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What is Known about Initial Teacher Education for Child Protection? A Protocol for a Systematic Scoping Review

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Abstract: Child maltreatment is a serious problem, worldwide. Children and young people who have experienced maltreatment face multiple physical and mental health challenges which hinder their success at school and these adverse experiences makes them more challenging to teach than their non-maltreated peers. Increasingly, teachers are considered as an important part of the wider child protection workforce as they are well-placed to intervene and prevent further harm. To fulfil this role effectively, teachers require requisite training beginning in initial teacher education programs. This paper is a protocol for a systematic scoping review that asks: "What is known about preservice/initial teacher education for child protection?" Systematic scoping reviews are worthwhile and necessary in fields where research is diverse and needing of synthesis to identify strengths in the body of evidence and identify gaps to set new research directions. We will draw on Askey and O'Malley's six-stage scoping review methodology to assess the scope, range, and nature of research activity on this topic. We will add an innovative seventh stage involving a commitment to disseminating and applying knowledge generated from the review. The research question has been established, and key terms defined (Stage 1). The search strategy has been devised, and searches have been run (Stage 2). Round 1 screening of titles and abstracts is completed and full text screening is currently in progress (Stage 3). To our knowledge this is the first attempt to systematically map the empirical literature on child protection in pre-service teacher education. When completed, this systematic scoping review will offer a comprehensive, transparent, and replicable way to assess the full scope of empirical research on this important topic of utmost educational relevance.

Keywords: *Child protection, safeguarding, child maltreatment, teacher education, preservice teacher, trainee teacher, scoping review.*

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Introduction

Maltreatment of children by their parents, caregivers, and others in positions of trust and authority is a ubiquitous public health and social welfare problem, worldwide (Pinhiero, 2006). The adverse educational effects of child maltreatment are also well established. These effects can be different for maltreatment subtypes, and are generally more severe for multi-type maltreatment based on the concept of *cumulative harm* in which maltreatment effects are amplified in circumstances that are chronic, recurrent, and prolonged (Bromfield, Gillingham, & Higgins, 2007; Johnson-Reid, Kohl, & Drake, 2012). Children in out-of-home-care as a result of child maltreatment and/or family violence are among the most significantly affected and educationally vulnerable (Stone, 2007; Tilbury, Creed, Buys, Osmond, & Crawford, 2014).

Children and young people who have experienced maltreatment face challenges which hinder their academic success, and the deprivation and trauma they have suffered makes them more challenging to teach (and reach) than other

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students. The consequences of child maltreatment manifest most clearly in children's impaired academic functioning, mental health, and behavioural problems (Maguire, Williams, Naughton, Cowley, Tempest, Mann, Teague, & Kemp, 2015; Trickett & McBride-Chang, 1995; Veltman & Browne, 2001). In the preschool years, maltreated children may show developmental delays, particularly in language and cognition, which seriously compromise their participation in learning experiences (Maguire et al., 2015; Merritt & Klein, 2015). At school, maltreated children experience higher rates of school absences, grade retention, remedial class involvement, and school dropout, leading to lower rates of school graduation and academic achievement (Fry et al., 2018; Romano, Babchishin, Marquis, & Frechette, 2015). Long-term effects of child maltreatment extend to negative effects on mental health, physical health, violence, and criminal behaviour (Gilbert et al., 2009; Herrenkohl, Hong, Klika, Herrenkohl, & Russo, 2013) and the costs of addressing these effects present a major economic challenge to societies globally (Fang, Brown, Florence, & Mercy, 2012; Fang, Fry, Finkelhor, Chen, Lannen, & Dunne, 2015).

Worldwide, schools and early childhood education services are seen as important settings for child maltreatment prevention with teachers having an integral role in promoting the safety of children and young people whom they teach (United Nations, 2015). Increasingly, teachers are considered an important part of the wider child protection workforce as they are in a unique position to identify child abuse and neglect, respond to its effects, and implement strategies to prevent further harm (Klika, Lee, & Lee, 2018). To fulfil this role effectively teachers require essential knowledge, skills, and dispositions. Acquiring these capabilities is an important component of their education and training at both pre-service and in-service levels. Although there has been much interest in examining the scope and nature of the empirical evidence on child protection training for qualified professionals including teachers (Carpenter, Hackett, Patsios, & Szilassy, 2010; Carter, Bannon, Limbert, Docherty, & Barlow, 2006; Mathews, Walsh, Coe, Kenny, & Vagenas, 2015), less emphasis has been placed on collating available research on the provision of child protection training in pre-service teacher training. This is of utmost importance when considering the prevalence of child maltreatment – which in a meta-analysis of global self-reports has been estimated at rates of 363/1000 for emotional abuse, 226/1000 for physical abuse, 163-184/1000 for neglect, and 127/1000 for sexual abuse (Stoltenborgh, Bakermans-Kranenburg, Lenneke, Alink, & van IJzendoorn, 2014) – and the likelihood that pre-service teachers will begin to encounter forms of child maltreatment during their field placements in educational settings from the first year of their degree (McKee & Dillenburger, 2009). Teachers in many jurisdictions around the world have legislative or policy-based duties to report known or suspected child abuse and neglect to statutory child protection authorities (Mathews & Kenny, 2007), thus teachers require preparation for this role, yet little is known about the scope, nature, and efficacy of child protection initiatives in pre-service teacher education.

