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Exploring the role of social workers in Norwegian primary schools: a scoping review protocol

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Exploring the role of social workers in Norwegian primary schools: a scoping review protocol

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Keywords

Primary school, school social worker, early intervention, multidisciplinary cooperation

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Abstract

Introduction

Early intervention by identifying children at risk and providing the necessary support is vital to prevent stunted psychosocial development, mental health issues, and school dropouts. In this regard, schools are important intervention arenas, reaching all students at a universal level. The need for enhanced efforts in this field is well recognized in Norwegian policy documents. Here, school social workers can play a significant role in supporting teachers with expanded knowledge and expertise on psychosocial factors, mental health, and relevant interventions. Despite the clearly stated needs for multidisciplinary competence in school, limited research on such positions has been conducted, and there are no national standards or guidelines for their practice.

Thus, this scoping review's overall objectives are to systematically map the existing research on social workers' roles and responsibilities in Norwegian primary schools and to explore the reported impacts of social-worker positions.

Methods and analysis

To investigate existing literature in this field, a scoping review will be conducted, using the methodological framework of Arksey and O'Malley [1]. Four of their defined goals will be of significance: (1) Examine the extent, range, and nature of the research activity; (2) Determine the value of undertaking a full systematic review; (3) Summarize and disseminate research findings; (4) Identify research gaps in the existing literature. Systematic searches will be conducted in relevant databases and search portals and by using the screening data extraction software Covidence. A thematic analysis of the literature will be carried out.

Ethics and dissemination

The aim of this scoping review is to investigate already published materials, documents, and research; therefore, ethical approval is not considered necessary. The findings will be submitted for publication through scientific papers, and at relevant conferences as part of the main nationwide project. The protocol will be registered in the Open Science Framework (OSF.io).

Strengths and limitations of this study

- This study will be the first to systematically investigate school social workers' roles and responsibilities in Norwegian primary schools and to accumulate knowledge about potential positive effects of such functions.
- Limiting the actual research to the Norwegian context faces the risk of including a high percentage of literature that is not peer-reviewed and that consists of master's theses or other documents representing gray literature.
- Since a small sample of existing literature on this topic is expected, a quality assessment of the articles will not be performed.

Introduction

Providing healthy environments contributing to children's mental health and positive development is defined as a social responsibility beyond the children's primary caregivers. Inclusive communities and early intervention are core elements in this regard [2]. To reveal children at risk of negative emotional and psychosocial development, early intervention in school settings is vital for the promotion of positive mental health and student well-being and for the prevention of future dropouts [3]. The school staff comprises frontline professionals who should identify emerging problems among the students and serve as gateway-providers for professional help [4, 5]. However, schools tend to be crisis-driven in terms of directing their multi-professional work toward emerging and existing problem behaviors at selective and indicative levels rather than at universal levels [6]. Existing research shows that only 17–18% of students with emotional difficulties seek help for their problems, resulting in a negative circle of poor academic achievement, low self-esteem, and enhanced risk of mental health problems in secondary school [8, 9]. Thus, the school staff's capacity to identify emerging problems at an early stage and facilitate help-seeking behavior is vital.

Success in early intervention approaches requires adults' attentive presence in students' daily environments. Here, school social workers play a key role in observing and interacting with students in and outside the classroom setting, as well as in establishing supportive relationships. Teachers are neither professionally prepared nor equipped with the necessary time resources to deal with the students' various and complex social and emotional needs [10, 11]. Thus, the impact of enhanced multi-professional collaboration in schools is highlighted and explored in a range of recent Norwegian policy documents [2, 3, 12]. A common denominator is the recognition that teachers need more support and guidance from school social workers and health professionals to provide sufficient help and support for their students. As White Paper 19 (2009-2010) [11] points out, teachers' time spent on behavior management, pastoral care, and conflict resolution in class encroaches severely on their time devoted to instructional tasks. Mental health difficulties also present an increasing challenge to teacher effectivity and are sources of professional stress [13, 14]. These combined issues substantiate the need for an increased use of staff with social work and psychosocial competencies to support both teachers and students. However, Borg et al [10] note the lack of systematic thinking and a joint strategy on how to utilize the existing multi-professional resources in school. Despite the clear evidence of school social workers' positive impacts on the learning environment and the school climate, the effects are mostly individual based instead of system based. To ensure more system-based effects, there is a need for role clarification and refinement of tasks and responsibilities for social workers in multi-professional collaboration in school.

