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Prediction of Teacher Well-Being through Beliefs: A Mixed-Methods Study of Educators

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A thesis submitted in partial fulfillment of the requirements for the Master of Arts degree in Education
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Abstract

Teachers' beliefs regarding students with disabilities and their overall well-being are critical for successful inclusion. The current project sought to explore whether teacher beliefs predict teacher well-being and aimed to increase our understanding of how teachers' experiences with inclusion influence well-being and teaching practices. Participants (n=67) completed a demographic questionnaire, the Beliefs about Learning and Teaching Questionnaire, and the Kessler-6 instrument. Eleven teachers participated in interviews regarding their experiences in inclusion and relevant teaching practices. Results suggest that increased professional experience predicted higher levels of distress in teachers. Additionally, thematic analysis of the interviews identified five themes regarding the current climate of teaching: (a) definition of inclusion, (b) increased demands, (c) classroom management strategies, (d) successful inclusion requires support, and (e) the impact of standardized inclusion. Such knowledge provides recommendations for teacher education programs and professional development opportunities to strengthen inclusive beliefs and promote effective wellness practices in teachers.

Keywords: inclusion, teachers, beliefs, diversity, experiences, well-being

Summary for Lay Audience

Inclusive education is defined as all students having access to education in their local neighbourhoods with their same-aged peers. For inclusive education to be successful, it requires that teachers be the primary advocate of inclusivity, and believe that all students have the right to be in the general classroom. However, promoting inclusion is not an easy task and increases teacher demands and stress, particularly affecting their overall well-being. When teachers experience chronic and/or high levels of stress in teaching, it impacts their mental health, their work ethic, and, ultimately, their students. The goal of this project was to explore if teacher beliefs about inclusive education predict teacher well-being. Additionally, this project was conducted to help us understand how teachers' experiences with inclusion influence well-being and teaching practices. Teachers were recruited to complete a brief questionnaire about themselves, questions regarding their beliefs about learning and teaching, and questions about their current mental health and well-being. There were 67 teachers in total. Following the completion of the questionnaire, 11 teachers participated in interviews regarding their experiences in inclusion and relevant teaching practices. The results suggest that increased professional experience with learners who require more support predicted higher levels of distress in teachers. Interview data was analyzed using Braun and Clarke's (2021) thematic analysis process to identify recurring themes in the data that help deepen our understanding of teacher beliefs, well-being, and inclusion. Teachers identified five themes in their interviews: (a) the definition of inclusion, (b) increased demands, (c) classroom management strategies, (d) successful inclusion requires support, and (e) the impact of standardized inclusion. Teachers provided insight into the current climate of teaching and the education system, and areas where they need more support and/or resources to be successful. The knowledge acquired from the results of this study helps to provide recommendations for teacher education programs and professional development opportunities to strengthen inclusive beliefs and increase wellness practices for teachers.

Acknowledgments

Firstly, I would like to deeply thank my supervisor, Dr. Jacqui Specht, for her continuous support and thoughtful mentorship over the last two years. I am so grateful for your expertise, your guidance, and your listening ear through this entire process. It is truly a privilege to work with and learn from you, and I am excited for the years of collaboration and learning to come.

I would also like to thank Dr. Susan Rodger and the Teacher Wellness team; without you all, this project would not have been possible. To the teachers who participated in this project, thank you for your vulnerability, your time, and for sharing your stories.

Finally, I am forever grateful for my family and friends who have supported this journey since the day I began applying to graduate school. My best friends, thank you for always showing up for me, motivating me, and staying connected no matter how far I move away. To my sister, Dr. Tracey Adams, you have been my role model ever since I can remember. Thank you for your constant empathy and selflessness, and for picking up the phone no matter how many times I called. To my partner, Calvin, thank you for keeping me grounded, for making me laugh when I need it most, and for your unwavering support of all my goals and dreams (including four more years of school). And to my parents, my pillars, whom this journey would not be possible without. Thank you for providing me with everything I needed to reach my goals and believing in me more than I ever could.

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Chapter 1

1 Introduction

Following the issuance of the Salamanca Statement, government officials worldwide have increasingly focused on the development of inclusive education systems (UNESCO, 1994). Broadly, inclusive education is defined as providing all students with access to education with their same-aged peers in their neighbourhood communities (Porter & Towell, 2017). The Salamanca Statement affirmed not only that students with disabilities have the right to be included in the general classroom, but that in doing so, education systems worldwide could create environments that combat discrimination, foster positive community relationships, and engage all students in meaningful education (Hehir et al., 2016). Since the Salamanca Statement, inclusive education has become a growing area of research in education as the literature sought to investigate the impacts of segregation and, in turn, the benefits of inclusion. What is known is that inclusive education is important, as it not only provides equal opportunities but equitable, if not increased, academic and social outcomes for all students, regardless of ability. In fact, recent literature has demonstrated the positive effects of inclusion on school attendance and academic motivation, social relationships in and outside of school, and the pursuit of post-secondary education and employment rates of children and youth with disabilities (Hehir et al., 2016; Kefallinou et al., 2020).

The Canadian Charter of Rights and Freedoms was the first in the world to advocate and protect education for students of all abilities by including the rights and freedoms of persons with physical and mental disabilities in 1982 (Bradford et al., 2021; Sokal & Katz, 2015). Since then, Canadian education has made a gradual increase in the defunding of segregated schools, the reconstruction of general classrooms, and the subsequent integration and inclusion of children with disabilities. However, there is still work to be done (Grynova & Kalinichenko, 2018). The Canadian education system is mandated provincially, meaning that each of the provincial/territorial educational departments develops its own K-12 curriculum and dictates the definitions, policies, and practices for how inclusion is implemented. As such, there is variability in how each school board

approaches inclusion and how educators are supported. Particularly, there are provinces and school boards that have implemented thorough and thoughtful inclusive practices; whereas others are unable to provide the human and financial resources necessary for successful inclusion (Sokal & Katz, 2015). Thus, without a unified goal from ministries at the provincial level, there exists a disconnect between national policy and provincial practice.

Moreover, although reform exists, empirical evidence suggests that Canadian teachers feel ill-prepared for the responsibility of successfully teaching in inclusive classrooms (Bradford et al., 2021; Sokal & Katz, 2015). Teachers' concerns regarding supporting diverse populations stem from the inability to meet the needs of each student in the classroom, and the stress of not providing students with the sufficient attention and learning tools they need (McCracken et al., 2023). Concerns about effective teaching in an inclusive classroom may not be adequately addressed in the teacher education program, or if they are addressed through curricula, their training offers a lack of experiences with diverse populations and inhibits new teachers from translating such knowledge into practice (Massouti, 2019; UNICEF, 2012). These concerns, coupled with the profession's list of demands, demonstrate the reason for avoiding inclusive teaching. The problem, henceforth, lies in acquiring the appropriate resources to successfully implement the recommendations from the literature in inclusive classrooms, in hopes of narrowing the research-to-practice gap.

1.1 Theoretical Framework

Shulman's (2005) framework of pedagogy describes three fundamental components of preparing teachers, and any other professionals, for their profession. These preparations, named apprenticeships, require teachers to have a cognitive apprenticeship (to think), a practical apprenticeship (to perform), and a moral apprenticeship (to act with integrity) before beginning their careers as educators. Sharma (2018), based on this framework, developed the 3H Model of Inclusive Teacher Education that employs these three elements as its framework for teacher development, particularly in the context of inclusive education. In the 3H Model, these apprenticeships are known as the *heart* (to act with moral integrity), the *head* (to think), and the *hands* (to perform). The model's

foundation is the *heart*, which are the attitudes and beliefs of teachers critical to one's profession. These are beliefs they may carry from their personal lives or acquire throughout their careers and that ultimately guide their teaching. Research has noted that for inclusion to be successful, educators must hold positive attitudes toward students and believe that all, not some, students should be included in the general education classroom (Sharma, 2018). The *head* is the knowledge teachers must acquire before entering and teaching in classrooms. Specific to inclusion, the *head* requires teachers to know potential adaptations and modifications to the curriculum or instructional practice, behavioural management and de-escalation techniques, and strategies for promoting social relationships between students. Finally, the *hands* are the applied practice of inclusive education; how teachers implement their beliefs and knowledge in the classroom, modified by feedback and self-reflection. Utilizing this three-pronged model as a guide for inclusive teaching requires teachers to possess the necessary beliefs about inclusivity before cultivating knowledge, followed by applying the skills they acquire over their teaching program to their careers as classroom teachers. Sharma (2018) describes this application as one of the more challenging steps to inclusive education, as personal beliefs and theoretical knowledge do not always translate to the realities of the classroom environment. Thus, to design and deliver appropriate support for teachers in their efforts to implement inclusion, research must investigate the association between beliefs and other dimensions of the *heart* that may influence the *head* and *hands*.

