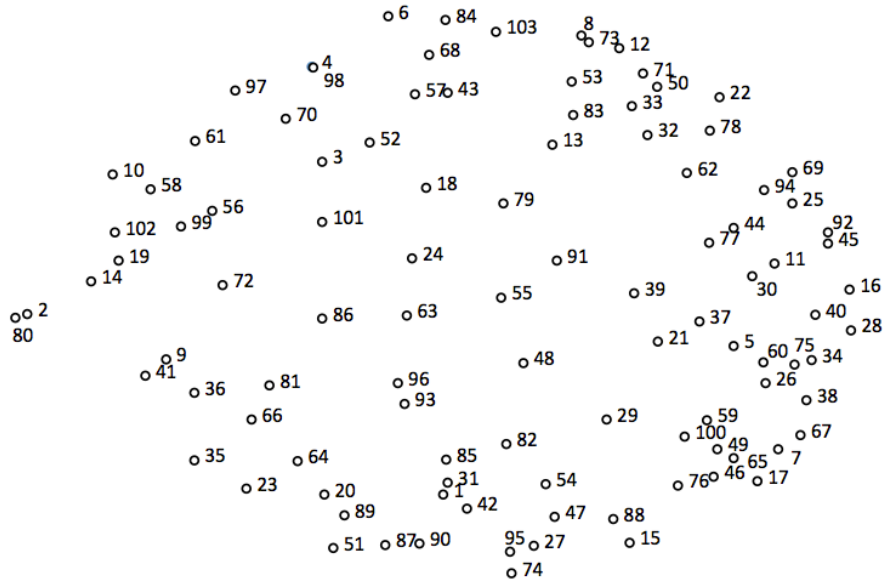
#### 3.5.1 Multidimensional Scaling

Participants' sorting data were analyzed using the Concept System Global MAX software (Concept Systems, 2013). A two-dimensional point map of the distances between statements based on the sorts of the 10 participants was created using multidimensional scaling (see Figure 5). Each point on the map represents a statement, and the distances between the points represent thematic similarities as perceived by the participants. Thus, statements closer together on the map were more likely to be sorted together by participants (Jackson & Trochim, 2002). For example, Statement 2 “The majority of parents aren't as involved and the responsibility is passed on more and more

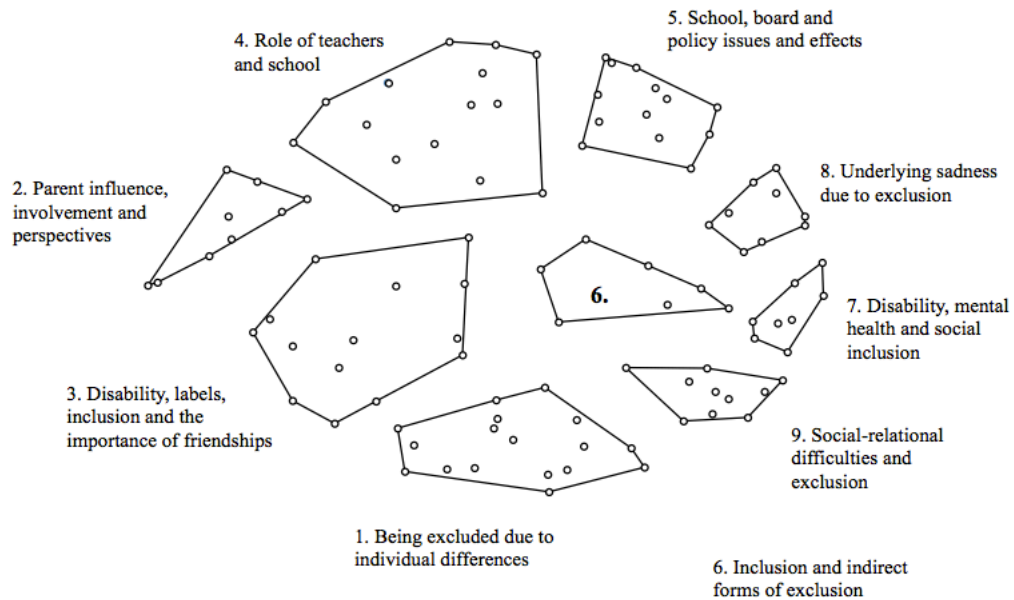
to the students” and Statement 80 “I think part of the issues that are out there is quite often parents don't take the time to really understand what's going on with their child” are both related to the behaviour of parents and are grouped together closely on the point map, which indicates that participants sorted them together frequently.

### **3.5.2 Hierarchical Cluster Analysis**

Hierarchical cluster analysis groups statements that are close in proximity on the point map (Kane & Trochim, 2007). The cluster analysis can create as many clusters as there are statements. Based on the number of statements and the average number of piles created by the participants, we created 11 concept maps, ranging from five to 15 clusters. It was apparent with the 15-cluster solution that several of the clusters divided statements that were thematically similar to one another, so we chose not to examine cluster solutions higher than 15. In order to determine the ideal number of clusters for this study, we started by examining the two clusters that merged when moving from the 15-cluster solution to the 14-cluster solution, a process outlined in Kane and Trochim (2007). We continued this process of examining only the two clusters that merged at each cluster level, making notes about whether the statements in each merged cluster were thematically similar to other statements within the same cluster. We also examined the average bridging values for each cluster within each of the cluster solutions. The bridging value indicates on a scale between 0 and 1 how frequently a statement was sorted with other statements within the same cluster. A low bridging value indicates that statements were sorted together frequently with other statements in that cluster (Jackson & Trochim, 2002). After an extensive examination of the themes and bridging values for each cluster,



**Figure 5.** Point map of 103 statements in response to the question “Are high school students who have learning difficulties sometimes left out at school?”



**Figure 6.** Nine cluster map of 103 statements in response to the question “Are high school students who have learning difficulties sometimes left out at school?”

a nine-cluster solution was chosen as the best fit for the data (See Figure 6). Statements within each cluster were thematically similar to other statements within the same cluster, and the majority of the clusters had low average bridging values. The bridging values for each statement and the average bridging values for each cluster are shown in Table 3.

### **3.5.3 Stress Value**

The stress value measures the degree to which the distances on the point map are different from the input data. A high stress value indicates that the point map does not represent the input data well, whereas a low stress value indicates that the point map is a good representation of the input data (Kane & Trochim, 2007). High stress values may suggest that there is more complexity in the data than can be represented in a two-dimensional map, or that there was high variability in how the participants sorted the statements, or both (Kane & Trochim, 2007). The final stress value for this study was 0.3714. Overall, 95% of concept mapping studies have stress values that fall between 0.205 and 0.365 (Kane & Trochim 2007). Therefore, the stress value for this study was slightly above average, which could be due to the complex nature of the statements.

### **3.5.4 Labelling the Clusters**

The final step in concept mapping analysis is to choose appropriate labels for each of the clusters in the final cluster solution. During the sort phase, participants were asked to give each of their piles an appropriate label or title. The first author read through the labels created by participants for each cluster. Two of the final labels used were taken directly from participants' labels (Cluster Five: School, Board, and Policy Issues and Effects and Cluster Nine: Social-Relational Difficulties and Exclusion). The remaining

Table 3

*Cluster items, bridging values, and average ratings for concept map*

<b>Concept and statement</b>	<b>Bridging value</b>	<b>Average rating</b>
<b>Cluster one: Being excluded due to individual differences</b>	<b>0.25</b>	<b>3.54</b>
82. For my kids, they have a whole pile of friends with Asperger's and no neurotypical friendships.	0.05	2.92
88. Since most conditions are comorbid, things like anxiety and depression really prevent some kids from establishing themselves in the social hierarchy.	0.09	4.08
54. Sometimes it is self-exclusion too because kids with learning difficulties are not that interested.	0.14	3.58
31. I think the label makes kids with learning difficulties easier targets.	0.14	3.00
27. There is no bullying but other kids also don't necessarily befriend kids with learning difficulties.	0.15	3.08
74. Kids with learning difficulties might say "oh I have a lot of friends" but really they're people that they know by name and they say hi politely but they are not really friends they hang out with.	0.16	4.09
85. Writing your tests in the resource room or the library makes you stand out if you are not writing with the rest of the class but then that's something that's helpful for them.	0.16	3.83
47. There are still social classes in life and I think that certain people are drawn to other people so sports people are drawn to sports people and gamers are attracted to gamers.	0.17	3.75
15. Kids with learning difficulties socially lag and can be behind their peers in terms of interests, so those are the things that cause more difficulties in the social interactions.	0.19	4.17
1. I don't know if exclusion is because of the learning difficulties per se.	0.23	3.30



90.	When our child tries to interact with other kids and be funny which we encourage sometimes other kids kind of outcast him for that role.	0.25	3.58
42.	I personally experience that whether or not they are socially included comes down to the personality of the child.	0.29	3.33
95.	Students with learning difficulties don't go to parties or they don't go for coffee or whatever is the trend.	0.29	3.33
87.	The more something is noticeably different, the more likely a student is going to be marginalized by that whether it's a disability, or race, or gender, or orientation, or social economic status, any of those factors.	0.32	4.00
89.	Dances, if you can't attend something where there is a lot of noise, a lot of lights, a lot of confusion, they tend to get shunned.	0.44	3.33
51.	Lots of times our kids come home and they'll tell us stories about being bullied and the other kids actually saying to them you're different I don't like you.	0.46	3.42
20.	I think there are issues around comprehension.	0.70	3.5
<b>Cluster two: Parent influence, involvement and perspectives</b>		<b>0.73</b>	<b>3.12</b>
2.	The majority of parents aren't as involved and the responsibility is passed on more and more to the students.	0.54	2.84
99.	There are times when our children come home and tell us wonderful stories of inclusion.	0.54	3.08
80.	I think part of the issues that are out there is quite often parents don't take the time to really understand what's going on with their child.	0.60	2.92
56.	There doesn't seem to be much that they can join that is athletic.	0.61	3.25
19.	My child cannot attend the pep rallies because there is far too much noise and there is far too much to take in.	0.78	3.58
102.	The only part that I find difficult is the financial burden of it because its almost like every other week they've got a school trip or an activity that requires some sort of financial commitment.	0.80	2.75
58.	I've always taught my child that if you don't like somebody, then just stay away from them.	0.82	3.00
14.	For group work, my child gets paired with somebody who's not there that day to choose.	0.92	3.27

10.	There's the battle of inclusion - if the student isn't able to learn to the best of their ability in the regular classroom then they're removed from the classroom and segregated.	1.00	3.33
<b>Cluster three: Disability, labels, inclusion and the importance of friendships</b>		<b>0.50</b>	<b>3.47</b>
96.	I don't think you could assimilate all children with learning difficulties because of their severe exceptionalities.	0.17	3.67
24.	My daughter met her friends through resource.	0.19	3.36
63.	There are circumstances I know where students have learning disabilities and their grades are impeded because of it, and they can't play the extra-curricular sports because they are not making the grade criteria.	0.20	3.67
93.	But now with so many diagnoses I fear that kids with learning difficulties won't get the jobs because people might be afraid of the label.	0.28	3.92
86.	One of the most important things in your life are your friends, your peers are the ones that are going to be with you in school, and if you keep that friendship it is going to be for your life.	0.36	3.25
64.	Kids with learning difficulties have their own little table in the cafeteria but they don't really interact with anybody else.	0.45	3.25
81.	Kids with learning difficulties have the same opportunities to go to things; they sign up for things.	0.50	2.33
72.	When your peers are not aware of what it means to have a disability, they don't pay attention, even if you are in the same class.	0.52	3.33
66.	The more they fit in, the less likely they are going to be left out.	0.58	3.75
36.	I think friendship is born out of the day-to-day activities.	0.66	4.27
9.	If the classroom is a segregated classroom it is going to be worse, because you are going to socialize with the ones that you are with.	0.67	3.54
23.	People are seeing the label first instead of the person.	0.70	3.42
41.	One of the other kids in the class said why are you picking on him? They said I'm picking on him because he is special needs.	0.74	3.00
35.	My child hasn't tried out for school teams.	0.93	3.91

<b>Cluster four: Role of teachers and school</b>		<b>0.38</b>	<b>3.64</b>
84.	My child had to move to different schools because supposedly they couldn't handle her exceptionalities.	0.10	3.08
68.	When I've gone in to speak to the teachers they said that they try to keep an eye on things in terms of bullying or any sort of social interactions, but they can't keep an eye on everything.	0.16	3.58
43.	There are probably very many cases where teachers are making the wrong decisions.	0.17	3.92
18.	I can't really remember or recall a time where my child has been left out because of her learning disability.	0.19	1.19
79.	Kids with learning difficulties are not often recognized; it might be seen as laziness or not trying your best.	0.22	4.17
101.	When our child is in that mainstream hallway with hundreds of kids walking around him in between periods or at lunch time, the other kids do try to interact with him.	0.26	2.58
57.	My child goes on some of these sporting events where the other special needs programs in the area they get together and they compete.	0.26	3.25
103.	The idea for me is that everybody is included, but the ones that need help, doesn't matter the disability, they should receive one-on-one help every single day.	0.35	4.33
98.	There are some teachers out there that are just not knowledgeable nor are they empathetic.	0.36	4.33
52.	My child has trouble in group dynamics so the teachers will often let him do the entire assignment by himself.	0.36	3.25
6.	I think generally the system the way it's in place it is based on the diagnosis and the medical model instead of just looking at the difficulties a child is experiencing.	0.39	4.08
3.	If the kids get to choose their own group to work on some assignment, kids with learning difficulties are sometimes the last one chosen.	0.43	4.23
4.	There's been a couple of times that getting the support she deserved was a little bit of a challenge, for example, a teacher refusing to send her to the resource room to write a test or something like that.	0.43	3.77

97.	There are some resources but I find that I as a parent have to constantly be in contact with the resource teacher and with the teachers individually and keep on top of things personally.	0.69	4.17
70.	In high school, with behavioural people or people that don't learn as well, they get categorized into groups.	0.79	3.67
61.	There is not a lot of parent support, like parent training on how to support your child, or best practices.	0.84	3.83
<b>Cluster five: School, board and policy issues and effects</b>		<b>0.15</b>	<b>3.50</b>
8.	They have like an ASD specialist but there's two of them for the whole school board so that doesn't get very far.	0.00	4.42
12.	Our school system doesn't lead to equal chances for students.	0.04	3.50
71.	I don't think our current school-based model is accepting of differences and different ability.	0.04	3.33
50.	I think the school boards are in a particularly difficult position to integrate.	0.10	2.92
73.	In terms of the structure of the school I know that there is a class for more severely disabled children.	0.12	3.92
33.	They talk about it in school that kids have different ways of learning and that everybody's different and that something different isn't bad.	0.14	3.50
32.	I'm unaware of a situation where students with learning difficulties would be excluded from a certain event, trip, or classroom project.	0.18	2.58
53.	In my child's school they do their own sort of inclusive activities.	0.19	2.92
22.	I know a great many students in high school who volunteer their time and energy in those developmental classrooms so I feel in that way it's still inclusive.	0.21	3.25
13.	If the high schools could find everybody's gemstone and shine, polish, and help them have an area of expertise I think that would go a long way in popularity.	0.22	3.58
62.	Kids with learning difficulties that are not necessarily disruptive or anything in class aren't recognized because they can get by and I think it catches up to them at a certain point.	0.24	4.25

78.	There have always been children with severe disabilities that were included throughout the whole 8 years at the elementary level so those same classmates end up being caregivers to the children with disabilities as they go through high school.	0.24	3.67
83.	I do think that the high school itself has made great gains in ensuring that kids are included in general.	0.26	3.67
<b>Cluster six: Inclusion and indirect forms of exclusion</b>		<b>0.09</b>	<b>3.69</b>
21.	I think kids generally have a better awareness about learning difficulties now.	0.04	3.33
39.	I don't know per se if it's a friendship but you will have those people who will offer to help because in their moral fiber they feel sad for them, they want them to succeed, they want other people to leave them alone.	0.07	3.42
91.	I don't know if they are left out, but they are left behind.	0.07	3.50
5.	It is very difficult to either work with a group or another person that doesn't want to work with you.	0.09	4.54
37.	It's a roller coaster ride.	0.11	4.42
55.	I think exclusion also affects their ability to achieve in a regular way.	0.12	3.50
48.	It's not that they are not included, but I don't think they have enough information (e.g., to know when there is going to be a semi-formal).	0.12	3.17
<b>Cluster seven: Disability, mental health and social inclusion</b>		<b>0.24</b>	<b>3.94</b>
26.	Socially too I can imagine having a learning difficulty must lead to a sense of panic because there's a need to want to save face.	0.14	3.58
60.	When everybody wants to be the same its difficult for kids with learning difficulties to assimilate with the rest of the kids because they are different.	0.17	3.67
38.	I think children that are maybe above average intelligence that have these struggles, they are the ones that do get kind of lost.	0.19	4.08
34.	There are opportunities but unless we get some of the underlying things like anxiety and depression taken care of, inclusion is difficult.	0.20	4.00

