# United States and Canada pre-service teacher certification standards for student mental health: A comparative case study

Elizabeth Levine Brown [a, *], Kate L. Phillippo [b], Karen Weston [c], Susan Rodger [d]

[a] George Mason University, College of Education and Human Development, 4400 University Drive, MS 4B3, Thompson Hall 1804, Fairfax, VA, 22030, USA
[b] Loyola University Chicago, USA
[c] Arizona State University, USA
[d] Western University, Canada

## HIGHLIGHTS

- Mental health-related certification standards are limited and standards' content varied substantially across countries.
- Specialist teacher candidates are more likely to encounter mental health-related certification standards.
- Some provinces' and states' standards emphasize teachers' preparation to address students' specific psychosocial stressors.
- Few requirements that teacher candidates obtain training in mental health-relevant intervention were found.

## ARTICLE INFO

## ABSTRACT

U.S. and Canadian K-12 students face social-emotional and mental health concerns that stand to jeopardize their well-being and achievement. Teachers possess unique potential to promote students' social-emotional and mental health wellness. However, training in these areas is not widespread in most teacher candidates' learning experiences. This study compares policy within and across neighboring countries, identifying the extent to which all fifty United States and ten Canadian Provinces specify mental health competency standards for teacher certification. These standards were limited in number and phrased generally, with notable, informative exceptions in scattered states and provinces. Implications for research, practice and policy are discussed.

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## 1. Introduction

U.S. and Canadian K-12 students face a variety of mental health concerns that stand to jeopardize their well-being and achievement. Mental health has been defined as a state of well-being by the World Health Organization (WHO), "in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2014). By this definition, mental health concerns loom large in the lives of P-12 students. LGBTQ students in both nations encounter high rates of peer harassment in schools, and are more likely to leave school and to experience mental health problems, suicidal thoughts and substance abuse (Blais, Bergeron, Duford, Boislard, & Hébert, 2015; Robinson & Espelage, 2012; Saewyc, Konishi, Rose, & Homma, 2014; Ybarra, Mitchell, Kosciw, & Korchmaros, 2015). Additionally, recent data show high rates of major depressive episodes in Canadian and U.S. adolescents. Twelve percent of Canadian adolescent females and 5% of males have experienced major depressive episodes (Canadian Mental Health Association, 2017). This rate has risen from 8.7% in 2005 to 11.5% in the U.S., representing a 37% increase (Mojtabai, Olfson, & Han, 2016). Over 1.3 million homeless youth attend U.S. public schools, an increase of

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* Corresponding author.
E-mail address: ebrown11@gmu.edu (E.L. Brown).

more than 85% over ten years (National Association for the Education of Homeless Children, 2014). Forty-thousand Canadian adolescents and young adults find themselves homeless each year (Gaetz, O'Grady, Kidd, & Schwan, 2016), while over 14% of Canadian homeless shelter residents are children.

Student mental health concerns span a continuum from wellness to problems, and multiple professions are engaged in efforts to support student well-being (Ball et al., 2016; Mellin, Anderson-Butcher, & Bronstein, 2011; Weston, Anderson-Butcher, & Burke, 2008). Teachers stand in the position to provide first-line support to the young people they see daily (Reinke, Herman, & Newcomer, 2016; Schonfeld et al., 2015). They encounter their students' mental health concerns through routine contact as well as when students seek support from them as known, trusted adults (e.g., Michie, 2009, 2012; Phillippo, 2013). Recently, U.S. practice researchers have developed intervention programs that include guidance for teachers as they engage—alongside school-based mental health professionals—with student mental health issues such as suicide (Bartgis & Albright, 2016; Nadeem et al., 2011; Shannonhouse, Lin, Shaw, Wanna, & Porter, 2017), community violence (Jaycox, Stein, & Wong, 2014), depression (Teesson et al., 2014), anxiety (Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017), and trauma (Jaycox et al., 2009; Mendelson et al., 2015). These strides capitalize on classroom teachers' unique potential to promote student well-being.

Unfortunately, training on how to address students' mental health needs has not become widespread in most teacher in-service or pre-service experiences (Oberle & Schonert-Reichl, 2016; see also; Koller & Bertel, 2006). For example, Ball et al. (2016) and Atkins & Rodger (2016) found that in K-12, U. S. in-service teacher standards, academic-supportive language dwarfed mental health-supportive language. Even when mental health programming is present in schools, teachers rarely receive adequate training. For example, Graham, Phelps, Maddison, and Fitzgerald (2011) examined teachers' perspectives on their ability to support the mental health of their students, and found a significant number of teachers who "expressed an urgency and frustration in their need for additional support, including the need for more training" (p. 489). Research remains limited about the expectations of pre-service teachers' knowledge of and ability to respond to students' mental health needs.

The present study aims to close these gaps by identifying the extent to which mental health competency requirements for initial teacher certification are codified in statute for all fifty United States and ten Canadian Provinces. Our analysis compares policy within and across neighboring countries. This paper continues with our framework for teachers' mental health competencies, so that we may clarify the span of mental health support that teachers stand in the position to provide. We then describe the U.S. and Canadian policy contexts, and highlight factors that contribute to the policy parameters that we encountered. Next, we elaborate upon the methods used to gather and analyze mental health-relevant policy across states and provinces. We then describe our study's findings, considering both descriptive data and themes that emerged from our analysis of policies' text. This paper closes with consideration of these findings' implications for teacher education policy and program-level practice to best prepare teacher candidates to understand and respond to student mental health needs.

## 2. Theoretical framework: defining and delimiting teachers' mental health competencies

Keyes' (2007) "Dual Continuum Model of Mental Health and Mental Illness" serves to further specify teachers' potential role in promoting positive mental health in schools. According to this model, individuals function along a continuum of mental health, from *flourishing* (optimal mental health) to *languishing* (poor mental health), as well as along a second continuum of mental illness, from no mental illness symptoms exhibited to significant symptoms exhibited. As opposed to the single continuum definition of mental health, where individual functioning ranges from mental health to mental illness, the dual continua model conveys that lacking a mental illness does not necessarily ensure positive mental health. In other words, it is possible for an individual without a mental illness to be "languishing," or experiencing social functioning struggles (e.g., relationships) and diminished life satisfaction (Westerhof & Keyes, 2010). Conversely, an individual with a mental illness with proper treatment may very well be flourishing, experiencing close social relationships, self-acceptance, self-actualization, and overall satisfaction with life (Westerhof & Keyes, 2010). Two implications for schools are that students without mental illness concerns still may need mental health promotive experiences, and students with mental illness struggles are not doomed to languish. Given the proper supports, all students have the potential to flourish and encounter success, especially if teachers are prepared to address these mental health needs.