The objective of this review is to examine the scope and nature of the literature on pre-service teacher education for child protection by identifying, synthesising and describing the major themes, and critically appraising the reported evidence. In doing so, we aim to characterise the evidence base and set directions for future research in this field. This paper details the *protocol* for the systematic scoping review. Publication of systematic review protocols is encouraged for several reasons including to guard against haphazard decision-making during the review process, to enable readers to compare finalised reviews with the protocol and thereby identify the presence of selective reporting, and to reduce review duplication and redundancy (Shamseer et al., 2015).

Methods

Reviews conducted in the field of pre-service teacher education tend to be traditional narrative reviews, however, despite their wide appeal and acceptance, narrative methods are not always comprehensive, transparent, and replicable, and are subject to author biases (Littell, 2008; Shlonsky, Noonan, Littell, & Montgomery, 2011). Scoping reviews, also known as *scoping studies*, and *systematic scoping reviews* among other titles (Tricco et al., 2016), have become increasingly used in response to the growing demand for syntheses of the range, extent, and nature of primary research on particular topics. A review by Tricco et al. (2016) found that although scoping reviews first appeared in the literature in the 1980s, almost half of all scoping reviews had been published since 2012. Their use in educational research has only recently emerged and the terms used to describe the type of review we are undertaking are inconsistent (see for example, Coemans, Wang, Leysen, & Hannes, 2015; Coemans & Hannes, 2017; Forsman & Vinnerljung, 2012; O'Flaherty, Phillips, Karanicolas, Snelling, & Winning, 2015). For this reason, we use the term *systematic scoping review* (SSR) to emphasise the systematic nature of our approach to research synthesis and to distinguish this from non-systematic approaches.

Systematic scoping review

For the purpose of this review, we adopted the scoping review definition offered by Colquhoun et al. (2014):

“A scoping review... is a form of knowledge synthesis that addresses an exploratory research question aimed at mapping key concepts, types of evidence, and gaps in research related to a defined area or field by systematically searching, selecting, and synthesizing (sic) existing knowledge” (p.1294).

A scoping review is an ideal methodology for mapping the existing literature on a defined research topic when the topic has not yet been extensively reviewed or is potentially large, complex, and diverse (Arskey & O'Malley, 2005; Levac, Colquhoun, & O'Brien, 2010; Pham et al., 2014). Scoping reviews are considered one of the new review *species* within the broad *family* of systematic reviews (Moher et al., 2015, p.183). As kin, scoping reviews share certain characteristics with systematic reviews. These include a priori protocol design, use of comprehensive search strategies, and rigorous, transparent and replicable methods for analysing all relevant scholarly literature addressing the research question (Higgins & Green, 2011; Gough, Oliver, & Thomas, 2012). Scoping reviews *differ* from traditional systematic reviews, such as Cochrane and Campbell reviews in their purpose and aims (Cochrane Library, 2018; Campbell Collaboration, 2018). Traditional systematic reviews aim to assess the best available research evidence, typically about the effectiveness of interventions (i.e. what works, for whom, and under what circumstances). These usually include a narrow range of study types (e.g. experimental and quasi-experimental studies) and, crucially, involve appraisal of study quality and risk of bias (Higgins & Green, 2011). In contrast, scoping reviews aim to map the literature according to themes, concepts or trends, irrespective of study quality, and thus include a wider range of study types inclusive of qualitative designs (Pham et al., 2014). Scoping reviews, therefore, offer greater latitude for cataloguing the range, extent, and nature of existing empirical research in a field with a view towards attaining policy- and research-relevant synthesis that can be replicated over time.

Scoping review methodology was first described by Arskey and O'Malley (2005) and later advanced by Levac et al., (2010), with methodological guidance building on this work published by the Johanna Briggs Institute (2015). Our review protocol was developed drawing on several published sources. We used the six-stage scoping review framework proposed by Arskey and O'Malley (2005) and augmented by Levac et al., (2010), and additional detail provided in guidelines from the Johanna Briggs Institute (2015). We also relied on the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA-P) guidelines, a 27-item checklist and a four-stage flow diagram detailing items for systematic review protocols (Moher et al., 2015; Shamseer et al., 2015). Our protocol describes a systematic scoping review with six stages: (i) identifying the research question; (ii) identifying relevant studies; (iii) study selection; (iv) charting the data; (v) collating, summarising and reporting the results; and (vi) consultation (optional stage) (Arskey & O'Malley, 2005). Informed by Bidonde et al's., (2017) work, we also include a seventh stage: (vii) disseminating the knowledge. Stages 1, 2, and part of Stage 3 are complete at the time of submitting this protocol for review.