75.	There's a lot of people working to make it better but there's still, whatever you want to call it, the uncomfortability of difference.	0.28	4.08
28.	I think exclusion affects kids socially because it affects how they communicate or don't communicate inside of the school.	0.32	3.92
16.	I could certainly see how being included would be even more of a challenge in some ways if you had learning difficulties or physical difficulties.	0.32	4.17
40.	My son has gross motor difficulties so his athletic abilities are limited and as a boy that's affected him socially because he has not participated in schoolyard activities.	0.32	4.00
<b>Cluster eight: Underlying sadness due to exclusion</b>		<b>0.30</b>	<b>3.64</b>
77.	If you are not enjoying the academics or you are not finding success there, I think you are less likely to engage in other avenues at school, whether it is the social or the extra-curricular.	0.18	3.92
44.	You don't want to force other kids to have to work with somebody who can be very difficult.	0.21	3.33
30.	I don't want to sound discouraging but you find out, when kids get involved, you see that there is still intolerance.	0.21	4.00
92.	I know that his friends are aware of some of his struggles but I don't know to what extent he's been telling them because he probably has just accepted it as part of who he is so he doesn't see it as something different.	0.29	3.50
94.	I believe that the school is working on integration as best as they can, but they have to keep a balance between typical students and students that have disabilities.	0.32	3.17
25.	I think kids with learning difficulties have the same opportunities on paper, but maybe not in reality.	0.37	3.50
45.	There are moments of greatness and moments of profound sadness where you feel like you've got to start climbing that ladder again.	0.37	4.17
11.	I'm glad that my kids have like one or two others that they can count on.	0.38	3.58
69.	There are opportunities but the circumstances take those opportunities away.	0.41	3.58

<b>Cluster nine: Social-relational difficulties and exclusion</b>	<b>0.12</b>	<b>3.66</b>
46. Our child lacks the social skills and he struggles there.	0.07	4.17
65. I think his giftedness actually contributes to some of his social issues because I don't think he has an understanding of other people and how they think.	0.08	3.83
100. I don't think that going to the resource room bothers my son at the moment but in grade 9 he was very resistant to it because he didn't want to be seen as different.	0.09	2.83
17. Children with autism don't know the significance of what is socially appropriate in every case.	0.09	4.50
76. In grade school, he didn't want to use his laptop because it made him different.	0.10	3.00
59. School staff want kids with learning difficulties to go to the cafeteria and socialize but I think that they stick with people who are nice to them.	0.12	3.75
29. Whether or not we can chalk it up to kids being kids or parents not socializing their kids properly, victimization is there.	0.14	3.33
7. I think there are issues around behaviour.	0.15	4.00
49. If you had maybe more of a socially unacceptable learning difficulty perhaps students would not be as willing to be your friend.	0.17	3.58
67. Kids with learning difficulties can stand out a bit but they are not necessarily aware of that.	0.23	3.58

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labels were created by combining participants' labels that were the most relevant to the themes of each cluster, except for the label for Cluster Eight (Underlying Sadness Due to Exclusion), which was written by the authors. A detailed description of the themes within each cluster is provided below, followed by a summary of the rating data.

### **3.5.5 Cluster One: Being Excluded Due to Individual Differences**

This cluster included 17 statements and had bridging values in the low to middle range (minimum = 0.05, maximum = 0.70,  $M = 0.25$ ,  $SD = 0.16$ ). The overarching theme for statements in this cluster was being excluded for being different. This was particularly evident in the statements "I think the label makes kids with learning difficulties easier targets", "The more something is noticeably different, the more likely a student is going to be marginalized by that whether it's a disability, or race, or gender, or orientation, or social economic status, any of those factors", and "Lots of times our kids come home and they'll tell us stories about being bullied and the other kids actually saying to them you're different I don't like you." The relationship between the personality of the child and whether or not they were included was clearly stated by a parent who said, "I personally experience that whether or not they are socially included comes down to the personality of the child." Further, the statements "There are social classes in life and I think certain people are drawn to other people so sports people are drawn to sports people and gamers are attracted to gamers" and "Kids with learning difficulties socially lag and can be behind their peers in terms of interests, so those are the things that cause more difficulties in the social interactions" referred to the value of shared interests in the development of friendships. The following statement highlighted the relationship between mental health challenges and social relationships "Since most things are comorbid, things like anxiety



and depression really prevent some kids from establishing themselves in the social hierarchy.”

### **3.5.6 Cluster Two: Parent Influence, Involvement and Perspectives**

This cluster had nine statements and an average bridging value of 0.73 (minimum = 0.54, maximum = 1.00,  $SD = 0.16$ ). The themes in this cluster were less cohesive compared to the other clusters, which may be explained by the higher bridging values. Overall, statements in this cluster reflected the experiences or behaviours of parents. For example, the statements “The majority of parents aren’t as involved and the responsibility is passed on more and more to the students”, and “I think part of the issues that are out there is quite often parents don’t take the time to really understand what is going on with their child” depicted parent involvement. The statements “There are times when our children come home and tell us wonderful stories of inclusion”, and “I’ve always taught my child that if you don’t like somebody, then just stay away from them” painted a picture of parents and their children engaging in discussions about school and interacting with other students. One interesting comment, “The only part that I find difficult is the financial burden of it because its almost like every other week they've got a school trip or an activity that requires some sort of financial commitment”, demonstrated the financial burden placed on parents in order for their children to participate in school-related events and activities. The statement “There's the battle of inclusion - if the student isn't able to learn to the best of their ability in the regular classroom then they're removed from the classroom and segregated” shed light on the struggle parents of students with learning difficulties often face when fighting to have their child included in the regular classroom.

### 3.5.7 Cluster Three: Disability, Labels, Inclusion and the Importance of Friendships

This cluster included 14 statements and had an average bridging value of 0.50 (minimum = 0.17, maximum = 0.93,  $SD = 0.23$ ). The bridging values for statements in this cluster were varied, which is explained by the higher standard deviation. There were two prominent themes in this cluster, the relationship between having a disability or a label and inclusion, and the importance of having friends at school. The statements “I don't think you could assimilate all children with learning difficulties because of their severe exceptionalities”, “One of the other kids in the class said why are you picking on him? They said I'm picking on him because he is special needs”, and “The more they fit in, the less likely they are going to be left out” demonstrated the relationship between having a disability and inclusion. The effects of being labeled was illustrated by the statements “But now with so many diagnoses I fear that kids with learning difficulties won't get the jobs because people might be afraid of the label” and “People are seeing the label first instead of the person.” The importance of developing friendships in school was emphasized by one participant who said: “One of the most important things in your life are your friends, your peers are the ones that are going to be with you in school, and if you keep that friendship it is going to be for your life.” However, since “...friendship is born out of the day-to-day activities” as stated by one participant, it is going to be challenging for students with learning difficulties to develop friendships with other students in the school if they are segregated. The challenge of segregation was also supported by a participant who stated: “If the classroom is a segregated classroom it is going to be worse, because you are going to socialize with the ones you are with.” In fact, several participants alluded to the fact that their children mostly socialized with other

students with learning difficulties, as demonstrated by the statements “My daughter met her friends through resource” and “Kids with learning difficulties have their own little table in the cafeteria but they don't really interact with anybody else.”

### **3.5.8 Cluster Four: Role of Teachers and School**

This cluster included 16 statements and had an average bridging value of 0.38 (minimum = 0.10, maximum = 0.84,  $SD = 0.22$ ). The overarching theme for statements within this cluster was the behaviour of teachers and the structure of the school or the lack of school-based resources. One theme was the expressed frustration with the behaviour of teachers, as illustrated by the statements “There are probably many cases where teachers are making the wrong decisions”, “There are some teachers that are not knowledgeable nor are they empathetic”, and “There's been a couple of times that getting the support she deserved was a little bit of a challenge, for example, a teacher refusing to send her to the resource room to write a test or something like that.” Another primary theme in this cluster was frustration with the school system, including a lack of support and resources for students and parents, schools not being able to handle students with exceptionalities, and issues surrounding diagnosis, labeling, and categorization. The issue of categorization was summarized well by the statement “I think generally the system the way it's in place it is based on the diagnosis and the medical model instead of just looking at the difficulties a child is experiencing.” The idea that all students should receive help regardless of label or disability was supported by the statement “The idea for me is that everybody is included, but the one's that need help, doesn't matter the disability, they should receive one-on-one help every single day.” Statements in this cluster also referred to issues with group work, including students working by themselves

or being the last one chosen for groups by their classmates. For example, the statement “My child has trouble in group dynamics so the teachers will often let him do the entire assignment by himself.”

### **3.5.9 Cluster Five: School, Board and Policy Issues and Effects**

This cluster included 13 statements and had a low average bridging value of 0.15 (minimum = 0.00, maximum = 0.26,  $SD = 0.08$ ). Statements in this cluster also referred to the relationship between school board policies and the inclusion of students with learning difficulties. However, the statements in this cluster referred to both positive and negative aspects of various school policies. For example, the statements “They have like an ASD specialist but there’s two of them for the whole school board so that doesn’t get very far”, “Our school system doesn’t lead to equal chances for students”, “I don’t think our current school-based model is accepting of differences and different ability” and “In terms of the structure of the school I know that there is a class for more severely disabled children” demonstrated negative aspects of the school system. Alternatively, the statements “In my child’s school they do their own sort of inclusive activities” and “I do think that the high school itself has made great gains in ensuring that kids are included in general” reflected ways in which schools have made great strides towards inclusion. The statement “There have always been children with severe disabilities that were included throughout the whole 8 years at the elementary level so those same classmates end up being caregivers to the children with disabilities as they go through high school” demonstrated that including students with disabilities in elementary school led to the social inclusion of these students in high school.

### **3.5.10 Cluster Six: Inclusion and Indirect Forms of Exclusion**

This cluster included seven statements and had a low average bridging value of 0.09 (minimum = 0.04, maximum = 0.12,  $SD = 0.03$ ), which indicated that statements in this cluster were sorted together frequently by participants. Statements in this cluster referred to perceived inclusive behaviours or indirect forms of exclusion. The statement “It’s not that they are not included, but I don’t think they have enough information (e.g., to know when there is going to be a semi-formal)” demonstrated a form of indirect exclusion in that although students with learning difficulties were welcome to attend school events, they may not have been provided with enough information to know how to participate and therefore they were excluded. In addition, the statement “I don’t know if it’s a friendship but you will have those people who will offer to help because in their moral fiber they feel sad for them, they want them to succeed, they want other people to leave them alone” demonstrated a form of indirect exclusion since the behaviour depicted in this statement appeared to be inclusive on the surface, yet since it was not a true friendship, they were still not fully included and accepted by their peers.

### **3.5.11 Cluster Seven: Disability, Mental Health and Social Inclusion**

This cluster included eight statements and had a low average bridging value of 0.24 (minimum = 0.14, maximum = 0.32,  $SD = 0.07$ ). The overarching theme of the statements in this cluster was the relationship between having a learning difficulty, physical disability, or struggles with mental health and social inclusion. For example, the statements “Socially too I can imagine having a learning difficulty must lead to a sense of panic because there’s a need to want to save face” and “When everybody wants to be the same it is difficult for kids with learning difficulties to assimilate with the rest of the kids

because they are different” demonstrated how having a learning difficulty may affect students socially. The statements “I could certainly see how inclusion would be even more of a challenge in some ways if you had learning difficulties or physical difficulties” and “My son has gross motor difficulties so his athletic abilities are limited and as a boy that’s affected him socially because he has not participated in schoolyard activities” demonstrated the perceived effect of physical disabilities on social inclusion. Participants also discussed the influence of comorbid mental health conditions on the social inclusion of students with learning difficulties, as illustrated by the statement “There are opportunities but unless we get some of the underlying things like anxiety and depression taken care of, inclusion is difficult.”

### **3.5.12 Cluster Eight: Underlying Sadness Due to Exclusion**

This cluster included nine statements and had an average bridging value of 0.30 (minimum = 0.18, maximum = 0.41,  $SD = 0.08$ ). For statements within this cluster, there appeared to be a common theme of sadness from the participants due to their children being excluded. This was best illustrated by the statements “I don’t want to sound discouraging but you find out, when kids get involved, you see that there is still intolerance”, “I think kids with learning difficulties have the same opportunities on paper, but maybe not in reality”, and “There are opportunities but the circumstances take those opportunities away.”

### **3.5.13 Cluster Nine: Social-Relational Difficulties and Exclusion**

This cluster included 10 statements and had a low average bridging value of 0.12 (minimum = 0.07, maximum = 0.23,  $SD = 0.05$ ). Statements in this cluster referred to the relationship between difficulties with social skills and inclusion. This was illustrated by

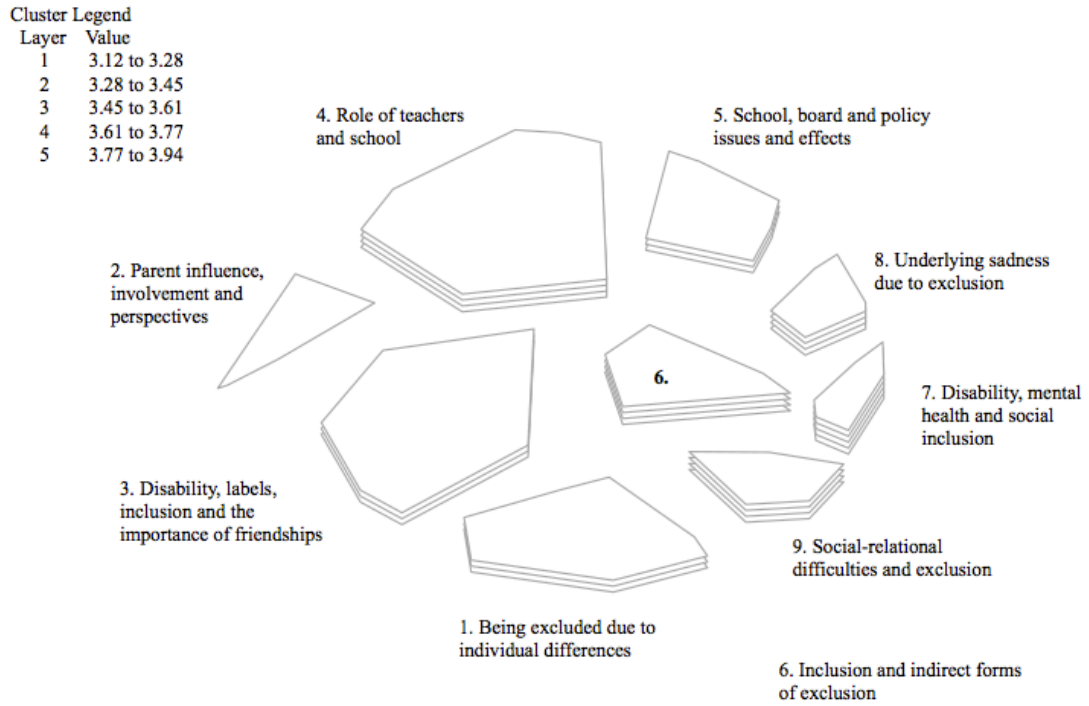
the statements “Our child lacks the social skills and he struggles there”, “Children with autism don’t know the significance of what is socially appropriate in every case”, and “If you had maybe more of a socially unacceptable learning difficulty perhaps students would not be as willing to be your friend.” One participant whose son was given a dual diagnosis of giftedness and a learning disability also discussed how his giftedness contributed to his social issues. Statements in this cluster also referred to how some students were resistant to using services available to them because they were afraid that it would single them out to other students. For example, the statement “In grade school, he didn't want to use his laptop because it made him different.”

#### **3.5.14 Rating Data**

Following the sorting task, participants were asked to rate each of the statements based on agreement. The statements with the lowest agreement ratings were: “I can't really remember or recall a time where my child has been left out because of her learning disability” (1.19), “Kids with learning difficulties have the same opportunities to go to things; they sign up for things” (2.33), “When our child is in that mainstream hallway with hundreds of kids walking around him in between periods or at lunch time, the other kids do try to interact with him” (2.58), and “I'm unaware of a situation where students with learning difficulties would be excluded from a certain event, trip, or classroom project” (2.58). The statements with the highest agreement ratings were: “It is very difficult to either work with a group or another person that doesn't want to work with you” (4.54), “Children with autism don't know the significance of what is socially appropriate in every case” (4.50), “It's a roller coaster ride” (4.42), and “They have like an ASD specialist but there's two of them for the whole school board so that doesn't get

very far” (4.42). Figure 7 depicts the average rating value for each cluster. “Cluster two: Parent influence, involvement, and perspectives” had the lowest overall cluster rating mean and “Cluster seven: Disability, mental health, and social inclusion” had the highest overall cluster rating mean, as shown in Table 4.





**Figure 7.** Cluster rating map in response to the following rating prompt “On a scale of 1 to 5, please rate how strongly you agree or disagree with each of the following statements.”