The dual continua definition of mental health is the cornerstone for inquiry about teachers' mental health competencies and responsibilities. To be clear, teachers' mental health competencies, from our perspective, are *not* intended to supplant those of school- or community-based mental health professionals. In keeping with the previous scholarship on teachers' mental health responsibilities (Phillippo, 2013; Phillippo & Kelly, 2014; Weston et al., 2008) we understand the teacher's role as essential but not identical to that of school mental health professionals such as psychologists and social workers. Franklin, Kim, Ryan, Kelly, and Montgomery (2012) highlight that teachers' roles are threefold when it comes to supporting students' classroom mental health needs. First, teachers promote mental health at the universal level (e.g., teaching coping skills to all students); second, they collaboratively identify mental health supports with school-based colleagues and work together to implement those targeted interventions (e.g., using trauma-sensitive behavior supports for a student); and, third, they participate in referrals and support intensive, "strategic" interventions for selected students (e.g., implementing crisis response protocols for students in acute crisis such as suicidality or immediate trauma).

Although some teachers collaborate on school-based interprofessional teams with mental health professionals to better support the mental health needs of their students (Weist, Ambrose, & Lewis, 2006), many teachers remain unsure and overwhelmed as to how to identify and respond to these needs (Graham et al., 2011; Phillippo & Kelly, 2014). While teachers want to promote their students' mental health, they illustrate difficulty translating such attitudes into practice (Askell-Williams & Cefai, 2014; Rothi, Leavey, & Best, 2008). We use Keyes' (2007) framework to consider the possibilities for teachers' mental health support responsibilities. We next turn to the policy context of teacher preparation in the U.S. and Canada, in order to illustrate the landscape in which such possibilities play out.

## 3. The policy context of teacher preparation and its connection to student mental health

U.S. and Canadian policy contexts are characterized, to different degrees, by an emphasis on teacher preparation to promote measurable student achievement in core subject areas. Interestingly, neither Canada nor the U.S. has a nationalized education system to the same extent present in other nations' organized, powerful national education ministries. Each devolves schooling

decisions to more local governmental units. As such, Canadian and U.S. teacher education is shaped more by province- and state-level policies, although national policy has an increasing influence upon teacher certification in both.

In the U.S., state boards of education certify teachers. Still, contemporary national-level policy approaches to teacher preparation—namely the federal No Child Left Behind (NCLB) Act (2001) and the Race-to-the-Top (RTTT) Fund, a component of the American Recovery and Reinvestment Act (ARRA) of 2009, newly emphasize the importance of student access to "highly-qualified" teachers. NCLB focused narrowly on subject matter content knowledge as the crucial indicator of teacher effectiveness, giving rise to the content knowledge exit exam for preparation programs as well as the emergence of alternate routes to certification for individuals with university degrees in content areas and no or little pedagogical training (Wiseman, 2012). RTTT, the educational reform initiative continued the emphasis on teacher quality as defined by subject matter competency and introduced new accountability requirements that would link teacher preparation program effectiveness to PreK-12 student achievement (Wiseman, 2012).

Current national standards for U.S. teachers omit attention to student mental health. In their newest standards, the Council of Accreditation for Educator Preparation (CAEP, 2013) links teacher preparation programs and student achievement as a measure of "program impact." In so doing, these standards miss an opportunity to evaluate individual teacher certification programs' ability to prepare candidates to respond effectively to students' non-academic barriers to learning. Most recently, the federal Every Student Succeeds Act (ESSA, 2015), reinforces the academic focus of teacher preparation, emphasizing subject matter content knowledge as the dominant indicator of candidates' effectiveness. The absence of attention to pre-service teachers' exposure to student mental health is striking. Cochran-Smith et al. (2016) refer to this sort of omission as a "thin equity perspective" (p. 4). In contrast, they assert,

A *strong equity* perspective acknowledges the multiple in- and out-of-school factors that influence student achievement as well as the complex and intersecting historical, economic, social, institutional, and political systems that create inequalities in access to teacher quality in the first place. (p. 4)

Ball et al. (2016) illustrated this inequity when reporting that standards for inservice teachers emphasized academic expectations of teachers and largely excluded student mental health-related expectations. By this reasoning, U.S. teacher education policy lacks a strong equity perspective regarding teacher preparation to respond to the mental health needs that impact student academic success.

The Canadian policy landscape for teacher preparation has shifted somewhat, fueled by the Canadian mandate to ensure equitable access to education for all students (Specht et al., 2016). Like their U.S. counterparts, Canadian teacher preparation programs experience ongoing tensions as they try to respond to demands to teach more 'core fundamentals' like mathematics, science and literacy, while at the same time diverse stakeholders such as education deans, activists, Catholic bishops and the Canadian Teachers Federation urge educators to bridge policy-to-practice gaps in the areas of diversity, equity, social justice and inclusion (Association of Canadian Deans of Education, 2016; Canadian Teachers' Federation, 2018; Ontario Ministry of Education, 2009; Specht et al., 2016; Universities Canada, 2017). Efforts to shape teacher educator experiences in Canada are further led by provinces, since no national governance structure for education exists. Rather, each province and territory has ultimate responsibility for

education for students in elementary, secondary and post-secondary schools. There is, however, an Accord on Initial Teacher Education from the Association of Canadian Deans of Education (ACDE), which sets out 12 principles, including that "an effective initial teacher education program ensures that beginning teachers understand the development of children and youth (intellectual, physical, emotional, social, creative, spiritual, moral) and the nature of learning" (ACDE, 2016, p. 5).

Approximately 55 initial teacher education programs in Canada operate within complex networks that always include provincial ministries of education and university systems, but also include groups such as teacher federations, school boards, professional colleges, and accreditation agencies. Initial teacher education programs strive to prepare candidates with a distinct focus on helping them to respond to each province's diverse student population (Atkins & Rodger, 2016; Darling-Hammond, 2000; Gambhir, Broad, Evans, & Gaskell, 2008; Korthagen, 2004). Because of the province-driven nature of Canadian teacher preparation, an endemic challenge includes the development of national systems for program quality assurance (OECD, 2015). As in the U.S., most primary division teacher education students are enrolled in generalist programs, with subject specializations reserved for middle and secondary programs. An important difference between the U.S. and Canada is that while many specializations such as guidance counselor, special education teacher, or gifted education teacher are available in many states in the U. S. at the initial teacher education level, provinces and programs do not always offer such training until *after* initial certification (for example, in Ontario). However, more specialized programs, including those focused on arts-based education or urban education, are beginning to emerge.