Stage 1: Identifying the research question

Stage 1 involves articulating the research question(s) to guide the scope of the inquiry (Levac et al., 2010). Scoping review research questions must be both intentionally broad in nature to capture the breadth of evidence and, at the same time, clearly demarcated (Arksey & O'Malley, 2005; Levac et al., 2010). The research question for this review is: *What is known about pre-service/initial teacher education for child protection?*

We formulated the research question using the basic PICO/PICOTS technique (i.e., population, interventions, comparisons, outcomes, timing, setting, study design) (Higgins & Green, 2011; World Health Organization, 2014) as shown in Table 1.

Table 1: PICO/PICOTS technique for devising the review research question

PICO/PICOT prompt question	Answer
P Population: what group or population is targeted by the intervention or exposure under consideration?	Pre-service/initial teacher education students
I Intervention: what treatment, procedure, policy, social activity, initiative is under consideration?	Education/training about child protection, child maltreatment, family violence, and child exploitation
C Comparator: what courses of action or exposures can be considered as alternatives with which interventions can be compared	Not applicable in this review – no comparator is used as we are investigating the full scope of the literature, not limited to effectiveness studies
O Outcomes: what are the potential benefits and harms of the intervention (considered broadly using the multiple different terms above); what has actually been measured /accomplished /improved/affected in the studies (i.e. on what specific aspects has data been collected)?	Some studies may report on outcomes such as knowledge, skills, attitudes, dispositions, views, perceptions, practices. Other studies may report on course or program content (curriculum), methods (pedagogies), or approaches.
T Timing: what is the timing of outcomes measurement?	Any timing of study measures will be considered (short- or long-term)
S Setting: what is the setting under consideration?	Teacher education institutions/courses/programs
S Study design: what is the study design under consideration?	All study designs will be considered

Definitions of key terms (e.g. initial teacher education, child protection) should be formulated to offer guidance as to the types of literature most suitable for answering the review question. From these definitions, inclusion and exclusion criteria can be specified to aid review transparency, generalisability, and replication. We conducted a series of preliminary searches, followed by team discussions, to formulate definitions of three key terms: initial teacher education, child protection, and child maltreatment.

Definitions

Initial teacher education. For the purpose of this review, initial teacher education, also known as teacher education, preservice teacher education, teacher preparation among other expressions, is taken to mean all education and training undertaken prior to service including the ways in which teachers are “recruited, prepared, certified or licensed”[†] (Cochran-Smith & Villegas, 2015; Cochran-Smith, Villegas, Abrams, Chavez-Moreno, Mills, & Stern, 2015).

Child protection. We searched for overarching, non-country and non-discipline specific definitions; however, we did not identify a single universal definition of the term *child protection*. We found that conceptual definitions of child protection were virtually absent in the research literature. Child protection was defined, most succinctly, by UK child welfare researcher, Thorpe (1994), as: “measures taken by professionals to act directly as a barrier between children and significant harm” (p.194). The United Nations International Children’s Emergency Fund (UNICEF) (2006) used the term child protection to refer to “preventing and responding to violence, exploitation and abuse against children”[‡]. Elaborating on what such *measures* or *responses* might be, an international consortium of children’s welfare agencies, including Child Hope, National Society for Prevention of Cruelty to Children (UK), Save the Children, and World Vision among others described child protection as “philosophies, policies, standards, guidelines and procedures to protect children from both intentional and unintentional harm”[§] (Consortium for Street Children, 2005).

Integrating and adapting these definitions, we developed the following for the purpose of this review:

Child protection is defined as those measures including philosophies, policies, standards, guidelines and procedures taken by professionals to act directly as a barrier between children and significant harm.

Child maltreatment. Child maltreatment is defined differently according to the various purposes for which the term is used and therefore achieving clarity remains a significant challenge for the field (see for example Feerick, Knutson, Trickett, & Flanzer, 2006; Institute of Medicine & National Research Council, 2013; Mathews & Collin-Vézina, in press). The most widely-used current conceptual definition of child maltreatment is that developed by the World Health Organization (WHO) in collaboration with the International Society for Prevention of Child Abuse and Neglect (ISPCAN) (2006). Child maltreatment is conceptually defined as:

“all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power” (p.9).

This definition will be adopted for the purpose of this review. By way of further clarification, four sub-types of child maltreatment are typically distinguished: physical abuse, sexual abuse, emotional or psychological abuse, and neglect (WHO & ISPCAN, 2006, p.10). In some definitions, exposure to family or domestic violence, also known as witnessing family violence or exposure to intimate partner violence is named as a distinct fifth maltreatment subtype, yet in other definitions it is encompassed under emotional or psychological abuse. Our review will be inclusive of all five sub-types.

Finally, the scope of the review will not be limited to intra-familial child maltreatment, that is, maltreatment due to actions or inactions of parents and/or caregivers and other family members. It will also include literature on extra-familial child maltreatment encompassing child maltreatment perpetrated by other adults responsible for the care of children, such as teachers themselves. Not restricting the scope to maltreatment perpetrated only in family contexts will enable us to conduct a more meaningful review given that future teachers will encounter maltreatment of all types.

