



A Practice-based Methodology on Conducting a Collaborative Scoping Review with PRISMA-ScR Model for the Separated Refugee Youth Project

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Considering the novelty of the area of a 2-year study on impact of family loss and separation on refugee youth in Toronto, the research team decided to conduct a scoping review of the existing literature as a foundation document that included the extent, range, geography, and nature of research on the topic of interest.

A collaborative co-design approach for this review bought in wisdom from relevant stakeholders. Arksey and O'Malley's framework was modified for this scoping review that substantively identified the extent and magnitude of past research, research gaps, and best practice models for conducting such exploratory research on novel ideas. This framework yielded desired output, such as selection and characteristics of sources of evidence, critical appraisal within sources of evidence, and synthesis of results for the next steps of the research. Prudent researchers and professionals in this area of research, service provider agencies, and a university librarian were consulted. The PRISMA-ScR model saved time and ensured the appropriate yield of the search items. The quality of the review process was evaluated by the Critical Appraisal Skills Programme (CASP) Qualitative Studies Checklist tool.

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This article displays a practical example of how the scoping review process was instrumental in a community-based research project with separated refugee youth to generate the foundational evidence for broader research. This quality-embedded process of collecting and charting data for a scoping review is transferable to similar research initiatives. The flexibility and reproducibility of this review method are commendable.

Keywords: Critical appraisal in scoping review; PRISMA-ScR; collaborative design; community-based research; separated refugee youth; vulnerable population.

1. INTRODUCTION

This method article describes the collaborative engagement process of a reproducible model of 'scoping review' on the impact of family loss and separation among refugee youth in Toronto [1]. The primary aim of this scoping review was to offer recommendations for the ongoing research and possible implications for similar research practices. The 'collaborative design' in research engages relevant stakeholders with empowerment to discover their collective perspectives on the systems they live in to democratize power balance in research decision-making so that the findings are usable and meet their actual needs [2,3]. Previous researchers reported an inadequate amount of literature in this area of Community-Based Research (CBR) depicting the appropriate elements required in a review report to label it complete or incomplete [4]. In such a situation, the scoping review is an effective method to synthesize evidence and discover gaps in the available research [5,6]. A scoping review lists the existing literature including results from a variety of research methods and designs, and differs from a systematic review in several ways such as a systematic review begins with a focused research question to answer, while a scoping review begins with a broad search strategy and continuously redefined search strategy for a better yield. A scoping review is undertaken to identify the type, extent, and range of research available regarding a specific area, in order to ascertain whether there is a need to perform a complete systematic review [7].

Arksey and O'Malley's initial framework [6] explained the context behind their proposed methodology and detailed instructions that support its utilization by researchers and discussed four reasons for undertaking a scoping review. Firstly, it can give a snapshot of a research field, demonstrating the extent of the research focused on a specific area or topic. Secondly, it may indicate whether it is relevant or feasible to undertake a full systematic review,

including anticipated cost. Thirdly, it offers a swift and focused synthesis of all available work. Finally, scoping reviews allow a conclusion to be drawn regarding the available literature including the identification of gaps. These four reasons for undertaking the scoping review process confirm that it can be either a self-contained endeavour or the initial stage in a larger project that may include randomized trials, descriptive research, or systemic reviews.

In 2013, an enhanced model with practice-based narratives on scoping review was published to establish a great consistency in scoping review methodology by enhancing the original scoping review framework developed by Arksey and O'Malley [8]. This modification of the initial model is used here that suggests additional recommendations for each step. In 2015, Peters, et al. made another major review [5] leading to full methodological guidance for conducting scoping review with a focus on when to conduct the scoping review, how to extract and analyse data, how to present or interpret results, and how to use scoping review in practice and policy research.