Recent research on in-service teacher mental health knowledge standards (Ball et al., 2016) suggests that state and province teaching standards serve as critical points of examination for teacher candidates' knowledge about students' mental health needs. How such broad policy contexts translate into licensure requirements and pre-service teacher accountability measures remains unclear, however. Keyes' (2007) framework recognizes the importance of mental health and mental illness in the context of P-12 education, with implications for teachers' contributions. However, current standards in both U.S and Canada stop short of emphasizing teachers' mental health-related responsibilities. This perspective leads us to question whether and where these responsibilities exist within U.S. and Canadian standards for teacher licensure.

With this collaborative, comparative and international study, we address the major international issue of mental wellness and illness in schools and among school-aged children and youth (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015). We examine standards for initial teacher education, understanding this period of professional learning as time to both acquire knowledge and skills and to understand the profession's changing nature (Atkins & Rodger, 2016; Korthagen, 2004). According to Adamson (2012), such an *a priori* focus can provide a necessary bridge between academics and policy makers. We suggest that the rise of mental health problems in Canada and the U.S., coupled with the trends toward international collaboration and opportunities to learn from one another, make this time ripe to explore the connection between policies related to mental health as an integral part of initial teacher education, and the work of teachers. We therefore posed two research questions: (1) To what extent do teacher certification standards for Canadian and U.S. teachers address mental health-related skills and knowledge? and; (2) What, if any, differences exist between standards for different types of teachers, or between countries, or provinces and states with regards to mental health-related certification standards?

# 4. Method

To pursue our questions, we designed and carried out a comparative case study (Yin, 2013) of provinces' and states'[1] teacher certification standards.[2] This methodological focus enabled us to not only amass information on where mental health-relevant standards exist, but to also consider areas of policy convergence and divergence across international and international boundaries, and across different types of teachers and certifications. In keeping with other comparative policy analyses (e.g., Afdal, 2013; Collins, 2017), we sought to understand *how* standards varied. We recognize this investigation as the first step towards more elaborate comparative research on mental health-relevant teacher certification standards. From our study's outset, we planned subsequent research projects within provinces and states to pursue a clearer understanding of *why* standards vary in the ways that they do (Gupta, 2012).

## 4.1. Sample and data collection

Our research questions and study design required a sample that included all available Canadian province and U.S. state preservice teacher certification standards. Documents included state accreditation standards, licensing standards and codes of ethics. Common document title language included (but was not limited to): state standards for beginning teachers, rules governing the code of ethnics for educators, performance standards, standards and procedures for the review and approval of preparation programs for education personnel, education act, and accreditation (initial and renewal) requirements. The research team sought documents on province and state education department websites during the Spring of 2015 through Fall of 2016. If documents that specified standards were not easily identified via internet search, research team members directly contacted the corresponding board or department of education to request them. In total, our data collection procedures acquired 158 documents from across all fifty of the United States with one to two documents highlighting licensure codes and teaching standards. For Canadian documentation, the team obtained at least one document for the Newfoundland and Prince Edward Island provinces and two to four documents for all remaining provinces. However one out of four documents from the Canadian province of Quebec were excluded because the information was written in French, and therefore could not be analyzed at the same level of precision by research team members.

## 4.2. Data analysis

In order to ensure thorough identification and understanding of teacher certification standards' mental health-related content, we engaged in multi-staged analysis. In our *first stage*, the research team sought to identify all mental health-related content within the documents collected. To begin this work, the team consulted journals that concern school mental health (e.g., *Advances in School Mental Health Promotion*; *School Mental Health*) to identify key terms related to school mental health to guide preliminary structural coding process (Saldaña, 2015). Following our development of a preliminary list from these terms, the research team then consulted school mental health literature to confirm the presence and relevance of these terms. We did so in the interest of ensuring the terms' pertinence across the multiple professional disciplines represented on our research team (and in the field of school mental health), and to help ensure that subsequent analysis maximized the inclusion of relevant teacher certification standards. The team accordingly made adjustments and additions to the key terms list (see Table 1).

The team next sought to identify all text in our database's documents that pertained to our list of key terms. All team members independently reviewed a randomly selected set of two states' and two provinces' certification standards for all new K-12 teachers, excluding ancillary teachers such as career and technical teachers and pre-kindergarten teachers. As part of this review, each team member created new analytic documents for each state and province that contained only material from each database document that could be identified using our preliminary term list. The team then compared each set of analytic documents, and discussed discrepancies with the goal of ultimate inter-rater agreement and analytic inclusiveness. As a result of this conversation, team members developed a more specific terms list to guide the selection of data document material that pertained to our research questions. Team members then again collaboratively reviewed discrepancies and adjusted the list accordingly.

Our *first stage of analysis* continued with our solicitation of feedback on our preliminary coding protocol. We convened and sought feedback from an expert, interdisciplinary panel consisting of seven scholars in the fields of school mental health and teacher education. These experts spanned the disciplines of clinical psychology (1), social work (2), teacher education (2), special education (1) and school psychology (1) across the U.S. and Canada, and were familiar with teachers' roles in student mental health promotion. We asked that each expert review and provide feedback on our key terms list and inclusion criteria, so that we could ensure our identification of all mental health-relevant material in certification standards documents. Expert reviewers suggested that we include teacher certification standards pertaining to all P-12 teachers regardless of specialty, to ensure that we identified every case of mental health-relevant content. They also recommended additional specification of our terms, along with specific examples. For example, reviewers encouraged us to further specify the term, "psychosocial issues," renaming it "psychosocial issues known to contribute to mental health conditions."

Following expert review, we again revised our key terms list, and applied it to the two states and provinces initially included in preliminary analyses. All four authors reviewed each author's application of these terms and addressed any discrepancies that arose. The group elected to retain all key terms, but also agreed to distinguish the key term of "development," which focuses on students' holistic growth and development, from the more practice-oriented approach to development represented by social emotional learning pedagogy, and so created a separate key term

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[1] Canadian territories (Northwest Territories, Nunavut and Yukon) follow the standards of the province from which the teacher candidate graduated, so we did not include territories' standards in our analysis.

[2] Along with preservice teacher certification standards, we also included in our data set any available state or province documents that specified the required content of teacher certification programs. We included such documents because our study aimed to identify and analyze all expectations of what teachers should know and be able to do, either through standards for certifying them or accrediting the programs that train them. For the sake of brevity, we refer to our total set of documents in our data set as teacher certification standards.