Stage 2: Identifying relevant studies

This stage involves devising and revising the search strategy to enable location and abstraction of research evidence using different sources, and running the finalised search (Arskey & O’Malley, 2005; Levac et al., 2010).

Devising the search strategy

We developed a search strategy, via an iterative process, to ensure the review was conducted as comprehensively as possible within the bounds of the research question and reflecting key terminology. We began a process of documenting the search strategy following the 12-step framework proposed by Kable, Pich, and Malin-Prothero (2012).

[†] For the purpose of this review, the term licensing may also include *registration*, *accreditation* or other similar terms used in different jurisdictions for the process of granting authorisation or permission to teach.

[‡] This definition can be found at: [https://www.unicef.org/protection/files/UNICEF_VAC_ToC_WEB_271117\(2\).pdf](https://www.unicef.org/protection/files/UNICEF_VAC_ToC_WEB_271117(2).pdf)

[§] This definition can be found at: <https://resourcecentre.savethechildren.net/library/child-protection-policies-and-procedures-toolkit-how-create-child-safe-organization>

The information specialist on our review team (SH) identified relevant electronic bibliographic databases, drafted preliminary search terms, and designed the search strategy for testing. Test searches were run and results discussed with the review mentor (KW, four times) and with the full review team (twice). At each search iteration, relevant terms, filters, and Boolean operators were progressively customised.

Eleven databases were searched, electronically, for the time period January 1990 to December 2017 including: ERIC (via EBSCOHost); Education Source (via EBSCOHost); CINAHL; A+ Education; ProQuest Education Journals; PsycINFO; Medline; Scopus; ProQuest Dissertations & Theses Global; Trove: Australian Theses; and the Cochrane Library. We limited the search parameters to include papers published from 1990 onwards as the literature on the topic is relatively recent and it roughly marks the beginning of the focus child protection in teacher education (Baginsky, 2008; Briggs & Hawkins, 1997; Lowenthal, 2001). Searches were restricted to peer-reviewed papers and theses, where possible. No language or place of publication restrictions were applied. The complete search strategy by database is detailed in Appendix 1. Reference lists of relevant reviews identified in the searches will be checked for additional potentially-eligible sources to ensure these are included in the scoping review.

Conducting the finalised literature searches

Finalised searches were run in December 2017 by SH. Results of the searches were imported to database specific folders in EndNote (Clarivate Analytics, 2017) reference manager software for storage and retrieval. Duplicates were identified and removed. Records were imported into Covidence systematic review software for screening (Veritas Health Innovation, 2015).

Stage 3: Study selection

In scoping reviews, Arskey and O'Malley (2005) suggest that inclusion and exclusion criteria should be developed with a degree of flexibility with a view to refinement as the review team become more familiar with the literature. We developed inclusion and exclusion criteria in a series of trails beginning in the preliminary planning stages. Draft criteria are shown in Appendix 2.

Screening round 1: Titles and abstracts

In preparation for screening, the review team engaged in a training exercise with a dual purpose: (i) to establish a consistent approach for screening titles and abstracts against eligibility criteria, and (ii) to refine draft inclusion and exclusion criteria for greater clarity and explicitness. In three teams each comprising two reviewers, we independently screened the first 200 titles and abstracts, and assigned one of three standard Covidence screening codes: 'yes' (i.e., include), 'no' (i.e., exclude), 'maybe' (i.e., for group discussion). Inter-rater team discrepancies were calculated as 15.2%, 5.5% and 3.6%. The review team met via teleconference to discuss and resolve discrepancies, and revise inclusion and exclusion criteria accordingly (Levac et al., 2010). Inclusion and exclusion criteria were refined, iteratively, over three revisions. The final eligibility criteria are listed in Table 1. We included studies explicitly focusing on preservice teacher education students, preservice teacher educators, and preservice teacher education institutions. We included only empirical research, and did not restrict by study design. These studies must deal with some aspect of education and/or training for child protection, and be conducted primarily within the scope of initial teacher education. We translated these eligibility criteria into a screening companion (worksheet) for use during the full round 1 screening (see Appendix 3).

Screening in round 1 comprised reviewing titles and abstracts using Covidence software (Veritas Health Innovation, 2015) which enabled multiple users to review studies independently before comparing their results. Search results were imported from EndNote into Covidence. Each record was double screened. Two teams, each comprising two reviewers (LE & AF; CW & KW; KH & KW) worked independently to screen all titles and abstracts with each review team screening half of all records. The goal at this stage was to eliminate papers that clearly did not address the scoping review research question by applying inclusion and exclusion criteria as consistently as possible. If in doubt, we coded as 'maybe' so that no potentially eligible paper was excluded without proper assessment. Conflicts were resolved via discussion.