Table 4

*Mean cluster ratings*

Cluster Name	Overall Cluster Rating Mean (SD)	Number of Statements in Cluster	Minimum Statement Rating	Maximum Statement Rating
Cluster one: Being excluded due to individual differences	3.54 (0.38)	17	2.92	4.17
Cluster two: Parent influence, involvement and perspectives	3.12 (0.24)	9	2.75	3.58
Cluster three: Disability, labels, inclusion and the importance of friendships	3.48 (0.45)	14	2.33	4.27
Cluster four: Role of teachers and school	3.64 (0.66)	16	1.92	4.33
Cluster five: School, board and policy issues and effects	3.50 (0.50)	13	2.58	4.42
Cluster six: Inclusion and indirect forms of exclusion	3.69 (0.50)	7	3.17	4.50
Cluster seven: Disability, mental health and social inclusion	3.94 (0.19)	8	3.58	4.17
Cluster eight: Underlying sadness due to exclusion	3.64 (0.31)	9	3.17	4.17
Cluster nine: Social-relational difficulties and exclusion	3.66 (0.49)	10	2.83	4.50

### 3.6 Discussion

The purpose of this study was to investigate the perspectives of parents regarding the social inclusion of students with learning difficulties in secondary school. According to the 12 participants that we interviewed for this study, students with learning difficulties were not fully included by their teachers and peers. Participants provided several reasons for the exclusion of students with learning difficulties, such as a lack of resources for students with learning difficulties and their parents, and teachers and school systems that were generally unsupportive of students with learning difficulties. Participants also discussed how fear or discomfort surrounding difference may result in social exclusion, and how limited social skills make it difficult for students with learning difficulties to relate to other students.

Several of the participants' statements highlighted the victimization of students with learning difficulties in school, including students being bullied or teased for being different. These statements supported prior studies, which found that students with disabilities were at risk for bullying and victimization in general education classrooms (McDougall et al., 2004; Norwich & Kelly, 2004; Symes & Humphrey, 2010; Zablotsky et al., 2012). Furthermore, although there were positive examples of inclusion in the data, several of these statements had the lowest agreement ratings from parents, which indicates that most of their children were not fully included in school. This finding also illustrates the utility of including an agreement-rating component to enhance the findings of a qualitative study.

Similar to prior research with parents, several participants in this study discussed the behaviour of teachers. For example, Falkmer, Anderson, Joosten, and Falkmer (2015)

conducted a comprehensive review of the perspectives of parents of students with ASD and discovered that the most identified aspects that had implications for inclusion were all in some way related to teachers, including their characteristics, training, knowledge, and ability to communicate and elicit trust. In the present study, one of the statements with the highest agreement ratings was “There are some teachers out there that are just not knowledgeable nor are they empathetic” (4.33). According to the subjective norm component of the theory of planned behaviour (Ajzen & Madden, 1986), the attitudes and behaviour of teachers can influence the attitudes and behaviour of students. Therefore, it is crucial for teachers to promote social interaction between students with and without learning difficulties and to create an accepting environment in which students with learning difficulties are considered valued members of the classroom (Bennett et al., 1997).

Another prominent theme was that students with learning difficulties often found group work challenging because they were frequently the last chosen, were paired with someone who was absent, or were excluded altogether. This is particularly troubling since group work has been found to facilitate social interaction between students (Cambra & Silvestre, 2003; Carter et al., 2005). Group work, also known as cooperative learning, is essential for the inclusive classroom and has positive implications not only for social skill development and peer acceptance but also for academic achievement (Putnam, 2009). Teachers are responsible for ensuring the inclusion of students with learning difficulties in cooperative learning activities. When teachers allow students with learning difficulties to do an assignment on their own, allow them to be chosen last for groups, or pair them with someone who is not present, this sends a message to students that it is

acceptable to be exclusive. Since teachers are trusted and respected figures, and can be a subjective norm, they set a precedent for the students in their class for how to behave towards students with learning difficulties.

Not only are teachers responsible for creating inclusive classroom environments, it is also the responsibility of principals and school administrators. Not only is the principal responsible for facilitating entry into general education classrooms; they are instrumental in creating an inclusive school environment (Soodak & Erwin, 2000). In the present study, several participants described school practices that were not supportive of inclusion. Not only does this send a message to students with learning difficulties that they are not welcome, it also sends a message to other students about how they should behave toward students with learning difficulties. In order facilitate the social inclusion of students with learning difficulties, teachers, principals, and school personnel need to set an example and send a clear message that students with learning difficulties are valued members of the school community.

Participants' statements also revealed concern over the lack of resources for students with learning difficulties in general education classrooms. This finding lends support to previous research, which has found that parents were concerned about their children losing support in general education classrooms. For example, in their review of the literature examining parental perspectives toward inclusion, Garrick Duhaney and Salend (2000) found that parents were concerned about the availability of qualified personnel, the loss of specialized programs, and inadequate teacher training in general education environments. For students to be fully included and socially integrated with

their peers, there needs to be appropriate supports and resources in place to help students succeed in this environment.

It was apparent from several participants that the majority of their children's friendships were with other students who have learning difficulties. Major and Eccleston (2005) discussed how individuals who experience stigma-based discrimination or exclusion might seek alternative forms of inclusion by affiliating with others who are similarly stigmatized. For students with learning difficulties, this may include seeking out other students with learning difficulties to create their social circle. It is possible that students seek out others who are similarly stigmatized as a protective factor, but it is also possible that students tend to form friendships with the individuals with whom they spend most of their day. Results from this study revealed that students with learning difficulties still experience segregation. Segregated students who are in a separate class, spend most of their day in the resource room, or who are paired with an educational assistant apart from other students within the same classroom are less likely to form relationships with other students in the school. Based on the perceived behavioural control component of the theory of planned behaviour (Ajzen & Madden, 1986), students will not develop intentions to interact with one another if they believe that it will be difficult to do so, and physical segregation makes it difficult for social interaction to occur.

### **3.6.1 Limitations**

Only 12 parents participated in the interview phase of this study, and although this is the minimum number of participants recommended by Kane and Trochim (2007), it means that the results of this study may not be generalizable to other parents of students with learning difficulties. For example, participants in this study had children with a wide

range of learning abilities, from learning disabilities to Autism. Prior research has found that parents may have different views towards inclusion based on the severity or type of their child's disability (Kasari et al., 1999; Leyser & Kirk, 2004). Therefore, it is possible that a similar study conducted with a group of parents whose children have different or more severe learning difficulties may have different findings.

In addition, there was attrition between the interview phase and the sorting and rating phases, which meant that the authors had to recruit additional parents to reach the recommended minimum number of sorters. Twenty-two participants started the sorting task, yet only 12 completed it, and only 10 completed it according to the instructions. The low return rate could be due to the complex nature of the sorting task. The sorting task is more time consuming and more cognitively demanding compared to checking off boxes on a questionnaire. However, low response rates have been discussed in other studies with parents of students with disabilities that used surveys or questionnaires, for example, in Bennett et al. (1997).

Based on the interviews with parents, it was evident that their children were attending a variety of educational settings. Although all students spent at least part of their day in general education classrooms, some attended all general education classes but received additional support in the resource room whereas others attended special education classes or autism programs for part of the day. Further, not all participants were from the same school board. Even within the same school board, the extent to which individual students are included in general education classrooms varies depending on their needs and the resources available. In future studies, it may be beneficial to compare

the social inclusion and peer relationships of students with learning difficulties based on whether they experience partial inclusion or full inclusion.

One additional limitation of this study was that the majority of parents were mothers. Out of all of the participants, only two were fathers. It is fairly common for studies with parents to include primarily female participants (Elkins et al., 2003; Resch et al., 2010). It may be of interest in future educational research with parents to investigate why mothers are more likely to participate and how to motivate fathers to be more involved in research studies.

### **3.7 Implications and Conclusions**

One primary purpose for the creation of inclusive schools is to create a more inclusive society. It is within the four walls of the school that students learn from respected adults how individuals with learning difficulties are to be treated. When children with learning difficulties are segregated from other students in school, parents often hold concerns that their children will remain separated from the mainstream community as adults (Scorgie, 2015). We must make a moral commitment to integrate all children within our education system as part of a larger commitment to integrate individuals with disabilities or learning difficulties into society (Oliver, 1996). However, simply placing students with learning difficulties into general education classrooms is not enough. Difference cannot simply be tolerated; it must be accepted, valued, and celebrated. This may require some disability awareness training to educate teachers and students on how to accept those who are different (Oliver, 1996). Ultimately, teachers, principals, and school personnel need to set a positive example for how students with



learning difficulties should be treated. School leaders can work together to create an inclusive school culture wherein students with learning difficulties are considered valued members of the community. Furthermore, the perspectives of parents should be taken into consideration when making decisions that will impact their children. Parents have unique insight into the lives of their children and can provide valuable feedback regarding areas in which their children may need additional support.

Based on the perspectives of parents within this sample, secondary school students with learning difficulties were not fully included by their peers. Students with learning difficulties experienced instances of victimization, segregation, and negative attitudes. However, there were examples of positive experiences of inclusion, which gives us hope that things are moving in a positive direction. Future research should focus on how to improve the attitudes of teachers and principals toward including students with learning difficulties, since the attitudes of respected figures in the school may influence the attitudes of students. Also, researchers need to uncover additional strategies for facilitating social interaction between students with and without learning difficulties in school. This may involve examining any existing barriers that may be preventing students from engaging socially, such as negative attitudes, limited social skills, structural barriers, and lack of resources for supporting students with learning difficulties in inclusive classrooms. In conclusion, the results of this study revealed several areas in which students with learning difficulties still need support, which will be valuable for future research in the area of inclusive education in secondary school.

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## **4 Perspectives of Secondary School Students with Learning Difficulties on Social**

### **Inclusion**

#### **4.1 Abstract**

Although general education classrooms provide many social and academic benefits for students with learning difficulties, the reality is that these students often experience social isolation and victimization by their peers in these environments. To determine why such students experience this kind of isolation, we used concept mapping methodology to survey secondary school students with learning difficulties about their perceptions of their peers', in this case fellow students with learning difficulties, extent of social inclusion in the school environment. We interviewed 12 secondary school students with learning difficulties aged 15 to 18 in southern Ontario. Interviews were audio recorded, and a total of 55 unique statements that answered the focus prompt "Are high school students who have learning difficulties sometimes left out at school? Why or why not?" were extracted from interview transcripts. Participants were then asked to sort the statements into meaningful categories, and then rate them according to level of agreement. The sorting data from each of the participants were then analyzed using multidimensional scaling, which creates a two-dimensional point map of the participants' sorts, and hierarchical cluster analysis, which groups together statements based on their proximity on the point map. A five-cluster solution was selected as the best fit for the data and included the following themes: (1) experiences with exclusion; (2) social isolation; (3) social and academic reasons for exclusion; (4) friendships and supportive people; and (5) positive experiences of inclusion.

Inclusive educational placements put students with learning difficulties alongside same-age peers in general education classrooms, and have been shown to benefit both groups, more importantly the former, socially and academically (Bennett & Gallagher, 2013; Frederickson, Dunsmuir, Lang, & Monsen, 2004; Gasteiger-Klicpera, Klicpera, Gebhardt, & Schwab, 2013; Leyser & Kirk, 2011). More broadly, inclusive schools contribute to the development of inclusive societies by creating welcoming communities for students with learning difficulties and combatting discriminatory attitudes (UNESCO, 1994, page ix). However, for schools to be fully inclusive, and for any benefit to come out of this inclusion, students with learning difficulties must be fully integrated into all aspects of the school and must be accepted by their teachers and peers. Even within general education or "inclusive" settings, students with learning difficulties often experience ongoing separation from the other students (Scorgie, 2015). For example, being placed at the back of the classroom with a teaching assistant separate from the other students in the class. Further, previous studies conducted with students with physical or learning difficulties have found that students frequently reported experiencing bullying, victimization, or social isolation by their peers in mainstream schools (Bitsika & Sharpley, 2014, Norwich & Kelly, 2004; Pivik, McComas, & Laflamme, 2002; Symes & Humphrey, 2010). Experiences with peer victimization can lead to anxiety and depression and a decrease in self-esteem, attitudes towards school, attendance, and grades (Rueger & Jenkins, 2014). Therefore, we must not overlook peer relationships for students with learning difficulties as such relationships are an essential aspect of their school experience. To create a complete picture of the current state of peer relationships for students with learning difficulties in school, it is vital that we obtain the perspectives

of students with learning difficulties themselves. Therefore, for this study, the authors interviewed secondary school students with learning difficulties to determine their views on whether or not their peers socially include students with learning difficulties. We focused specifically on students with learning difficulties since the school experiences of students with physical disabilities can be somewhat different. Also, prior research has found that students with physical disabilities are more likely to be included in the social environment of secondary school compared to students with autism or multiple disabilities (Elkins, Van Kraayenoord, & Jobling, 2003). Further, Pivik, McComas, and Laflamme (2002) highlighted the perspectives of students with physical disabilities aged 9 to 15 years of age on barriers to and facilitators of inclusion. For the present study, the term 'learning difficulties' was used as a general term that included a continuum of learning challenges, such as general intellectual deficiency, general and specific learning disabilities, intellectual disabilities, autism, exceptionalities, lower academic ability, and special needs (Nowicki, 2012).

#### **4.2 Theoretical Framework**

The theoretical framework for this study is the theory of planned behaviour (Ajzen & Fishbein, 2005), which is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980). With this theory, the goal is not only to predict human behaviour, but also to understand it, and to identify the determinants of one's intentions to engage in a particular behaviour (Ajzen & Fishbein, 1980). An individual's intentions are considered to be the immediate antecedents to performing a behaviour and are considered good predictors of specific behaviours (Ajzen & Fishbein, 2005). According to the theory of reasoned action, the following two determinants comprise an individual's intentions: their

positive or negative attitudes towards performing the behaviour, and their perception of the social pressures put on them by important others to perform the behaviour (Ajzen & Fishbein, 1980). The theory of planned behaviour extends the theory of reasoned action by including perceived behavioural control as a determinant of an individual's intentions (Ajzen & Fishbein, 2005). An individual's control beliefs are a product of their perceptions of whether or not a particular behaviour will be easy or difficult to perform. Therefore, the more skills or resources that an individual believes they possess to perform a behaviour or overcome barriers, the stronger their sense of perceived behavioural control (Ajzen & Fishbein, 2005). Thus, an individual is more likely to have positive intentions toward engaging in a behaviour if they have positive attitudes toward the behaviour (attitudes), if they perceive that important others have positive attitudes toward the behaviour (normative beliefs), and if they perceive that the behaviour will be easy to perform (control beliefs) (Ajzen & Fishbein, 2005).

Perception of the likely positive or negative consequences of the behaviour influences attitudes towards engaging in that behaviour. If an individual perceives that the advantages of the behaviour outweigh the disadvantages, they are more likely to have positive attitudes towards it (Ajzen & Fishbein, 2005). It is important to note that this theory's focus is on attitudes toward behaviours, not attitudes toward individuals or objects. Attitudes toward individuals, including in respect to their personality traits and demographic characteristics, are considered external variables, which are likely to influence attitudinal or normative considerations (Ajzen & Fishbein, 1980). Several studies have suggested that students with learning difficulties are less likely to be accepted by their peers without such difficulties (Cambra & Silvestre, 2003; de Boer, Pijl,

Post & Minnaert, 2013; Estell et al., 2008; Maras & Brown, 2000; Nowicki, 2012; Nowicki, 2003; Pijl & Frostad, 2010), with Nowicki (2012) contending that some children demonstrate a clear bias favoring peers without difficulties over those with them. However, students' attitudes towards interacting with students with learning difficulties may be contextual. For example, Ralli et al. (2011) found that children had more positive attitudes towards 'playing with' and 'doing a school project with' peers with learning difficulties but held more negative attitudes towards 'having children with learning difficulties in their school', 'in their classroom' and 'sitting next to them'. It is possible that these children held negative attitudes towards including students with learning difficulties in school or classroom-based activities due to the normative beliefs that the adults in their lives, be they teachers or parents, may have imposed on them regarding the inclusion of students with learning difficulties.

Normative beliefs, also known as the subjective norm component of the theory of planned behaviour, comprise beliefs of whether or not important others approve or disapprove of a particular behaviour (Ajzen & Fishbein, 2005). For students, important others are likely to include peers, parents, siblings, teachers, principals, and so on. When a student perceives that important others expect that student to perform a behaviour or are performing a behaviour themselves, the subjective norm will exert pressure on the student to perform the behaviour as well. Alternatively, if a student perceives that important others hold negative attitudes towards the behaviour, the subjective norm will exert pressure on that student not to perform the behaviour (Ajzen & Fishbein, 2005). When teachers hold negative views towards inclusion, it influences how students in the class perceive and behave towards students with learning difficulties. Several studies in

the area of school inclusion have demonstrated concern over the negative behaviours and attitudes of teachers (Gibb, Tunbridge, Chua, & Frederickson, 2007; Morina Diez, 2010; Pivik, McComas, & Laflamme, 2002). For example, Morina Diez (2010) interviewed adults with disabilities aged 18 to 25 about their prior school experiences and found that they perceived mainstream teachers to be non-supportive of academic and social inclusion. Also, the participants viewed the classroom structure and the execution of classroom tasks to be significant barriers to inclusion. As for the influence of peers, prior research has found that students believed that their peers would hold them in lower regard for being friends with someone with a disability (Kalymon et al., 2010). Also, Siperstein et al. (2007) found that students had higher behavioural intentions to interact with students with intellectual disabilities inside of school compared to outside of school because the social norms and pressures of their peer groups were felt more acutely outside of the school environment.