In 2018, a group of researchers compiled the Preferred Reporting Item for Systematic Review and Meta-analysis extension for Scoping Review (PRISMA-ScR). This framework aimed at improving the scoping review reporting completeness and provided a framework for result appraisal for decision-making [9]. The Enhancing the Quality and Transparency of Health Research (EQUATOR) Network recommended a structural component to the PRISMA-ScR framework comprising the checklist, which included 20 mandatory and two optional items [10].

Thomas & Harden's explanatory approach aided in charting data after review and followed by thematic analysis of data for preparing a working document [11,6]. The Joanna Briggs Institute (JBI) Scoping Review Working Group of the University of Adelaide prepared a manual in

2015 (updated in 2020) to offer a practical illustration for the usage of the scoping review support as a method for generating evidence in the context of community-based research. They highlighted ‘population, concept, and context (PCC)’ as a matrix to structure the probable size and type of the corpus of literature regarding a specific topic and the sequence for writing a report [12, 13, 14, 6, 8].

The goal of this scoping review was to:

- i. Examine the current body of knowledge on the extent, range, geography, and nature of research on this topic of interest;
- ii. Generate a research-based solid foundation document to guide the study on the impact of family loss and separation among refugee youth, and
- iii. Create a modified reproducible model for conducting a scoping review in community-based research.

1.1 Methodology for Creating a Reproducible Modified Framework for Conducting a ‘Scoping Review’

Scoping reviews, like systematic reviews, require comprehensive and structured searches of the literature to maximize the capture of relevant information, provide reproducible results, and decrease potential bias from flawed implementation. The scoping review allows the inclusion of a whole range of published or unpublished study designs and methodologies for mapping broad and diverse topics; however, it carries the challenges of less defined boundaries, lack of agreed-upon detailed

methodologies, guidance, and standards [14]. The study was registered (DOI 10.17605/OSF.IO/Q2WXY) with the Open Science Framework (OSF) [15]. This research team collaboratively analyzed the current scoping review frameworks [13,14,6]. Then decided to use Arksey and O’Malley’s [6] proposed six steps proposed at the initial scoping review framework. This team modified the original model by embedding other supporting models (such as PRISMA-ScR, Critical Appraisal Skills Programme (CASP) [16], DEPICT [17], etc.) into the framework to make it a practice-friendly composite tool (Fig. 1).

Step-1: The research team identified three research questions for the ScR, which were clearly defined, critical, and broad enough to capture maximum literature around our study of interest. These questions were: (i) what were the characteristics of the research conducted on separated refugee youth? (ii) what was the research methodology used in the research conducted on the separated refugee youth?, and (iii) what were the main emerging themes of the research conducted on the separated refugee youth? The first question was to explore the attribution (breadth, extent, nature, and geography) of the research activities conducted on refugee youth having experience of family loss or separation. This question mainly described the characteristics of the existing research to find gaps in the previous literature. The second question was to chart the level of evidence by reviewing the methodologies used in such research. The third question determined the key themes from previous research on this population, topics, and areas of interest.

