Nordic Early Childhood Education and Care Research

A 2024 Mapping and Evidence Assessment

Knowledge Centre for Education

University of Stavanger



© Knowledge Centre for Education 2026

Distribution:
Knowledge Centre for Education,
University of Stavanger,
4036 STAVANGER

https://www.uis.no/nb/forskning/kunnskapssenter-for-utdanning
Telephone: 51 83 00 00

Photos: Getty Images, Unsplash
Layout and design: Impress Publisering

Report No. 1/2026
Knowledge Centre for Education
ISBN 978-82-8439-506-7

Published: 10.11.2026

Reference: Knowledge Centre for Education. (2026). *Nordic early childhood education and care research: A 2024 mapping and evidence assessment* (Report No. 1/2026). University of Stavanger.

Rights: © 2026 Knowledge Centre for Education, University of Stavanger, Stavanger. Quoting from this report is permitted for research or other non-commercial use – provided that the quotations are rendered and attributed correctly and that rights are not affected. All other use requires written permission.

Preface

This report maps Nordic empirical research on early childhood education and care (ECEC) published in 2024. The work is funded by the five Nordic countries and the Nordic Council of Ministers through the Danish Evaluation Institute, the Finnish Ministry of Education and Culture, the Icelandic Directorate of Education and School Services, the Icelandic Ministry of Education and Children, the Norwegian Directorate for Education and Training, the Norwegian Ministry of Education and Research, and the Swedish National Agency for Education.

The initiative to map Scandinavian empirical ECEC research began in 2006 as a collaboration between Norway, Sweden, and Denmark, and the Knowledge Centre for Education has been responsible for the project since 2020. The 2024 mapping represents an important milestone, as its scope has been expanded from these three Scandinavian countries to a fully Nordic collaboration covering all five Nordic countries, with ECEC research concerning children aged 0–6 years from all five Nordic countries.

The research is compiled and made accessible through the Nordic Base of Early Childhood Education and Care (NB-ECEC). The database provides unique access to Nordic ECEC research and is an important source of knowledge for ECEC teachers, centre directors, student teachers, teacher educators, policymakers, and leaders in both the public and private sectors.

We are grateful for the trust given us through this assignment, and I would like to thank the dedicated staff at the Knowledge Centre for Education and the members of the External Research Panel and the Scientific Advisory Board for their valuable contributions. Special thanks go to project leader May Irene Furenes Klippen, who led the work in close collaboration with the project management team: Kjersti Velde Helgøy, Jeanette Rollheim, and Helene Urdland Karlsen. I would also like to thank Maximiliaan Willem Pierre Thijssen and Astrid Guldbrandsen for harmonising labels across years and conducting the trend analyses.

Stavanger, August 2026

Oddny Judith Solheim
Director, Knowledge Centre for Education



Photo: Elisabeth Tønnessen

Executive summary

This report maps empirical research published in 2024 on early childhood education and care (ECEC) for children aged 0–6 in the Nordic countries. It describes what has been studied, by whom, using which methods, and where gaps remain. It does not synthesise individual study findings or assess which practices work.

The mapping identified 336 eligible publications in 2024, bringing the 2006–2024 dataset to 2,769 publications. Finland and Iceland were included for the first time in 2024, alongside Norway, Sweden, and Denmark. The full Nordic total therefore cannot be compared directly with earlier years. Trends over time are based on the three-country Scandinavian series, which has been mapped consistently since 2006.

Six findings stand out. First, research output has risen in every mapping period since 2006, driven by Norway and Sweden, while Denmark remains a smaller and more slowly growing contributor. Second, two-thirds of the 2024 publications were in English, continuing a long-term shift, especially in Norway and Sweden, although national-language publishing remains visible. Third, the research is predominantly qualitative and descriptive, drawing on case studies, ethnography, observation, and interviews, while experimental and quasi-experimental designs remain rare. Fourth, research concentrates on adults, especially staff, while children are often studied indirectly through the adults around them. Fifth, the thematic profile is increasingly centred on professional practice and activities and routines, while physical environment and social relations are less prominent. Sixth, 82 percent of publications were rated as medium or high quality and are therefore eligible for indexing in the Nordic Base of Early Childhood Education and Care (NB-ECEC) database.

Two features of the data govern how these findings should be read. First, categories such as country, theme, method, and informant are not mutually exclusive, so a study can be counted in more than one, and percentages are shares of included studies rather than parts of a whole. Second, the historical series is harmonised into a common codebook after the fact, so broad patterns across several years are more reliable than small year-to-year differences. Throughout, the counts describe the literature, not the state of early childhood provision. Overall, the mapping points to a maturing, internationally oriented Nordic ECEC research field with a strong qualitative tradition and a persistent focus on adults and professional practice.