**Table 1**
Key school mental health terms used for first round of data analysis.

| Student mental health | Mental health intervention | Safety |
|---|---|---|
| Student mental wellness Psychosocial Development/Developmental Prevention/Preventive | Social-emotional learning Mental health intervention Crisis | Social skills Coping Emotional |

for it. We then collaboratively created a coding protocol from our key terms list and finalized our study's inclusion criteria (see Table 2). The protocol used to analyze certification standards for all P-12 teachers in all provinces and states included: 1) Specific mental health conditions, 2) Psychosocial issues known to contribute to mental health conditions, 3) Universal, preventative interventions intended to promote student mental health (e.g., suicide prevention, coping skills instruction), 4) Targeted or strategic interventions that teachers delivered to students with identified mental health needs, and 5) Collaboration with school-based or community-based providers to address student mental health needs.

The research team divided into two dyads for the *second stage of data analysis*. Each dyad used the finalized protocol and conducted within-dyad member checks to ensure inter-rater agreement. Each dyad shared any discrepancies with the team, resulting in elaborations of our code definitions (e.g., examples of strategic and universal interventions) and reapplication of the coding protocol to analytic documents where needed. After coding the first half of wave two documents, the entire research team convened to confirm consistency of coding practice. A noted area of divergent coding practice throughout stage two stemmed from the interdisciplinary membership of the research team, specifically between members' perceptions of what team members considered universal versus mental health-specific domains. The coding protocol was modified, and finalized (see Table 2) and reapplied where needed. After this point, the dyads created an analytic document, which included all policy content material, for each province and state.

In the *third and final stage of analysis*, research team members applied codes, using NVivo (2010) software (Version 9), to the analytic documents for all states and provinces. The purpose of stage three was to use qualitative coding software to apply our coding protocol to all of the documents we collected, which allowed for the application of multiple codes to certification standards' descriptions. Two members of the research team (one from each dyad) completed this round of coding. Each of these two team members coded documents that she did not code previously. This additional layer of coding strengthened interrater agreement, and the usefulness of the data (Yin, 2013) to understand how school mental health promotion is represented within teacher preparation across the U.S. and Canada.

### 4.3. Data quality

Throughout all stages of data analysis, authors engaged in memo-writing and made connections among concepts as they emerged from the data (Charmaz, 2006). Additionally, to ensure data quality, we used a referenced model of trustworthiness inclusive of multiple criteria such as transferability, dependability, confirmability and credibility (Guba, 1981). Of these criteria, this study employed: triangulation of investigators across multiple disciplines, peer examination, and thick description (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005; Trainor & Graue, 2014). The team met regularly to discuss analytic procedures, discrepancies and emergent findings. Where possible, documentation was triangulated, drawing from multiple sources of teacher certification standards in many provinces and states. Moreover, the team remained reflective throughout coding, reviewing one another's analytic memos and discussing any emergent biases based on discipline and individual background. Team members considered one another's and experts' expertise to acknowledge and address potential bias. For example, we considered and compared teacher educator and clinical mental health perspectives on social-emotional learning curricula to ensure that our definition and application was inclusive and consistently coded across research team members. Finally, the team gathered data comprehensively over one year to assure that it compiled the most current, relevant sources of information (Brantlinger et al., 2005; Trainor & Graue, 2014).

## 5. Findings

This study aimed to identify the extent to which initial teacher education certification standards require teachers to obtain mental health-related skills and knowledge. Additionally, this study sought out differences and similarities in these standards, across teacher certification specialties, provinces, states, and countries. Overall, we found that mental health-related certification standards are limited and that these standards' content varied substantially across both Canada and the U.S. Most standards tend towards general statements about mental health and stop short of providing specific guidance about what mental health skills or knowledge teacher candidates ought to acquire. Some provinces' and states' standards emphasize teachers' preparation to respond to specific

**Table 2**
Final coding protocol, listing codes and examples where appropriate.

| Code | Examples |
| --- | --- |
| **Certification standards that pertain to mental health-related situations** | |
| Mental health-specific | Depression, Anxiety, eating disorder |
| Psychosocial issues known to contribute to mental health conditions | Homelessness, immigration, community and family violence |
| **Certification standards that pertain to teacher mental health-related actions** | |
| Universal, preventative interventions | Suicide prevention, coping skills, Social-emotional Learning |
| Strategic or targeted mental health interventions (not universal) | Crisis intervention, in-class depression intervention |
| Collaboration with school-based mental health providers | Work with school psychologist, social worker, guidance counselor, and other mental health providers |
| Collaboration with community-based providers | Work with professionals from community agencies, hospitals |
| **Teaching credential type** | |
| Primary generalist | K-5 teachers |
| Secondary/academic | Middle school, junior high, high school |
| Family and consumer services Health (K-12) | |
| English as a Second Language/Bilingual/English Language-Learners (K-12) | |
| Special education (K-12) | |
| Gifted (K-12) | |
| Physical Education (P-12) | |
| Early childhood (Pre-K) | |
| Early childhood special education (Pre-K) | |

psychosocial stressors among their students (e.g., substance use, homelessness). These standards also vary in content across provinces and states.

Far less frequent are requirements that teacher candidates obtain training in mental health-relevant intervention. Most required training pertained to preventative interventions rather than intervention once specific student mental health concerns are identified. Specialist teacher candidates—preparing for careers, for example, in gifted, health or early childhood education—are more likely to encounter mental health-related certification standards. In addition, differences in standards are more pronounced across teacher candidate specialty and across states and provinces than they were between the U.S. and Canada, although substantially more states than provinces include mental health-related standards. Below, we briefly review descriptive data before addressing each of these themes.

### 5.1. Descriptive data

Most states' and provinces' teacher certification standards contain some reference to mental health, and these references vary by content as well as teacher credential type (see Table 3). All states' certification standards include at least one reference to student mental health, compared to only six provinces. In every category, states' certification standards contain mental health references in greater proportion than do provinces' standards.

Standards, particularly in states, pertain most frequently to general mentions of mental health, specific mental health conditions, psychosocial issues with the potential to contribute to mental health conditions, and teacher collaboration related to student mental health needs. Teachers' direct mental health intervention with students appear less often in certification standards, specifically, in seven states and no provinces. For different teaching credential types, standards vary both by country and by credential type. Only two Canadian provinces provide credential-type specific mental health standards, and these standards pertained to primary and secondary academic teachers. Primary and secondary academic teaching credentials also address mental health in U.S. states, but the frequency of these standards is comparable to, if not exceeded, by, health, special education and early childhood teachers.