Table 1: Final SSR eligibility criteria (after 3 revisions)

Inclusion criteria

- Paper/study participants: Initial teacher education students preservice teachers, trainee teachers, student teachers, or any other term used to mean education and training for teachers undertaken prior to service; teacher educators/academics; teacher education courses/institutions/universities
 - Study type: Empirical research (e.g. cross-sectional surveys, pre-/post-test surveys, program/practice/resource implementation studies, experimental or quasi-experimental research, systematic review, qualitative studies, course evaluation reports)
 - Topic focus: Education and/or training for child protection, dealing with child maltreatment (physical abuse, emotional abuse, sexual abuse, neglect), family/domestic violence, child exploitation?
 - Context: Within in the scope of initial teacher education
-

Table 1. Continued

Exclusion criteria

- Paper / study participants: Children, parents, already qualified or practicing teachers, other students or trainees (e.g. medicine, nursing, counselling), other qualified professionals, classroom teachers, supervising teachers for field placements or practice teaching
- Paper/study type: Non-empirical research (e.g. book reviews, commentaries, editorials, opinion pieces, reflection on or descriptions of teaching resources or materials or methods not based on data collection, guidelines or guidance, policy documents, conference presentations, annotated bibliographies)
- Topic focus: Some other aspect of the child welfare system (e.g. educational effects of child maltreatment, extent of child maltreatment, effects of child maltreatment, studies of children in education contexts); education and/or training for something other than child protection
- Context: Outside the scope of initial teacher education

Screening round 2: Full-text assessment

Screening in round 2 involved retrieving full papers of those references identified as potentially eligible for inclusion in round 1. Potentially eligible studies will be assessed by three reviewers working independently (LE, AF, KW) using a MS Excel spreadsheet containing an eligibility criteria checklist corresponding to the screening companion in Appendix 3. Reviewers will not be blinded to journal titles, study authors or institutions. Discrepancies will be resolved via discussion with a fourth reviewer (KH) until consensus is reached. We will manage conflicts of interest for review authors by ensuring that papers authored by review authors are reviewed independently. Reasons for exclusion will be recorded. SH will prepare a full list of included papers as an EndNote file with the full text of papers attached and this will go forward to the next stage of the review. Spreadsheets, Endnote libraries, and decision files will be treated as study data and archived in a password-protected university network drive accessible only to the review authors. A PRISMA flowchart diagram will be finalised.

Stage 4: Charting the data

Stage 4 consists of *charting* relevant information obtained from the included papers. Arskey and O'Malley (2005) recommend collecting two categories of information (or data) from the papers: general information about the study, and specific information related to the research question. We developed a *charting form* as a MS Excel spreadsheet adapted from templates used by the Cochrane Public Health Group (2011), Johanna Briggs Institute (2015, p.14, 23), and Shepherd et al. (2013, pp.63-179-184). It will be piloted, refined and updated during the review process (Arskey & O'Malley, 2005; Johanna Briggs Institute, 2015). Key categories of information captured in the charting form are shown in Table 2.

Table 2: Key categories of information for the charting form (data extraction tool)

Data	Details extracted
Paper details	Study number Study ID Authors Year Citation (in APA format) Keywords Reviewer initials Review date
General information	Publication type (e.g., journal article) Study location (city, country) Study aims/objectives/purpose Rationale (why the study was necessary/important) Research question(s) Study design Setting /context
Methodology/methods	Study type Study design Data collection methods
Participants	Study participants (who was targetted to participate) Participant description Number of participants (sample size) Selection (how was sample selected?) Participant characteristics (e.g., age, gender, ethnicity) Representativeness of sample (% of targetted individuals who agreed to participate)

Table 2. Continued

Data	Details extracted
Context	Type of university/training institution
Details of education / training	Stated focus or purpose Content Format/methods/pedagogies Intensity/frequency Timing Duration Trainer/educator details (discipline, qualifications, experience) Theoretical framework Theory of change Content / topics covered Teaching & learning strategies used Modes of delivery Place where the learning occurred Attendance records Fidelity
Outcomes measured	What was measured in the study or what were data collected on or about? Were data collection tools shown to be valid & reliable? Sources of bias Statistical methods Analyses
Key findings/important results	Summarise findings relevant to the review question Strengths Limitations Funding

In line with recommendations by Levac et al (2010), as a training exercise, all members of the research team will independently complete a charting form for the first 5-10 papers and will meet to review results and calibrate responses. Suggestions for improving the charting form and data extraction process will also be taken, and charting form refinements made. Each included paper will then be reviewed by two reviewers, working independently, who will extract data in the charting form and compare results. Discrepancies will be resolved via discussion or brought to a review team meeting for resolution. We will aim for consistency in the order and style used to describe the key categories of information extracted, and will note missing information in research reports as “unclear” or “not reported”, to make it clear that the information was missing from the study report rather than this being attributed to a reviewer error or oversight (Cochrane Public Health Group, 2011). Where possible, reviewers will extract verbatim extracts directly into the charting form using quotation marks and accompanied by a page number reference. We will *not* contact study authors to request provision of missing information. If duplicate, overlapping, or companion studies are identified during data extraction (i.e., that there are multiple papers reporting on one study such as an original thesis, and a peer-reviewed journal article) we will combine multiple papers into one record and will nominate one paper as the primary source (e.g., the thesis, or first published paper in a series of papers). Data extraction spreadsheets, records of dispute resolution, and records of reasons for exclusion are considered as data in a systematic scoping review and we will collate these in sufficient detail to enable review replication and transparency in reporting on the completed review, as well as to comply with institutional data storage and management policies.