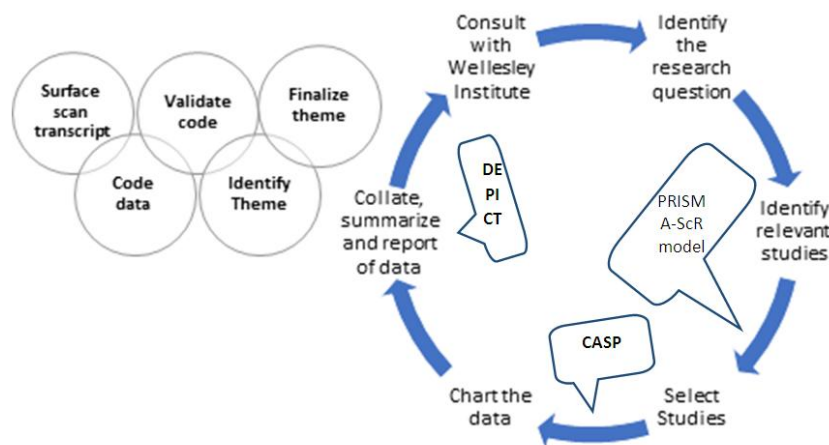


Fig. 1. Steps for Conducting the Scoping Review

Step 2: Relevant studies were retrieved from three major electronic databases (e.g., EBSCO, Elsevier, and Springer), Google Scholar, and online peer-reviewed open access journals. Lastly, a snowball search approach was utilized for expanding upon the research through searching the bibliographies of retrieved articles. The multi-purpose (mp) search criteria, Boolean Operators, and databases were primarily selected by the research team that has a track record of research in this area (of whom two researchers have Ph.D. degree and the third one is a registered counselor therapist with a master degree in social welfare). This search design was consulted for validation first with the advisory team and finally with the University of Toronto Librarian. The multi-purpose search criteria (to look at the title, original title, abstract, subject heading, and registry word fields) were supplemented by added criteria such as the type of journal publication (i.e., peer-reviewed journal). The search strategy initially allowed for the identification of appropriate ‘queries’ concerning the title and abstract. Subsequently, a list of keywords was indexed to search the required articles (e.g., “refugee youth”, “separated refugee youth”, “family loss”, “refugee”, “unaccompanied minors”, “impact on health”, “unaccompanied refugee minors”, “separated minors”, “asylum seekers”, “minor refugees”, “refugee mental health”, “social services to refugee youth”, “psychotherapy”, and “refugee journey”, etc.). The list of queries was iterative and extended to four rounds of search to include more articles for review until saturation of

the researchers for quality and the power of data.

Step 3: The research team collaboratively *selected articles for review*, based on inclusion and exclusion criteria. The review included articles that discussed refugee youth between the ages of 16 and 24 years who experienced family loss or separation or forced family separation due to detention of parents, and separated refugee youth living in detention or camp facilities. The exclusion criteria ruled out articles published before 2009, published in languages other than English, and mentioned data from accompanied refugee youth who did not experience family loss or separation. Rayyan’s web application for scoping review was used for articles screening. The Preferred Reporting Items for Systematic Review and Meta-analysis for Scoping Review (PRISMA-ScR) framework saved time for this review, and ensured the satisfactory yield of the search articles [9]. Consistent with the PRISMA-ScR protocol, this report includes information about research and publication database sources, reflecting the type of database and general criteria that apply to the search process, such as publication date and journal type (e.g. peer-reviewed). One of the major scoping review report elements is the presentation of the search strategy including single and combined keywords. Fig. 2 illustrates the process of inclusion and exclusion to create an article pool for data extraction, number of articles after each step of article screening using the embedded PRISMA-ScR framework.