Review objectives

For this purpose, the current scoping review protocol describes one of two projects that aims to provide a knowledge base of current practices of social workers in Norwegian primary schools. Thus, the planned scoping review is the first part of a nationwide project with the overarching aim of providing a structured approach and a work description that clarifies school social workers' roles and responsibilities in their daily work in students' psychosocial

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3 environment. The suggested approaches will include different areas of investigation, such as
4 psychosocial environment, conflict management, bullying prevention, and mental health
5 promotion, or efforts to enhance students' relational competence and life skills. The project
6 will also investigate whether school social workers' expertise and practical approaches can
7 have positive effects on teachers or other interprofessional collaborations between and among
8 services.
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11 The project comprises three main components using a sequential multi-method design: 1)
12 clarification of the knowledge base through the planned scoping review of evidence in the
13 field, in addition to a survey covering the use and potential positive outcomes of social
14 workers' services in primary schools in two Norwegian counties; 2) preparation of a
15 structured approach for these professions based on the knowledge base and feedback from a
16 selection of social workers in primary schools; and 3) implementation of the structured work
17 approach in a sample of primary schools and investigation of its impacts on relevant factors
18 concerning i) students, ii) teachers, and iii) interdisciplinary collaboration between school
19 social workers and providers of relevant child services in the municipality.
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23 To prepare the main project with a research-based and experience-based approach, one of the
24 strategies is to obtain an overview of existing research in this field. The planned scoping
25 review will therefore provide important contributions to several aspects relevant for the
26 preparation of the main project.
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29 In sum, the overall objective of this scoping review is to map the existing research on the
30 roles and responsibilities of social workers in Norwegian primary schools. The specific aims
31 are as follows:
32

- 33 1. Identify the terminology used to describe school social workers' roles.
- 34 2. Summarize the actual job tasks and responsibilities of school social workers.
- 35 3. Map the reported outcomes and impacts of school social workers' roles.
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40 Methods and analysis

41 A scoping review will be used as a research design for the proposed review protocol because
42 it is a suitable method for obtaining an overview of the current state of knowledge in the
43 research field. Moreover, a scoping review allows the inclusion of a wide range of materials
44 and diverse research designs in disciplines with emerging evidence. The scoping review
45 protocol will be based on the five-step framework and recommendations of Arksey and
46 O'Malley [1, p. 22] and Levac et al. [15], including 1) identifying the research questions, 2)
47 identifying relevant studies, 3) selection studies, 4) charting the data, and 5) collating,
48 summarizing, and reporting the results. An optional step, consultation exercise, where
49 practitioners, stakeholders, and consumers contribute to the work, will also be included in the
50 protocol [1, 15]. The literature search will be completed by May 6, 2022. The scoping review
51 protocol and all available data from the study will be available on request when the study is
52 completed and published.
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60 **Stage 1: Identifying the research questions**

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3 Due to the preliminary investigations presented in public documents and statements from a
4 variety of professionals working in Norwegian primary schools, the current roles of school
5 social workers in this context lack structured approaches. In combination with the increased
6 focus on early intervention, including expertise and competence in children's mental health,
7 such professionals' attentive presence among the children in primary schools is required.
8 Thus, targeted and evidence-based approaches should be developed to ensure positive
9 outcomes. Therefore, the previously mentioned objectives have been defined, with the overall
10 aim of building a knowledge base for use in the development of an evidence-based
11 intervention by school social workers.
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15 **Stage 2: Identifying relevant studies**

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17 The second stage of the chosen framework aims to identify studies that are relevant for the
18 scoping review. Although such an approach attempts to cover a wide range of publications,
19 there might be a broad spectrum of literature that addresses some of the included thematic
20 fields but not the main objective of this review. Therefore, the following criteria will be
21 significant in guiding the literature search.
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24 The scoping review will include studies and scientific papers published in international and
25 national peer-reviewed journals, in addition to gray literature, such as public national
26 documents and reports, PhD dissertations, and MA theses. The following electronic databases
27 will be searched: CINAHL, ERIC, Idunn, MEDLINE, PsychInfo, PubMed, Scopus, Web of
28 Science, and WorldCat, in addition to the search portals Google Scholar and Oria. Databases
29 linked to Norwegian universities that offer professional health-related educational programs
30 will be searched for gray literature, such as PhD dissertations and MA theses. Experts and
31 stakeholders will also be consulted. Snowballing and manual searching will be used as
32 additional methods to capture as many relevant publications as possible.
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38 The following eligibility criteria will also be applied:

- 39 • Language: English and Norwegian
- 40 • Publication years: 2000–2022
- 41 • Included literature: international and national peer-reviewed journals, public national
42 documents and reports, PhD dissertations, MA theses
- 43 • Context: Norwegian context, primary school (6–12-year-old students), social workers
44 with specified areas of intervention related to students' psychosocial health and
45 development at universal and selected levels. Exclusion criteria will be social workers
46 with Special Education Needs (SEN) responsibilities
- 47 • Study population: school social workers, milieu-therapeutic staff, psychosocial
48 counselor, social counselor, school counselor, 6–12-year-old students
- 49 • Intervention: work descriptions and performance outcomes of social workers in
50 primary schools
- 51 • Key search terms (in English): primary school, elementary school, middle school,
52 school social worker, milieu therapist, interprofessional collaboration,
53 interdisciplinary collaboration
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- Key search terms (nøkkelord) (in Norwegian): barneskole, sosialveileder, sosialarbeider, miljøterapeut, tverrfaglig samarbeid, tverretatlig samarbeid, flerfaglig samarbeid