Assessing the quality of studies included in a systematic scoping review has been the subject of discussion. Arskey and O'Malley (2005) did not anticipate that scoping reviews would routinely assess the quality of included studies, because study types and methods were likely to be diverse. However others have since called for the development of a critical appraisal tool for systematic scoping reviews (Levac et al., 2010; Daudt et al., 2013) to be built in to charting forms for data extraction. This is necessary if a scoping review is to provide reliable synthesis of a research topic that can be useful to practitioners, policymakers, and future researchers. Thus, critical appraisal (including assessing methodological quality and risk of bias) is necessary for legitimatisation of the scoping review methodology. Several critical appraisal tools for specific study types have been published such as the Cochrane Risk of Bias tool, (Higgins et al., 2011), the EPPI-Centre Guidelines for Extracting Data and Quality Assessing Primary Studies in Educational Research (EPPI-Centre, 2003), the GRADE-CERqual (Lewin et al., 2018), and the Total Quality Framework (Roller & Lavrakas, 2015). In this review we will adopt and adapt the Critical Skills Appraisal Programme Qualitative Research Checklist (CASP, 2013) which asks ten questions answered with three domain-specific response options: (yes/no/can't tell). Although this checklist was designed for qualitative studies it has sufficient scope for adaptation to quantitative studies, whereas tools specifically designed for quantitative studies do not have similar adaptability for qualitative studies.

Stage 5: Collating, summarising, and reporting the results

This stage of the scoping review involves collating, summarising and reporting the results. Results collected in the Stage 4 charting exercise will be analysed, reported and discussed (Levac et al., 2010). Following Arskey and O'Malley's (2005) framework, this should comprise: (i) a basic descriptive numerical summary of the included studies; and (ii) a qualitative thematic analysis.

We will use descriptive tables to map the extent and nature of empirical studies on child protection in pre-service teacher education conducted since 1990. We will use data extracted from the charting form to collate an overview table detailing key features of the review corpus, modelled after a descriptive mapping of teacher training studies in the broader field of health education (Shepherd et al., 2013). We will use a series of shorter tables to summarise key study characteristics and their distributions, presenting frequencies and percentages where available, accompanied by text descriptions.

Thematic analysis (Braun & Clark, 2006) will be used to develop a narrative synthesis. We will begin by developing categories for data in each charting form column. Where possible, verbatim extracts of text from the study papers will be coded. Coded extracts will be used to develop descriptive categories. For example, a simple deductive coding approach for study participants may be used to categorise these as 'initial teacher education students', 'teacher educators', 'teacher education institutions' or 'other' (as determined by our inclusion criteria). However, other data columns, for example the study rationales and study findings, are likely to require a more nuanced inductive approach that will involve developing tentative categories and refining these in consultation with review team members. Ideally, we will be able to develop a map of the literature that provides a kind of *birds eye view* of the landscape of studies, visualising the range of studies that are available, organised according to key trends and issues identified in the evidence base. We may also be able to compare themes in the literature with existing education and training guidelines applicable across jurisdictions, for example, the International Society for Prevention of Child Abuse and Neglect (2016) *International Training Program (ITP)* (see <http://www.ispcan.org/?page=ITPITraining> and http://www.ispcan.org/?page=Training_Materials) and the World Health Organization (2015) *Toolkit on Mapping Legal, Health and Social Services Responses to Child Maltreatment* (see http://www.who.int/violence_injury_prevention/publications/violence/toolkit_child_maltreatment/en/), and recent systematic reviews about child maltreatment prevention (e.g., Mikton & Butchart, 2009) and evidence-based responses (e.g., Chaffin & Friederich, 2004).

Strengths and gaps in the existing research and recommendations for future research should emerge from the thematic analysis. One of the key tasks of a systematic scoping review is to draw conclusions about the overall state of research activity on a topic. The review will identify gaps in the literature, and it may assess the need for a full systematic review depending on the quality and type of research uncovered. In writing up our systematic scoping review, at a minimum, we will adapt the PRISMA reporting guidelines for systematic reviews (Moher et al., 2009).

Stage 6: Consultation

Arskey and O'Malley (2005) propose consultation as an optional stage in a scoping review while Levac et al (2010) recommends this as an essential stage. Consultation with key stakeholders (e.g., via focus groups) is thought to offer opportunities for new and/or different insights on the review findings, thereby enhancing the study validity (Levac et al., 2010). Consultation can also be used to translate study findings and brainstorm strategies for effective dissemination of review findings (Arskey & O'Malley, 2005). Our scoping review will be conducted by teacher educators from different institutions, therefore, we hope to judge the applicability and useability of the results without the need for broader consultation. However, we will consider the feasibility of conducting a virtual focus group with six to eight of the included study authors using web conferencing, to seek their views on the relevance of the review findings to initial teacher education programs outside of our own country.