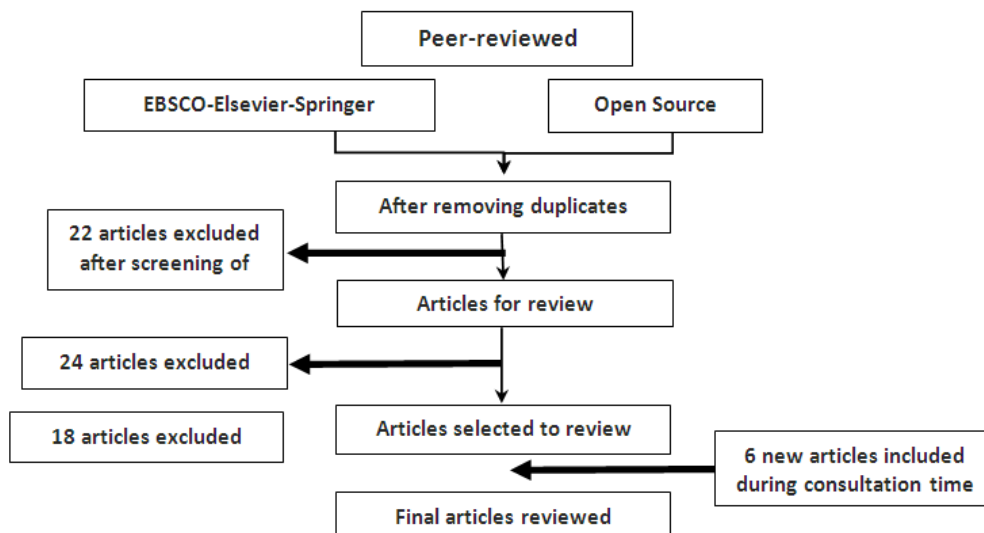


Fig. 2. Inclusion and Exclusion criteria for the Articles in the Scoping Review

PRISMA-ScR model also suggested recording an explicit description in the report of the data charting methods, format for data extraction, and whether the charting was done independently or collaboratively. Accordingly, the research team used a data extraction form, which represented what type of variable the researchers sought as the structure for the analysis process, which enabled the research team to answer the scoping review questions and synthesize the evidence accordingly. PRISMA-ScR checklist also included three other main elements: summary of evidence, risk/ challenges, and conclusions to summarize the findings.

To ensure the scientific rigor of the review, the articles were evaluated for quality appraisal in order to verify the completeness of the article that indicates the inclusion of the detailed methodology, empirical data, and finding section. Despite an optional step in scoping review, a quality appraisal was performed by using the 'Critical Appraisal Skills Programme (CASP) Qualitative Studies Checklist' tool to evaluate the strength of the selected articles [16]. The quality appraisal elements are presented in Table 1.

Step 4: Charting of data (the data extraction process in a scoping review) involved the use of a 'data charting form' to extract the relevant information from the reviewed literature (Table 2). The charting process was done collaboratively following the Collaborative Data Analysis (CDA) approach [17]. Data was charted

in detail by the aim or focus of the article, methodology (including sampling and data collection strategy), level of evidence, reflexivity, how they addressed ethical issues, data analysis process, and the relevance of the findings. Rayyan's web application for scoping review was helpful in the process of screening and selecting studies for organizing data into the chart [18].

Step 5: A report of the reviewed results was compiled for key attributes after collating and coding the charted data (Surface scan), such as the geographic area covered in the research, research population, research design, and methodology. There are various recommendations for the classification and summarization of the charted data to synthesize results for the scoping review. In this review, the numeric data was synthesized using the aggregation methods to describe characteristics of the previous research (e.g., participants' gender, country, methodology type, and evidence level). The thematic analysis framework classified the evidence and arranged domains that helped to oversee the major trends in each theme in addition to cross-cutting themes. In this study, Reflexive Thematic Analysis for qualitative data was practiced to find out the type of themes characterized in the research such as mental health and social interventions [19]. The Qualitative Data Analysis Software NVivo (QSR International) was used to synthesize codes from ideas in the chart [20].