### 5.2. Specific references to mental health dominated by general statements

Of the references to specific student mental health needs, the majority are phrased very generally. Generic references of this sort appear in 21 states and one province. The Alberta standards for teacher quality (Alberta Ministry of Education, 2013), for example, stress the importance of teachers' ability to analyze contextual variables that impact teaching and learning. These contextual variables include students' "mental and emotional states and conditions" (p. 2–3). Similarly, the Minnesota Department of Education (2012) requires early childhood teachers to understand "the development of mental health" (p. 4) and Tennessee K-6 teachers must demonstrate a "broad, general understanding" of "positive emotional, social, and mental health practices" (Tennessee Department of Education, 2014, p. 47). These references make clear the importance of mental health. They do not, however, lay out a clear path of action for teacher education programs or instructors.

Specific mental health diagnoses appeared in six states' certification standards. These concerned suicidality, eating disorders, substance addiction and self-harm. Indiana's reference to depression takes a particular form, in that it specifies that teachers of secondary-level "high ability students" should develop "the ability to recognize and respond to early warning signs of emotional issues associated with high ability, including perfectionism, depression, stress, and alienation, and knowledge of strategies for helping students address these issues" (Indiana Department of Education, 2010b, p. 7). Slightly less specific are the Kansas regulations for health teachers (Kansas State Deparment of Educatio, 2014, p. 151), which require health teachers to know "six adolescent risk behaviors," including "intentional/unintentional injury." Ten states and one province make reference to mental illness or disorders, but do not specify what those disorders are. West Virginia special education candidates' field experiences, for example, must include the provision of "instructional and behavioral support for students in each of the areas of emotional/behavioral disorders" (p. 15). Health educator candidates in Florida and Indiana must learn how to identify mental health risk and protective factors, but these states' standards do not specify any details about which factors. These examples illustrate how mental health receives attention in

**Table 3**
Descriptive data: Number of provinces and states with certification standards, sorted by standards' mental health content and teaching credential type.

| | Canadian Provinces (and territories) | U.S. States |
|---|---|---|
| Certification standards available for analysis | 11 | 50 |
| Standards contained one or more references to student mental health | 6 | 50 |
| Certification standards mental health content | | |
| Mental health-specific | 3 | 25 |
| Psychosocial issues known to contribute to mental health conditions | 0 | 36 |
| Universal, preventative mental health intervention by teachers | 2 | 20 |
| Strategic or targeted mental health interventions by teachers | 0 | 7 |
| Collaboration with community-based providers | 1 | 39 |
| Collaboration with school providers | 2 | 36 |
| Teaching credential type | | |
| Primary generalist | 1 | 28 |
| Secondary/academic | 0 | 28 |
| English as a Second Language/Bilingual/English Language-Learners (K-12) | 0 | 8 |
| Family and consumer services Health (K-12) | 0 | 13 |
| Gifted (K-12) | 0 | 10 |
| Health | 0 | 21 |
| Physical Education (P-12) | 0 | 16 |
| Special education (K-12) | 0 | 25 |
| Early childhood (Pre-K) | 0 | 30 |
| Early childhood special education (Pre-K) Other | 0 | 13 |

Note. Many certification standards did not specify a particular type of teacher to whom a credential applies. This category pertains to certification standards that specified the type of teacher to which they applied.

certification standards. This attention, though, does not provide a clear idea of what, specifically, teacher education programs or instructors are expected to teach candidates.

### 5.3. Psychosocial stressor-related requirements identified specific areas for teacher attention

While references to mental health-related standards are limited in number and specificity, requirements for teachers to recognize and respond to psychosocial stressors receive somewhat more attention. The most frequently identified specific psychosocial stressors include abuse, neglect and violence (24 states), drug and alcohol use (20 states) and crisis or trauma (10 states). Kansas' early childhood and primary teachers, for example, are required to recognize signs of emotional distress, child abuse, and neglect and trauma and to take steps to obtain assistance or intervention for students where indicated. By comparison, Indiana health teacher standards (Indiana Department of Education, 2010a) are more preventative, requiring teachers to understand "factors and behaviors that cause and influence violence, and practices and strategies for avoiding and preventing violence" and "practices, principles, and strategies for resisting, avoiding, and protecting oneself against sexual health risks, unwanted sexual attention, sexual harassment, and sexual assault" (p. 6). Less frequently identified stressors included situations such as family disruption, hearing loss, death, sexual harassment, and interpersonal conflict.

The focus of psychosocial stressor-related standards varies. Substance abuse education requirements tend to focus on the effects of student substance abuse on their own development and well-being. All Nevada middle grade teachers are required to obtain training on substance abuse as it relates to young adolescents' mental health needs. Standards related to teachers' engagement with crisis and trauma addressed both students' direct experiences and their family experiences. Family and Consumer Sciences (FACS) teacher standards are particularly comprehensive, calling for candidates to demonstrate crisis knowledge such as the ability to "identify types of family crises brought about by events such as birth, aging, long-term illness, and death," "recognize coping skills in dealing with crises," and "identify support systems and agencies for crisis assistance" (Florida Department of Education, 2013, p. 99). Crises affecting younger students were the focus of early childhood teacher standards such as Montana's, which required candidates to "understand the effects of childhood trauma on social, emotional, physical, and behavioral development and be able to demonstrate trauma-informed classroom management strategies" and to "demonstrate a knowledge of the implications of secondary trauma" (Montana Board of Public Education, 2014, p. 56). These stressors' specificity gives a clearer signal to teacher educators and candidates with regards to student circumstances that may precipitate or exacerbate mental health issues.

### 5.4. Mental health intervention requirements fewer in number, predominantly preventative

Teacher certification standards that specifically involve mental health intervention appear less frequently than those discussed above. Twenty states and two provinces require teacher candidates to develop preventative skills while only seven states require teachers to learn how to conduct strategic or targeted intervention. The most common type of preventative intervention requirement involves social-emotional learning (SEL) instruction in the classroom. Ontario's standards, for example, state that "all students can benefit from building capacities to manage stress, building healthy relationships and self-reflection" (Ontario College of Teachers, 2013, p. 24). Making a more general statement about SEL, Texas

standards required that teachers "support all students in their pursuit of social-emotional learning" (Texas Education Agency, 2014). Other types of preventative interventions included social skills development in areas such as interpersonal communication and conflict prevention. Certification requirements also addressed substance abuse and suicide prevention. Seven states, but no provinces, require teachers to learn about substance abuse prevention, often in general terms. For example, New York requires that teachers obtain "pedagogical knowledge, understanding and skills" in the area of "preventing alcohol, tobacco and other drug abuse" (New York State Education Department, 2004). Six states require teachers to acquire suicide prevention skills, which were likewise described in general terms, such as Indiana's reference to "warning signs and symptoms" of conditions including suicidal tendencies, and "methods and resources for addressing, reporting and obtaining help for these conditions" (Indiana Department of Education, 2010a, p. 4). Five apply this requirement to health teachers while Arkansas alone requires all certified teachers to obtain these skills.