English

Step 1: (“elementary school” OR “primary school” OR “middle school”) AND (“school social worker” OR “milieu therapist” OR “social worker” OR “social teacher”)

Step 2: AND (“interprofessional collaboration” OR “interdisciplinary collaboration” OR “cross-disciplinary collaboration” OR “multi-professional collaboration” OR “multi-disciplinary collaboration”)

Norwegian:

Step 1: (“barneskole” ELLER “grunnskole”) OG (“sosialveileder” ELLER “miljøterapeut” ELLER “miljøarbeider” ELLER “sosiallærer” ELLER “sosialarbeider”)

Step 2: OG (“tverrfaglig samarbeid” ELLER “tverretatlig samarbeid” ELLER “flerfaglig samarbeid”)

Stage 3: Selecting studies

The Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist will be used for reporting the results of the scoping review protocol [16, 17]. A flow diagram, as presented in Figure 1, will be used to visualize and support the study selection process.

Insert Figure 1 about here

After completing the literature search, all references will be uploaded to the reference manager EndNote. Next, all documents will be exported to the online literature review software, Covidence, for removal of duplicates before screening all remaining documents by title and abstract (to be independently conducted by two of the authors) to sort out irrelevant materials. If uncertainties or disagreements occur in the screening process, such as whether a study should be included or excluded, the third author will act as the tiebreaker and establish consensus. In the final step, potentially relevant studies will undergo full-text retrieval and screening to determine which materials to include for the final analysis. The results of the search and the study inclusion process will be reported in full in the final scoping review.

Stage 4: Charting the data

A descriptive summary of each included source will be developed and plotted into a charting table to provide an overview of the material and to record key information about the source, such as author, year of publication, publication type, aim/purpose, context, population and sample size, methods, instruments for data collection, and results or findings relevant to the

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3 scoping review questions. The data will also be presented visually, and mapping of the field
4 will be provided through charts and tables.
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8 **Stage 5: Collating, summarizing, and reporting the results** 9

10 In the final stage of the scoping review, the included materials will undergo thematic analysis
11 to identify recurring patterns, concepts, conflicts, and knowledge gaps [18]. A thematic
12 analysis is “a method for identifying, analyzing, and reporting patterns (themes) within data”
13 [18, p. 79], where the themes capture “something important about the data in relation to the
14 research question” [18, p. 82]. This six-step process will be used to analyze the data: 1)
15 familiarization with the data, 2) generation of initial codes, 3) search for themes, 4) review of
16 themes, 5) definition and naming of themes, and 6) production of the report. The themes will
17 be reported in the final stage of the review.
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23 **Optional stage: Consultation exercise** 24

25 The scoping review will include a consultation exercise where practitioners, stakeholders,
26 and consumers will contribute to the work through a discussion of the preliminary review
27 findings. Contributors to the consultation exercise can provide additional references about
28 potential materials to include in the review, as well as valuable insights about issues relating
29 to the phenomenon examined in the study that would potentially be missed in the scoping
30 review. The participants who are relevant for the consultation exercise include school social
31 workers, teachers, school principals, school nurses, students, and representatives from other
32 services in the municipality, such as from child welfare services.
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37 **Patient and Public Involvement** 38

39 No patient involved.
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43 **Ethics and dissemination** 44

45 The planned scoping review aims to provide an overview of already published and publicly
46 available research, documents, and reports; thus, this investigation does not require a new
47 ethical approval. However, at the optional stage of conducting this scoping review,
48 stakeholders will be introduced and included as research collaborators. Informed consent will
49 be obtained before their involvement, and their anonymity will be maintained throughout the
50 process. A consultation exercise will also be conducted to validate each stakeholder’s concise
51 contributions. The researchers will also endeavor to communicate their findings as
52 descriptively and neutrally as possible, and to the best of their ability, will avoid risks that
53 might place the investigated groups in a vulnerable position.
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58 The findings from the scoping review will be submitted as publications in both scientific and
59 other relevant national journals. Furthermore, the results will be used as part of the
60 knowledge base in a national project, with the aim of developing a structured approach with

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3 guidelines for the exercise of social worker positions in Norwegian primary schools. The
4 protocol will be registered in the Open Science Framework (OSF.io).
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7 Contributorship statement

8
9 MTS had the overall responsibility for the final manuscript and has been involved in all parts
10 of the writing process, in the development of the search strings, in addition to being in charge
11 of the final quality check, proofreading, and submission of the protocol.
12