The factor of perceived behavioural control was included in the theory of planned behaviour since there are often behaviours that individuals perceive to be outside of their control. When individuals possess a strong sense of perceived behavioural control, it is because they believe that they possess the skills and resources necessary to perform the behaviour in question (Ajzen & Fishbein, 2005). Roberts and Smith (1999) used the theory of planned behaviour to explore students' attitudes, behavioural intentions, and actual behaviour towards interacting with students with physical disabilities. Participants included 188 students aged eight to 12 as well as nine students with cerebral palsy. Perceived behavioural control was significantly related to both behavioural intentions and actual behaviour towards students with disabilities. When children believed that it would

be easy to interact with a student with a disability, they readily expressed an intention to do so. When they perceived that it would be difficult, they had fewer intentions to interact with students with disabilities. Roberts and Smith (1999) also found that attitudes were significantly related to behavioural intentions but not actual behaviour towards classmates with disabilities. Thus, despite positive attitudes towards students with disabilities, most children made little effort to integrate children with disabilities into their classroom activities. Therefore, improving positive attitudes is not enough to foster social interactions between students with and without disabilities. Perceived behavioural control must be taken into account.

One factor that is likely to influence a student's perceived behavioural control is the structure of the school or classroom. The physical segregation of students with learning difficulties into special education classes makes it difficult for them to interact with other students in the school. For example, Bunch and Valeo (2004) found that students in schools that had inclusive classrooms were more likely to report having friends with disabilities compared to students from schools that followed a special education model. Another factor that may influence perceived behavioural control is a lack of education or knowledge about students with learning difficulties. For example, in a study by Kalymon et al. (2010), students indicated that they did not have the necessary knowledge or skills to interact with a student with a disability who behaved in a way to which they were not accustomed. Also, prior research has found that secondary school students reported a need for more education and awareness training on disabilities, including developing skills for interacting with students with disabilities (Copeland et al., 2004; Townsend & Hassall, 2007). According to the theory of planned behaviour, it is

also possible that students with learning difficulties who have limited social skills may lack perceived behavioural control to interact with other students, which may lead to self-isolation. Further, in focus groups conducted with adults who have intellectual disabilities, participants reported that it was more difficult to be friends with individuals who do not have disabilities because of their perception of the possible effects of stigma, what they perceived as their potential friends' lack of understanding of their disability, and their doubt as to whether they were 'on the same level' as the potential friends (McVilly et al., 2006).

The social inclusion of students with learning difficulties is a complicated process with many variables and considerations that influence student behaviour. One of the primary goals of inclusive education is to foster social relationships between students with and without learning difficulties. However, students with learning difficulties often experience bullying, rejection, and isolation by their peers in inclusive settings. Therefore, it is critical that researchers continue to explore peer relationships for students with learning difficulties to determine strategies that support students in this respect, which includes understanding the perspectives of students with learning difficulties. However, the voices of students with learning difficulties are often neglected in educational research. Therefore, the present study elicited the perspectives of secondary school students with learning difficulties to determine their views on social exclusion.

This study builds on previous work by Nowicki, Brown, and Stepien (2013), which used concept mapping methodology to elicit the beliefs of students in grades five and six on why their peers with intellectual or learning disabilities were socially excluded at school. In their study, two of the children who participated in the interview phase and



one who took part in the sort phase voluntarily disclosed that they had learning difficulties. The remaining participants did not have learning difficulties. Concept mapping methodology has not been used with a sample composed entirely of students with learning difficulties in past educational research. For the present study, we were interested in whether students with learning difficulties were able to participate in the concept mapping process. There are several benefits to using concept mapping methodology compared to more traditional qualitative methodologies. One of the benefits is that it includes original statements from participants as units of analysis, which highlights participants' voices while maintaining context (Kane & Trochim, 2007). Another benefit is that it includes participants as co-researchers by involving them in the process of analyzing the data by asking them to sort the statements into categories based on meaning, which helps to reduce researcher bias and ensures that the central themes reflect the participants' perspectives. Therefore, the two primary objectives of this study were to (a) determine the perspectives of secondary school students with learning difficulties regarding the social inclusion and exclusion of their peers, and (b) determine whether secondary school students with learning difficulties are reliable participants in the concept mapping process. Based on previous literature, we hypothesized that themes related to the theory of planned behaviour (Ajzen & Fishbein, 2005) would emerge in the concept mapping statements.

### **4.3 Concept Mapping Methodology**

We would like to begin by providing a brief overview of how we used concept mapping methodology for this study. To start, we selected our participant sample, which included secondary school students with learning difficulties. We conducted individual

interviews with each participant to elicit their views on the social inclusion and exclusion of students with learning difficulties. We then extracted all statements that answered the focus question from interview transcripts and compiled a final list of unique statements. Following this, participants were asked to sort the statements into piles "in a way that makes sense to you" and then give each pile a label that describes its contents. Afterwards, participants were asked to rate each statement according to agreement. The data was analysed using multidimensional scaling, which resulted in a point map in which each point represents a participant's statement, and hierarchical cluster analysis, which groups the points into clusters (Kane & Trochim, 2007). A more detailed discussion of this process is provided below.

## 4.4 Method

### 4.4.1 Participants

**Interview phase.** Twelve secondary school students with learning difficulties in Southern Ontario (9 male, 3 female,  $M_{age}=16$  years, age range: 15-18 years) participated in the interview phase of this study. Participants were from a variety of educational placements and experienced inclusion to varying degrees. However, all participants spent at least part of their day in inclusive classroom environments. Type of learning difficulty was indicated by parents, and included: autism (4), attention deficit hyperactivity disorder (ADHD, 5), Asperger's (3), learning disabilities (LD, 5), Tourette's (1), developmental delay (1), selective mutism (1), mood disorder (1), and dual diagnosis gifted and LD (1). Several of these were comorbid, and ADHD was listed as a second diagnosis in all five instances where a diagnosis of ADHD was present.

**Sorting and rating phase.** All but two of the participants from the interview phase also participated in the sorting and rating phases. Due to attrition, two additional students with learning difficulties were recruited to meet the minimum requirement of 10 sorters. These two additional participants were recruited through their parents who were in turn recruited via word of mouth or referral. Eleven participants completed the sorting phase. However, one participant did not follow the instructions for the sorting task, so their data from that task was excluded from the analysis. The concept maps reflect the perspectives of the remaining 10 participants (8 male, 1 female, 1 who chose not to disclose,  $M_{age}= 16.1$  years, age range: 14-18 years). Ten participants completed the rating phase (8 male, 2 female,  $M_{age}=16.4$  years, age range: 14-18 years). Besides one participant who completed the sorting but not the rating and one participant who completed the sorting task incorrectly, all other participants completed both the sorting and rating tasks. Participants were in grades nine through 12 except for one participant who was in high school at the time of their interview but was in their first year of college when the sorting and rating tasks took place.

#### **4.4.2 Procedure**

Ethics approval was obtained from our university's ethics review board and the local Catholic school board's ethics review committee. Students were recruited through their parents, and parents were recruited through letters of information sent home with students, digital posters displayed on school websites, as well as on websites for local disability awareness groups such as Autism Ontario and the Learning Disability Association of Ontario. Posters were also displayed in public spaces, including local businesses, churches, and libraries. Also, digital posters were shared on the social media

sites Facebook and Twitter. Parents were also recruited through word of mouth and referral. Convenience sampling methods were used for this study to try and reach as many interested participants as possible. Parents who expressed interest in the study were sent letters of information and consent forms through email. Parents then indicated if their child was interested in participating and emailed the first author a scanned copy of the signed consent form with both their signature and their child's signature. For their child to be eligible to participate in this study, they had to be attending secondary school at the time of the study and have a learning difficulty. Once all 12 interviews were complete, parents were contacted via phone and email to inform them of the second phase of the study. All 12 students expressed interest in participating in the sorting and rating activities at the end of their interviews. Parents were provided with instructions for their children to participate as well as a link to the sorting and rating tasks via email unless we were asked to contact the child directly.

**Interview phase.** All interviews were conducted by telephone except for one, which was conducted in person at the student's home as per their parent's request. Interviews were audio-recorded with the participants' consent and were later transcribed. Participants were asked to provide their grade, age, and gender. Next, participants were asked the following warm-up questions to determine their understanding of learning difficulties: "Can you tell me why you think some high school students find learning new things difficult?" and "Can you give me some examples of the kinds of things that high school students who have learning difficulties would find difficult at school?" Participants were also given the opportunity to disclose their learning difficulties. Finally, participants were asked the focus question "Are high school students who have learning

difficulties sometimes left out at school? Why or why not?" Prompts such as "Can you tell me more? Can you give me an example? Why do you think that is?" were used to elicit additional responses. Interviews were an average of 18:28 minutes in length (range: 11:09 - 33:09). We chose not to ask students specifically about their own experiences of inclusion or exclusion for multiple reasons. The first reason was that we did not want students to feel uncomfortable speaking about their own experiences of social inclusion or exclusion if they did not wish to do so. However, we found that many of the participants did speak about their personal experiences even though we did not directly ask them to do so. Secondly, in a meta-analysis of research summarizing the social acceptance of students with learning disabilities, Nowicki (2003) reported that students with learning disabilities were not necessarily aware of their social deficits or their poor social acceptance by classmates. Therefore, we believed that participants might provide more accurate or honest responses if they were not asked directly about their own experiences, but only their insider perspectives of the experiences of students with learning difficulties in general.

**Data preparation.** Once all 12 interviews were complete, all statements that answered the focus question were extracted from the interview transcripts. Sentences that contained multiple ideas, including sentences using the words "and/or", were split up so that each statement included only one coherent thought or idea. This process resulted in a list of 142 statements. The authors then individually coded each of these statements as unique, redundant, or irrelevant. Statements coded as irrelevant were statements that did not answer the focus prompt. The authors then compared their codes to determine where there was agreement or disagreement. For statements for which the authors had different

codes, each author provided a rationale for why or why not the statement should be included, and differences were resolved through discussion. This process resulted in a final list of 55 unique statements. These statements were edited slightly for clarity as needed and then entered into the web-based Concept Systems Global MAX software (Concept Systems, 2013) for the sorting and rating phase.

**Sorting and rating phase.** All participants completed the sorting and rating tasks online at home at a time of their choosing. Participants were sent a link to the sorting and rating activities via email. Participants were asked to answer a few demographic questions, including age, grade, gender, and whether they had a learning difficulty. All participants responded “yes” to having a learning difficulty. For the sorting phase, participants were asked to “sort the statements according to your view of their meaning or theme.” They were prompted not to sort the statements according to priority, or value, such as 'important', 'hard to do', or 'agree.' Once they were finished sorting the statements, they were instructed to give each pile a name or a label that described its theme or contents. For the rating activity, they were asked: "On a scale of 1 to 5, please rate how strongly you agree or disagree with each of the following statements, where 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree.”

## 4.5 Results

### 4.5.1 Multidimensional Scaling

Data analysis was conducted using the Concept System Global MAX software (Concept Systems, 2013). Multi-dimensional scaling analysis created a two-dimensional point map of the average distances between statements (see Figure 8), wherein each point

on the map represents a statement, and the distances between these points represent how frequently these statements were sorted together by the participants (Jackson & Trochim, 2002). Statements that are closer together on the point map were more likely to be sorted together and thus are likely to be thematically similar. For example, statements 49 “Other students don't know what to say when they invite students with learning difficulties” and 26 “I think some people with learning difficulties might not know how to speak with people” are side by side on the point map, and both statements are related to issues with communication skills.

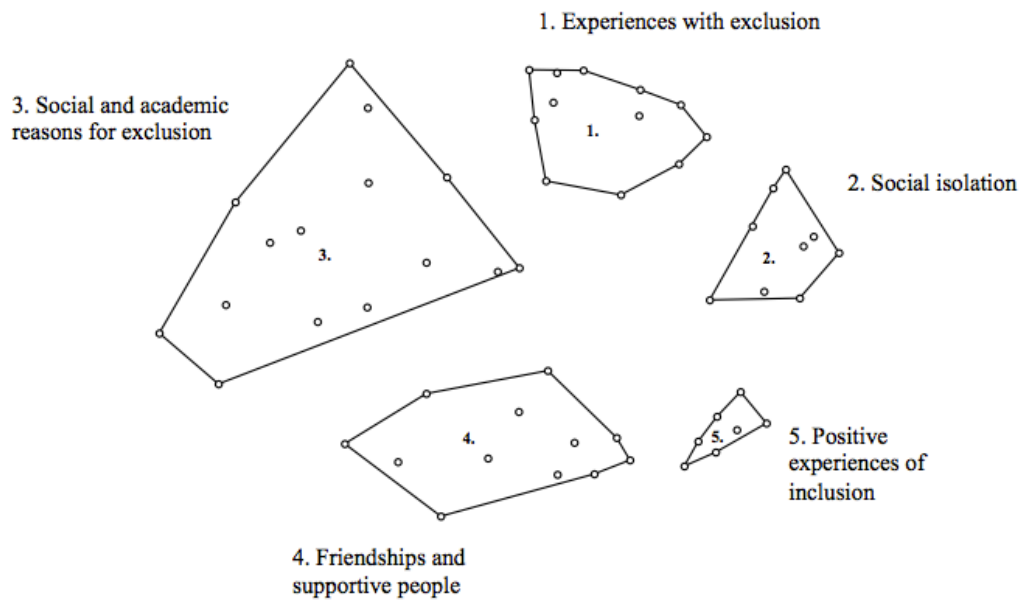
#### **4.5.2 Hierarchical Cluster Analysis**

Hierarchical cluster analysis separates the points on the map into clusters or groups of statements (Kane & Trochim, 2007) and can produce as many clusters as there are statements. Therefore, it is up to the researchers to decide on the ideal number of clusters (Trochim, 1989). The statistical procedure that is used when deciding on the ideal cluster solution is the bridging value. Each statement within a cluster is assigned a bridging value between zero and one, and each cluster is assigned an average bridging value. A low bridging value indicates that the statement was sorted together frequently with other statements within the same cluster (Jackson & Trochim, 2002). For the present study, based on the number of statements and the average number of piles created by the participants, we created six maps ranging between three and eight clusters per map. We used the process for selecting a final cluster solution recommended by Kane and Trochim (2007). We began by examining the eight-cluster solution, and then observed which clusters merged together when moving to the seven-cluster solution and so on. We examined the statements in each of the merged clusters to determine whether they



**Figure 8.** Point map of 55 statements in response to the question “Are high school students who have learning difficulties sometimes left out at school?”





**Figure 9.** Five cluster map of 55 statements in response to the question “Are high school students who have learning difficulties sometimes left out at school?”

appeared to belong within the same cluster. We also examined the bridging values for each cluster solution. Based on the bridging values and themes for each cluster, a five-cluster solution was selected as the best fit for the data (see Figure 9). Table 5 depicts the bridging values and average rating scores for each statement and for each cluster. All of the clusters had low average bridging values, indicating that the five-cluster solution was a good fit for the data and the statements within each cluster were sorted together frequently by the participants.

#### **4.5.3 Stress Value**

The stress value measures the goodness of fit between the point map and the input data, with a low stress value indicating that the resulting point map is representative of the input data (Kane & Trochim, 2007). The stress value for this study was 0.3159. Since 95% of concept mapping studies have stress values that fall between 0.205 and 0.365 (Kane & Trochim, 2007), the stress value for this study was well within the appropriate range. This indicates that the point map was representative of the input data.