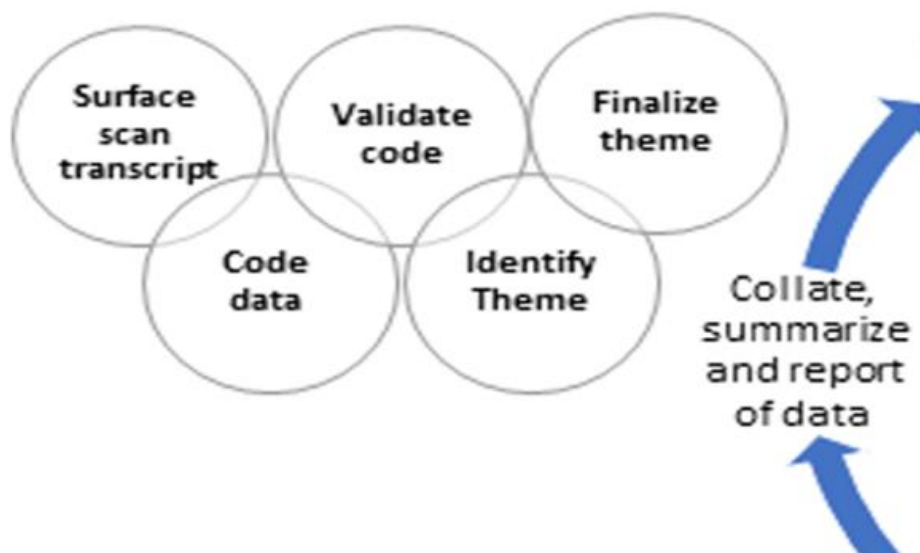


Fig. 3. Process of Creating a Report from Charted Data

Table1. Quality appraisal indicators used for selection of articles

Author (year published)	Aim	Methods	Sampling	Data collection	Reflexivity	Ethical issues	Data analysis	Finding	Value of research
Demott, Jakobsen, Wentzel-larsen, & Heir, (2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sierau, Schneider, Nesterko, & Glaesmer, (2019)	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ribul, (2017) stakeholder no sample for	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ishrat Zakia Sultana, (2013) not focus on youth	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 2. Sample of data charting for the scoping review

Author	Focus or aim of the study	Methodology	Participants	Data collection	Results
Demott, Jakobsen, Wentzel-larsen, & Heir, (2017)	The aim of the study was to examine whether such an intervention may alleviate symptoms of trauma and enhance life satisfaction and hope.	Quantitative/ Level III	145 unaccompanied asylum boys seeking between 15 and 18 years old	The socio-demographic questionnaire, post-traumatic stress symptoms (PTSS), general psychological distress (HSCL-25A), current life satisfaction (CLS), and expected life satisfaction (ELS). The instruments were presented in the participants' native languages, using touch-screen laptops and the computer program Multilingual Computer Assisted Interview (MultiCASI).	A manualized EXIT group intervention can have a beneficial effect on helping minor refugee boys to cope with symptoms of trauma, strengthen their life satisfaction and develop hope for the future. Our findings support previous studies showing that the arts may help people in reconstructing meaning and connection with others by focusing on resources and creativity.

Author	Focus or aim of the study	Methodology	Participants	Data collection	Results
Sierau, Schneider, Nesterko, & Glaesmer, (2019)	The first aim of the present study is to analyze differences between social support from family members, peers, and mentors in unattached minors (UM) with family contact. Second, it should be examined to what extent the quality of social support from networks outside the family (peers and adult mentors) differs in UM with or without family contact. Third, it should be analyzed in UM with family contact if the quality of social support from each of the three sectors moderates the relationship between Stressful Life Events (SLE) and mental health problems.	quantitative / Level VI	105 male UM from Syria and Afghanistan aged 14–19 years who were living in group homes of the Child Protection Services in Leipzig	Perceived social support of the UM in the three sectors, family, peers, and mentors, was assessed with the Multisector Social Support Inventory	Lower social support from mentors increased the risk for PTSD, depression and anxiety symptoms after SLE, whereas lower social support from peers increased the association between SLE and anxiety symptoms. Mentor and peer support in the host country is relevant for the processing of SLE. UM without family contact represent a “double burden” group, as they might feel less supported by other social networks.

The codes were validated by repeated consultation with the core research team (AA, SN, and AA), and with the advisory team through adopting the CDA approach [17] to generate main themes (e.g. mental health, social intervention) and subthemes such as mental health prevalence and psychological predictors of mental health. As shown in Fig. 3, those themes were finalized after repeated consultation with members of the core research team as a collaborative research approach [3]. This process is a significant but important commitment to community-based research, as incorporating a participatory co-design process is an asset for the scoping review.