13 SE wrote the Introduction section, developed the search strings, and commented on and
14 proofread the main text.
15

16 FMR wrote the Methodology section of the scoping review protocol, as well as commented
17 on and proofread the main text.
18
19

20 Competing interests

21 The authors declare that they have no competing interests.
22
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27 number N/A.
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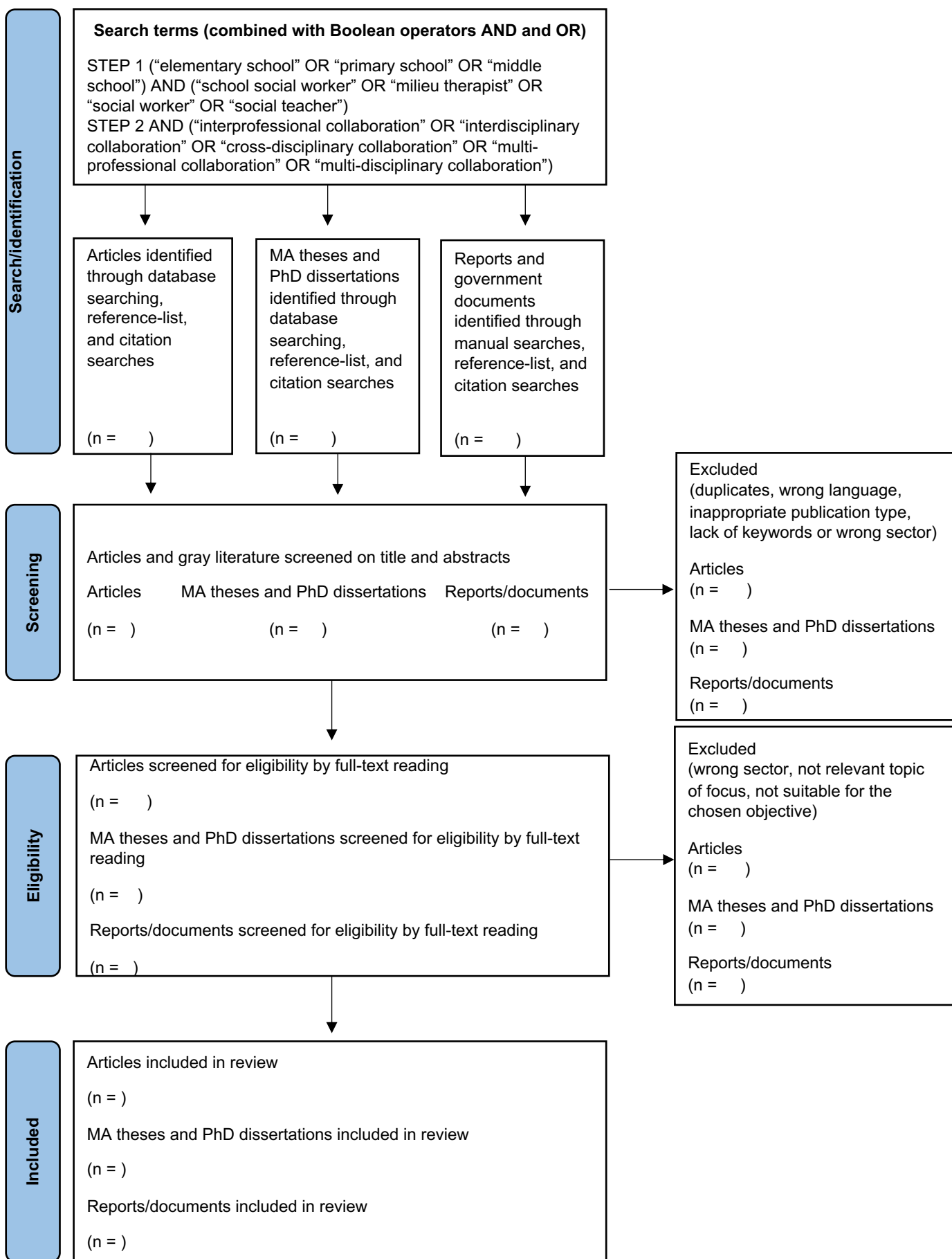
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Figure legends

Figure 1. The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) flow diagram of the study selection process

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Promoting psychosocial environments in Norwegian primary schools: a scoping review protocol exploring the roles and responsibilities of school social workers

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Primary Subject Heading:	Public health
Secondary Subject Heading:	Mental health
Keywords:	PUBLIC HEALTH, SOCIAL MEDICINE, MENTAL HEALTH, PRIMARY CARE

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Promoting psychosocial environments in Norwegian primary schools: a scoping review protocol exploring the roles and responsibilities of school social workers

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Keywords

Primary school, school social worker, early intervention, interprofessional collaboration

Word count: 2698

Abstract

Introduction

Early intervention by identifying children at risk and providing necessary support is vital to prevent stunted psychosocial development and mental health issues. In this regard, schools are important intervention arenas, reaching all students at a universal level. The need for enhanced efforts is well recognized in Norwegian policy documents, whereas school social workers can represent significant roles in supporting teachers with expanded knowledge on psychosocial factors, mental health, and relevant interventions. Despite the clearly stated needs for interprofessional competence in school, limited research has been conducted, and there are no national standards or guidelines for school social workers' practice. Thus, this scoping review's overall objectives are to systematically map the existing research on social workers' roles and responsibilities in Norwegian primary schools.