#### **4.5.4 Cluster Labels**

The final step was to select appropriate labels for each of the clusters. During the sorting task, participants were asked to create a label for each of their clusters to describe its contents. Once the final cluster solution was selected, the first author went through the labels created by participants for each cluster, and then combined labels created by participants that were most reflective of the statements within that cluster to create the final labels. For example, for Cluster One: Experiences with Exclusion, labels created by participants that were reflective of statements within that cluster were “Excluded”,

Table 5

*Cluster items, bridging values, and average ratings for concept map*

<b>Concept and statement</b>	<b>Bridging value</b>	<b>Average rating</b>
<b>Cluster One: Experiences with exclusion</b>	<b>0.09</b>	<b>2.98</b>
53. The people with learning disabilities that I know occasionally they do get left out.	0.01	3.00
28. The groups that students with learning difficulties are in don't tend to be the main groups, like the sort of mainstream friend groups that are in the school.	0.05	3.10
41. Personally I was excluded.	0.05	2.44
22. I have a very low tolerance for people bullying me after the experiences that I had in elementary school.	0.06	4.22
16. Students with severe learning difficulties would definitely be more likely to be excluded.	0.06	3.20
24. I realized that my social skills are so poor that just having me at the same lunch table makes people uncomfortable even if I haven't said or done anything yet.	0.06	2.60
7. Other students are too busy to include students with learning difficulties.	0.06	2.80
9. Usually students with learning difficulties just hang out by themselves.	0.11	3.20
21. Students with learning difficulties may not be valued as much because they may not know how to participate.	0.12	3.11
1. Students with learning difficulties don't feel welcome at school.	0.14	2.54
15. Usually, students with learning difficulties don't try to be friends with other kids.	0.16	2.40
25. For the most part students with Asperger's are isolated because of their lack of social skills.	0.22	3.22
<b>Cluster Two: Social Isolation</b>	<b>0.17</b>	<b>3.90</b>

6.	When students with learning difficulties get left out they need a friend there.	0.08	4.30
4.	People who don't understand the disability exclude more.	0.08	4.10
33.	I think they feel left out because some people think that they are a little different.	0.15	3.70
14.	Some people with depression or anxiety self-isolate themselves because they feel like they're not up to par.	0.15	4.11
27.	For the most part, people with Asperger's are highly isolated and they don't know why.	0.18	3.30
19.	Students with learning difficulties might prefer to hang out by themselves at lunch.	0.21	3.50
13.	If somebody is talking about the weather, you don't bring up your favourite video game, which is a huge issue for people with autism.	0.21	3.70
12.	Some people with social anxiety that's even worse because they don't like talking to people because they are worried that they are going to be judged or whatever they feel afraid of.	0.23	4.40
18.	Some of the kids that don't talk like the nonverbal ones they can't communicate or they have their own way of communicating.	0.23	4.00
<b>Cluster Three: Social and Academic Reasons for Exclusion</b>		<b>0.36</b>	<b>3.43</b>
49.	Other students don't know what to say when they invite students with learning difficulties.	0.02	3.20
26.	I think some people with learning difficulties might not know how to speak with people.	0.03	3.80
50.	When I go to resource, I don't see other students like helping each other out they just want to get their work done and move on to their other activities.	0.14	2.70
51.	If I have a class full of jerks that I'm in, I tend to not really like doing group work.	0.17	4.00
42.	The only time that like a learning disability will affect inclusion or exclusion is when they don't work well with groups.	0.18	2.90
35.	Whether or not students with learning difficulties are left out depends on the situation.	0.28	3.90

39.	If students with learning difficulties are sometimes cold or harsh to other people they might be less valued because of their lack of social interaction.	0.30	3.60
31.	Students with learning difficulties may not know the concept of stay away or don't touch me.	0.30	3.60
11.	I think the ones that don't have disabilities they do get to go to these cool things.	0.36	2.80
32.	I wouldn't say there is a direct correlation between disabilities and socialness.	0.43	3.10
10.	Usually students with major learning disabilities are not in our class.	0.48	3.20
52.	Some people think that because students with learning difficulties simply can't learn the conventional way then they're not as smart.	0.52	3.60
44.	Just depends on the person I guess.	0.57	4.20
30.	Some people are going to be jerks, make no mistake, there is always going to be a jerk in your class.	0.66	3.90
54.	Students with learning difficulties mostly go to sports things, such as the Special Olympics.	1.00	3.00
<b>Cluster Four: Friendships and Supportive People</b>		<b>0.18</b>	<b>3.94</b>
23.	All of the friends I have with learning difficulties they have groups of friends, so I wouldn't say that they're socially left out.	0.02	4.00
47.	If they are left out it's because they are not friends with that group of people but generally the disability is never the reason for exclusion.	0.02	3.60
38.	I would say usually we're okay making friends and all that.	0.04	3.70
8.	People tend to make friends with people who are in their classes, people who they went to public school with, or know from other people.	0.04	4.30
2.	It really is between the students to decide whether or not they are going to isolate someone or whether or not someone is going to isolate themselves.	0.06	3.66

37.	I never really see a lot of people getting bullied in school whatsoever.	0.11	3.90
43.	People who understand your disability will relate to you more and will let you into their conversations more.	0.18	4.30
5.	I have learning difficulties and my two best friends have learning difficulties so, I guess you could say they don't have trouble fitting in when they find people like them that they can relate to.	0.21	4.30
55.	Us kids with different disabilities we tend to I guess you can say clamp on to someone nice, like an educational assistant or a teacher.	0.24	3.70
29.	Their friends are their friends and having a minor disability isn't really going to change that.	0.27	4.40
40.	I don't pay much attention to the rest of my school outside of my group of friends.	0.45	3.30
48.	The teachers do their best to make sure the people aren't isolated.	0.47	4.10
<b>Cluster Five: Positive Experiences of Inclusion</b>		<b>0.07</b>	<b>3.87</b>
34.	Students with learning difficulties are always treated well in our school.	0.00	4.00
36.	There's a lot of activities, there's a lot of things that people do with students with learning difficulties.	0.04	3.90
17.	Other students welcome students with learning difficulties.	0.05	3.80
45.	I know at my school there's a lot of encouragement to join clubs or teams that you are interested in, so you can meet people with similar interests.	0.06	4.10
46.	In everything, it's like they are normal people and that's how they should be treated.	0.07	4.20
3.	Normal everyday activities that normal people do, they are always included.	0.07	3.22
20.	Even after I tell people that I have a disability they treat me the same as before; they say they didn't even realize that I have a disability.	0.21	3.80

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“Feeling Excluded”, and “Negative Experiences.” The label for Cluster Three: Social and Academic Reasons for Exclusion was not directly derived from participants’ labels, but is reflective of the statements within that cluster. A detailed description of each cluster is provided below, including participants’ labels that were relevant to each cluster.

#### **4.5.5 Cluster One: Experiences with Exclusion**

This cluster included 12 statements and had a low average bridging value of 0.09 (minimum = 0.01, maximum = 0.22,  $SD = 0.06$ ). Statements within this cluster referred to either personal or observed experiences with exclusion. Unique labels created by participants for statements within this cluster included: Negative Experiences and Social Skills. Labels that overlapped with Cluster Two were: Excluded, Feeling Excluded, and Isolation. Statements that reflected personal experiences with exclusion included “Personally I was excluded” and “I have a very low tolerance for people bullying me after the experiences that I had in elementary school.” Observed experiences of exclusion was demonstrated by the statements “The people with learning disabilities that I know occasionally they do get left out”, “Students with severe learning difficulties would definitely be more likely to be excluded”, “Other students are too busy to include students with learning difficulties”, and “Students with learning difficulties don't feel welcome at school.” Participants also discussed the relationship between an individual’s social skills and social exclusion, as illustrated by the statements “I realized that my social skills are so poor that just having me at the same lunch table makes people uncomfortable even if I haven't said or done anything yet”, “Students with learning difficulties may not be valued as much because they may not know how to participate”, and “For the most part students with Asperger's are isolated because of their lack of

social skills.” Another theme that emerged within this cluster was the idea that students with learning difficulties are isolating themselves, as demonstrated by the statements “Usually students with learning difficulties just hang out by themselves” and “Usually, students with learning difficulties don't try to be friends with other kids.”

#### **4.5.6 Cluster Two: Social Isolation**

This cluster included nine statements and had a low average bridging value of 0.17 (minimum = 0.08, maximum = 0.23,  $SD = 0.06$ ). Unique labels created by participants for statements within this cluster included: Problems Those with Learning Difficulties Face and Disability Limitations. Although there was thematic overlap between statements in this cluster and statements in Cluster One, the main theme within this cluster was how individual differences might contribute to social isolation. For example, the statements “Some people with depression or anxiety self-isolate themselves because they feel like they're not up to par” and “Some people with social anxiety that's even worse because they don't like talking to people because they are worried that they are going to be judged or whatever they feel afraid of” demonstrated how comorbid mental health conditions might lead to social isolation. The statement “Some of the kids that don't talk like the nonverbal ones they cannot communicate or they have their own way of communicating” referred to how different communication styles may create a barrier to social interactions. Other factors that contribute to social isolation discussed within this cluster included: limited social skills- “If somebody is talking about the weather, you don't bring up your favourite video game, which is a huge issue for people with autism”, lack of understanding- “People who don't understand the disability exclude more”, and perceived differences- “I think they feel left out because some people think



that they are a little different.”

#### **4.5.7 Cluster Three: Social and Academic Reasons for Exclusion**

This cluster included 15 statements and had an average bridging value of 0.36 (minimum = 0.02, maximum = 1.00, *SD* = 0.25). Unique labels created by participants for statements within this cluster included: Problems Created by the School, Activities and Involvement, Students Personal View, Disability Ignorance, and Bias. The theme of poor social skills also emerged within this cluster, and was illustrated by the statements “I think some people with learning difficulties might not know how to speak with people”, “If students with learning difficulties are sometimes cold or harsh to other people they might be less valued because of their lack of social interaction”, and “Students with learning difficulties may not know the concept of stay away or don't touch me.” Another theme that was evident in this cluster was the practice of physical segregation based on ability. For example, the statements “Students with learning difficulties mostly go to sports things, such as the Special Olympics” and “I think the ones that don't have disabilities they do get to go to these cool things” suggested that students may be participating in separate events or activities based on whether or not they have a learning difficulty. Further, the statement “Usually students with major learning disabilities are not in our class” demonstrated the physical segregation of students in schools. Another theme that emerged within this cluster was issues surrounding group work, as illustrated by the statements “If I have a class full of jerks that I'm in, I tend to not really like doing group work” and “The only time that like a learning disability will affect inclusion or exclusion is when they don't work well with groups.” Finally, the statements “Other students don't know what to say when they invite students with learning difficulties” and

“Some people think that because students with learning difficulties simply can't learn the conventional way then they're not as smart” drew attention to a lack of knowledge and understanding about students with learning difficulties and how to include them.

#### **4.5.8 Cluster Four: Friendships and Supportive People**

This cluster included 12 statements and had a low average bridging value of 0.18 (minimum = 0.02, maximum = 0.47,  $SD = 0.15$ ). Unique labels created by participants for statements within this cluster included: Supportive People, Own Group, and Not Always About Disability. Labels that overlapped with Cluster Five included: Things are OK, "Normal Viewpoint", and Inclusion. The statements “Us kids with different disabilities we tend to I guess you can say clamp on to someone nice, like an educational assistant or a teacher”, “The teachers do their best to make sure the people aren't isolated”, and “People who understand your disability will relate to you more and will let you into their conversations more” demonstrated the theme of students or adults lending support or showing kindness. The second primary theme within this cluster was experiences with friendships and social relationships. For example, the statements “All of the friends I have with learning difficulties they have groups of friends, so I wouldn't say that they're socially left out” and “I would say usually we're okay making friends and all that” illustrated positive experiences of friendship. Further, the statement “I have learning difficulties and my two best friends have learning difficulties so, I guess you could say they don't have trouble fitting in when they find people like them that they can relate to” highlighted the importance of shared experiences in developing friendships. Also, the statement “People tend to make friends with people who are in their classes, people who they went to public school with, or know from other people” illustrated how proximity or

personal connections support the development of friendships. Another theme that emerged in this cluster was the perception that disability in itself does not influence whether or not someone is going to be your friend, as demonstrated by the statements “Their friends are their friends and having a minor disability isn't really going to change that” and “If they are left out it's because they are not friends with that group of people but generally the disability is never the reason for exclusion.”

#### **4.5.9 Cluster Five: Positive Experiences of Inclusion**

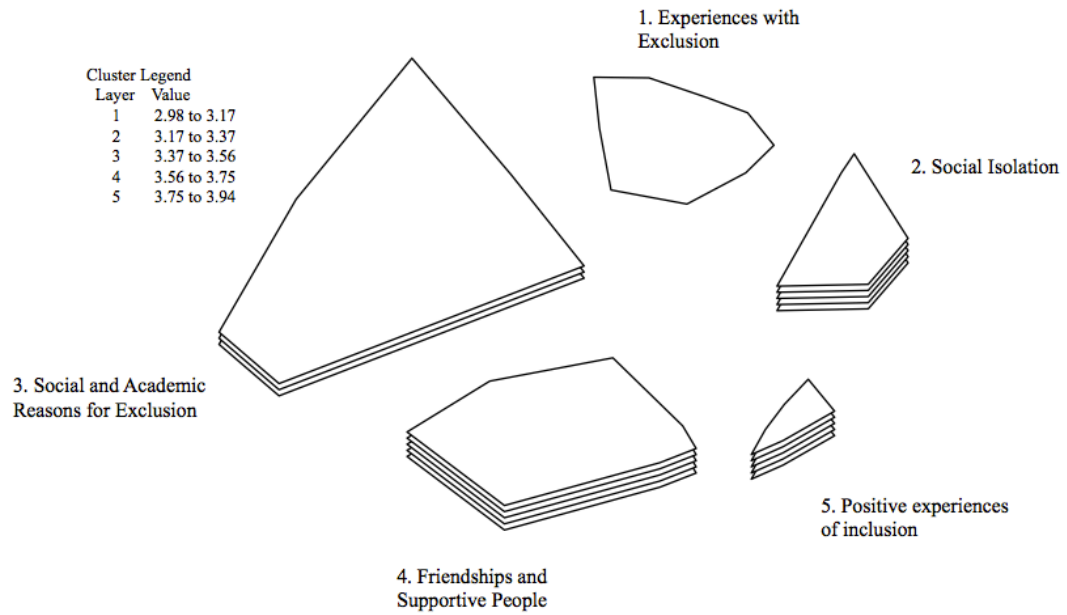
This cluster included seven statements and had a low average bridging value of 0.07 (minimum = 0.00, maximum = 0.21,  $SD = 0.06$ ), which indicates that statements within this cluster were sorted together frequently by participants. Unique participant labels for statements within this cluster were: Positive Experiences and Feeling Included. The overall theme of this cluster was positive examples of inclusion, as illustrated by the statements “In everything, it's like they are normal people and that's how they should be treated” and “Normal everyday activities that normal people do, they are always included.” The statements “Students with learning difficulties are always treated well in our school”, “There's a lot of activities, there's a lot of things that people do with students with learning difficulties”, and “I know at my school there's a lot of encouragement to join clubs or teams that you are interested in, so you can meet people with similar interests” provided examples of school cultures that support inclusion. The statements “Other students welcome students with learning difficulties” and “Even after I tell people that I have a disability they treat me the same as before; they say they didn't even realize that I have a disability” highlighted the inclusive behaviours of other students.

#### 4.5.10 Rating Data

Following the sorting task, participants were asked to rate the statements according to level of agreement. Table 5 depicts the average rating values for each statement. The statements with the highest average ratings and therefore the highest agreement among participants were: “Some people with social anxiety that's even worse because they don't like talking to people because they are worried that they are going to be judged or whatever they feel afraid of” (4.40), “Their friends are their friends and having a minor disability isn't really going to change that” (4.40), “When students with learning difficulties get left out they need a friend there” (4.30), “People tend to make friends with people who are in their classes, people who they went to public school with, or know from other people” (4.30), “People who understand your disability will relate to you more and will let you into their conversations more” (4.30), and “I have learning difficulties and my two best friends have learning difficulties so, I guess you could say they don't have trouble fitting in when they find people like them that they can relate to” (4.30).

The statements with the lowest average ratings and therefore the lowest agreement among participants were: “Usually, students with learning difficulties don't try to be friends with other kids” (2.40), “Personally I was excluded” (2.44), “I realized that my social skills are so poor that just having me at the same lunch table makes people uncomfortable even if I haven't said or done anything yet” (2.60), “Students with learning difficulties don't feel welcome at school” (2.60), and “When I go to resource, I don't see other students like helping each other out they just want to get their work done and move on to their other activities” (2.70). Figure 10 depicts the average ratings for each cluster.

“Cluster One: Experiences with Exclusion” had the lowest overall cluster rating mean and “Cluster Four: Friendships and Supportive People” had the highest (see Table 6).



**Figure 10.** Cluster rating map in response to the following rating prompt “On a scale of 1 to 5, please rate how strongly you agree or disagree with each of the following statements.”