Strategic and targeted mental health interventions are far fewer in number—seven all together (see Table 3)—and worded in general terms. For example, Illinois, Kansas, New Hampshire and North Carolina require teachers to obtain crisis intervention skills, while Indiana secondary teachers were required to understand and "help students address" (Indiana Department of Education, 2010b, p. 2) challenges characterized in the standards as developmentally appropriate, including identity formation, risk taking and self-image development.

### 5.5. Mental health-related standards more elaborate for specialist teachers

Candidates for specialty credentials are often expected to develop mental health-related skills and knowledge. All states and most provinces have some type of mental health-related standards for primary and secondary teachers, whether these apply to all teachers or explicitly to teachers at the primary or secondary level. These are often further differentiated at the secondary level by area of academic specialization such as mathematics or social sciences. Twenty-eight states and one province have some mental health-related content in their secondary teacher certification standards. Idaho, for example, provides specific standards for secondary teachers by subject area. Those standards state the need for teacher candidates from the subject areas journalism to world languages to agricultural science to interact "in a professional, effective manner with colleagues, parents, and other members of the community to support students' learning and well-being" (Idaho State Board of Education, 2013, pp. 33—195). However, we identified only seventeen instances of generalist standards related to mental health conditions, interventions or student psychosocial issues at the primary level, and thirteen at the secondary level. The Québec Ministry of Education's (n.d.) fact sheet, Practising the Profession of General Education Teacher, specifies that during their elementary studies, "students are introduced to basic subjects and develop psychosocial skills" (p. 8), underscoring the responsibility of elementary teachers to help students develop psychosocial skills. For example, certification standards for Connecticut primary teachers required training in educational psychology that could include (among other options), "child-adolescent psychology" or "mental hygiene." An additional four states and one province have mental health-related or —specific standards that apply to all types of teachers, such as Texas' requirement of all teachers to facilitate social-emotional learning for all students, as mentioned above (Texas Education Agency, 2014).

Even though P-12 schools tend to employ specialized teachers in

smaller numbers than generalist teachers, state and province standards for these teachers emphasize specific mental health knowledge and skills far more often. In particular, early childhood, health education, family and consumer science (FACS), gifted and special education teachers have explicit mental health standards that differ from those in place for generalists. This trend, however, is present only in the U.S. Canadian provinces does not specify unique requirements for specialized teachers in any of the documents we reviewed, which relates to the Canadian practice of providing initial certification for generalist teachers only. In the U.S., early childhood licensure rules in 30 states contain at least one mental health-specific certification requirement, whereas, by comparison, the primary teacher licensure codes of 28 states and one Canadian province meet the same threshold. These standards tend to emphasize early childhood teachers' capacity to respond to student emotions and to promote student social-emotional well-being. Early childhood teachers in New Hampshire, for example, must demonstrate, among other things, knowledge about "social and emotional wellness and their influence on development and learning in the content areas" (New Hampshire Department of Education, 2014, p. 167). Another area of focus, albeit less prevalent, is psychosocial issues present in early childhood students' lives. This can be seen in the certification requirements for Vermont, which demand early childhood teachers to demonstrate an understanding of "signs of emotional stress, harassment, child abuse, and neglect in young children" (Vermont Agency of Education, 2014, p. 38).

Health teacher certification standards also stress mental health. In fact, all certification standards involving mental health for health teachers involve requirements that we consider "mental health specific": pertaining specifically to mental health, psychosocial issues, or mental health-oriented intervention. Tennessee health teachers, for example, are required to "foster children's increasing competence in regulating, recognizing, and expressing emotions, verbally and non-verbally," and to:

> understand and teach concepts related to mental health including the development of positive self-concept and respect for individual differences; application of problem solving and decision making skills; appropriate methods of managing stress and identification of risk factors associated with emotional problems including suicide and eating disorders (Tennessee Department of Education, 2014, p. 268).

Health teachers were the only teachers whose standards addressed direct mental health intervention with students, and were the teachers identified in four of five states with responsibility to conduct suicide prevention instruction. Special education teachers also have substantial mental health responsibilities per certification standards. These include crisis intervention, the instruction on self-advocacy, support for coping with discrimination, and the identification of disabilities' psychosocial effects on students.

While far fewer in number, Family and Consumer Sciences (FACS) teachers' mental health standards—present in thirteen states-are striking in their attunement to mental health issues (see Table 3). Many types of teachers are expected to identify and respond to signs of child abuse or neglect. FACS teachers are expected to more broadly address the potential for violence by addressing situations such as dating violence, family dynamics, and the effect of stress at different times in a family's life cycle. While these standards are often oriented towards promoting personal and family well-being, they also place the FACS teacher in the position of discussing mental health issues with students. Similarly, while many types of teachers were expected to provide universal,

preventive instruction, FACS teachers are at times held to a more stringent standard. Colorado FACS teachers, for example, are to develop skill in the areas of "communication, leadership, teamwork, and negotiation skills; and coping strategies, i.e. to handle and manage peer pressure, change, and crisis situations" (Colorado Department of Education, 1991, p. 72).

## 6. Discussion and future directions for research

Extensive literature emphasizes the necessity of teacher preparation in school mental health (Mazzer & Rickwood, 2015; Phillippo, 2013; Phillippo & Kelly, 2014; Phillippo & Blosser, 2017; Reinke et al., 2011; Ringeisen et al., 2016), while also voicing concern about the absence of opportunities for teacher learning in this area (Graham et al., 2011; Koller & Bertel, 2006; Mazzer & Rickwood, 2015; Oberle & Schonert-Reichl, 2016). The present study delves further into this area by exploring extant standards for teacher certification regarding student mental health. Our comparisons of Canadian provinces' and U.S. states' standards—to one another and across teacher certificate types—highlight that despite calls for in-service teachers to know much more about student mental health (Ball et al., 2016), the explicit, unambiguous presence of mental health in teacher certification standards remains scant. Moreover, our findings raise concerns about teachers' preparation to address ubiquitous student mental health needs in both nations. Still, rare but present standards in this area illuminate possible pathways forward.