1.2   Defining Teacher Beliefs

Belief is a construct that exists in all humans, guiding processes such as attention, decision-making, and behaviour (Fives & Buehl, 2012; Kagan, 1992). Beliefs are significant to the individual as they support humans in navigating the world, extracting meaning, managing uncertainty, and interpreting new events and environments (Connors & Halligan, 2015). The development of beliefs occurs passively, such that individuals acquire beliefs without the awareness that this process is happening. As such, beliefs are often shaped by the experiences of the individual, as they observe, participate with, and imitate others and the world around them. These beliefs may strengthen or change over time due to the experiences they encounter throughout their lives (Pajares, 1992).

In education, teacher belief is the unconscious assumptions that teachers have about students, classrooms, learning, and teaching materials. These beliefs tend to be relatively stable over time and influence teachers' teaching approaches and strategies for classroom management (Kagan, 1992). In addition to specific education beliefs that guide their classroom behaviour, the beliefs that teachers carry about the world shape the lens through which they view inclusion and diverse students. Research exploring teachers' beliefs about inclusion may demonstrate the aforementioned disconnect between policy and practice, as these beliefs play a role in their willingness and motivation to implement reform (Dignath et al., 2022). Jordan and colleagues (2009) suggest that teacher beliefs may be defined by a spectrum of two opposing views of student abilities. On one end, teachers who align with *entity* beliefs may believe that a student's learning ability is set from birth and remains stable throughout life. These teachers view disability as pathology and, therefore, not susceptible to intervention, marking students with disabilities as incapable of improvement. However, on the other end, teachers who align more closely with *incremental* beliefs about learning view themselves as interventionists, such that children with disabilities can overcome challenges with the help of changes in the learning environment, and that they are the primary change agents of this process (Jordan, 2018b). For example, a teacher with incremental beliefs might seek information from and work collaboratively with the students, their families and colleagues, systematically track students' progress, and find ways to accommodate learning to the student's needs (Jordan, 2009).

Teachers who hold more positive beliefs regarding disability and inclusion are evidenced to be more successful in inclusive teaching. The literature suggests that teachers who hold positive beliefs toward the inclusion of students with disabilities are more likely to consistently include children and youth in full-class activities and assist all students, with and without exceptionalities, to thrive both academically and socially (Jordan, 2018a; Silverman, 2007). Further, teachers who possess more inclusive beliefs engage in more academic talk with all of their students and interact with struggling students almost twice as much as with others (Jordan, 2018a). Finally, teachers with higher inclusive beliefs tend to have higher self-efficacy, such that teachers who believe it is their responsibility to teach inclusively have a higher sense of self-confidence and strongly believe they can

take on the task (Jordan, 2018b; Kagan, 1992). However, teachers who do not possess positive beliefs experience more deleterious outcomes for themselves and their students. Teachers who hold negative beliefs regarding inclusion are more likely to view the inclusion of some children (i.e., with behavioural challenges) as 'impossible.' These teachers attribute unfavourable classroom behaviours to a student's disability and place the onus on others to teach students with diverse needs, therefore engaging in less collaboration with families and coworkers (Jordan, 2009; Vermeulen et al., 2012; Zambelli & Bonni, 2004). Negative beliefs have also been associated with lower expectations for these students and, in turn, incite lowered academic and negative social outcomes (Jussim & Harber, 2005). As the *heart* is the foundation of inclusive teaching, it is imperative to explore the limitations to successful inclusive education, particularly, through examining why teachers have negative or neutral beliefs in inclusion and/or of students with disabilities.

1.3   Beliefs about Teaching and Learning Questionnaire

In investigating teacher beliefs, a measure utilized in the literature is the Beliefs about Learning and Teaching Questionnaire (BLTQ) developed by the Supporting Effective Teaching (SET) project team. The SET team conducted over 20 years of work regarding how teachers support students with special education needs, and if differences between teachers played a role in successful inclusion and various student outcomes (Jordan, 2018a). These differences in teachers are marked by certain teacher characteristics (i.e., beliefs, self-efficacy) that influence their behaviour and teaching practices and thus, the academic, social, or behavioural outcomes of their students. Through their work with teachers, the SET team created the Pathognomonic-Interventionist (P-I) interview. The P-I interview rates teachers based on their programming, monitoring, and communication regarding a student's learning needs and places their beliefs about ability on a continuum (i.e., from pathognomonic to interventionist). On this continuum, teachers who have more *pathognomonic* beliefs hold similar views to entity beliefs, such that students with disabilities have fixed characteristics that are not susceptible to change, as well as needs that are beyond the help of a teacher. Teachers with more *interventionist* beliefs believe that ability is malleable, and they are responsible for eliminating barriers to helping

students with disabilities achieve their goals. Despite the P-I interview being a powerful tool for collecting data, the SET team sought a more economical, brief approach to measuring teacher beliefs. Thus, the BLTQ is a 20-item self-report scale developed to capture teachers' beliefs about ability, teaching and learning, and their role in student learning and the classroom in a short-form, feasible manner (Glenn, 2018).

The BLTQ is comprised of four scales in which items are aggregated and interpreted to evaluate teachers' beliefs about student learning. Firstly, the Teacher-Controlled Instruction subscale reflects more "traditional" ways of teaching. The Teacher-Controlled Instruction subscale is marked by teachers having full control over the learning of their students, with minimal flexibility regarding how students acquire knowledge and is thus, less inclusive. For example, this subscale has items such as "It is important for teachers to maintain complete control over lessons." Secondly, akin to the Pathognomonic-Interventionist continuum, the Entity-Increment scale highlights where teachers fall on the spectrum of ability as a fixed or malleable trait. Lower scores on the Entity-Increment scale reflect entity beliefs that ability is a stable trait that cannot be improved and affects learning in all areas; whereas higher scores on this scale reflect the incremental, interventionist belief that ability can change as a result of good teaching and practice. Items on this scale include, "There will always be some students who simply won't 'get it' no matter what I do."

The Student-Centred Instruction scale reflects the belief that a teacher's role is to provide support and guidance to students as they navigate activities that require them to acquire knowledge and communicate findings. For example, the Student-Centred items reflect a student's ability to understand concepts rather than have correct responses, such as, "Good instruction relates learning materials to things students are interested in outside of school." Higher scores on this scale reflect the belief that teaching requires flexibility and freedom in instruction and assessment. Finally, the Attaining Standards subscale reflects teachers' beliefs in how students meet the standards set out by the curriculum, school, and policy. For example, "The more students are concerned about grades and performance, the more they learn." Higher scores on this scale reflect the belief that teachers should emphasize the production of correct results and use grades as motivation for students to

meet standards. In summary, higher scores on the Entity-Increment and Student-Centred Instruction scales, and lower scores on the Teacher Controlled Instruction and Attaining Standards scales, are indicative of higher inclusive beliefs. Previous literature has utilized the BLTQ when evaluating the beliefs of Canadian pre- and in-service teachers (Delorey et al., 2020; Specht & Metsala, 2018).

1.4 The Development of Inclusive Beliefs

Much like other beliefs, the development of beliefs that support inclusion occurs unconsciously. As a student growing up in the education system, we acquire beliefs about schooling, teachers, and other students with and without disabilities. These beliefs we acquire guide us into high school and post-secondary, where we continue to gather beliefs as our teachers, social groups, and learning changes. For those who continue to post-secondary education to become teachers, these beliefs branch out to become a network, with core beliefs at their trunk, as they gain more knowledge and skills in inclusion (Kagan, 1992; Pajares, 1992). Therefore, as new information is processed, it either coincides with or contradicts existing beliefs, and begins a process of adjustment or dismissal. The literature suggests certain teacher characteristics may be associated with increased beliefs, such that teachers who identify as female, teach at the elementary level, and/or teachers with more years spent in the education field tend to have more positive beliefs (Qi & Ha, 2020; Specht & Metsala, 2018; Specht et al., 2022).

At the core of the development of inclusive beliefs, empirical evidence suggests experiences with diverse students (i.e., students with disabilities) are critical for stable, positive teacher beliefs (Delorey et al., 2020; Dignath et al., 2022; Sharma, 2018). As such, pre-service and in-service teachers who have more personal and/or professional experience in inclusive education settings and/or with students with disabilities have firmer or more positive inclusive beliefs and attitudes (Jordan, 2018a; Van Mieghem, 2020). For example, personal/professional experiences may be having a friend or family member with a disability, volunteering experiences before entering post-graduate education, or practicum placements at the teacher education level. Additionally, some individuals are more likely to develop inclusive beliefs, and it is suggested that those with high positive beliefs when entering their teacher education program maintain these beliefs

throughout their degree and in the early years of their careers (Specht et al., 2022). However, without previous experiences, the development of positive beliefs for others may be contingent upon receiving opportunities to collaborate and engage with disabled and diverse students throughout their degree.