Table 6

*Mean cluster ratings*

Cluster Name	Overall Cluster Rating Mean (SD)	Number of Statements in Cluster	Minimum Statement Rating	Maximum Statement Rating
Cluster one: Experiences with exclusion	2.99 (0.47)	12	2.40	4.22
Cluster two: Social isolation	3.90 (0.35)	9	3.30	4.40
Cluster three: Social and academic reasons for exclusion	3.43 (0.46)	15	2.70	4.20
Cluster four: Friendships and supportive people	3.95 (0.33)	12	3.30	4.40
Cluster five: Positive experiences of inclusion	3.86 (0.29)	7	3.22	4.20

#### 4.6 Discussion

This study sought out to investigate the perspectives of secondary school students with learning difficulties on social inclusion and exclusion in school. The participants provided many examples of inclusion and exclusion, and as a group, they were able to competently categorize these ideas into thematically meaningful clusters. A five-cluster solution was selected as the best fit for the data. Overall, three of the clusters were related to exclusion, and two were related to inclusion. Statements in the first three clusters referred to either personal or observed experiences of exclusion, including issues with social skills, the notion of self-exclusion, issues with group work, physical segregation, social isolation, and lack of knowledge about learning difficulties. Positive experiences with inclusion included making friends, finding someone you can relate to, people being supportive and understanding, and schools creating inclusive environments through acceptance and creating opportunities for social interaction.

Many participants in this study discussed either observed or personal experiences with exclusion, social isolation, and bullying. This finding lends support to previous research conducted with students with learning or physical disabilities. For example, Pivik, McComas, Laflamme (2002) interviewed students with physical disabilities and found that all of the participants reported instances of isolation, physical bullying, or emotional bullying. Bitsika and Sharpley (2014) reported that among their study sample of 48 high-functioning boys with autism (ASD) aged seven to 12 years, a large number of the boys reported that they had friends, and yet 60% reported that they spent the school lunch hour alone. Furthermore, 39.6% reported that someone they considered a friend had bullied them. The authors concluded that students with ASD might struggle with



identifying who their true friends are, and may need specific training to avoid future bullying experiences. Additionally, even when students with learning disabilities report that they have peer groups, they still score lower than their peers without disabilities on peer-nominated popularity and social preference (Estell et al., 2008). Thus, the presence or perception of friendships does not guarantee full integration into the social aspects of the school for students with disabilities, and they may still be victims of bullying. For the present study, participants discussed positive experiences of inclusion and friendship, but they also discussed instances of social isolation and exclusion. Based on research by Bitsika and Sharpley (2014), it is possible that these participants may not have been able to identify friendships accurately.

Another prominent theme that emerged in the data was the notion that students with learning difficulties may be engaging in self-isolation due to poor social skills or a lack of interest in developing friendships with other students. Based on the theory of planned behaviour (Ajzen & Fishbein, 2005), students who do not believe they have the social skills necessary to interact with other students may lack perceived behavioural control to engage socially with other students. Therefore, it may be easier for students with learning difficulties to either stick to themselves or to other students who have learning difficulties. Furthermore, several statements in this study referred to the importance of shared experiences in developing friendships. For example, one of the statements with the highest average agreement rating was “I have learning difficulties and my two best friends have learning difficulties so, I guess you could say they don't have trouble fitting in when they find people like them that they can relate to.” For students with learning difficulties, it would likely require less effort to develop friendships with

other students who share similar experiences. McVilly et al. (2006) conducted focus groups with adults with intellectual disabilities in the area of friendships. The participants indicated that the shared experience of having an intellectual disability provided a sense of comfort and equality that made it easier to enter into genuine, lasting friendships. For some students with intellectual, physical, or learning disabilities, inclusive environments fail to provide them with opportunities for socialization, and it may be easier to develop friendships in special education classrooms with other students who have disabilities (Morina Diez, 2010). Whitehurst (2007) investigated the effectiveness of a two-year drama program that integrated students with profound learning difficulties from a special school with students from a mainstream school. They found that students from the special school more frequently pointed to photos of students from their school when asked who their friends were, and were more hesitant to point to photos of students without disabilities from the mainstream school. Therefore, although it is essential to foster friendships between students with and without learning difficulties to create inclusive schools and communities, we cannot undermine the importance of friendships between individuals with learning difficulties.

Another theme that emerged in this study was the notion that students without learning difficulties may not have the knowledge or skills to interact with students with such difficulties. This finding also supports the perceived behavioural control component of the theory of planned behaviour (Ajzen & Fishbein, 2005). Participants remarked that students were more likely to be inclusive when they had an understanding of their disability. One of the statements with the highest average agreement rating was “People who understand your disability will relate to you more and will let you into their

conversations more.” In the study Pivik et al. (2002) conducted with students with physical disabilities and their parents, both groups reported the need for disability awareness training for both students and teachers. Further, in studies conducted with students without disabilities, students reported that they did not have the necessary skills for interacting with students with disabilities and discussed the need for greater awareness, education, and training on disability (Copeland et al., 2004; Kalymon et al., 2010; Townsend & Hassall, 2007). Therefore, providing students with a greater knowledge and understanding of disability is likely to result in more positive social interactions and a more inclusive school environment for students with learning difficulties (Nowicki & Brown, 2013). This study has shown that both students with and without learning difficulties need specific training to give them the skills, confidence, and thus the perceived behavioural control to interact with one another.

#### **4.6.1 Limitations**

Due to the small sample size, the results of this study may not be generalizable and may not apply to other secondary school students with learning difficulties. Further, this study used convenience sampling for recruiting participants. The types of learning difficulties represented in this sample do not include all possible learning difficulties and there were a large proportion of students with Asperger's or Autism. This may have biased the sample.

Also, the participants were from different locations across southern Ontario. Even within the same city, schools often differ in how they implement inclusive practices. Participants in this study were from a variety of educational placements and experienced inclusion to varying degrees. Therefore, some of the statements reflect the perspectives of

students who were from inclusive classrooms and others reflect the perspectives of students who only spent part of their day in inclusive environments. In hindsight, it would have been informative to further investigate the school structure for each participant and obtain more detail on their level of inclusion. For future studies, it would be beneficial to compare the perspectives of students who experience full inclusion to the perspectives of students who experience partial inclusion. For a concept mapping study, this may involve having separate concept maps representing the perspectives of students from different educational placements.

All of the participants had high-functioning learning difficulties and had the cognitive and linguistic capacity to participate in interviews and the online sorting and rating tasks. However, the authors did not intentionally recruit students with high-functioning learning difficulties. It is possible that parents of students with more significant learning difficulties may have been more hesitant to sign their children up for this study. Therefore, the results of this study cannot be generalized to students with more profound learning difficulties who may experience more instances of social isolation and physical segregation (Palmer, Fuller, Arora, & Nelson, 2001).

Another limitation of this study was that the majority of participants were male (nine out of 12 for the interview phase and 8 out of 10 for the sorting and rating phase) which means that the results of this study may be biased towards a male perspective.

#### **4.7 Implications and Conclusions**

The perceived behavioural control component of the theory of planned behaviour (Ajzen & Fishbein, 2005) was very prominent in the data, as evidenced by the themes of poor social skills, self-isolation, issues with group work, physical segregation, and lack of

knowledge or skills for interacting with students with learning difficulties. This finding lends support to Roberts and Smith's (1999) study in which the strongest correlation was between students' perceived behavioural control and behavioural intentions, which were significantly related to their actual behaviour towards students with physical disabilities. The results of the present study indicate that students with and without learning difficulties need to be taught the necessary skills for interacting with one another to increase their perceived behavioural control. This may include providing social skills learning opportunities for students with learning difficulties and disability awareness education for students without learning difficulties. Based on participants' responses, it would also be beneficial for schools to provide additional structured opportunities for students to interact with one another to practice these skills, such as clubs, activities, or social events.

Participants' cluster labels, the stress value, the low average bridging values, and the cluster themes demonstrated that the participants had a sound conceptual understanding of the data and were able to sort the statements into meaningful categories. Therefore, this study demonstrated that concept mapping methodology is a suitable method to use with adolescents or adults with high-functioning learning difficulties.

Although many statements provided positive examples of inclusion, it was apparent that the student body did not necessarily accept students with learning difficulties, and many participants experienced or observed instances of social isolation and exclusion. This study illustrates the importance of including the perspectives of students with learning difficulties in educational research since these students provide an insider perspective that is vital for determining how to support social inclusion in school.

For future research, it would be beneficial to explore the perspectives of students with learning difficulties to determine specific strategies for enhancing social inclusion.

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## 5 Conclusion

For this dissertation, I interviewed three different participant groups on social inclusion and exclusion in secondary school and presented the results separately using an integrated-article format. Study One included the perspectives of 12<sup>th</sup>-grade students without learning difficulties, Study Two included the perspectives of parents of secondary school students with learning difficulties, and Study Three included the perspectives of secondary school students with learning difficulties. The students in Study Three were the children of the parents from Study Two. For this final chapter, I will discuss common themes that emerged across the three studies and provide an interpretation using the theory of planned behaviour (Ajzen, 1985), followed by recommendations based on these findings and future research directions. Seven prominent themes that emerged across the three studies were: the behaviour of teachers, physical and social segregation, perceived individual differences, social skills, exclusion from group work, mental health challenges, and self-isolation.

### 5.1 Overall Findings

**Teacher behaviour.** All three participant groups discussed both the positive and negative efforts of teachers towards the social inclusion of students with learning difficulties. Participants in Study One observed how some teachers had difficulty adapting the curriculum to include students with learning difficulties (e.g. Cluster One: Social Inclusion and Exclusion, statements 20 and 6; Cluster Two: Teacher Behaviour/Learning Environment/Fitting In, statements 77 and 15). Parents in Study Two expressed frustration with teachers based on their perceptions of teachers' flawed decision-making, their lack of knowledge or empathy, or their denying students access to

necessary support (e.g. Cluster Four: Role of Teachers and School, statements 68, 43, 98). Alternatively, two participants in Study Three discussed positive behaviours of teachers (e.g. Cluster Four: Friendships and Supportive People, statements 55 and 48).

According to the subjective norm component of the theory of planned behaviour (Ajzen, 1985), a person will be more likely to engage in a particular behaviour if they perceive that important others believe they should perform it. When teachers exhibit non-inclusive behaviours in the classroom, they provide an example to their students of how to behave towards students with learning difficulties. If a teacher is unwilling or unable to adapt their behaviour and lesson plans to be more inclusive of students with learning difficulties, how can students be expected to change their behaviours to be more inclusive of that same group? As respected figures in the school, teachers have a responsibility to model inclusive behaviour by demonstrating that students with learning difficulties are valued, participating members of the classroom. Further, in the model proposed by Juvonen (2006), it is through social relationships with both peers and teachers that students develop a sense of school belonging. Thus, students with learning difficulties are more likely to feel as though they belong in the school if they perceive that their teachers are supportive and fair. Alternatively, if students perceive that their teachers mistreat them, or if there is any conflict with their teachers, they are more likely to feel isolated in school.

**Segregation.** All three studies included statements related to the segregation of students with learning difficulties, particularly for students with more severe difficulties. Participants in Study One expressed that students with learning difficulties were often placed in separate special education classrooms (e.g. Cluster Seven: Physical and Social

Separation, statements 21, 32, 3, and 59). A participant in Study Three confirmed this (Statement 10, *Usually students with major learning disabilities are not in our class*). Parents in Study Two responded that children with learning difficulties were often segregated or grouped based on their abilities (e.g. Cluster Four: Role of Teachers and School, Statement 70; Cluster Five: School, Board and Policy Issues and Effects, statements 73 and 22). One parent in Study Two also stated that their child was required to switch to a different school entirely because her school could not handle her exceptionalities (Cluster Four, statement 84).

When students with learning difficulties are grouped in a separate classroom, social interactions with other students in the school are undoubtedly more difficult (e.g. Study Two, statement 9, *If the classroom is a segregated classroom it is going to be worse, because you are going to socialize with the ones that you are with*). According to Ajzen (1985), the perceived behavioural control component of the theory of planned behaviour is composed of both internal and external factors. External factors include time, opportunity, and dependence on others. Physical segregation certainly limits time and opportunity for students with learning difficulties to interact with other students in the school and vice versa. Thus, to foster social relationships between students with and without learning difficulties, educators need to create opportunities for positive social interaction both in and out of the classroom. This may include limiting the length of time students with learning difficulties spend in segregated environments and creating structured opportunities for students with and without learning difficulties to socialize.

Schools that promote segregated classrooms might also influence students' normative beliefs (Ajzen, 1985) toward interacting with students who have learning

difficulties. When the adults in the school physically exclude students with learning difficulties by placing them in separate classrooms, other students in the school are more likely to socially exclude them as well. Previous research has indicated that students tend to accept and internalize the educational approach of their schools. For example, Bunch and Valeo (2004) found that, at both the elementary and secondary levels, students in schools following the special education model accepted segregation, and students in schools following an inclusion model accepted inclusion. In further support of inclusive classrooms, Campbell (2010) discovered that in their sample of third, fourth, and fifth grade students, inclusion had a statistically significant influence on students' intentions to include classmates with disabilities. Bunch and Valeo (2004) suggested that students look to trusted figures to guide their actions, which also lends support to the subjective norm component of the theory of planned behaviour (Ajzen, 1985), and demonstrates the importance of adults modeling inclusive behaviours for students.

**Perceived individual differences.** Another theme that emerged across all three studies was social exclusion due to perceived individual differences. In Study One, Cluster Five: Behaviour and Ability Level of Students, statements referred to the physical ability and cognitive understanding of students with learning difficulties, such as their ability to understand a joke or particular topics. Several statements in Cluster Four: Hard Time Relating (12, 19, 24, and 31) referred to perceived individual differences, including behavioural differences and lack of understanding. Parents in Study Two reported that children with learning difficulties were often socially excluded due to individual differences (e.g. Cluster One: Being Excluded Due to Individual Differences, statements 47, 42, 87, and 51). However, some of the individual differences mentioned were not

specifically related to the presence of a learning difficulty, but were instead different interests (athletics versus video games) and different personality types. Participants with learning difficulties in Study Three discussed how individual differences might lead to social isolation, such as differences in communication styles (e.g. Cluster Two: Social Isolation, statements 33 and 18).

Overall, it appears that many of these perceived differences might be due to a lack of understanding or inaccurate knowledge about learning difficulties, which could lead to the development of negative attitudes towards individuals with learning difficulties. Although attitudes towards individuals, including their demographic characteristics, are considered to be external variables, these external variables influence normative and attitudinal beliefs (Ajzen & Fishbein, 1980). Additionally, relating to someone who communicates or behaves differently from what you are accustomed to likely requires more effort, which would influence perceived behavioural control (Ajzen, 1985). To reduce negative attitudes and stereotypes and increase perceived behavioural control towards interacting with students with learning difficulties, we must educate students about disability so that they have a more complete and fair picture of what disability entails. Specifically, students need to be taught to embrace, celebrate, and value individual differences (Oliver, 1996). As stated by participants in Study Three, '*People who don't understand the disability exclude more*' (Statement 4) and '*People who understand your disability will relate to you more and will let you into your conversations more*' (Statement 43).

**Social skills.** In Study One, participants discussed how limited social skills might make it difficult for students with learning difficulties to get along with others or to



follow along with conversations (e.g. Cluster Five: Behaviour and Ability Level of Students, statements 72 and 83). In Study Two, the theme of social skill deficits emerged strongly in Cluster Nine: Social-Relational Difficulties and Exclusion (Statements 46, 65, 17, and 49). Examples included difficulty understanding the thoughts of others, certain social situations and behavioural issues. The first three clusters in Study Three, all of which were related to social exclusion, included statements that referred to social skills deficits for students with learning difficulties (e.g. Cluster One, statements 24 and 25; Cluster Two, statement 13; Cluster Three, statements 26, 39, and 31). Examples included inadvertently making other people feel uncomfortable, focusing on personal interests, lack of conversation skills, and unawareness of personal boundaries.

According to Ajzen (1985), when an individual intends to perform a behaviour, they might discover that they lack the required knowledge, skills, or abilities, including necessary verbal or social skills. This encompasses the self-efficacy or internal factor of the perceived behavioural control component of the theory of planned behaviour (Ajzen, 1985). For students with learning difficulties, lack of social skills may lead to a decrease in perceived behavioural control to interact with or befriend other students, which would contribute to their social isolation or exclusion. Additionally, poor social skills for students with learning difficulties may lead to other students developing negative attitudes towards interacting with them because talking with someone who does not understand the concept of personal space, reciprocal conversations, or other typical social conventions, particularly for someone who has a limited understanding of learning difficulties, can be off-putting.

**Exclusion from group work.** The theme of issues with group work repeatedly emerged across all three studies. In Study One, statements referring to group work were present in four of the seven clusters (e.g. Cluster Two, statement 58; Cluster Three, statement 40; Cluster Five, statement 28; and Cluster Seven, statements 62 and 53). Participants in Study One responded that working in groups with students who have learning difficulties was more challenging and that they preferred to study with the “smarter” students in the class.

In Study Two, statements referring to group work were present in four out of nine clusters (e.g. Cluster Two, statement 14; Cluster Four, statements 52 and 3; Cluster Six, statement 5; and Cluster Eight, statement 44). Parents in Study Two lamented that their children were often the last ones chosen for groups, were often paired with someone who was absent, or completed the assignment on their own. Two parents also suggested that it is challenging for students to work with someone who is being difficult or who does not want to work with you.