Methods and analysis

A scoping review will be conducted, using the methodological framework of Arksey and O'Malley. Four of their defined goals will be of significance: (1) Examine the extent, range, and nature of the research activity; (2) Determine the value of undertaking a full systematic review; (3) Summarize and disseminate research findings; (4) Identify research gaps in the existing literature. Systematic searches will be conducted in relevant databases and search portals, including snowballing and manually searching reference lists. Publication language is restricted to English and Norwegian, the date range is from the 1st of January 2000 until the 31st of October 2022, and inclusion requires focus on social workers in a Norwegian primary school context. The data will be screened using the screening data extraction software Covidence. A thematic analysis of the literature will be carried out.

Ethics and dissemination

Ethical approval is not considered necessary as the aim of this scoping review is to investigate already published materials. Findings will be submitted as scientific papers and at conferences as part of the main project.

Strengths and limitations of this study

- Using a scoping review methodology allow us to systematically investigate a broad range of evidence on school social workers' roles and responsibilities in Norwegian

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3 primary schools, and to accumulate knowledge about potential positive effects of such
4 functions.
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- 6 • This study will be the first to systematically identify recommended practice for school
7 social workers, thereby providing an important contribution for today's practice.
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- 9 • Limiting the actual research to the Norwegian context faces the risk of including a
10 high percentage of literature that is not peer-reviewed and that consists of master's
11 theses or other documents representing gray literature.
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17 **Study registration**

18 The protocol is registered in the Open Science Framework (OSF.io).
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21
22

23 **Introduction**

24 Providing healthy environments contributing to children's mental health and positive
25 development is defined as a social responsibility beyond the children's primary caregivers.
26 Inclusive communities and early intervention are core elements in this regard [1]. To reveal
27 children at risk of negative emotional and psychosocial development, early intervention in
28 school settings is vital for the promotion of positive mental health and student well-being and
29 for the prevention of future dropouts [2]. The school staff comprises frontline professionals
30 who should identify emerging problems among the students and serve as gateway-providers
31 for professional help [3, 4]. However, schools tend to be crisis-driven in terms of directing
32 their interprofessional work toward emerging and existing problem behaviors at selective and
33 indicative levels rather than at universal levels [5, 6]. Existing research shows that only 17–
34 18% of students with emotional difficulties seek help for their problems, resulting in a
35 negative cycle of poor academic achievement, low self-esteem, and enhanced risk of mental
36 health problems in secondary school [7, 8]. Thus, the school staff's capacity to identify
37 emerging problems at an early stage and facilitate help-seeking behavior is vital. However,
38 success in early intervention approaches requires adults' attentive presence in students' daily
39 environments. Here, school social workers play a key role in observing and interacting with
40 students in and outside the classroom setting, as well as in establishing supportive
41 relationships. Teachers are neither professionally prepared nor equipped with the necessary
42 time resources to deal with the students' various and complex social and emotional needs [9,
43 10]. Thus, the impact of enhanced interprofessional collaboration in schools is highlighted
44 and explored in a range of recent Norwegian policy documents [1, 2, 11]. A common
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3 denominator is the recognition that teachers need more support and guidance from school
4 social workers and health professionals to provide sufficient help and support for their
5 students. As White Paper 19 (2009-2010) [10] points out, teachers' time spent on behavior
6 management, pastoral care, and conflict resolution in class encroaches severely on their time
7 devoted to instructional tasks. Mental health difficulties also present an increasing challenge
8 to teachers efficiency and are sources of professional stress [12, 13]. Research and literature
9 reviews from other Nordic countries support the need of reducing teachers' administrative
10 tasks and enhance teachers' opportunities for interprofessional collaboration. Such
11 collaboration is thought to provide higher quality of the professional- and pedagogical work
12 and facilitate a holistic approach to students' individual needs. However, unclarity regarding
13 the role and responsibilities of school social workers, remains a key challenge [14, 15].
14 According to Borg et al [9] there is a lack of systematic thinking and a joint strategy on how
15 to utilize the existing interprofessional resources in school. In addition, Gjertsen et al [16]
16 state the important role of school social workers in their research, however, these professions
17 roles and status remains unclear in today's practice. Despite the clear evidence of school
18 social workers' positive impacts on the learning environment and the school climate, the
19 effects are mostly individual based instead of system based. To ensure more system-based
20 effects, there is a need for role clarification and refinement of tasks and responsibilities for
21 social workers in interprofessional collaboration in school.
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38 **Study rationale and objectives**