Step 6: Consultation exercise was practiced throughout the data management process with different levels of engagement. The study review team met repeatedly for initial scanning of charted data, creation of codes, and validation of themes. Stakeholders outside the study review team (Wellesley Institute and advisory committee) were invited to provide their insights as well as to inform and validate the findings of the scoping review. The themes were finalized in a collaborative meeting of the research team with the advisory committee. Repeated consultation was done with experts in the advisory team. The Advisory team had key researchers from the Wellesley Institute (the apex institute in Toronto for Community Based research), the Canadian Association of Mental Health (the lead organization for research on mental health in Toronto), the Ontario Council of Agencies Serving Immigrants (OCASI), and the Canadian Centre for Victims of Torture (CCVT). The trained peer-researchers led the research collaboratively.

Strategy-2 for consultation and wisdom buy-in: The methodology of this scoping review was presented at two international conferences (2019 Metropolis Conference in the USA, and the 2019 IMIS Conference in Germany) for external consultation at the global level, and two conferences in Toronto (2019 student-led conference of the University of Toronto and the 2019 Alliance for Healthier Communities conference at Toronto). This was a robust co-design process where the stakeholders not only helped to validate findings but also supported the whole process from the early stages of the development of the scoping review including the search strategy, study selection, study charting, collating and summarization of data, as well as sharing the results of the report.

2. DISCUSSION ON HOW OUR MODEL DIFFERS FROM OTHER MODELS

Although Arksey and O'Malley [6] recommended collaboration or consultation as the last stage of the framework; nevertheless, our modified framework argues that collaborative decision-making requires integration at all stages of the review process. Such practices will enrich the review report with more reflective elements (i.e., selection of sources of evidence, repurposing the sources of evidence, critical appraisal within sources of evidence, and real-time monitoring of findings), which supports the conduction of efficient research as an output.

This modified scoping review framework recommends some exclusive elements, such as search strategy, eligibility criteria, and charting data in addition to the common research report elements (such as title, abstract, and introduction). This discourse stated, in a clear informative manner, the importance of carrying out the review, main objectives to synthesize evidence, the gap in the existing research, information around the next steps of the research project, types of topics that require more attention, and evaluation of the existence of research from quality perspectives. The abstract prepared for this scoping review gives the reader a quick preview of the main elements such as background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.

Despite the common understanding of the fluidity, iterative process, and broad scope of a scoping review process, we identified some risks at the planning stage; and accordingly designed mitigation strategies to overcome those predicted challenges. The first challenge was to define the scope and boundaries of the review. For example, definitions of 'youth' (by age group) were different in different jurisdictions of Canada (e.g. Human Resources and Skills Development Canada defines youth as between 15-24 years of age, while Statistics Canada defines youth to be between 16 and 28). We provided an operational definition of youth for our research, which is between 16 years and 24 years of age. Another example of varying definitions is the meaning of 'family loss and separation', which is defined differently by authors, researchers, or organizations. In this case, the study team framed an operational definition for these two terminologies. The second risk was finding a

universal methodology, structured guidance, and agreed-upon standards for the scoping review. As such, we decided to adopt the Arksey and O'Malley model to structure the review, PRISMA-ScR framework for managing the number of the journal articles or grey literature, and CASP checklist for evaluating the strength of the selected literature as a quality assurance strategy, which is the third anticipated risk for conducting a scoping review. The fourth risk was the feasibility of our current team for conducting this review. We engaged Wellesley Institute, a key community-based research organization in Toronto, to mentor the review activities conducted by our research team. The Wellesley Institute provided us with a dedicated workstation and mentored one member of our research team to complete this work. The fifth challenge was feasibility concerning time and resources. The research team hired a doctoral-level psychotherapist as an immigrant scholar researcher and hires and trained two peer researchers (with lived refugee experience) to ensure necessary resources. Moreover, Access Alliance's community-based research team has developed a historical reputation for conducting qualitative research on social determinants of health. The next risk was the credibility of the conducting scoping review outside the academic environment. We included academics working in the field, reputed researchers from the leading research organization (Wellesley Institute), researchers from the apex mental health support organization (CAMH), policy planners, as well as leaders from leading community organizations (The Ontario Council of Agencies Serving Immigrants- OCASI, and Canadian Centre for Victims of Torture- CCCVT). This broader team collaboratively validated all of the review activities and data. These are some of the ways how we designed our risk mitigation strategy.