In Study Three, three statements referred to issues with group work (e.g. Cluster Three: Social and Academic Reasons for Exclusion, statements 51, 42, and 50), including the statement: *‘The only time that like a learning disability will affect inclusion or exclusion is when they don't work well with groups’* (statement 42).

Based on these results, it is apparent that students find it challenging to complete group work with students who have learning difficulties. Therefore, students with learning difficulties experienced exclusion from these collaborative learning activities either by their classmates or by their teachers. This is troubling since collaborative group activities have the potential to provide excellent opportunities for social interaction

between students with and without learning difficulties (Carter, Cushing, Clark, & Kennedy, 2005). However, as stated by Ajzen (1985), it is only possible to cooperate with someone who is willing to cooperate with you in return. Students with learning difficulties may appear to be unwilling to work in groups due to behavioural issues, social skills deficits, or perhaps a past history of rejection, which makes group work more difficult. Other students may need to put forth more effort to work with students who have learning difficulties, which may lead to excluding them from group work. Therefore, students with and without learning difficulties may need to be directly taught the necessary social skills for collaborating with others on group assignments to make group work more effective at enhancing students' learning and social relationships. Also, teachers need to consider implementing fair grading practices for group assignments so that students are not penalized for the quality of work produced by their peers, particularly if they are paired with students who have learning difficulties. Further research is needed to determine strategies for increasing perceived behavioural control for participation in inclusive collaborative group activities.

**Mental health.** Multiple participants in Study Two (e.g. Cluster One, statement 88, and Cluster Seven, statement 34) and Study Three (e.g. Cluster Two, statements 14 and 12) identified the relationship between mental health and social exclusion. Statements referred to how the presence of anxiety or depression might limit students from developing social relationships with others and therefore may increase social exclusion and isolation. This finding lends support to research conducted by Honey, Emerson, and Llewellyn (2011) on the mental health of people with physical, sensory, or intellectual disabilities aged 15 to 29 years. They discovered that individuals with

disabilities, both males and females, had significantly lower scores on a self-administered Mental Health Scale compared to their peers without disabilities. Additionally, participants with lower social support had poorer mental health, and this effect was stronger for participants with disabilities compared to participants without disabilities. The standardized mental health scores for participants with disabilities who had high social support showed no statistically significant differences from the mental health scores of participants without disabilities (Honey et al., 2011). Based on the results of the present study, it also appears that the presence of anxiety or depression might also lead to further social exclusion. Thus, there may be a reciprocal relationship between social exclusion and mental health, where social exclusion leads to poorer mental health, and mental health challenges make it even more difficult to form social relationships.

**Self-isolation.** The theme of students with learning difficulties isolating themselves, not showing interest in friendships, or only befriending other students with learning difficulties was one of the most prominent reoccurring themes across the three studies. In Study One, participants suggested that students with learning difficulties either kept to themselves or associated only with students with learning difficulties (e.g. Cluster Five: Behaviour and Ability Level of Students, statement 73; and Cluster Six: Self-Exclusion/Negative Stigma and Attitudes, statements 88, 74, and 65).

In Study Two, several participants responded that their children's friendships were primarily with other students with learning difficulties, that their children met their friends through resource rooms, and that children with learning difficulties often sat together in the cafeteria (e.g. Cluster One: Being Excluded Due to Individual Differences, statements 82 and 54; Cluster Three: Disability, Labels, Inclusion and The Importance of

Friendships, statements 24 and 64). One participant also suggested that students with learning difficulties might be excluding themselves due to a lack of interest in friendships.

Participants in Study Three discussed how students with learning difficulties might prefer to be alone or might not be interested in befriending other students (e.g. Cluster One: Experiences with Exclusion, statements 9 and 15; Cluster Two: Social Isolation, statements 14 and 19). Further, one participant from Study Three stated '*I have learning difficulties and my two best friends have learning difficulties so, I guess you could say they don't have trouble fitting in when they find people like them that they can relate to*' (Cluster Four, statement 5). This statement demonstrates that it might be easier for students with learning difficulties to befriend other students with learning difficulties who share similar experiences.

Students with learning difficulties who experience exclusion from other students may withdraw from social interactions entirely and engage in self-isolation. This could be a form of learned helplessness, where students with learning difficulties who experience repeated instances of rejection might give up on seeking social relationships entirely. Alternatively, they may seek out friendships with other students with learning difficulties who share similar experiences. According to Juvonen (2006), membership in peer networks is an essential factor in developing a sense of belonging in school. For students who experience rejection from their classmates, forming relationships with similarly marginalized peers can help them feel a sense of connectedness and belonging in school. For students with learning difficulties, forming friendships with other students with learning difficulties can mitigate the effects of social exclusion and facilitate a sense of

school belonging. Further, in the study McVilly, Stancliffe, Parmenter, and Burton-Smith (2006) conducted with adults with intellectual disabilities, participants reported that it was more difficult to develop friendships with individuals without intellectual disabilities due to inequality, stigma, and lack of understanding, and expressed a sense of comfort in their friendships with other individuals with intellectual disabilities. Thus, according to the theory of planned behaviour (Ajzen, 1985), it is likely more difficult or effortful for students with learning difficulties to develop friendships with students without learning difficulties. This may lead them to withdraw from social interactions entirely or befriend other students with learning difficulties, a behaviour for which they likely have a higher sense of perceived behavioural control.

## **5.2 Recommendations and Future Research**

The physical segregation or ability grouping of students with learning difficulties was a commonly observed phenomenon by participants across the three studies. Therefore, my first recommendation is that school administrators reduce the physical segregation of students with learning difficulties as much as possible. Several researchers have reported the positive influence of inclusion for students with and without learning difficulties, both academically and socially (Bennett & Gallagher, 2013; Frederickson, Dunsmuir, Lang, & Monsen, 2004; Gasteiger-Klicpera, Klicpera, Gebhardt, & Schwab, 2013; Lesser & Kirk, 2011), so it is surprising that physical segregation still occurs in Ontario schools. In addition to reducing segregation, schools need to provide opportunities for meaningful interaction between students with and without learning difficulties both in and out of the classroom. This includes ensuring that students with learning difficulties are included in school events, such as school dances, pep rallies, and

sporting events. One parent in Study Two (Cluster Six, statement 48) suggested that students with learning difficulties were not necessarily excluded intentionally, but they were often not provided with enough information on how to participate. Perhaps teachers could recruit students to act as activity chaperones to ensure that students with learning difficulties are aware of different school events and accompany them to the events that they are interested in attending, and then researchers could qualitatively examine the effectiveness of this program. In Study Three, three participants discussed inclusion in school activities, such as being encouraged to join teams or clubs to meet people with similar interests (Cluster Five, statements 36, 45, and 3). Therefore, it is beneficial for school personnel to encourage students with learning difficulties to participate in extracurricular activities and ensure that these activities are inclusive of students with all ability levels.

Another tool that teachers can use to create opportunities for social interaction in the classroom is cooperative group activities. Unfortunately, the results of this study demonstrate that students with learning difficulties often have challenges with group work and therefore, they are often excluded from these activities. At the secondary level, the larger workloads and increased pressure to get good grades may result in students being less willing to collaborate with students for whom the work is more difficult. It would be interesting to explore whether inclusive collaborative learning activities are more challenging at the secondary level compared to the elementary level due to increased academic demands. Examining strategies for facilitating inclusive group learning activities without the added pressure of grades would also be beneficial, for example, creating group assignments that are pass/fail but require participation from all

group members. Teachers could also create roles for each group member, and place students with learning difficulties in roles that cater to their strengths. For example, Study Two, statement 13 '*If the high schools could find everybody's gemstone and shine, polish, and help them have an area of expertise I think that would go a long way in popularity*' could certainly apply to the context of group work.

Data presented in this dissertation also demonstrates that students are in need of disability awareness education, a finding discussed in many prior studies on inclusion (Cambra & Silvestre, 2003; Copeland et al., 2004; Humphrey, 2008; Kalymon et al., 2010; Maras & Brown, 2000; Pivik, McComas, & Laflamme, 2002; Ring & Travers, 2005; Roberts & Smith, 1999; Townsend & Hassall, 2007). The purpose of educating students about learning difficulties would be to reduce negative attitudes, stereotypes, and stigma, and to increase positive social interactions between students with and without learning difficulties. This might include providing students with skills and strategies for interacting with students who behave or communicate differently to increase their sense of perceived behavioural control (Roberts & Smith, 1999). Ideally, these programs should teach students how to embrace and celebrate diversity (Oliver, 1996). Lindsay and Edwards (2013) conducted a systematic review of studies examining the effectiveness of various disability awareness programs. Overall, they found that of the 42 studies included in the review, 34 showed significant improvements in the attitudes of children and youth towards students with disabilities. They found that the most successful programs included multiple methods, such as social contact with students with disabilities, interactive activities (including videos, games, stories, discussions, simulations, and books), and multiple sessions over a period of time. However, none of



the studies included the perspectives of students with learning difficulties on the effectiveness of these programs (Lindsay & Edwards, 2013). Therefore, for future research, it would be beneficial to examine the effectiveness of disability awareness programs from the perspectives of students with learning difficulties, including their perceptions on changes to the attitudes and behaviours of their peers as a result of the programs. Additionally, students with learning difficulties need to be taught the necessary social skills to increase their perceived behavioural control for interacting with other students. Decreasing the negative attitudes and behaviours of other students and increasing the social skills and perceived behavioural control of students with learning difficulties may reduce instances of self-isolation by giving students more confidence to engage socially with others without fear of rejection. Overall, data from this dissertation demonstrates that both students with and without learning difficulties need to be taught skills for interacting with one another.

Furthermore, teachers, administrators, and school personnel need to model inclusive behaviours, since students look to these respected figures for guidance when forming their intentions to interact with students with learning difficulties. Data presented in Study One suggests that students are observant and perceptive of the behaviours of teachers and can pick up on even subtle exclusionary or discriminatory attitudes. Therefore, it is crucial that teachers practice and demonstrate inclusive behaviours in their classrooms by adapting their lessons and teaching styles to be more inclusive of students with learning difficulties. School administrators can model inclusive behaviours for students by limiting segregation and creating school cultures that are welcoming and accepting of students of all abilities.

Comorbid mental health conditions, including depression and anxiety, and their effect on social inclusion was an interesting theme that emerged in this study. Given that prior research has shown that social exclusion leads to poorer mental health (Honey et al., 2011), and data presented in this dissertation suggests that poor mental health may contribute to social isolation, future research should explore the reciprocal relationship between mental health and social exclusion.

As a follow-up to the research presented in this dissertation, I asked the three participant groups from Study One, Two, and Three to provide strategies for helping students with learning difficulties feel more included in school. The findings presented in this dissertation show that secondary school students with learning difficulties in Southern Ontario schools are not fully included by their teachers and peers. The second part of this larger study will explore strategies for creating more inclusive schools, including actions that both teachers and students can take to create a more welcoming environment for students with learning difficulties.

### **5.3 Limitations**

The results presented in this dissertation reflect the perspectives of a small sample of 12<sup>th</sup> grade students, as well as secondary school students with learning difficulties and their parents. Due to the small sample size of each study, caution should be taken when generalizing these findings to different educational contexts or participant samples. Another limitation of this research is self-selection bias since interested participants volunteered to participate in response to advertisements, word of mouth, or referral. It is possible that participants who were interested in sharing their insights on the topic of inclusion may have had different viewpoints compared to those who did not volunteer to

participate. Also, students were only able to participate with parental consent; so interested students under the age of 18 years without consent were not able to participate.

Additionally, students with learning difficulties and their parents were not required to provide a formal assessment in order to participate. However, the focus of this study was on students with learning difficulties in general, not on any one particular type of learning difficulty. Therefore, it was appropriate for any student who struggled with learning to participate. That being said, all parents indicated that their children had undergone official testing and had been assessed prior to participating.

To provide additional context for each of the participants, it may have been beneficial to speak with the principals or administrators from each of the participant's schools to determine their perspectives on the level of inclusion and the climate of each school. However, the focus of this dissertation was on the perspectives of students and parents, not principals and teachers, so it did not seem necessary to do so. Also, this may have been too cumbersome for the scope of this dissertation since many of the participants from Study Two and Study Three were from different schools. Using concept mapping methodology to explore secondary school principals' and teachers' perspectives on social inclusion would be worth exploring in future research.

#### **5.4 Final Words**

The purpose of this dissertation was to utilize Trochim's (1989) concept mapping methodology to explore students' and parents' perspectives on the social inclusion and exclusion of secondary school students with learning difficulties. Overall, concept mapping was a suitable methodology for this study since it highlighted participants'

voices and allowed for comparison of perspectives across participant groups.

Furthermore, this research demonstrated that concept mapping is an appropriate methodology to use with individuals with learning difficulties. Concept mapping methodology has not been used previously with a sample of students with learning difficulties in prior research, and it was unclear whether this would be an appropriate method due to the cognitively demanding nature of the sorting task. However, the stress value, bridging values, and cluster themes for Study 3 demonstrated that concept mapping worked well with this group of participants. Additionally, the theory of planned behaviour (Ajzen, 1985) allowed for an in-depth interpretation of the data and proved useful in providing an explanation for why students with learning difficulties often experience social exclusion in school. Based on the results of this dissertation, it is evident that students with learning difficulties still face physical and social isolation from their peers, although there have been positive changes: many students and parents shared examples of inclusion. There are still several areas in which students with learning difficulties need support to facilitate their social inclusion in secondary schools. For example, students with and without learning difficulties need to be taught the necessary social skills for interacting with each other, and this should also include social skill instruction for participation in group work. Further, disability awareness education is needed to change the negative attitudes and behaviours of administrators, teachers, and students towards students with learning difficulties. The results of this dissertation contribute to the current body of research on inclusive education and provide researchers and educators with additional support in developing inclusive educational practices for students with learning difficulties at the secondary level.

### 5.5 References

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**Appendix A: Ethics Approval****Western  
Research****Western University Non-Medical Research Ethics Board  
NMREB Annual Continuing Ethics Approval Notice**

Research Ethics

**Date:** July 13, 2016**Principal Investigator:** Dr. Elizabeth Nowicki**Department & Institution:** Education\Faculty of Education, Western University**NMREB File Number:** 106889**Study Title:** Social Exclusion and Inclusion of Students with Learning Difficulties**Sponsor:** Social Sciences and Humanities Research Council**NMREB Renewal Due Date & NMREB Expiry Date:**

Renewal Due -2017/06/30

Expiry Date -2017/07/27

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed the Continuing Ethics Review (CER) form and is re-issuing approval for the above noted study.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), Part 4 of the Natural Health Product Regulations, the Ontario Freedom of Information and Protection of Privacy Act (FIPPA, 1990), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.



## Appendix B: Ethics Revision Approval



**Western  
Research**

Research Ethics

**Western University Non-Medical Research Ethics Board  
NMREB Amendment Approval Notice**

**Principal Investigator:** Dr. Elizabeth Nowicki  
**Department & Institution:** Education/Faculty of Education, Western University

**NMREB File Number:** 106889  
**Study Title:** Social Exclusion and Inclusion of Students with Learning Difficulties  
**Sponsor:** Social Sciences and Humanities Research Council

**NMREB Revision Approval Date:** March 14, 2017  
**NMREB Expiry Date:** July 27, 2017

**Documents Approved and/or Received for Information:**

Document Name	Comments	Version Date
Revised Western University Protocol	Received February 24, 2017.	
Advertisement	Poster for Social Media. Received February 24, 2017.	
Advertisement	Poster for Community Spaces. Received February 24, 2017.	

The Western University Non-Medical Science Research Ethics Board (NMREB) has reviewed and approved the amendment to the above named study, as of the NMREB Amendment Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.



**Appendix C: Letter of Information for Parents****SOCIAL INCLUSION AND EXCLUSION OF STUDENTS WITH LEARNING DIFFICULTIES**

## LETTER OF INFORMATION

**Introduction**

Our names are Dr. Elizabeth Nowicki, Dr. Jason Brown, Jennifer Richardson, and Lynn Dare from Western University. We are conducting a study that focuses on the thoughts of students, parents, and educators on the social inclusion and exclusion of students with learning difficulties in school. We are seeking parents to participate in this study.

**Purpose of the study**

The purpose of this study is to interview students, teachers, and parents to find out (a) their thoughts on why students with learning difficulties are sometimes socially excluded at school, and (b) their strategies for enhancing the social inclusion of students with learning difficulties at school.

**If you agree to participate**

If you agree to participate in this study, you will be asked to participate in an interview that will take approximately 10 to 15 minutes. Interviews will be audio-recorded, and will be conducted in person, online, or by telephone. If you do not wish to be audio-recorded you may still participate in this study, and we will take notes on your comments. At a later date, you will be asked to sort and rate a set of anonymous statements taken from interviews with other parents. You will have the option of completing the sorting and rating tasks online or by mail. It will take approximately 30 to 40 minutes to sort and rate the statements.