Our results show that neither U. S. nor Canadian teacher certification standards fully respond to exhortations for teachers to address student mental health needs. Mental health-related standards, we found, are both limited in number and, when they do exist, often provide general, unspecified guidance for teachers regarding student mental health. We identified very few standards that offered any guidance to teacher certification programs or teacher educators as to what steps they might take to promote candidate learning about student mental health. Without this information, teacher education programs and their faculty are on their own to figure out how to implement these standards. In turn, we anticipate that teacher candidates within the same state or province, or teacher education program, may have vastly different learning experiences with regards to student mental health.

In a professional field that has a tenuous-at-most connection to student mental health (Phillippo, 2013), a lack of teacher certification standards is perhaps unsurprising. However, this relative omission leaves open the question of how teacher candidates will obtain knowledge and skills with regards to student mental health. Teacher education programs consistently contend with limited time (Darling-Hammond, 2000), while pressed to incorporate a variety of professional, political and social demands (Cochran-Smith & Demers, 2008; Grant & Gibson, 2011). Yet without the anchoring effect of standards, student mental health as a teacher education topic is likely to remain marginalized, and optional within teacher education programs. The Ontario Ministry of Education uniquely offers extensive teacher mental health training, but these opportunities are not reflected in provincial initial teacher certification standards. Specifically, Western University in Ontario requires teacher candidates to complete a course and corresponding practicum in mental health literacy. Canadian colleagues (Rodger, Hibbert & Leschied, 2017) share that this course's modules are based on the comprehensive set of teacher mental health competencies (Weston et al., 2008), which emphasize culturally relevant, strengths-based teacher proficiencies in the areas of key policies and laws, learning supports, use of relevant student data, effective communication and relationship-building, engagement of multiple systems and people, and personal and professional

growth. Clearly, space exists for this potential next phase of research, but current standards are not driving such efforts.

We find the lack of specific, widely applied mental health standards for teacher candidates to conflict with a growing emphasis on trauma-informed education. Over the past decade, calls have come to consider trauma-informed care as a mechanism of support for children and youth in schools (Carrion & Wong, 2012; Morton & Berardi, 2017), since over 40% of U.S. students in the U.S. have experienced some sort of trauma (National Child Traumatic Stress Network, 2016) and typically those students reside in mainstream classroom settings (Bruznell, Stokes, & Waters, 2016). With teachers serving as the first responders "to ensure that there is a comprehensive continuum of care available and accessible to all traumatized children and their families" (Ko et al., 2008, p. 397), it seems plausible that teacher educators would consider how the prepare teachers for trauma-informed care. This connection is particularly evident in states like Virginia, where large local districts are calling for newly hired teachers to possess knowledge on trauma-informed care.

Our findings instantiate Ko and colleagues' (2008) claim that "teachers, school psychologists, counselors, and school social workers typically receive little formal training or continuing education about the impact of trauma on students and ways they can help traumatized students achieve better educational outcomes" (p. 398). For instance, we found that teacher certification standards in both the U.S. and Canada address student mental health but in very general capacities. When described, often, the language used is conflated with other aspects of child functioning or development such as social, emotional or physical development. This framing leaves significant interpretation—including the option to omit mental health—to the teacher education programs and faculty to decipher what their candidates need to know regarding these areas of development. The same holds true for how mental health competencies situate within trauma-informed care. In fact, given more stringent licensure requirements of late—focusing more on instruction and less on whole child discussions (Cochran-Smith et al., 2016)—programs must include in child development content not only child development (inclusive of all domains) but also cultural proficiency, family engagement, mental health, trauma and working with children with exceptionalities, across one 15-week semester. Each of these areas of content could be their own semester-long course.

We also note that relatively few teacher certification standards use the specific terms "mental health" or "mental illness." In fact, only a few states (i.e., Virginia, Colorado) and one province (i.e., Ontario) utilize the phrase "mental health" as a preparation requirement for all teacher candidates. Why is that the case? Discussions on mental health are possibly intimidating for teacher educators as their expertise may not reside in school mental health. Or perhaps the discourse on mental health may be too socially loaded, so instead it is couched within content related to development, conversations within social-emotional learning (SEL) curriculum or classroom management (e.g., PBIS), or is renamed as something like trauma-informed care.

We hypothesize that the omission of teacher certification policy references to student mental health or mental illness may carry over into teacher preparation program curricula. So that teachers understand their mental health responsibilities and to assure they are prepared to meet them, we see a need for more explicit, elaborate state and province licensure and certification program standards. Mental health is not the same as social emotional learning or human development, in the same way that "health" is not the same as healthy lifestyle choices or physical development. Mental health encompasses and extends beyond these constructs. To build capacity in teacher candidates to promote mental health, we must

begin calling it what it is. If we don't recognize the existence of mental illness or mental health problems as something that is identifiable and important to a child's education, how can we expect policy makers to include it in teacher preparation and licensure standards? In the absence of explicit mental health-relevant teacher certification standards, teachers may not see how psychosocial stressors like family disruption, domestic violence or homelessness potentially contribute to mental health responses such as anxiety or depression, which stand to affect students' schooling experiences. Or, they may see the role of stressors in students' academic lives, but feel ill-prepared to respond.

Findings about standards' limitations and inconsistencies raise concern and highlight possible pathways forward for teacher educators and other proponents of teacher learning about student mental health. We note limited consistency across states and provinces (within and across national boundaries) about what teachers should know and what teacher are able to do to promote student mental health. For instance, Colorado and Florida cite numerous competencies of candidates' knowledge and understanding of mental health across all teaching roles and for work with all age ranges. However, bordering states, Wyoming and Alabama respectively, show little expectation for their teachers to know mental health needs of children and youth. This same situation is illustrated in Canada also with Ontario and Manitoba. This finding highlights the opportunity for states and provinces, and even countries, to communicate across borders, especially in the U.S. where many teacher candidates obtain certification in one state and teach in an adjoining state. It raises the notion that states and provinces with strong representation of mental health competences within their teacher certification standards might serve as models and share expertise to tighten these gaps in teacher education knowledge and skills sets.