Sharma (2018) highlights that current teacher education programs emphasize the *head* of inclusive education, particularly, how to teach and what to do. However, there is less emphasis on the "why?" or the *heart* of teaching inclusively. Consequentially, teachers who hold neutral or negative beliefs regarding inclusion are less likely to invest in their knowledge and apply these skills to promote and teach inclusive spaces. Therefore, targeting pre-service and in-service teachers with low beliefs in inclusion and providing them with the opportunity to interact, engage, and learn from students with disabilities, along with providing them with the tools to teach in diverse classrooms, is imperative for student success. Education programs are uniquely positioned to provide pre-service teachers with opportunities to observe effective inclusive practices, engage with learners with diverse needs, and subsequently implement their learned skills in a safe environment with the guidance and feedback of a colleague or preceptor. Results from a recent article suggest that pre-service teachers reported their practicum and collaboration experiences as highly important for modelling inclusive education and scaffolding positive beliefs (Delorey et al., 2020). Particularly, experience and exposure to inclusive spaces and students with disabilities have been associated with higher positive attitudes and reduced concerns towards inclusion (McCracken et al., 2023). As teacher beliefs are a critical antecedent to their classroom behaviours, understanding the association between beliefs and practice is an important focus of research and contemporary teacher education programs today.

1.5 Stress and Burnout in Teaching

Teaching diverse classrooms and promoting inclusion is not an easy task as it increases teacher demands, which, in addition to instructing large classroom sizes, managing behaviour and disciplinary action, and effectively planning and executing the required curriculum, particularly affects their overall mental health (Hascher & Waber, 2021, Simonton et al., 2022). As such, teachers are at a heightened risk for teacher stress and

occupational burnout. Teacher stress is defined by Kyriacou (2001) as "a negative emotional experience that is triggered by teachers' perception of an external situation as a threat to their self-esteem or well-being." Although teaching is recognized as a high-stress profession, significant teacher stress has been associated in the literature with poorer student academic (Herman et al., 2018) and behavioural outcomes (Elliott et al., 2024), as well as less effective instructional practices (Bottiani et al., 2019).

In addition to the roles mentioned above, teachers are now tasked with remedying the impacts of the pandemic on their students. Although the COVID-19 pandemic is considered over, in the post-stay-at-home and mask-mandated classroom, teachers are facing the impacts that the pandemic had on the development of their students, resulting in increasing mental health and trauma concerns in the classroom. As student needs increase, so does the list of demands with which teachers are tasked. For some teachers, the increase in job demands may limit their ability to cope and lead to factors depriving their engagement in teaching (i.e., depressed mood; Skaalvik & Skaalvik, 2018); thus, the importance of effective administrative supports and social resources in education systems. In addition to the time constraints as a result of increased demands, previous work by Gearheart and colleagues (2022) listed various barriers to effective stress management, such as poor social climate, inconsistent administration support, and social stigma. Teachers often face obstacles in accessing sufficient support and resources and ultimately, do not receive the support they need themselves for effective teaching (Canadian Teachers' Federation, 2020b; Gearhart et al., 2022). Due to this rise in stressors, coupled with a lack of support, stressed teachers are at risk for an increase in emotional exhaustion and a lowered sense of personal accomplishment (Friesen et al., 2023). As a result of chronic stressors and emotional and physical fatigue, teachers experience occupational burnout (Maslach et al., 2001).

Teacher burnout is especially worrying in education, as poor performance, leaves of absence, and attrition place further stress on the education system and practicing teachers. Of particular concern is the effect of teacher burnout on inclusive education, as students who require more support may be met with disconnected and disengaged teachers who cannot meet their diverse needs (Friesen et al., 2023). However, not all teachers who

teach inclusive classrooms experience heightened levels of stress and occupational burnout. Therefore, research investigating teacher characteristics associated with negative mental health and burnout may be required to adequately prepare teachers and schools for successful inclusion.

1.6   Teacher Well-Being

A protective buffer against heightened levels of stress and occupational burnout may be teacher well-being (Fox et al., 2020). Teacher well-being refers to a positive emotional outlook as a result of the harmony between the school environment and student factors (Engels et al., 2004). For example, the achievement expectations set out by the school's administration and the level of ability amongst students to meet these expectations in a teacher's classroom. These factors that interact to promote well-being may be external (i.e., school leadership, quantity of resources), or internal (i.e., satisfaction, coping) to the teacher (Fox et al., 2020). Specifically, Fox (2021) outlines four components of teacher well-being, namely, teacher efficacy, teacher disposition, school connectedness, and job-specific stress. School connectedness, such as feeling respected and cared for, having positive relationships with coworkers, and adequate support from administration is important for teacher well-being. For example, teacher well-being is associated with a positive school climate and increased commitment of teachers (Hascher & Waber, 2021). Specifically for inclusion, the more teachers perceive their social environment as positive and conducive to inclusion, the less they experience emotional distress such as burnout and non-fulfillment (Talmor et al., 2005). Thus, the school impacts teacher well-being just as much as teacher well-being impacts the school.

In addition to themselves, positive teacher well-being has been associated with critical outcomes for students. Teacher well-being has been associated with student-teacher relationships, such that positive relationships contribute to positive teacher well-being and conflictual relationships can have strong negative effects on well-being (Split et al., 2011). In addition to meaningful relationships, teacher well-being plays a critical role in student academic outcomes (Arens & Morin, 2016; Oberle & Schonert-Reichl, 2016). Particularly, teacher well-being has been linked to outcomes for students with disabilities,

such that having higher levels of well-being enhances their ability to teach diverse groups (Roffey, 2012).

As Fox (2021) mentions, teacher disposition and efficacy are critically related to their well-being. To complement these components of Fox's definition, teacher well-being has been associated with teacher characteristics in the literature, such as autonomy and creativity of teaching, sense of achievement, and self-efficacy (Bardach et al., 2022; Fox et al., 2020; Seligman, 2012; Zee & Koomen, 2016). Self-efficacy, importantly, is related to confidence and beliefs in teaching such that teachers with higher self-efficacy are more inclusive as they believe they can take on the task (Wray et al., 2022). It is intuitive, then, to argue that should a teacher feel more confident and efficacious in their teaching, we would see improvement in their level of well-being. For instance, a recent study suggests that higher inclusive beliefs and self-efficacy predict lower levels of burnout in a sample of Canadian teachers (Friesen et al., 2023). However, this area of research is limited. In considering the demands of the profession, investigating how well-being is related to other factors internal to teachers may be salient to how teacher education programs, professional development, and policy reform respond to inclusive education needs in Canada.

Teachers are the primary pillar of successful inclusive education, therefore their well-being and beliefs are integral to the implementation of meaningful inclusive practice. Given that teacher well-being can influence self-efficacy, and self-efficacious teachers have more inclusive beliefs potentially relating to less burnout, research on the factors relating to well-being may be critical for inclusive education. Furthermore, by recognizing that the beliefs, or the *heart* of inclusive teaching, are the foundation for which the *head* and the *hands* build, research examining the interplay between the dimensions of the *heart* may be integral to successful inclusive teaching. To our knowledge, there is a gap in the literature investigating how teacher beliefs are associated with teacher well-being.

1.7   The Present Study

In considering the previous literature, it is important to explore how internal (i.e., disposition, beliefs) and external (i.e., community, environment) factors impact teachers' level of well-being, particularly when considering inclusive education. Therefore, in extending the previous literature, the current project examines the association between teacher beliefs and teacher well-being. Additionally, it seeks to explore how contextual factors, such as supports and resources, influence beliefs and contribute to their well-being and inclusive practices. As such, it aimed to: (a) evaluate if teacher beliefs uniquely predict teacher well-being, and (b) gain a greater understanding of how teachers' experiences in education and beliefs about inclusion influence well-being and teaching strategies.

Chapter 2

2 Methodology

2.1 Participants

Sixty-seven associate teachers recruited through mass email in the Faculty of Education at Western University participated in this project. Participants were eligible for participation if they were actively accepting pre-service teachers in their classrooms to complete their practicum placements at the time of enrollment. Teachers were, on average, 45 years old (SD = 7.8) and had been teaching for 18.5 years (SD = 7.0). Our sample was predominately White (97%) and female (83%). Fifty-one percent of teachers were currently teaching at the secondary level. Four participants were not included in the final analyses due to missing data.

2.2 Measures

Sociodemographic characteristics. Teachers were asked a series of demographic questions including their age, ethnicity, gender, years spent teaching, and grades taught (i.e., elementary or secondary). Teachers also indicated if they have encountered diverse learners (i.e., yes or no) in the following ways: self, family member, friend, co-worker/volunteer, in a professional role or none. Finally, teachers were asked to rate their amount of professional and personal experience working with *learners who need more support* on a Likert scale from none at all (0) to extensive (3).

Beliefs about Learning and Teaching Questionnaire–Revised (BLTQ; Glenn, 2018). The BLTQ is a 20-item revised scale that measures teachers' roles, goals, and beliefs about ability based on four factors: Student-Centered Instruction, Teacher-Controlled Instruction, Entity-Increment, and Attaining Standards. Teachers responded to items using a Likert scale from strongly disagree (1) to strongly agree (6). Higher scores on the Student-Centered Instruction and Entity-Increment scales, and lower scores on Teacher Controlled Instruction and Attaining Standards, reflect higher inclusive beliefs (Specht & Metsala, 2018). For the current sample, Cronbach's alpha for the BLTQ subscales were as

follows: Teacher-Controlled Instruction ($\alpha = .58$), Entity-Increment ($\alpha = .55$), Student-Centred Instruction ($\alpha = .67$), and Attaining Standards ($\alpha = .75$).