**Confidentiality**

The information collected will be used for research purposes only. All information collected for the study will be kept confidential. Participants will be identified by unique code numbers on digital recordings and transcribed data. Names will not be recorded and will not be used in the sorting or rating tasks, any publication or presentation. All data will be destroyed five years after the study has been published.

**Risks & Benefits**

There are no known risks to participating in this study. Benefits are that researchers and educators will have a better understanding of the beliefs of students, parents, and teachers regarding the social inclusion and exclusion of students with learning difficulties at school. Participants will receive a \$10 iTunes gift card by email once the sorting task is complete.

**Voluntary Participation**

If you would like to participate in our study, please contact us at [REDACTED] to set up an appointment for an interview. Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time. You do not waive any legal rights by participate

**Questions**

If you have any questions about the conduct of this study or your rights as a research participant you may contact the Manager, Office of Research Ethics, Western University at [REDACTED]. If you have any questions about this study, please contact us at [REDACTED]. This letter is yours to keep for future reference.

Dr. Elizabeth Nowicki, Dr. Jason Brown, Jennifer Richardson (doctoral candidate), and Lynn Dare (doctoral candidate)

Western University, Faculty of Education, Althouse College  
1137 Western Road, London, ON, Canada N6G 1G7 www.westernu.ca

**SOCIAL INCLUSION AND EXCLUSION OF STUDENTS WITH LEARNING DIFFICULTIES**

*Dr. Elizabeth Nowicki, Dr. Jason Brown, Jennifer Richardson, and Lynn Dare  
Western University*

CONSENT FORM

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate in the study. All questions have been answered to my satisfaction.

Name (please print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

CONTACT INFORMATION

Email address: \_\_\_\_\_

OR

Telephone number: \_\_\_\_\_

## Appendix D: Letter of Information for Students



### *SOCIAL INCLUSION AND EXCLUSION OF STUDENTS WITH LEARNING DIFFICULTIES*

#### LETTER OF INFORMATION FOR PARENTS OF SECONDARY STUDENTS

##### **Introduction**

Our names are Dr. Elizabeth Nowicki, Dr. Jason Brown, Jenny Richardson, and Lynn Dare from Western University. We are conducting a study that focuses on the thoughts of students, parents, and educators on the social inclusion and exclusion of students with learning difficulties in school. We are seeking secondary school students to participate in this study.

##### **Purpose of the study**

The purpose of this study is to interview students to find out (a) their thoughts on why secondary school students with learning difficulties are sometimes socially excluded at school, and (b) their strategies for enhancing the social inclusion of students with learning difficulties at school.

##### **If you agree to participate**

If your son or daughter agrees to participate in this study, he or she will be asked to participate in an interview by phone or by Skype that will take approximately 10 to 15 minutes. Interviews will be audio-recorded. If your daughter or son does not wish to be audio-recorded she or he may still participate in this study, and we will take notes on her or his comments. At a later date, he or she will be invited to sort and rate a set of anonymous statements, either in person or online, taken from interviews with other students. It will take approximately 30 to 40 minutes to sort and rate the statements.

##### **Confidentiality**

The information collected will be used for research purposes only. All information collected for the study will be kept confidential. Participants will be identified by unique code numbers on digital recordings and transcribed data. Names will not be recorded and will not be used in the sorting or rating tasks, any publication or presentation. All data will be destroyed five years after the study has been published.

##### **Risks & Benefits**

There are no known risks to participating in this study. Benefits are that researchers and educators will have a better understanding of the beliefs of students regarding the social inclusion and exclusion of students with learning difficulties. Participants will receive a \$10 iTunes gift card by email once the sorting task is complete.

##### **Voluntary Participation**

If your son or daughter would like to participate in this study, they are asked to contact us at [REDACTED] to set up an appointment for an interview. Participation in this study is voluntary. Your daughter or son may refuse to participate, refuse to answer any questions, or withdraw from the study at any time. She or he does not waive any legal rights by participating in this study.

##### **Questions**

If you have any questions about the conduct of this study or your child's rights as a research participant you may contact the Manager, Office of Research Ethics, Western University at [REDACTED]. If you have any questions about this study, please contact us at [REDACTED]. This letter is yours to keep for future reference.

Sincerely,  
Dr. Elizabeth Nowicki, Dr. Jason Brown, Jennifer Richardson (doctoral candidate) and Lynn Dare (doctoral candidate)

Western University, Faculty of Education  
1137 Western Road, London, ON N6G 1G7 www.westernu.ca

**SOCIAL INCLUSION AND EXCLUSION OF STUDENTS WITH LEARNING DIFFICULTIES**

*Dr. Elizabeth Nowicki; Dr. Jason Brown; Jennifer Richardson, MEd; and Lynn Dare, MEd  
Western University*

CONSENT FORM

I have read the Letter of Information, have had the nature of the study explained to me and give permission for my child to participate in this study. All questions have been answered to my satisfaction.

Students who are 18 years or older may give their own consent.

Name (please print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Child's name (please print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Appendix E: Letter of Information for Students Over 18****SOCIAL INCLUSION AND EXCLUSION OF STUDENTS WITH LEARNING DIFFICULTIES**

## LETTER OF INFORMATION FOR STUDENTS 18 YEARS OF AGE OR OLDER

**Introduction**

Our names are Dr. Elizabeth Nowicki, Dr. Jason Brown, Jenny Richardson, and Lynn Dare from Western University. We are conducting a study that focuses on the thoughts of students, parents, and educators on the social inclusion and exclusion of students with learning difficulties in school. We are seeking secondary school students to participate in this study.

**Purpose of the study**

The purpose of this study is to interview students to find out (a) their thoughts on why secondary school students with learning difficulties are sometimes socially excluded at school, and (b) their strategies for enhancing the social inclusion of students with learning difficulties at school.

**If you agree to participate**

If you agree to participate in this study, you will be asked to participate in an interview that will take approximately 10 to 20 minutes. Interviews will take place at school or by Skype, and will be audio-recorded. If you do not wish to be audio-recorded you may still participate in this study, and we will take notes on your comments. At a later date, you will be asked to sort and rate a set of anonymous statements, either in-person or online, taken from interviews with other students your age. It will take approximately 15 to 30 minutes to sort and rate the statements.

**Confidentiality**

The information collected will be used for research purposes only. All information collected for the study will be kept confidential. Participants will be identified by unique code numbers on digital recordings and transcribed data. Names will not be recorded and will not be used in the sorting or rating tasks, any publication or presentation. All data will be destroyed five years after the study has been published.

**Risks & Benefits**

There are no known risks to participating in this study. Benefits are that researchers and educators will have a better understanding of the beliefs of students regarding the social inclusion and exclusion of students with learning difficulties at school.

**Voluntary Participation**

If you would like to participate in our study, please contact us at [REDACTED] to set up an appointment for an interview. Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time. You do not waive any legal rights by participating in this study.

**Questions**

If you have any questions about the conduct of this study or your rights as a research participant you may contact the Manager, Office of Research Ethics, Western University at [REDACTED]. If you have any questions about this study, please contact us at [REDACTED]. This letter is yours to keep for future reference.

Sincerely,

Dr. Elizabeth Nowicki, Dr. Jason Brown, Jennifer Richardson (doctoral candidate), and Lynn Dare (doctoral candidate)

**SOCIAL INCLUSION AND EXCLUSION OF STUDENTS WITH LEARNING DIFFICULTIES**

*Dr. Elizabeth Nowicki, Dr. Jason Brown, Jennifer Richardson and Lynne Dare  
Western University*

CONSENT FORM

I have read the Letter of Information, have had the nature of the study explained to me and give permission for my child to participate in this study. All questions have been answered to my satisfaction.

Students who are 18 years or older may give their own consent.

Name (please print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix F: Curriculum Vitae

### Academic Background

#### **Doctor of Philosophy in Education Studies**

Applied Educational Psychology

Western University (London, Ontario), *September 2012 – present*

Supervisor: Dr Elizabeth Nowicki

#### **Master of Education**

Educational Psychology/Special Education

Western University (London, Ontario), *December 2012*

Thesis: *Social skill development of adults with disabilities in a community drama group*

Supervisor: Dr Alan Edmunds

#### **Bachelor of Arts**

Honours Double Major in Psychology and Social Justice and Peace Studies

King's University College (London, Ontario), *April 2010*

### Teaching Experience

**Instructor**, Shiloh University (Kalona, IA), Summer 2014, Summer 2015, Summer 2016

Instructor of an online undergraduate course entitled "*Principles of Interpersonal Relationships*"

- Developed course rubrics, edited course content, and was responsible for all aspects of administering the course including: monitoring the weekly discussion forum, creating weekly announcements, providing support and assistance to students, and grading weekly assignments, discussion posts, and final projects.

**Teaching Assistant**, Western University (London, ON), January 2015-April 2015

Teaching assistant for a Bachelor of Education course entitled "*Classroom Management and Assessment*"

- Assisted with grading online assignments and quizzes as well as final presentations.

**Teaching Assistant**, Western University (London, ON), September 2014-December 2014

Teaching assistant for an online Master of Professional Education course entitled "*Introduction to Teaching Students with Exceptionalities*"

- Assisted with grading assignments and papers as well as monitoring online discussion forums.

### Courses and Workshops on University Teaching

**Western Certificate in University Teaching and Learning**, Western University, April 2018

- Included the completion of: a microteaching assignment, 10 Future Professor Workshops, a teaching mentorship program, a teaching portfolio, and a course outline.

**New Instructor Orientation**, Shiloh University, Spring 2016

- An online course for all new and current faculty members designed to familiarize faculty with key aspects of online instruction.



**The Theory and Practice of University Teaching**, GS 9500, Western University, Fall 2015

- A multidisciplinary graduate level course on the theory and practice of university teaching. Topics included principles of effective teaching, the globalization of education, curriculum theory, course design considerations, forms and functions of assessment, and practical instruction and application of teaching skills.

**Teaching Assistant Training Program**, Western University, August 2013

- A hands-on, three day training program designed for teaching assistants. Topics included fair grading practices, diversity in the classroom, lecturing, and giving students feedback on written work.

**Online Teaching in Higher Education**, Western University, June-July 2013

- An online course offered to faculty members and graduate students at the faculty of education on teaching online courses in university settings. Topics included approaches to teaching online, online teaching tools, and creating an online mini-lesson.

**Research Experience****Research Assistant**, Faculty of Education, Western University (London, ON)

June 2015 – April 2018, Director: Dr Elizabeth Nowicki

- Research assistant for a SSHRC funded cross-sectional study on the social inclusion of students with learning difficulties in school. Duties included assisting with ethics applications, preparation of research materials, participant recruitment, data collection, data analysis, and preparation of materials for publication.

**Research Assistant**, Centre for School Based Mental Health, Western University (London, ON)

September 2013 – April 2014, Director: Dr Susan Rodger

- Attending research meetings, performing literature and information searches, working with Master's level students who are doing their thesis research in the Centre for School-Based Mental Health, and other research related activities as assigned by the Director.

**Research Assistant**, Faculty of Education, Western University (London, ON)

September 2012 – April 2013, Director: Dr Alan Edmunds

- Proof and copy-editing special education book chapters, writing ethics protocols, and other research-related activities.

**Research Assistant**, Faculty of Health and Rehabilitation Sciences, Western University (London, ON)

August 2011 – February 2012, Director: Margot Stothers

- Contacting and scheduling participants, administering and scoring standardized tests including the Wechsler Adult Intelligence Scale, the Peabody Picture Vocabulary Test, Fourth Edition, and the Expressive Vocabulary Test, Second Edition.

**Conference Papers, Presentations, and Posters****Refereed**

Richardson, J. E., Nowicki, E., King, M. (2017). *Strategies for socially including students with disabilities: Secondary school student perspectives*. Paper presentation at the Canadian Society for the Study of Education Annual Conference, Toronto, ON, May 27-31.

- King, M., Nowicki, E., Richardson, J. E. (2017). *High school student perspectives on the social exclusion of peers with learning difficulties*. Poster presentation at the Canadian Society for the Study of Education Annual Conference, Toronto, ON, May 27-31. (accepted)
- Richardson, J. E., Nowicki, E., Brown, J. (2016). *Inclusive but not included: Perspectives of secondary school students on the social exclusion of students with learning difficulties*. Paper presentation at the Canadian Society for the Study of Education Annual Conference, Calgary, AB, May 27-June 2.
- Richardson, J. E. (2015). *Using cognitive strategy instruction to enhance the metacognitive awareness and academic self-evaluations of students with learning disabilities: Recommendations for researchers and educators*. Roundtable presentation at the Canadian Society for the Study of Education Annual Conference, Ottawa, ON, May 31-June 3.
- Richardson, J. E., Masters, E. R., & Rodger, S. (2014). *Talking to parents about student mental health: Barriers and enhancers to effective parent-teacher communication*. Paper presentation at the Canadian Society for the Study of Education Annual Conference, St. Catharines, ON, May 25-28.
- Richardson, J. E. (2013). *Social skill development in a community drama group for adults with disabilities: Discussion of findings and recommendations for future drama programs*. Poster presentation at the Ontario Council for Exceptional Children Annual Conference, Niagara Falls, ON, November 22-23.
- McAlpine\*, J. E. (2012). *Social skills and personal development in the dramatic arts*. Poster presentation at the Canadian Society for the Study of Education Annual Conference, Waterloo, ON, May 26-30.

### **Non-refereed**

- Richardson, J. E. (2013). *How to create posters for conference presentations*. Roundtable presentation at the Faculty of Education's Doctoral Seminar Series. Western University, London, ON, October 31.
- Richardson, J. E. (2013). *Examining the influence of educational placement on the school-based relationships, sense of school belonging, and emotional outcomes of students with disabilities*. Roundtable discussion at the Robert Macmillan Graduate Research in Education Symposium. Western University, London, ON, April 18.
- Richardson, J. E. (2013). *Perspectives of participants in a community drama group for adults with disabilities*. Poster presentation at Tri-faculty Research Day 2013. Western University, London, ON, March 25.
- McAlpine\*, J. E. (2012). *Exploring the social and personal development of adults with disabilities in the dramatic arts*. Roundtable discussion at the 3rd Annual Graduate Research in Education Symposium. Western University, London, ON, April 11.
- McAlpine\*, J. E. (2012). *Social skills and personal development in the dramatic arts: A presentation of methods*. Poster presentation at Tri-faculty Research Day. Western University, London, ON, March 19.

\*Maiden name

### Graduate Courses Completed

#### Doctor of Philosophy

PhD Seminar  
Multivariate Research Design  
Mixed Research Methods  
Students with Autism, Intellectual, and Developmental Disabilities  
Independent Reading and Research: Learning Disabilities

#### Masters of Education

Psychology in Education  
Assessment and Evaluation in Regular/Special Edu  
Special Topics: Learning Disabilities  
Problems and Issues in Special Education  
Statistics in Education  
Research Design in Education

### Community Service

#### Guest Presenter, Learning Skills Services, Western University (2016-2018)

- Developed and delivered a presentation entitled "Staying Motivated in Graduate School" as part of an ongoing lecture series for graduate students.

#### Learning Skills Peer, Learning Skills Services, Western University (Sept. 2016-April 2017)

- My role included providing assistance to undergraduate and graduate students with a variety of learning skills, such as: studying for exams, writing essays, time management, motivation, note-taking, textbook reading, etc.

#### Proposal Reviewer, Canadian Society for the Study of Education (2011-2016)

- Reviewed proposal submissions for the annual CSSE conference for both CCGSE and CAEP.

#### Roundtable Discussant, Canadian Society for the Study of Education Conference (2014)

- Read papers and provided feedback for presenters.

#### Education Graduate Student Association, Western University (2013-2015)

- Knowledge Dissemination Committee: Responsible for providing graduate students with information about what is happening at the faculty by updating the EGSA website, Facebook group, and bulletin boards about important events, news, and updates.
- Social Committee: Responsible for planning inclusive events for all graduate students to attend with the purpose of building a stronger school community.

#### Society of Graduate Students, Western University (2013-2014)

- Disabilities Commissioner: Act as a liaison and advocate for graduate students with disabilities.
- Education Councillor: Attend monthly meetings and vote on important issues that impact graduate students.

#### PhD Student Mentor, Faculty of Education, Western University (2013-2015)

- Responsible for providing guidance and support to first year PhD students.

### Professional Memberships and Activities

- **Canadian Society for the Study of Education (CSSE)**, 2011 – present

Canadian Association for Educational Psychology (CAEP)  
Canadian Committee of Graduate Students in Education (CCGSE)

- **Council for Exceptional Children (CEC)**, 2013 – 2014  
Ontario CEC – London Chapter
- **American Psychological Association (APA)**, 2014 – 2015  
Division 15: Educational Psychology and Division 16: School Psychology

#### **Academic Honours and Awards**

- Western Graduate Research Scholarship 2015-2016, Western University
- Ontario Graduate Scholarship 2014-2015, Western University, \$15 000
- Western Graduate Research Scholarship 2010-2014, Western University
- Dean's Honour List 2009 and 2010, King's University College