39 For this purpose, the current scoping review protocol aims to describe a planned scoping
40 review that will contribute to a knowledge base of current practices of social workers in
41 Norwegian primary schools. The scoping review will map existing knowledge of the roles
42 and responsibilities, and political priorities, of school social workers in a Norwegian context.
43 Thus, the planned scoping review represents the first part of a nationwide project with the
44 overarching aim of providing a structured approach and a work description that clarifies
45 school social workers' roles and responsibilities in their daily work in students' psychosocial
46 environment. The suggested approaches will include different areas of investigation related to
47 psychosocial environment in schools, encompassing conflict management, bullying
48 prevention, and mental health promotion, and efforts to enhance students' relational
49 competence and life skills. The project also aims to investigate the potential positive effect of
50 social workers expertise on teachers' perceived efficacy and the overall quality of
51 interprofessional collaboration in schools. The main project comprises three main
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3 components using a sequential multi-method design: 1) clarification of the knowledge base
4 through the planned scoping review of evidence in the field, in addition to a survey covering
5 the use and potential positive outcomes of social workers' services in primary schools in two
6 Norwegian counties; 2) preparation of a structured approach for these professions based on
7 the knowledge base and feedback from a selection of social workers in primary schools; and
8 3) implementation of the structured work approach in a sample of primary schools and
9 investigation of its impacts on relevant factors concerning i) students, ii) teachers, and iii)
10 interdisciplinary collaboration between school social workers and providers of relevant child
11 services in the municipality. To prepare the main project with a research-based and
12 experience-based approach, one of the strategies is to obtain an overview of existing research
13 in this field, based on data from a Norwegian context. Surely, inclusion of content from other
14 jurisdiction would have informed our research. However, we recognize the need to map the
15 national status in the field of school social work, before taking on a broader perspective and
16 include data from other geographical locations. Thus, the main objective of this scoping
17 review is to map the existing research on the roles and responsibilities of social workers in
18 Norwegian primary schools and learn more about the national political priorities related to
19 social work in schools. The specific research questions are as follows:

- 20 1. What is the terminology used to describe social workers roles?
- 21 2. What are the reported job tasks and responsibilities of school social workers?
- 22 3. What is the reported relevance of school social workers roles?

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Methods and analysis

A scoping review will be used as a research design for the proposed review protocol because it is a suitable method for obtaining an overview of the current state of knowledge in the research field. Moreover, a scoping review allows the inclusion of a wide range of materials and diverse research designs in disciplines with emerging evidence. The scoping review protocol will be based on the five-step framework and recommendations of Arksey and O'Malley [17, p. 22] and Levac et al. [18], including 1) identifying the research questions, 2) identifying relevant studies, 3) selection studies, 4) charting the data, and 5) collating, summarizing, and reporting the results. An optional step, consultation exercise, where practitioners, stakeholders, and consumers contribute to the work, will also be included in the protocol [17, 18]. The initial literature search will be completed by 6th of May 2022, whereas the final search will be ended by the 31st of October 2022. The scoping review protocol and

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3 all available data from the study will be available on request when the study is completed and
4 published.
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8 **Stage 1: Identifying the research questions**

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10 Due to the preliminary investigations presented in public documents and statements from a
11 variety of professionals working in Norwegian primary schools, the current roles of school
12 social workers in this context lack structured approaches. In combination with the increased
13 focus on early intervention, including expertise and competence in children's mental health,
14 such professionals' attentive presence among the children in primary schools is required.
15 Thus, targeted and evidence-based approaches should be developed to ensure positive
16 outcomes. Therefore, the previously mentioned objectives have been defined, with the overall
17 aim of building a knowledge base for use in the development of an evidence-based
18 intervention by school social workers. With these factors in mind, we explore the following
19 research question in the scoping review: *What is the current state of knowledge on the roles
20 and responsibilities of social workers in Norwegian primary schools?*
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29 **Stage 2: Identifying relevant studies**