2.1 Quality Appraisal of the Scoping Review Process and Product

The first step was visibility and auditability of the project by registering with Open Science Framework (OSF), which is open to be reviewed for quality assurance to make sure that the required laws and guidelines are followed [15]. If chosen, any representative of the Human Research Ethics Program (HREP) can access study-related data and/or consent materials as part of the review. All information accessed by the HREP will be upheld to the same level of confidentiality that has been stated by the research team. Quantitative assessment often

represents a summarization of all the sources that report specific issues and recommendations to ensure quality. In addition to the methodological challenges, the scoping review also faces criticism concerning an unclear matrix of how to interpret reviewed evidence as well as the 'lack of quality appraisal' [14].

Peters, et al, (2015) and Daudt et al., (2013) recommended that a minimum of two reviewers or coders undertake a review of the complete articles to assist with the selection process based on an 'a priori' protocol, and also to review the charted data to ensure the quality of the scoping review [5,8]. The protocol explicitly predefines the objectives, methodology, and a detailed narrative of the review plan. This specific review consistently involved more than two regular research team members at all stages for repeated consultation as well as periodic consultation of the broader team to validate the process of review and the product as the outcome.

Moreover, the team used the Critical Appraisal Skills Programme (CASP) Qualitative Studies Checklist tool as a matrix to evaluate the strength of the articles selected for the review [16]. Articles were assessed for 10 indicators (study aim, methods, sampling, data collection, reflexivity, ethical issues, data analysis, finding, and value of research), mentioned as columns in Table 1. The first nine indicators mentioned in the table were assessed based on their inclusion in the study. The 10th indicator in the column, the value of research, was assessed based on the overall score of the existence of other factors, such as fittingness to current practice, policy, relevant research-based literature, identification of necessary new areas of research, scalability of the findings, and methodology to other populations.

3. LIMITATION

Despite more recent models being available [4], because of more appropriateness, the research team decided to adopt the initial scoping review framework proposed by Arksey and O'Malley [5]. This was a contextual collaborative decision by the research and advisory team. The authors also acknowledge the date of the references. The number of reviewed articles was limited, because of the novel nature of the study.

4. CONCLUSION

This article shares experiential learning of how a community-based research project effectively

used the scoping review process as a first step for conducting a study in a novel area. The narratives in this article walk researchers through the major steps to synthesize evidence from previous research and complete a structured review methodology to identify the knowledge gaps in the study of interest. This modified framework incorporates other supportive practices in an integrated way, such as the PRISM-ScR model, CASP tool for quality check, and DEPICT approach for completing collaborative peer-led research. The PRISMA-ScR framework strengthened the methodological elements of the scoping review, provided a methodological guideline for the scoping review, and supported the report writing elements addressing each step of the review process. Evaluation of the scoping review from a quality perspective is another issue for the researchers which was addressed, in our model, by appropriate use of the CASP tool. The pivotal asset of this particular scoping review process was the peer-led collaborative design approach. Finally, we ask to use tools, practice, and framework of this experiential learning, from this project, asks that it is imperative to incorporate collaboration in each of the steps of a scoping review.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Abojedi A, Alamgir, Akm, Nudel S, Siddiqi R, Janczur A, McKenzie K, Roche B, Hynie M. (). Impact of family loss and separation