Stage 7: Disseminating the knowledge

In keeping with an implementation science perspective, Bidonde et al., (2017) propose that where relevant, the findings of scoping reviews should be made available to stakeholders so that better evidence-informed decisions can be made. To this end, the strategies we intend to implement include: writing a comprehensive, transparent and replicable account of the study in an open access scientific publication; developing a plain language summary (i.e., a "one-pager") for distribution to key personnel in teacher education institutions and to other stakeholders (for example in blogs or other social media platforms) and; presenting the results in a teacher education symposium at an appropriate child protection conference. Additionally, we will use the findings of this review to inform the review of teaching and learning materials in child protection for undergraduate and postgraduate teacher education students at our respective teacher education institutions.

Results

Stage 1 (identifying the research question) and 2 (identifying relevant studies) are now completed, along with the title and abstract screening for Stage 3. Searches yielded 8131 records across the eleven databases listed in Appendix 1. 1197 duplicates were removed leaving 6943 records for title and abstract screening. We are now conducting full text assessment of 88 papers after which we will finalise the list of included studies and begin data extraction. Completion is expected by December 2018, within the recommended 12 month standard since searches were completed (Higgins & Green, 2011).

Table 3: Preliminary database search results

Database searched	Results
ERIC (via EBSCOHost)	607
Education Source (via EBSCOHost)	1127
CINAHL	494
A+ Education	145
ProQuest Education Journals	1848
PsycINFO	119
Medline	931
Scopus	510
ProQuest Dissertations & Theses Global	1892
Trove: Australian Theses	174
Cochrane Library	284
Total	8131
Total after duplicates removed	6934

Discussion

Publishing a study protocol can help improve the quality of educational research. Ideally protocols are written before prospective studies are undertaken or in the initial stages of the research. Protocols should provide a detailed account of the review methods, thus reducing publication bias, and improving the comprehensiveness, transparency and reproducibility of the research.

Answering the research question: "What is known about preservice/initial teacher education for child protection?" in a systematic scoping review will enable progression towards better understanding of what initial teacher education courses/programs currently include in their courses? Additionally, the review can inform future courses or updates of current courses to better produce graduates who can effectively deploy their roles in child protection. Teachers play an important role in meeting the challenges of teaching children who have experienced maltreatment and educating children about child protection matters, maximising these children's opportunities to succeed regardless of their histories.

Our systematic scoping review is not limited to experimental or quasi-experimental studies. We deliberately chose to not limit our review inclusion criteria to a narrow range of studies with the aim to capture the full range of empirical studies conducted in the field since its inception. Extracting data from such a broad range of studies may prove to be challenging, however our objective is to report on the depth and breadth of the existing research and critically appraise the reported evidence. In doing so, we aim to characterise the evidence base and set directions for future research in this field. We intend to open a fundamental and long-overdue conversation about what constitutes effective teaching and learning for child protection in initial teacher education.

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Appendices

Appendix 1: Search strategy

Database	Search Statement	Fields / Limiters	Date Range
ERIC (via EBSCOHost)	("child protection" OR "child abuse" OR "child safety" OR "child welfare" OR "child maltreatment" OR "safeguarding" OR "family violence" OR "domestic violence" OR exploitation) AND ("preservice teacher education" OR "student teacher*" OR "initial teach* education" OR "initial teach* training" OR "teacher trainee*" OR "teacher candidate*" OR "university student*" OR "college student*" OR "teacher educator education*" OR "teacher educat* program*")	Peer Reviewed	1990-2017
Education Source (via EBSCOHost)	("child protection" OR "child abuse" OR "child safety" OR "child welfare" OR "child maltreatment" OR "safeguarding" OR "family violence" OR "domestic violence" OR exploitation) AND ("preservice teacher education" OR "student teacher*" OR "initial teach* education" OR "initial teach* training" OR "teacher trainee*" OR "teacher candidate*" OR "university student*" OR "college student*" OR "teacher educator education*" OR "teacher educat* program*")	Peer Reviewed	1990-2017
CINAHL	("child protection" OR "child abuse" OR "child safety" OR "safeguarding" OR "family violence" OR "domestic violence" OR exploitation) AND teacher*	Peer Reviewed	1990-2017
A+ Education	("child protection" OR "child abuse" OR "child safety" OR "child welfare" OR "child maltreatment" OR "safeguarding" OR "family violence" OR "domestic violence" OR exploitation) AND ("preservice teacher education" OR "student teacher*" OR "initial teach* education" OR "initial teach* training" OR "teacher trainee*" OR "teacher candidate*" OR "university student*" OR "college student*" OR "teacher educator education*" OR "teacher educat* program*")	NA	1990-2017
ProQuest Education Journals	("child protection" OR "child abuse" OR "child safety" OR "child welfare" OR "child maltreatment" OR "safeguarding" OR "family violence" OR "domestic violence" OR exploitation) AND ("preservice teacher education" OR "student teacher*" OR "teacher trainee*" OR "teacher candidate*" OR "teacher educator education*" OR "teacher educat* program*")	Peer Reviewed & Scholarly Journals & Conference Papers	1990-2017
PsycINFO	("child protection" OR "child abuse" OR "child safety" OR "safeguarding" OR "family violence" OR "domestic violence" OR exploitation) AND ("preservice teacher" OR "student teacher*" OR "teacher education" OR "teacher trainee*")	Peer Reviewed	1990-2017
Medline	("child protection" OR "child abuse" OR "child safety" OR "safeguarding" OR "family violence" OR "domestic violence" OR exploitation) AND ((MH "Faculty+") OR teacher*)	NA	1990-2017
Scopus	("child abuse" OR "child protection" OR "child exploitation" OR "child safety") AND ("preservice teacher education" OR "student teacher*")	Articles and Conference Papers	1992-2017
ProQuest Dissertations & Theses Global	("child abuse" OR "child protection" OR "child exploitation") AND ("preservice teacher education" OR "initial teach* training" OR "teacher trainee*" OR "teacher candidate*")	NA	1990-2017
Trove: Australian Theses	(child abuse OR child protection) (teacher education OR student teacher)	Thesis Only	1990-2017
Cochrane Library	("child abuse" OR "child protection" OR "child exploitation" OR "child safety") AND ("preservice teacher education" OR "student teacher*")	All Cochrane Reviews	2001-2017