The Kessler-6 Instrument for Assessing Mental Health (K6; Kessler et al., 2002). Teacher mental well-being was assessed using the K6 screening tool, a short-form instrument adapted from the Kessler-10 designed to quantify levels of psychological distress in a brief format. Participants completed a Likert-scale rating on how they have been feeling over the last month and how often these feelings have occurred from all of the time (4) to none of the time (0). The items are summed to produce a total score between 0 and 24. In general, the literature cites a cut-off point of 13, such that a score equal to or above 13 indicates high distress and potential psychological disorder. The K6 is a commonly used screening tool for mental illness and the psychometrics properties have been acceptable in the literature (Prochaska et al., 2012). For our sample, Cronbach's $\alpha = .89$.

2.3   Procedure

Interested teachers were provided with a link to the Letter of Information before proceeding with the data collection process (Appendix B). Informed consent was completed online using Qualtrics, a Western University Research Ethics Board (REB) approved online data collection software with a stringent security policy and server located in Canada to uphold confidentiality. Participants were prompted to read through the Letter of Information and identify whether they consent to participate in this study. Eligible and interested participants completed a battery of self-report questionnaires, which included demographics, BLTQ, and the K6 via Qualtrics (Appendix C-E). Upon completing the survey, participants were invited to enter their names in a draw from the Faculty of Education.

Before the completion of the survey, all participants were asked to confirm their interest in an interview with our research team. From our sample of 67 participants, 11 teachers expressed interest and participated in one-on-one semi-structured interviews to explore their beliefs in inclusive education related to their well-being. Teachers were asked the following questions: (a) what are your beliefs about inclusive education, and how did

these develop? (b) what is your daily work like in terms of inclusive education? and c) how do inclusive education practices and policies influence your daily work and wellness? Teachers were prompted to discuss the benefits and challenges of implementing inclusion and how this affects their ability to effectively teach in their classrooms. Interviews were about 60 minutes long and occurred virtually with a master's student in the Faculty of Education trained in interviewing.

Chapter 3

3 Results

3.1 Quantitative Data

As this sample of teachers had been teaching for, on average 18.5 years, only 1.5% of teachers reflected that they had never encountered a diverse learner. Forty-two percent of teachers self-disclosed themselves as diverse learners. Participants also encountered diverse learners in their personal lives, with 82% and 74% of teachers responding that they had encountered diverse learners through family members and friends, respectively. Professionally, 80% of teachers noted they had encountered diverse learners as co-workers or co-volunteers, and 92% had encountered diverse learners in their professional roles as teachers.

When asked about their specific personal experience with learners who need more support, very few (2%) teachers reported not having any personal experience. Twenty-six percent and 30% reported having little and moderate experience, and 42% reported extensive experience. In their professional lives, no teachers reported having no experience with learners who need more support. As such, 6% reported a little, 21% reported moderate, and 73% reported having extensive experience.

To address the first aim, a stepwise linear regression analysis was conducted to explore how teacher-related factors predict well-being (see correlations in Table 1). In selecting our predictor variables, we used theoretical assumptions for certain teacher characteristics as they have shown differences in teacher education literature. Therefore, gender, grade taught (i.e., elementary or secondary), years of teaching, and level of professional and personal experience with learners who need more support were included as predictors. Additionally, the four subscales (i.e., Teacher-Controlled Instruction, Entity- Increment, Student-Centred Instruction, and Attaining Standards) of the BLTQ were predictors in the analyses. Variables were entered in the order they appear listed above (i.e., teacher characteristics, levels of experiences, BLTQ scales). Total scores on the K6 were entered as the dependent variable. All variables were entered as continuous except for gender and grade taught, which were dummy-coded. For gender, the sex categories of male (0) and

female (1) were established. Individuals who identified as transgender/non-binary or unknown were collapsed within the female group due to a limited sample. For grade level taught, responses were coded as elementary (0), and secondary (1). At each step, variables were chosen based on p values and a threshold of $p < .05$ was used to set a limit of the total variables in the final model. Checks for assumptions such as linearity, independence, homoscedasticity, and normality of residuals were conducted to ensure the strength of the analysis.

Overall, our results suggest that this sample of teachers had relatively high scores on the Student-Centred Instruction (M= 4.41, SD = .67), and Entity-Increment (M = 5.19, SD = .56) scales and low scores on the Teacher-Controlled Instruction (M = 2.76, SD = .64), and Attaining Standards (M = 2.88, SD = .99) scales. On average, participants were experiencing moderate levels of distress (M = 7.03, SD = 5.52), as indexed by the K6.

Results from the stepwise regression can be found in Table 2. Our final model explained 7% of the variance in K6 scores ($\Delta R^2 = .072$). Results from the final model suggest only professional experience as contributing to unique variance to the K6 scores in that those with more professional experience reported greater levels of distress [β = .268, $p < .05$].

3.2   Qualitative Data

The interviews conducted with the teachers were used to explore the current climate of teaching and how, if at all, inclusion impacts teachers' level of well-being. Additionally, as our final regression model suggests that professional experience may be a significant predictor of well-being, we sought to explore whether teachers articulated this sentiment in their responses to the research team. Therefore, to address this as the second aim, qualitative interview data was analyzed through thematic analysis as outlined by Braun and Clarke's six-step process (2021). Braun and Clarke's thematic analysis is an iterative process of identifying and interpreting qualitative data, as it considers flexibility and evolvement of research questions or aims through theme development.

In beginning the thematic analysis process, I familiarized myself with the data by reading and rereading transcripts while taking detailed notes of my initial thoughts and

impressions. The second phase involved beginning to code the dataset, where participant answers that were relevant to the research questions were highlighted and identified as preliminary codes. These codes are the building blocks of the analysis, as the process involves forging relevant codes to build themes, in response to the specific research aims (Clarke & Braun, 2017). As such, the subsequent stage involved generating initial themes from the coded data where shared patterns are noted. Phases four and five consist of the fine-tuning of the process. Particularly, I developed and reviewed the themes by evaluating their relevance to the research aims and subsequently refined, defined, and named the themes. Finally, the sixth step involves writing the report to produce a compelling and understandable story for the reader. As such, this section presents findings from interviews with 11 teachers. In response to the quantitative results, as well as in understanding inclusion and well-being, five themes emerged from the interviews: defining inclusion, increasing demands, classroom management strategies, successful inclusion requires support, and the impact of standardized inclusion. Although these themes are different, they interrelate and overlap as teachers emphasize the current climate associated with the profession.

3.2.1 Defining Inclusion

Teachers were explicit in their descriptions of what inclusion meant to them, however specifically, what it meant for their roles and their classrooms. Some interviewees took a more conceptual, holistic approach to defining inclusion, and this often included more than disability at its center. Particularly, participants consistently said that all students deserve to be in the regular classroom, despite their ability level, culture, or socioeconomic background. In defining inclusion, participant 1 said: "…my personal philosophy is every individual's unique so therefore we have to include them as best we can given all of their differences." Other participants related their definition of inclusion to their role as teachers. Teachers described that inclusion requires them to be the champion or model for their students, ensuring students' experiences with inclusion are meaningful and that meeting students where they are is a hallmark of effective teaching. Participant 7 defined their role in inclusion as:

> bringing everybody together and hopefully you're able, as the teacher, to create experiences, like lessons and activities that hit on the different skills of each individual student and that ideally should help kids to realize that there's different ways to solve problems.

Further, inclusion was identified as providing students with the opportunities and experiences to learn from and engage with diverse students. Interviewees consistently mentioned that inclusion requires a level of harmony, respect, and connection between peers in their classrooms. As such, interviewees continued to describe that having this community and encouragement between students contributes to their positive well-being, participant 5 notes, "When you see those moments, those students helping students, and students encouraging students, that definitely does help."

3.2.2 Increased Demands

When speaking about the current climate of the profession, teachers frequently acknowledged the increase in their roles and responsibilities as educators in today's classroom. Teachers described their roles are continuously changing and their demands have accumulated in the form of increased clerical or administrative tasks, the learning curve and operation of new technology, attending to more students with more needs in their classrooms, and, in terms of inclusion, an increased awareness of better teaching practices that come with prioritizing inclusion (i.e., developing differentiated/tiered instruction, using safe and appropriate language, acknowledging different cultures/religions, creating more equitable assessment standards). Particularly, when speaking about inclusion, a more experienced teacher (participant 11) noted,

> I know experienced teachers were overwhelmed by it all [tiered instruction], and I have colleagues who have retired because of the increasing demands. Like, I could have retired seven years ago, right? So people will just be like, oh, I can't take it anymore, I gotta get out, there's [inaudible – overlap]. It's just too overwhelming, it's too demanding, it's too this, it's too that...