- on refugee youth: Implications for policy and programs—scoping review. *Canadian Diversity*, 2020;17(2): 37-46.
2. Steen M, Manschot M, De Koning N. Benefits of co-design in service design projects. *International Journal of Design*. 2011;5(2):53-60.
3. Binet A, Gavin V, Carroll L, Arcaya M. Designing and facilitating collaborative research design and data analysis workshops: Lessons Learned in the Healthy Neighborhoods Study. *Int. J. Environ. Res. Public Health*. 2019;16:324. DOI:10.3390/ijerph16030324.
4. Salimi Y, Shahandeh K, Malekafzali H, Loori N, Azita Kheiltash A, Jamshidi E, Frouzan AS, Majdzadeh R. Is Community-based Participatory Research (CBPR) Useful? A Systematic Review on Papers in a Decade. *Int J Prev Med.*; 2012;3(6):386–393. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3389435/>.
5. Peters MDJ, Godfrey CM, Khalil H, McInerney P, Parker D, Soares CB. Guidance for conducting systematic scoping reviews. *Int J Evid Based Healthc*. 2015;13:141–146. Available: <https://pubmed.ncbi.nlm.nih.gov/26134548/>.
6. Arksey H, O'Malley L. Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory and Practice*. 2005;8(1):19–32. Available: <https://doi.org/10.1080/1364557032000119616>.
7. Templier M, Paré G. A framework for guiding and evaluating literature reviews. *Communications of the Association for Information Systems*. 2015;37(August):112–137. Available: <https://doi.org/10.17705/1cais.03706>.
8. Daudt HM, van Mossel C, Scott SJ. Enhancing the scoping study methodology: a large, inter-professional team's experience with Arksey and O'Malley's framework. *BMC Med Res Methodol* 2013;13:48. Available: <https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/1471-2288-13-48> <https://doi.org/10.1186/1471-2288-13-48>
9. Tricco AC, Lillie E, Zarin W, et al. PRISMA Extension for Scoping Reviews (PRISMA-

- ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473.
Available: : <https://doi.org/10.7326/M18-0850>.
10. The UK EQUATOR. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation; 2019.
Available:<https://www.equator-network.org/reporting-guidelines/prisma-scr/>.
 11. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology.* 2008;8:1–10.
Available: <https://doi.org/10.1186/1471-2288-8-45>.
 12. JBI Scoping Review Working Group. The Joanna Briggs Institute Reviewers' Manual 2015: Methodology for JBI Scoping Reviews. University of Adelaide, Australia; 2020.
Available:<https://nursing.lsuhs.edu/JBI/docs/ReviewersManuals/Scoping-.pdf>.
 13. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci.* 2010;20;5:69.
DOI: 10.1186/1748-5908-5-69. 1–9.
 14. O'Brien KK, Colquhoun H, Levac D, Baxter L, Tricco AC, Straus S, Wickerson L, Nayar A, David Moher D, O'Malley L. Advancing scoping study methodology: a web-based survey and consultation of perceptions on terminology, definition and methodological steps. *BMC Health Services Research,* 2016;16(1):305.
DOI 10.1186/s12913-016-1579-z.
 15. Open Science Framework; 2020.
Available:<https://osf.io/>.
 16. Critical Appraisal Skills Programme Qualitative Studies Checklist; 2020.
Available:https://casp-uk.net/wp-content/uploads/2018/03/CASP-Systematic-Review-Checklist-2018_fillable-form.pdf.
 17. Flicker S, Nixon SA. The DEPICT model for participatory qualitative health promotion research analysis piloted in Canada, Zambia, and South Africa. *Health Promotion International,* 2014;30(3): 616-624.
DOI:10.1093/heapro/dat093.
 18. McGill Library. Rayyan for Systematic Reviews. (Updated July 2021).
Available:
<https://libraryguides.mcgill.ca/rayyan>.
 19. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health.* 2019;11(4):589-597.
Available:
<https://doi.org/10.1080/2159676X.2019.1628806>.
 20. Qualitative Data Analysis Software NVivo - QSR International.
Available:<https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>.
 21. Zenk S, Schulz AJ, House AB, Kannan S. Application of community-based participatory research in the design of an observational tool: The neighborhood observational checklist. In: Israel, B.A., Eng, E., Schulz, A,J., and Parker E (editors). *Methods in Community-Based Participatory Research for Health.* San Francisco: Jossey-Bass; 2012.
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