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31 The second stage of the chosen framework aims to identify studies that are relevant for the
32 scoping review. Although such an approach attempts to cover a wide range of publications,
33 there might be a broad spectrum of literature that addresses some of the included thematic
34 fields but not the main objective of this review. Therefore, the following criteria will be
35 significant in guiding the literature search.
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40 The scoping review will include studies and scientific papers published in international and
41 national peer-reviewed journals, in addition to gray literature, such as public national
42 documents and reports, PhD dissertations, and MA theses. The following electronic databases
43 will be searched: CINAHL, ERIC, Idunn, MEDLINE, PsychInfo, PubMed, Scopus, Web of
44 Science, and WorldCat, in addition to the search portals Google Scholar and Oria. Databases
45 linked to Norwegian universities that offer professional health-related educational programs
46 will be searched for gray literature, such as PhD dissertations and MA theses. Experts and
47 stakeholders will also be consulted. Snowballing and manual searching will be used as
48 additional methods to capture as many relevant publications as possible. The included year
49 span from 2000 – 2022 was set due to a marked shift in national policy at the turn of the
50 millennium, regarding inter-professional collaboration in schools. In 2000 a Norwegian
51 White Paper [19] addressing teacher attrition and future teacher roles, identified a marked
52 need for social workers in school to support teachers in dealing with students' expanding
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3 social and emotional needs. This inter-professional collaboration is necessary for teachers to
4 maintain their primary pedagogical role.
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8 The following eligibility criteria will also be applied:
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- 10 • Language: English and Norwegian
- 11 • Publication years: 2000–2022
- 12 • Included literature: international and national peer-reviewed journals, public national
13 documents and reports, PhD dissertations, MA theses
- 14 • Context: Norwegian context, primary school (6–12-year-old students), social workers
15 with specified areas of intervention related to students' psychosocial health and
16 development at universal and selected levels. Exclusion criteria will be social workers
17 with Special Education Needs (SEN) responsibilities
- 18 • Study population: school social workers, milieu-therapeutic staff, psychosocial
19 counselor, social counselor, school counselor, 6–12-year-old students
- 20 • Intervention: work descriptions and performance outcomes of social workers in
21 primary schools
- 22 • Key search terms (in English): primary school, elementary school, middle school,
23 school social worker, milieu therapist, interprofessional collaboration,
24 interdisciplinary collaboration
- 25 • Key search terms (nøkkelord) (in Norwegian): barneskole, sosialveileder,
26 sosialarbeider, miljøterapeut, tverrfaglig samarbeid, tverretatlig samarbeid, flerfaglig
27 samarbeid
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45 *English*

46 Step 1: (“elementary school” OR “primary school” OR “middle school”) AND (“school
47 social worker” OR “milieu therapist” OR “social worker” OR “social teacher”)
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49 Step 2: AND (“interprofessional collaboration” OR “interdisciplinary collaboration” OR
50 “cross-disciplinary collaboration” OR “multi-professional collaboration” OR “multi-
51 disciplinary collaboration”)
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54 *Norwegian:*

55 Step 1: (“barneskole” ELLER “grunnskole”) OG (“sosialveileder” ELLER “miljøterapeut”
56 ELLER “miljøarbeider” ELLER “sosiallærer” ELLER “sosialarbeider”)
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3 Step 2: OG (“tverrfaglig samarbeid” ELLER “tverretatlig samarbeid” ELLER “flerfaglig
4 samarbeid”)
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6 **Stage 3: Selecting studies**

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8 The Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for
9 Scoping Reviews (PRISMA-ScR) Checklist will be used for reporting the results of the
10 scoping review protocol [20, 21]. A flow diagram, as presented in Figure 1, will be used to
11 visualize and support the study selection process.
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17 Insert Figure 1 about here

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19 Figure 1. The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) flow diagram of
20 the study selection process

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22 After completing the literature search, all references will be uploaded to the reference
23 manager EndNote. Next, all documents will be exported to the online literature review
24 software, Covidence, for removal of duplicates before screening all remaining documents by
25 title and abstract (to be independently conducted by two of the authors) to sort out irrelevant
26 materials. If uncertainties or disagreements occur in the screening process, such as whether a
27 study should be included or excluded, the third author will act as the tiebreaker and establish
28 consensus. In the final step, potentially relevant studies will undergo full-text retrieval and
29 screening to determine which materials to include for the final analysis. The results of the
30 search and the study inclusion process will be reported in full in the final scoping review.
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39 **Stage 4: Charting the data**

40 A descriptive summary of each included source will be developed and plotted into a charting
41 table to provide an overview of the material and to record key information about the source,
42 such as author, year of publication, publication type, aim/purpose, context, population and
43 sample size, methods, instruments for data collection, and results or findings relevant to the
44 scoping review questions. The data will also be presented visually, and mapping of the field
45 will be provided through charts and tables.
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52 **Stage 5: Collating, summarizing, and reporting the results**