Throughout the interviews, teachers used terms like awareness (i.e., being aware of all students in the classroom at once), juggling (i.e., new policies, increased class sizes, different roles), and personal responsibility (i.e., 'it's our jobs,' 'I have to take it upon myself,' 'it's up to us') to describe their perception of inclusion relating to their demands. Interviewees highlighted the fact that although inclusion is preferable, attending to each student in the classroom at once is nearly impossible. Participant 2 highlighted this notion by saying, "Being able to reach diverse populations of students is dependent on how many individuals you have in the classroom." As class sizes grow, teachers struggle to teach all students efficiently and effectively, noting that students may not be getting what they need regardless of inclusion efforts. For example, having students of all abilities in their class leaves high-performing students feeling less stimulated, as participant 1 stated, "It's not just the kids that have learning disabilities or that are on IEPs or that are struggling, it's the other ones, too, that you have to be aware of and because then if they get bored they're disinterested." Therefore, the increase in teacher demands limits not just the inclusion efforts of students with more complex needs but also takes away from students who do not have such needs, potentially harming their education.

Coupled with this seemingly continuous list of demands, teachers spoke about how they feel these responsibilities contribute to their feelings of being spread thin, burnt out, and inadequate in meeting the needs of all their students. Participant 8 explains that full inclusion requires teachers to be available for each student in the classroom and, as they are not always available to attend to each student, jeopardizes their self-worth:

> So, I think that's like one thing that we kind of struggle is you just wish that you were 10 people instead of one sometimes 'cause there's just so many needs, right?, and I think with full inclusion, with every learning need in the classroom, if there's only one of you, you just never feel like you're quite enough to get what each of them needs, if that makes sense. […] Like, we were kind of talking about the wellness, like that feeling of constantly not being enough to every kid that needs you is, I think, takes a toll.

Teachers further described that having one-on-one interactions with students is beneficial to their well-being, but they rarely have the time to do so. In addition to self-worth, teachers agree with the sentiment of being emotionally exhausted and how this impacts their work-life balance, energy levels, and overall well-being. Ultimately, teachers describe the inclusion process as "not easy," particularly in the context of their current workload.

3.2.3 Classroom Management Strategies

Along with increased demands on teachers comes the need to develop specific classroom management strategies to be able to deliver instruction, assessment, and disciplinary action. After being asked how they manage the stress of having an inclusive classroom, participant 1 indicated, "Well, I have a system, so without the system, it wouldn't work." Although interviewees taught a variety of subjects, they reflected on how ensuring that their students feel safe, welcomed, and represented in their lesson plans and curriculum was of the utmost importance, and they were responsible for creating this sense of safety. Teachers addressed various classroom management strategies they had developed and implemented to include all students in their classrooms. For example, teachers spoke about the various ways they made their classrooms safe spaces by displaying reading materials featuring members of equity-deserving groups or inclusive flags and posters. Teachers frequently mentioned the reworking of assessments, either allowing students to demonstrate their learnings in one subject through the medium of another subject (i.e., presenting skills in English through woodshop creations) or skills based on improvement across the semester as opposed to in comparison to other students (i.e., fitness testing). Finally, celebrations such as graduations, award ceremonies, or character trait assemblies became opportunities to celebrate all students' success as a means of being more inclusive.

Importantly, interviewees noted that giving students a sense of autonomy in their learning was not only a critical classroom management strategy but contributed to students' sense of inclusion in the classroom. Participant 4 spoke about how he incorporated inclusion to leverage student strengths in the first week of school,

In their written introductions of themselves to me, I do encourage them to tell me about anything they think I should know about their sense of identity, and about things they found difficult in school as well as things that they enjoy, things they do well at, things they do outside of school, to try to get as broad a sense of who they are so that if I think someone is kind of stuck, I can tap into that information and encourage them to make a connection to their life outside of school to do the work.

In promoting student learning, teachers also described that to manage the stress of teaching in high-demand classrooms, they would create archives of lessons from previous years to save time, divide classes in half to be able to attend to more complex tasks with fewer students, and deliver tiered lesson planning to assist students at all levels to come to the same curriculum goal. Interviewees described these strategies as essential to their well-being to facilitate meeting the demands of their students and their schools.

3.2.4 Successful Inclusion Requires Support

With the increase in teacher demands and responsibilities comes the need for extra resources, whether they are professional, financial, or human. Interviewees highlighted the fact that, currently, they lack the resources to successfully teach a large group of students with a variety of needs, skills, and abilities. As Ontario school boards begin to destream classrooms at the high school level, class sizes are increasing, unique needs are increasing, and yet, the resources provided to educators remain the same. Some teachers even highlight that in the post-pandemic classroom there are fewer supports available to them, particularly, participant 9 stated,

I think where we as front-line educators are—what we're seeing is, especially in the last maybe, since the pandemic, it's kind of gotten worse, but before the pandemic even, we're not necessarily getting the same level of support staff that we, the same quantity of support staff that we once had, and I think that that's leading to, more akin to like babysitting situations…

Consequently, the lack of support for teachers results in less instructional time and more time "babysitting," leaving students disengaged with the material and unfulfilled in their education. Teachers highlight that to increase their ability to help students support could take many forms, such as additional adults in the classroom, consultation with other professionals, supportive and flexible administration, and funding for inclusion. Interviewees often talked about the benefit of having and normalizing education assistants (EAs) in the classroom, that perhaps inclusion would be easier not only because teachers are getting more support, but it is not just students with high needs that are receiving the aid of an EA. When speaking about other professional supports, participant 8 mentioned that inclusion is essential, but in scaffolding specific skills, some learners may require additional support outside of the classroom environment. They mention the benefit of having one-on-one support for the basics of two of her young learners, "one of our little ones that is just really struggling with behaviour and sometimes that smaller environment might help," and for another child, "even having short bursts of one-on-one, or some English as a second language, or MLL, I guess, learning time would just help really focus on the skills, those foundational skills for her." This teacher emphasized that especially because her students are early in their education careers, these supports would greatly benefit their academic and social development as they progress through the system. Teachers additionally emphasized that this lack of support contributes to their feelings of stress and lowered well-being. Participant 9 discusses a student who receives extra support from a social worker, however,

> even in his situation, because the need is so great, he doesn't even see her once a week , and that's not right. That's not right, like, and we can—so sometimes you feel, like on a professional level you feel a little bit like we as a society but more of a system are failing some of them.

Teachers who mentioned that inclusion was at the forefront of their school's values and policies reflected their inclusion practices. As such, administration reflects the "top-down" processes required for an inclusive school, such that the values and beliefs reflected at the highest level shape the decisions, practices, and beliefs of staff and students. For example, participant 5 implemented large changes in their instructional

practices and assessment tools as their school had the capacity and motivation to improve student outcomes and school satisfaction. Participant 6 noted a similar sentiment, "I believe our school board is, that's [inclusion] always first and foremost on the things that they're talking about." However, when asked if their school or school board provided tools for navigating difficult situations with their students, the answer was a brief "No." Therefore, considering inclusion at the administrative level is important, but putting this into action to support teachers is how inclusion is effectively implemented in schools.

3.2.5 Impact of Standardized Inclusion

Although teachers often spoke about how their added demands, lack of resources, and increased needs impact their well-being, a couple of teachers highlighted how their well-being is directly impacted by inclusion policies or push from the board and government officials. Teachers who have extensive professional experience in teaching frequently noted how education has shifted throughout their careers, particularly in the context of inclusion, and how these shifts impact their ability to teach. Participant 11 acknowledges these shifts in inclusion by outlining how implementing differentiated instruction impacts her self-efficacy in teaching,

> So how do I - now feel like an imposter saying, okay, I designed this lesson for you, and you're like, you can't design a lesson for me, you don't know what it's like to be me, or to, sit here in a different culture from my own, and so then all of this has to run in the back of your mind…

Therefore, in this sense, inclusion without equipping pre-service and in-service teachers with professional development tools to confidently deliver inclusive lessons elevates the risk of low self-efficacy and, as a result, poor well-being. Teachers spoke in the interviews about how knowledge and skills in inclusion and developing and delivering inclusive lessons should be provided by the board or government to staff and schools. Despite providing professional development or staff meetings on inclusion to teachers, interviewees noted that these are primarily delivered as standardized PowerPoints or scripted speeches, without providing specific tools or answers to burning questions from teachers. In a particular interview, participant 4 stood out as someone who has experience

teaching in inclusion and implementing classroom management strategies but disagrees with the standards of inclusion set out by their board. They highlight "But that's *their* propaganda. And so we questioned the person who presented it [bell curve standardization], and after that meeting, our principal was raked over the coals because the staff weren't onside, that we hadn't been indoctrinated yet." As such, teachers reported often the challenges of misalignment between the opinions of staff/administration and board-level professionals when it comes to inclusion. For example, participant 10 spoke about inclusion during pride month, and stated "There's a few trustees that are not as progressive and there's been a lot of battles within our— battles that we're winning, I think, and there's like a trustee visit tomorrow and there's a lot of teachers that are going to be wearing rainbows, so we'll see how that goes." Both participants use terminology alluding to the difficulties educators face when their promotion of inclusion does not align with their board's policies and/or procedures. The inconsistency in goals creates a sense of mistrust in their superiors as it leaves teachers feeling ill-prepared to teach in inclusive classrooms, thus risking their sense of confidence and well-being in their professional role.