On a more positive note, though, standards' inconsistency across states and provinces also highlights the possibility that those with more articulated standards might serve as models for the development of teacher certification standards related to mental health where they are needed. The development of new standards, though, is tricky. For one, our findings show that explicit mental health knowledge and skills were required for specialized credential teacher candidates more than for general education teacher candidates. Mental health–related standards for teacher candidates are not a ubiquitous part of teacher education in Canada or the U.S. Therefore, efforts to introduce such material into the mainstream of teacher education programs may be perceived as disruptive or out of place as student mental health content moves out of the periphery and towards the core of teacher preparation. Teacher education programs across the U.S. and Canada could collectively pursue standards that would support the preparation of all future teachers for greater awareness of and responsiveness to student mental health needs. Given similar policy limitations across and within nations, needed changes to teacher certification standards seem to reside within the field rather than within provinces, states or nations. And although some might argue that student mental health-related coursework or credentialing should occur outside of teacher education (e.g., in the fields of psychology or social work), we argue that teacher education would do well to define and develop its own content, to better prepare candidates for the work demands that they are already encountering.

## 6.1. Limitations

Although this work highlights many new considerations for teacher education that have implications for policy and practice, we note some limitations to our work. First, the task of accessing the

data was arduous and time-consuming, and may have constrained our ability to include all current regulatory documents in the data set. Ultimately, we were able to acquire regulations for each state and province, but it is possible that we missed documents as a result of the particular contacts that we made. A second limitation arises from our comprehensive exploration of state and provincial preparation standards. Had we taken initially a smaller sample of state and provinces to examine, we might have been able to penetrate the teacher preparation institutions within each country to determine whether government policies and legal mandates trickle down to individual teacher preparation programs, and then observe whether these are enacted in different ways across countries. In other words, the current study's findings about provinces' and states' incorporation of mental health competency standards for teacher candidates does not necessarily correlate to what is happening within individual preparation programs. It is possible that within states or provinces with little evidence of mental health integration into teacher regulations there exists individual preparation programs that exceed expectations to promote student mental health. Similarly, programs may, in practice, fall short of provinces' and states' requirements. In the future, we aim to extend our research into program level instructional practices and their relation to teacher certification. We remain confident that our choice to begin with a broad, rather than deep, investigation was necessary given the substantial variability across states and provinces in the regulatory codes.

Finally, we acknowledge the potential limitation of our study's sole focus on pre-service teacher preparation, rather than on the broader spectrum of teacher professional growth and development. No one has unequivocally determined the appropriate placement of a mental health promotion curriculum within teacher education, whether pre-service or in-service. There is likely a need for continuous learning from initial preparation through a teacher's career in order to sustain key knowledge and skills as well to as adapt them to differing educational contexts. Yet efforts to develop preK-12 teachers' mental health competencies during pre-service preparation may serve several critical functions. Foremost, given the shrinking pre-service teacher pipeline over the past decade (Sutcher, Darling-Hammond, & Carver-Thomas, 2016) and the continued trend of up to 50% of new teachers leaving the profession within their first five years (McCallum, Price, Graham, & Morrison, 2017), the field may otherwise miss an opportunity to provide essential learning experiences that better-prepare candidates for the current realities of the field. These efforts could also boost teacher efficacy at meeting non-academic barriers to learning and fully supporting all students. The impetus to care for and support all students is ubiquitous among those who choose to prepare for a teaching career, with many describing teaching as a "calling." "Perceiving a calling" and feeling capable of "living a calling," however, are two different things (Duffy & Autin, 2013). Preservice learning experiences that build efficacy for addressing student mental health might allow for multiple occasions to cultivate teachers' callings, reinforce professional commitment and prevent early exit.

### 6.2. Implications and conclusion

Teacher education stands at a crossroads regarding the role of mental health within the preparation of future teachers. Accessible, transparent, specific teacher certification policy that pertains to student mental health can help. The difficulty we experienced as researchers in accessing the relevant documents reveals a lack of guidelines that could provide teacher educators, policy-makers and researchers with richer information about the potentially vital relationships between teacher preparation and P-12 student mental health.

The matter of formulating mental health-specific province- and state-level policy raises important questions about the extent to which policy should direct teacher preparation. On one hand, overly prescriptive teacher preparation policy flies in the face of the democratic, decentralized principles upon which U.S. and Canadian education systems were built. As we saw with policy mandates for value-added teacher evaluation, overly prescriptive policy runs the risk of de-professionalizing and alienating educators. On the other hand, overly vague teacher preparation policy is likely to contribute to non-systematic policy interpretation and implementation. In this case, it could narrow school leaders', policymakers' and researchers' ability to obtain generalizable evidence of policy-informed teacher preparation practice change. Concrete policy language about teacher candidates' mental health competencies can lead towards more consistent policy interpretation, while still allowing for local variation in implementation. Such efforts could also triangulate policy across states and provinces, and therein create opportunities to share knowledge and practice in ways that would enhance teachers' professional knowledge and ultimately support students.

Future research that investigates individual programs' efforts to promote teachers' mental health competencies will help illustrate how policy translates into program curriculum content and sequencing, and how programming in turn connects to effective teacher practice. Leading the way in this research are several recent programs that provide initial evidence that they can build teacher candidates' capacity to engage in mental health promotive practices. For example, Schonert-Reichl and colleagues (2017) identified a number of SEL-promotive courses in the U.S., and three teacher preparation programs as exemplars of innovative and comprehensive integration of SEL competencies: San Jose State University, University of Pittsburgh, and Rutgers University (through a partnership with the College of St. Elizabeth). Additionally, the Urban Teaching Cohort at Miami University (Ohio) provides an innovative, community-based training experience that equips teacher candidates to support the mental health of students living in high-poverty areas by building on community and family strengths (Schwartz, Dinnen, Smith-Millman, Dixon, & Flaspohler, 2017). To build upon this work, future research could use teacher mental health competences (Weston et al., 2008) that frame these programs to examine not only how we acknowledge mental health within teacher preparation but also how to specifically incorporate mental health knowledge and exercises into candidate expectations and practice. In these ways, teacher education practice stands to inform research and policy.

The present study also speaks to the need for closer collaboration between policy-makers, institutions of teacher preparation, and P-12 schools. An infusion of mental health content into teacher preparation and certification standards would represent a big step forward, but would not be sufficient. P-12 schools provide a frontline understanding of what teachers really need to know about the mental health of their students. Collaboration across these key stakeholders is required to establish a more effective and efficacious teacher workforce.

Teachers stand in a position where they encounter student mental health needs and challenges in the classroom. While this study illustrates powerful examples of how U.S. and Canadian policy can contribute to teacher preparation to meet these important demands, current teacher certification policy merits further development and elaboration. It is our hope that his study contributes to this development and articulation, so that teacher candidates will be poised to fully recognize and respond to their students learning needs.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.tate.2018.12.015.

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