53 In the final stage of the scoping review, the included materials will undergo thematic analysis
54 to identify recurring patterns, concepts, conflicts, and knowledge gaps [22]. A thematic
55 analysis is “a method for identifying, analyzing, and reporting patterns (themes) within data”
56 [22, p. 79], where the themes capture “something important about the data in relation to the
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3 research question” [22, p. 82]. This six-step process will be used to analyze the data: 1)
4 familiarization with the data, 2) generation of initial codes, 3) search for themes, 4) review of
5 themes, 5) definition and naming of themes, and 6) production of the report. The themes will
6 be reported in the final stage of the review. First, we will familiarize ourselves with the data
7 by carefully examining the included literature. Second, we created initial codes by
8 systematically color coding the dataset in Microsoft Word for unique features, here by using
9 the research question as a guide; we will use two orientations when it comes to the coding: a
10 deductive approach, which we generated from theory, ideas, and concepts, and an inductive
11 approach, which generated codes “bottom-up” from the data [23, p. 853]. In the third step, we
12 search the list of codes for themes by sorting, collating, and refocusing the analysis of codes
13 into constructing broad level themes. The themes will be constructed on a semantic level, that
14 is, close to the explicit texts in the gathered literature, and on a latent level that can help
15 “focus on a deeper, more implicit or conceptual level of meaning, sometimes quite abstracted
16 from the explicit content of the data” [23, p. 853]. Fourth, we will review and refine the
17 themes by collapsing overlapping themes and removing those that lack enough data. Next, in
18 the fifth step, the names and definitions of the themes will be further refined to capture the
19 essence of what each theme is about. Finally, the final analysis will result in main themes
20 which will lead up to the paper’s discussion section.
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36 **Optional stage: Consultation exercise**

37 The scoping review will include a consultation exercise where practitioners, stakeholders,
38 and consumers will contribute to the work through a discussion of the preliminary review
39 findings. Contributors to the consultation exercise can provide additional references about
40 potential materials to include in the review, as well as valuable insights about issues relating
41 to the phenomenon examined in the study that would potentially be missed in the scoping
42 review. A reference group is already established for the main project, consisting of 7
43 participants, including students, school social workers, a school principal, a school social
44 worker coordinator, a representant from the practical-pedagogical service in primary schools,
45 and the leader of a national group working for a national legislation ensuring school social
46 workers at all schools in Norway. The reference group will be participating in the current
47 consultation exercise together with two researchers in the field. The manuscript will be sent
48 to the consultants for feedback and evaluation.
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Patient and Public Involvement

None.

Ethics and dissemination

The planned scoping review aims to provide an overview of already published and publicly available research, documents, and reports; thus, this investigation does not require a new ethical approval. However, at the optional stage of conducting this scoping review, stakeholders will be introduced and included as research collaborators. Informed consent will be obtained before their involvement, and their anonymity will be maintained throughout the process. A consultation exercise will also be conducted to validate each stakeholder's concise contributions. The researchers will also endeavor to communicate their findings as descriptively and neutrally as possible, and to the best of their ability, will avoid risks that might place the investigated groups in a vulnerable position.

The findings from the scoping review will be submitted as publications in both scientific and other relevant national journals. Furthermore, the results will be used as part of the knowledge base in a national project, with the aim of developing a structured approach with guidelines for the exercise of social worker positions in Norwegian primary schools. The protocol is registered in the Open Science Framework (OSF.io).

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19 **Contributors**

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21 MTS had the overall responsibility for the final manuscript and has been involved in all parts
22 of the writing process, in the development of the search strings, in addition to being in charge
23 of the final quality check, proofreading, and submission of the protocol.
24

25 SE wrote the Introduction section, developed the search strings, and commented on and
26 proofread the main text.
27

28 FMR wrote the Methodology section of the scoping review protocol, as well as commented
29 on and proofread the main text.
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31
32

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34
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40 **Competing interests' statement**

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42 The authors declare that they have no competing interests.
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Search/identification

Search terms (combined with Boolean operators AND and OR)

STEP 1 ("elementary school" OR "primary school" OR "middle school") AND ("school social worker" OR "milieu therapist" OR "social worker" OR "social teacher")

STEP 2 AND ("interprofessional collaboration" OR "interdisciplinary collaboration" OR "cross-disciplinary collaboration" OR "multi-professional collaboration" OR "multi-disciplinary collaboration")

Articles identified through database searching, reference-list, and citation searches

(n =)

MA theses and PhD dissertations identified through database searching, reference-list, and citation searches

(n =)

Reports and government documents identified through manual searches, reference-list, and citation searches

(n =)

Screening

Articles and gray literature screened on title and abstracts

Articles	MA theses and PhD dissertations	Reports/documents
(n =)	(n =)	(n =)

Excluded (duplicates, wrong language, inappropriate publication type, lack of keywords or wrong sector)

Articles	(n =)
MA theses and PhD dissertations	(n =)
Reports/documents	(n =)

Eligibility

Articles screened for eligibility by full-text reading (n =)

MA theses and PhD dissertations screened for eligibility by full-text reading (n =)

Reports/documents screened for eligibility by full-text reading (n =)

Excluded (wrong sector, not relevant topic of focus, not suitable for the chosen objective)

Articles	(n =)
MA theses and PhD dissertations	(n =)
Reports/documents	(n =)

Included

Articles included in review (n =)

MA theses and PhD dissertations included in review (n =)

Reports/documents included in review (n =)