*Appendix 2: Draft eligibility criteria (inclusion and exclusion criteria) **

Draft inclusion criteria

- Publication dates: 1990 to present
 - Published in any language, and/or in any place
 - Type of paper: peer-reviewed journal article or thesis
 - Focus: initial teacher education, preservice teacher education, teacher training (including studies of trainee teachers, student teachers, teacher educators, field experience host teachers)
 - Focus: child protection, child maltreatment (or specific maltreatment subtypes) identifying, reporting, responding, preventing, teaching, children in out-of-home-care, but only the in the context of initial teacher education
-

Draft exclusion criteria

- Publication dates: before 1990
 - Type of paper: non-peer reviewed or grey literature
 - Focus: in-service teacher/school staff professional development or continuing education
 - Focus: some other aspect of the child welfare system, educational effects of child maltreatment; studies of children in education contexts.
-

* After testing we found it was not necessary to use the first three inclusion and exclusion criteria in round 1 screening as the search strategy had returned appropriate records.

Appendix 3: Screening companion for round 1 (titles and abstracts)

What is known about child protection in teacher education?			
Screening question	Coding		
<p><i>Study participants</i></p> <p>Does the <i>title or abstract</i> refer to initial teacher education students, preservice teachers, trainee teachers, undergraduate students, student teachers, or any other term used to mean education and training for teachers undertaken prior to service? And/or teacher educators/academics, teacher education courses/institutions/universities.</p>	Yes (include)	No (exclude)	Abstract missing / maybe (for discussion)
<p><i>Study type</i></p> <p>Does the <i>title or abstract</i> describe empirical research such as cross-sectional surveys, pre-/post-test surveys, program/practice/resource implementation studies, experimental or quasi-experimental research, systematic review, qualitative studies, implementation reports, course content or development reports?</p>	Yes (include)	No (exclude)	Abstract missing / maybe (for discussion)
<p><i>Study topic focus</i></p> <p>Does the <i>title or abstract</i> refer to the topic of education and/or training for child protection, dealing with child maltreatment (physical abuse, emotional abuse, sexual abuse, neglect), family/domestic violence, child exploitation?</p>	Yes (include)	No (exclude)	Abstract missing / maybe (for discussion)
<p><i>Study context</i></p> <p>Does the <i>title or abstract</i> suggest that the paper's context primarily within the scope of initial teacher education?</p>	Yes (include)	No (exclude)	Abstract missing / maybe (for discussion)

Appendix 4: Screening companion for round 2 (full-text assessment)

What is known about child protection in teacher education?			
Screening question	Coding		
*Is the paper published in the range 1990 to present?	Yes (include)	No (exclude)	Unclear/maybe (for discussion)
*Is the paper published in English?	Yes (include)	No (exclude)	Unclear/maybe (for discussion)
*Is the paper peer reviewed or thesis?	Yes (include)	No (exclude)	Unclear/maybe (for discussion)
Do the participants meet inclusion criteria? i.e., initial teacher education students, preservice teachers, trainee teachers, undergraduate students, student teachers, or any other term used to mean education and training for teachers undertaken prior to service? And/or teacher educators/academics, teacher education courses/institutions/universities.	Yes (include)	No (exclude)	Unclear/maybe (for discussion)
Is this empirical research? i.e., cross-sectional surveys, pre-/post-test surveys, program/practice/resource implementation studies, experimental or quasi-experimental research, systematic review, qualitative studies, implementation reports, course content or development reports?	Yes (include)	No (exclude)	Unclear/maybe (for discussion)
Does the topic meet inclusion criteria? i.e., education and/or training for child protection, dealing with child maltreatment (physical abuse, emotional abuse, sexual abuse, neglect), family/domestic violence, child exploitation?	Yes (include)	No (exclude)	Unclear/maybe (for discussion)
Is the paper's context primarily within the scope of initial teacher education?	Yes (include)	No (exclude)	Unclear/maybe (for discussion)