As marked by the themes identified in the thematic analyses, teachers highlighted how their current experiences with inclusion and teaching generally have led them to have a lowered sense of self. Their experiences with standardized inclusion, increasing demands, and lowered resources impact their sense of well-being in their roles as educators. As such, implementing inclusion may be at risk in today's classroom.

Chapter 4

4   Discussion

For current models of inclusive education to be successful, it requires that teachers be the primary proponent of inclusivity in their classrooms. As such, our study aimed to explore the role of beliefs in predicting well-being, and how well-being relates to inclusion. The first goal of the present study sought to investigate if teacher beliefs predict their level of well-being utilizing data from 67 in-service teachers in Canada. Overall, scores from the BLTQ suggest our sample of teachers had relatively high inclusive beliefs marked by high scores on the Student-Centred Instruction and Entity-Increment scales. These scores on the BLTQ are consistent with previous findings of Canadian pre-service teachers exhibiting highly inclusive beliefs (Specht & Metsala, 2018; Specht et al., 2016). However, the results of the quantitative survey suggest that beliefs did not significantly predict well-being.

To investigate the aims of the study further, data from 11 interviews was analyzed using thematic analysis to get a better understanding of teachers' perspectives on inclusion, how inclusion is implemented in their classrooms, and their current well-being relating to inclusion. In accordance with the 3H model, the teacher spoke often about the *heart*, *head,* and *hands* involved in their teaching practice. Particularly, teachers emphasized the *heart* of teaching by describing how inclusion is important to them. Teachers spoke about how they are "all about inclusion" and giving all students representation, safety, and opportunities required for success. Moreover, they spoke about how important it was to instil these values or the *heart* in their students by promoting collaboration, empathy, and understanding between peers in their classrooms. They also explained that they wanted to teach their students that there are different ways of solving problems, thinking, and learning and that all of these differences can co-exist in their classrooms.

In addition to the *heart,* the *head* of teaching was highlighted as teachers described how they do not always feel like they have adequate knowledge in teaching diverse students. Teachers used language like "learning techniques," "take it upon myself," and "finding information." They further described that the resources and professional development

they are receiving are not always relevant to the population of students they are supporting, therefore, requiring them to seek this information on their own time. Lastly, teachers spoke about the *hands* of inclusive teaching in outlining the classroom strategies they use to ensure all of their students feel welcome and comfortable in their classrooms. Teachers spoke frequently about the strategies they utilized to promote equitable learning, manage larger classrooms, and honour diverse identities and needs. However, teachers stressed the importance of having support, the benefits of having human resources, and the challenges when there is not enough support for them in implementing inclusion. The *hands*, according to themes identified by teachers, are where they appear to struggle the most with inclusion.

Moreover, the final stepwise regression model suggested professional experience with learners who need more support as a potential predictor of teacher well-being. This association was positive, suggesting that increased professional experiences with learners who require more support lead teachers to report higher levels of distress. Through identifying themes of the interviews, there may be multiple reasons to explain why more experience with people with disabilities results in lower well-being. As such, we outline three potential reasons to explain teachers' current state of well-being. Firstly, teachers are experiencing a significant increase in their professional roles. Interviewees mentioned frequently that the push for inclusivity and the state of the education system generally has led to an increase in classroom sizes, an increase in administrative tasks required by teachers, and an increase in students with high complex needs in mainstream classrooms. They also noted that this increase has happened exponentially in the last decade, with more experienced teachers leaving the field or retiring early due to the current demands compared with the role of teaching in the 1980s and 90s. These increased demands lead to their feelings of being spread thin, less efficacious in their practice, and, unsurprisingly, exhaustion. It is perhaps not the actual amount of time spent working professionally, but how teachers are being exposed to learners who need more support on top of their existing roles that leads teachers to feel less positive about their well-being.

Secondly, in examining the qualitative data, interviewees highlighted how education has shifted in hopes of delivering more inclusive pedagogy, but the education system lacks

the resources to adequately address the needs of staff and students. Teachers frequently mentioned in the interviews that there is less support available to teachers due to staff shortages, funding withdrawals, and time constraints. Additionally, teachers are not provided with adequate training and resources to tier lesson plans to various needs, to cope with behavioural management, or to support and teach highly complex learning and behavioural disorders. These findings echo similar findings in the literature, such that teachers may be perceptive to the principle of inclusivity, but this is contingent on having adequate training and human resources to apply inclusion in practice (Thompson et al., 2014). Moreover, a study conducted in Israel suggests that if teachers do not receive resources to match their beliefs of what inclusion should be in their classroom, they are vulnerable to a heightened risk for burnout (Talmor et al., 2005). Therefore, it is possible that despite the heightened beliefs of our sample, the strains on teachers coupled with the lack of resources available to them have a greater impact on their subjective well-being.

Theoretically, this rationale may be explained by the Job Demands-Resources model (Bakker & Demerouti, 2007). The Job Demands-Resources model recognizes an individual, in this case, a teacher's appraisal of the external (i.e., professional development, personnel) and internal (i.e., resilience, self-efficacy) resources they have compared to the demands of their job. Bakker and Demerouti (2007) further describe these resources as helpful in achieving work goals, assisting in the reduction of job demands and associated costs, and/or promoting personal development and growth. When job demands and resources are balanced, teachers are effective in their role. However, stress is the result of a mismatch between job demands and resources, and as this gap grows, so does teacher stress. They explain that chronic job demands exhaust the individual's mental and physical resources, leading to poor performance, decreased energy, and other health problems. The Job Demands-Resources model has been utilized in the literature to explain teacher stress, burnout, and well-being (Simbula et al., 2012; Sokal et al., 2020). Particularly, Simbula and colleagues (2012) suggest that teachers with high resources (i.e., opportunities for professional development and colleague support) have more positive outcomes in job satisfaction, openness to change, altruism, and work engagement compared to teachers with fewer resources. In our interviews, teachers who had the tools to adapt coursework and/or the assistance of EAs or other staff reported that

these resources are facilitators of their positive well-being. Additionally, teachers who worked in schools that aimed to implement more inclusive celebrations and environments for their students highlighted these as examples of what made them happy and successful in their role. However, teachers who spoke about the lack of support in their classrooms reported feeling isolated in their work and incapable of attending to all student's needs. According to the Job Demands-Resources model, having fewer resources as a buffer against the demands of the job would increase levels of teacher exhaustion and stress, thus impacting overall well-being.

Lastly, interviewees spoke about the impacts of the board-level inclusion policies and professional development opportunities they are given. Teachers spoke using language such as "indoctrinated," "battle," and "propaganda" when speaking about how the board and government view inclusion versus their opinions of what inclusive teaching should be. They highlight that these changes to policies around inclusion (i.e., destreaming) are inclusive on the surface, but that they are potentially harming students in the long run as teachers are not provided with tools to successfully implement said changes. Therefore, perhaps the results suggest a decrease in well-being because of the increased professional experience of inclusivity being implemented as a "trend," and not as full educational reform. Moreover, as teachers spend more time in the education system, they may become increasingly frustrated with their perceived lack of control or autonomy in their classrooms as these processes become more standardized, leading them to potentially be more resentful or disinterested in inclusion, and dissatisfied in their role as a teacher. As stepwise regression is often utilized as an exploratory analysis, professional experience as an indicator of well-being and burnout should be investigated further.

These findings are similar to other findings in the literature with pre-service and in-service teachers (Forlin & Chambers, 2011; Kim et al., 2020; Mergler et al., 2016). Kim and colleagues (2020) explain following focus groups with special education teachers that barriers to inclusion (i.e., lack of resources, large diversity spectrum, lack of inclusion models) are reasons for which their increased experiences are associated with higher challenges and concerns in the profession. These concerns start at the pre-service level, as findings from Forlin and Chambers (2011) suggest that students in teacher education

programs are most preoccupied with their lack of knowledge and skills, increased workload, and lack of ability to give attention to all students once they enter the workforce. Perspectives from participants and existing literature illustrate how increased exposure in a professional setting with learners who require more support may lead to additional stress and decreased confidence, providing a potential explanation for the decrease in well-being.

Interestingly, teachers did not limit this discussion of inclusion solely to students with disabilities. In defining inclusion, interviewees talked about inclusion for *all* students and used terms such as "diverse identities," "ethnicity or cultural backgrounds," and "socioeconomic status" when describing what it means to include all students. Although teachers spoke about differentiating assessment, tiered/universal design for learning, and extra support for specific disabilities, they also spoke about the importance of culturally relevant lessons and materials for their students. Teachers were particularly vocal about the strategies and resources they were implementing for students from racialized and/or marginalized backgrounds in their classrooms. For example, one teacher was learning about the Quran to be able to relate to her Muslim students. This definition of inclusion is becoming increasingly common internationally, as inclusion is seen more broadly as restructuring education systems by learning about and from differences to respond to diversity amongst learners (UNESCO, 2017). In a recent commentary, Ainscow (2020) notes this shift by highlighting that reform must occur to not see diversity as a problem to be fixed but as an opportunity to improve learning, similar to the *incremental* view of ability. Particularly, Ainscow echoes the feelings of the interviewees that implementing inclusive reform for all students is difficult with pre-existing cultural norms within education systems, when professionals are faced with competing demands, and teachers have the sole responsibility of responding to differences in their classrooms.

4.1   Limitations

The present study has limitations to consider. Firstly, one should be judicious when interpreting the generalizability of these results as our sample consisted of 67 demographically homogenous groups of teachers within one province in Canada. Although we did not collect information regarding the location of participants, their

affiliation with the University would indicate that they remain in the southern Ontario area.

Additionally, a limitation of the study is the measures that were utilized to capture the quantitative data for teachers. It is perhaps the scope of these scales that limited the predictive ability of well-being through beliefs. Using the K6 as an indicator of well-being is an accessible and brief way of capturing the current mental health of our sample. However, utilizing another scale that specifically asks questions regarding well-being and/or burnout may have captured the state of teachers' well-being more accurately, particularly in the context of their careers and how their profession directly impacts their well-being. Moreover, the alpha levels of the BLTQ subscales, particularly the Teacher-Controlled Instruction and Entity-Increment scales were below what is considered acceptable in the literature. As Tavakol and Dennick (2011) note, this could be a result of the low number of items in each scale. More research is required to examine the factor structure of this scale.

Finally, a limitation of this research is the scope of questions that were asked to participants. Firstly, the terms utilized in the questionnaire were not operationalized, therefore, they relied on the interpretation of the participants to indicate students whom they defined as "diverse" or in "need of more support." The scope of the interview questions was acceptable, however, perhaps we should have been intentional in the interview process by asking specifically how experiences with inclusion impacted teachers' mental health, burnout, and well-being. Moreover, due to the nature of the semi-structured interview, not all participants reflected directly on their specific experiences and spoke more broadly about inclusion in their schools. We may have benefitted by being more directive in the questions we ask, particularly, in how diversity and inclusion in the classroom are related to their well-being.

4.2   Recommendations for future research

To gain a better understanding of teachers' well-being and their beliefs in inclusion, we outline recommendations for future researchers. Firstly, in considering the limitations of this research, future projects should include increased operationalization in key terms (i.e., inclusion, diverse students, well-being) embedded in quantitative research data to assure validity and consistency in participant responses. Further, this specificity should be considered in the generation of qualitative interview questions to provide comprehensive insights from teacher perspectives into exactly how beliefs and professional experiences in inclusion impact well-being.

Furthermore, future research should consider evaluating self-efficacy as a moderator in the relationship between beliefs and well-being. Historically, the literature indicates self-efficacy as essential to successful teaching in both inclusive and non-inclusive spaces (Specht & Metsala, 2018; Specht et al., 2016; Wray et al., 2022). For example, in addition to teachers' heightened beliefs in teaching all students, higher ratings on self-efficacy measures are positively related to student's academic adjustment and the use of effective teaching methods and high-quality instruction (i.e., monitoring, no criticism; Gibson & Dembo, 1984; Woodcock & Jones, 2020; Zee & Koomen, 2016). For inclusive spaces, teachers with high self-efficacy are more likely to implement inclusive strategies in the classroom (Jordan et al., 2009), such as universal design for learning (Griful-Frixenet et al., 2021). Self-efficacy has also been negatively associated with burnout in the literature, such that teachers who feel more confident in their role and that they can manage challenges have a higher sense of personal accomplishment and motivation, experience less job-related stress, and higher retention (Zee & Koomen, 2016). In the current project, as interviewees described their increased experiences with inclusion, they included descriptive terms for themselves such as feeling like an "imposter," "helpless," and "failing," when speaking about their current performance and inadequate and incapable of meeting the needs of all their students. Perhaps a protective factor for beliefs and well-being is self-efficacy, such that teachers who have the belief and confidence that they can teach in inclusive classrooms, do so significantly more successfully than those who lack the confidence to carry out efficacious teaching practices. Therefore, with

increased beliefs in inclusion and increased self-efficacy, teachers can better manage the increasing demands of the profession and in turn, have a more positive sense of well-being and perception of stress.

4.3　　Implications for Practice

The current study provides insight into recommendations for teacher education programs, school boards, and administration. Considering the literature in education and the findings of this project, it is evident that in-service teachers require ongoing support, resources, and professional development to help implement inclusive practices and abilities to successfully teach all students. Without these supports, teachers feel ill-equipped to teach in inclusive spaces, unable to manage the needs of all their students, and overall, less well. Per the Job Demands-Resources model, we seek to provide recommendations that allow teachers to achieve their teaching goals, assist in the reduction of demands, and promote opportunities for personal learning. Additionally, consistent with the 3H model, we seek to provide recommendations that address these aims through the *heart, head,* and *hands.*

Throughout the interviews, teachers highlighted their beliefs regarding diverse students or the *heart* of inclusive teaching. However, due to their stress and feelings of inadequacy, it is important to continue to promote these beliefs to ensure that teachers remain firm in their positive beliefs when they face challenges. Following pre-service literature, we recommend providing teachers with direct experiences with learners with disabilities or diverse identities in a training-based environment. This environment should allow teachers to feel comfortable and safe in that they can learn and ask questions with more experienced teachers and other professionals. Additionally, the promotion of positive beliefs of teachers could be through offering professional development courses to respond to the *head* of teaching as teachers can acquire more knowledge, learn specific strategies, and build their toolkit for inclusive teaching. This is particularly important for teachers who work with specific groups of students (i.e., refugee students) or students with complex needs, as they gain knowledge in how to best support their students and thus, teach more effectively.

Results from our discussions with teachers suggest that it is paramount to provide more support with the *hands* of teaching. Therefore, it is recommended that administration and government officials foster discussions with teachers about what supports would be directly beneficial to them and their students. The participants in this study were candid in their need for support and vulnerable regarding how the lack thereof affects their capacity to teach. Teachers highlighted some examples in our discussions about what support looks like, and this may include having support directly in the classroom, peer/staff-directed professional development, and increased opportunities for collaboration with other professionals. In addition, teachers require support themselves to effectively teach in inclusive classrooms. Therefore, support could further include wellness-based professional development (i.e., self-directed or full days), resources for mental health support, or opportunities to gather with other teachers. If in-service teachers are not provided with tools to help their *heart* and *head* to teach inclusive classrooms, then it will be increasingly difficult for schools to implement inclusive practices (i.e., *hands)* and in turn, jeopardize the success of their students. Thus, we implore school boards and policymakers to increase the number of professional development opportunities in the areas of wellness and inclusion for current teachers to increase well-being and avoid burnout, mental illness, and attrition.

In current Canadian teacher education, most programs prepare teachers for the *head* of teaching, that is, with the knowledge and skills necessary to teach inclusive classrooms in practice. However, without the *heart*, teachers may lack the motivation, beliefs, and attitudes necessary to teach diverse classrooms effectively, or believe they cannot do so. Therefore, we seek to additionally provide recommendations for teacher education programs. Programs must promote positive beliefs through positive experiences with inclusion and/or learners with disabilities. Recent literature states that increased practicum placements with diverse students are integral to promoting the development of inclusive beliefs (Delorey et al., 2020), therefore, exposing more teacher candidates to inclusive spaces while they are still in training may be beneficial in preparing them for the realities of teaching. Additionally, as evidenced by the themes from our teacher interviews, providing teacher candidates with the tools to navigate the stressful demands of teaching is imperative to their success as they begin their careers. These experiences, combined

with relevant supports, are likely to increase attitudes, self-efficacy, and preparedness for when candidates enter the workforce and are faced with the current pressures of the profession.

4.4   Conclusion

In conclusion, the results from this study suggest that increased professional experience with students with disabilities may predict lower well-being. Furthermore, the interviews with teachers highlight how the increased responsibilities, shortage of human resources and time, and lack of knowledge-to-implementation training make it difficult for them to execute inclusive education practices and decrease their sense of well-being, regardless of their positive beliefs. For most participants, their satisfaction and preparedness for successful inclusion were predicated on resources, support, and time. These conversations with teachers highlight the importance of providing meaningful support to teachers to scaffold positive well-being, experiences with students, and inclusive beliefs. It is not only necessary for teacher well-being, but also to bolster the academic, developmental, and social success of all students, as all students deserve the right to equitable, and meaningful, education.

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Table 1. *Pearson correlations between major variables***.**

Variable	1	2	3	4	5	6	7	8	9	10
1. K6	-	-	-	-	-	-	-	-	-	-
2. Gender	.082	-	-	-	-	-	-	-	-	-
3. Level taught	.000	-.167	-	-	-	-	-	-	-	-
4. Years teaching	-.152	-.166	.043	-	-	-	-	-	-	-
5. Professional experience	.268	.049	-.072	.106	-	-	-	-	-	-
6. Personal experience	-.042	-.080	.053	.060	-.032	-	-	-	-	-
7. Teacher Controlled	-.065	-.321	-.021	-.035	-.161	-.116	-	-	-	-
8. Entity Increment	.165	.188	-.163	.184	.338	.085	-.449	-	-	-
9. Student Centred	-.057	.208	-.034	.095	-.070	-.049	-.163	.048	-	-
10. Attaining Standards	-.067	-.326	.210	-.211	-.224	.015	.670	-.429	-.134	-

Table 2. *Predictors of teachers' well-being indicated by stepwise regression analysis.*

Predictor	Beta	*SE*	95% Confidence Intervals		β	*p*
			UL	*LL*		
Professional experience	2.485	1.143	.199	4.771	.268	.034

Appendices

Appendix A: Ethics Approval Letter

Western Research

Date: 21 April 2023

To: Dr. Susan Rodger

Project ID: 122070

Study Title: Exploring and Attending to the Wellness Needs of Teachers in a Trauma and Violence Informed Care Framework

Short Title: Teacher Wellness

Application Type: NMREB Initial Application

Review Type: Delegated

Full Board Reporting Date: 05/May/2023

Date Approval Issued: 21/Apr/2023 11:14

REB Approval Expiry Date: 21/Apr/2024

Dear Dr. Susan Rodger

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the WREM application form for the above mentioned study, as of the date noted above. NMREB approval for this study remains valid until the expiry date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

This research study is to be conducted by the investigator noted above. **All other required institutional approvals and mandated training must also be obtained prior to the conduct of the study.**

Documents Approved:

Document Name	Document Type	Document Date	Document Version
Teacher Wellness_Interview Prompts	Interview Guide	23/Feb/2023	1
email invitation _Initial_April 14_rev1_clean	Recruitment Materials	14/Apr/2023	2
Reminder_Email_ Teacher Wellness_April 14_clean	Recruitment Materials	14/Apr/2023	2
Teacher Wellness LOI_April 14_Survey_clean	Implied Consent/Assent	14/Apr/2023	2
verbal consent script -April 14_rev1_clean	Verbal Consent/Assent	14/Apr/2023	2
Teacher_Wellness_Survey_April 14_rev	Online Survey Document	14/Apr/2023	2
Teacher Wellness LOI_April 14_Consultation & Interview_Clean	Implied Consent/Assent	14/Apr/2023	1

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.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Ms. Katelyn Harris , Research Ethics Officer on behalf of Dr. Randal Graham, NMREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Appendix B. Letter of Information

Letter of Information: Exploring and Attending to the Wellness Needs of Teachers in a Trauma and Violence-Informed Care Framework

The work of teachers is increasingly complex. The effects of this work and current knowledge and attitudes and the possibilities for professional development and support in the areas of teacher wellness, inclusion, and working with students who have difficult experiences are being explored. As an Associate Teacher or Teacher Candidate in the B.Ed. program at Western University, you are being invited to participate in a survey about teacher wellness. The questions asked in this survey will ask you about your wellness and invite you to share what types of professional development related to teacher wellness that you would be interested in receiving (such as specific topics and format). We appreciate your interest in this work. The survey will take approximately 30 to 45 minutes to complete. It also does not need to be completed in one sitting. Should you be interrupted while completing it or need to come back to it later, you can exit out and continue where you left off. You may skip any questions you do not want to answer.

If you decide to withdraw from the study, you may do so at any time by exiting the survey window. Due to the anonymous nature of your data, once your survey responses have been submitted, the researchers will be unable to withdraw your data.

At the end of the survey, you will be asked to indicate your interest in participating in an online Zoom interview to be scheduled at a time convenient for you on these topics. The interview will take 30 to 60 minutes. You may skip any questions you do not want to answer. You will also have the opportunity to indicate your interest in participating in the consultation group to develop resources for teacher wellness. Your participation in this research is voluntary and will not impact your relationship with the Faculty of Education in any way.

Risks & Benefits
There are no known risks to participating in this study, but some questions may be sensitive in nature. You may decline to answer any or all questions without penalization. Should you feel any level of distress, support is available through Reach Out, a confidential, 24h information, support, and crisis service (1-866-933-2023). While there are no direct benefits to participating, study data will be utilized to develop and present professional development opportunities to teacher candidates and associate teachers affiliated with the Faculty of Education. Additionally, free online resources will be available to anyone starting from July 2023 on the Faculty of Education website.

Confidentiality
The information collected will be used for research purposes only, and neither your name nor any identifying information will be used in any publication or presentation of the study results. All survey information collected for the study will be kept confidential in

the possession of Western's research; only whole group findings and themes will be shared. Anonymized survey data will be made available in summary form to the Consultation Group (Associate Teachers and Teacher Candidates who volunteer their time), who will be involved in planning and developing resources to support teacher wellness.

Qualtrics is an online survey tool that will be used to collect responses to the survey questions, The server is located in Ireland, here is the link to the Qualtrics privacy policy. Although Qualtrics operates to the highest standard for data privacy and security, no information shared over the internet is fully guaranteed in terms of confidentiality.

All data will be retained for a minimum of 7 years. Representatives of Western University's Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research study. The results of the study will be disseminated through publication in a peer-reviewed journal and/or through presentation at relevant conferences. You do not waive any legal rights by consenting to this study.

There is no cost to participate in this study.

Compensation
For each component of the study that you are involved in (reading this invitation, participating in the survey, and/or participating in the interview, and/or participating in the consultation group), you will be given the opportunity to enter a draw for one of two iPads as our appreciation of your time and expertise. This draw will take place on June 30th, 2023. We anticipate between 150 and 250 entries in total.

What if I have questions?
If you have any questions about the conduct of this study or your rights as a research participant, you may contact the Office of Human Research Ethics. If you have any questions about this study, please contact our Primary Investigator. This letter is yours to keep for future reference.

At the end of the consent to participate in the Consultation Group, you will be asked to provide your first name and email address if you wish to be entered in a draw for one of two iPads. Your name and email address will not be associated with the survey, interview, or Consultation Group data. We anticipate 10-30 entries from those who agree to be interviewed (in addition to the 150-200 entries resulting from survey participants) for this draw.

We would like to extend our sincerest gratitude for your willingness to consider participating in our research. Thank you. Sincerely, The Research Team.

Appendix C. Demographic Questionnaire

First, we are going to ask you a few questions about yourself…

Q1. How many years have you been teaching? _____

Q2. I am teaching primarily in the following system

- o Elementary
- o Secondary

Q3. My gender is _____

Q4. How do you define yourself?

You may choose one answer or more than one

- o Black
- o East Asian
- o Indigenous
- o Latin American
- o South Asian
- o Southeast Asian
- o West Asian
- o White
- o Other, please specify: _____

Q5. I am _____ years old.

Q6. I have encountered people who are diverse learners in the following ways:

Please select **all** that apply.

- o Self
- o Family member
- o Friend
- o Co-worker/co-volunteer
- o In a professional role (i.e., teacher, caregiver, advocate)
- o Not at all

Q7.

	None at all	A little	Moderate	Extensive
How much *professional experience* have you had working with learners who need more support?	○	○	○	○
How much *personal experience* have you had with learners who need more support?	○	○	○	○

Appendix D. Beliefs about Learning and Teaching Questionnaire - Revised

Please read the following statements and indicate how strongly you agree or disagree with each one. All items are to be rated on the 6-point scale ranging from Strongly Disagree (1) to Strongly Agree (6).

Strongly Disagree					Strongly Agree
1	2	3	4	5	6

1. Students should rely on the teacher to evaluate their work.
2. Students cannot be counted upon to evaluate their own work.
3. It is important for students to complete assignments exactly as the teacher planned.
4. In every class I find students to whom I cannot teach core concepts.
5. It is important for teachers, not students, to direct the flow of a lesson.
6. It is important for teachers to have control over lessons.
7. The ability to learn is something people have a certain amount of and there isn't much they can do to change it.
8. The ability to learn is something that remains fixed throughout life.
9. There isn't much I can do about how much ability I have in mathematics, science and language arts.
10. There will always be some students who simply don't get it no matter what I do.
11. To assess students' understanding of a core concept, it is important to observe and listen to them as they work.
12. Good teachers give students choices in their learning tasks.
13. In core subjects, students should construct their own examples.
14. Good instruction relates learning material to things students are interested in outside of school.
15. It doesn't matter whether students get the right or wrong answer as long as they understand the concepts inherent in the problem.
16. Concerns about getting the right answer are likely to interfere with concept development and learning.
17. Giving grades is a good strategy for getting students to work.
18. The more students are concerned about grades, the more they learn.
19. All of my students would do well if they worked hard.
20. Students who produce correct answers have a good understanding of the core concepts.

Appendix E. The Kessler-6 Instrument for Assessing Mental Health

The following questions ask about how you have been feeling during the **past 30 days.** For each question, please select the number that best describes how often you had this feeling.

During the past 30 days, how often did you feel…

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
…nervous?	O	O	O	O	O
…hopeless?	O	O	O	O	O
…restless or fidgety?	O	O	O	O	O
…so depressed that nothing could cheer you up?	O	O	O	O	O
…that everything was an effort?	O	O	O	O	O
…worthless?	O	O	O	O	O

Curriculum Vitae

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