Samandrag

Rapporten gjev ei oversikt over empirisk forsking på barnehage (ECEC) for aldersgruppa 0–6 år publisert i Norden i 2024. Han skildrar forskingslandskapet gjennom kva det er forska på, kven som forskar, kva metodar som er nytta, og kvar det finst kunnskapshol. Rapporten samanstiller ikkje resultata frå dei einskilde studiane og vurderer heller ikkje effekten av ulike praksisar eller tiltak.

Til saman oppfylte 336 publikasjonar inklusjonskriteria i 2024. Med det omfattar datagrunnlaget for perioden 2006–2024 totalt 2 769 publikasjonar. Finland og Island vart inkluderte for første gong i 2024, saman med Noreg, Sverige og Danmark. Det nordiske datagrunnlaget kan difor ikkje samanliknast direkte med tidlegare år. Analysane av trendar byggjer på data frå Noreg, Sverige og Danmark, som har vore kartlagde etter same metode sidan 2006.

Seks hovudfunn peikar seg ut. For det første har talet på publikasjonar auka i kvar kartleggingsperiode sidan 2006. Auken er i hovudsak driven av Noreg og Sverige, medan Danmark står for ein mindre del av forskingsproduksjonen og har hatt ein meir moderat vekst. For det andre var to tredelar av publikasjonane i 2024 skrivne på engelsk, noko som føyer seg inn i ei langsiktig utvikling mot meir engelskspråkleg publisering, særleg i Noreg og Sverige. Samstundes er publisering på dei nasjonale språka framleis synleg. For det tredje er forskinga i overvegande grad kvalitativ og deskriptiv, og byggjer på casestudiar, etnografi, observasjonar og intervju. Eksperimentelle og kvasi-eksperimentelle forskingsdesign er framleis sjeldne. For det fjerde rettar forskinga seg i hovudsak mot vaksne, særleg tilsette, medan barn oftast blir studerte gjennom dei vaksne rundt dei. For det femte viser forskinga i aukande grad ei tematisk dreiing mot profesjonsutøving, aktivitetar og rutinar, medan fysisk miljø og sosiale relasjonar får mindre merksemd. For det sjette vart 82 % av publikasjonane i 2024 vurderte til å vere av middels eller høg kvalitet. Desse publikasjonane er inkluderte i databasen Nordic Base of Early Childhood Education and Care (NB-ECEC).

Ved tolking av funna er det viktig å ta omsyn til to forhold. For det første er ikkje kategoriar som land, tema, metode og informant, gjensidig utelukkande. Den same studien kan difor vere registrert i fleire kategoriar. Prosentdelane viser kor stor del av studiane som er registrerte i kvar kategori, og kan ikkje summerast til 100 %. For det andre er datagrunnlaget frå tidlegare år harmonisert i etterkant ved hjelp av ei felles kodebok. Analysar av overordna utviklingstrekk over fleire år er difor meir pålitelege enn samanlikningar av små endringar frå eitt år til det neste. Tala i rapporten skildrar forskingslitteraturen, ikkje tilstanden i barne-hagesektoren. Rapporten viser eit nordisk forskingsfelt prega av aukande internasjonal orientering, ein sterk kvalitativ forskingstradisjon og ei tydeleg prioritering av forsking på vaksne og profesjonsutøving.

Acknowledgements

Contributors affiliated with the Knowledge Centre for Education, alphabetically:

Project management team	
Helgøy, Kjersti V.	Associate professor
Karlsen, Helene U.	Advisor
Klippen, May Irene F.[1]	Associate professor
Rollheim, Jeanette	Senior advisor

[1] *Project manager.*

Search, screening, coding and/or quality assessment	
Baluszek, Joanna B.	Researcher
Forsström, Sanna E.	Associate professor
Friestad, Nina K.	PhD candidate
Grødem, Johannes N.	PhD candidate
Guldbrandsen, Astrid	Associate professor
Helgøy, Kjersti V.[1]	Associate professor
Hvalby, Lone	PhD candidate
Keles, Serap	Professor
Klippen, May Irene F.[1]	Associate professor
Njå, Morten B.	Associate professor
Solheim, Oddny J.	Professor

[1] *Responsible for the search.*

Harmonisation of labels	
Guldbrandsen, Astrid	Associate professor
Thijssen, Maximiliaan W. P. T.	Associate professor

Summary writing	
Acasuso, Linn S.	Senior advisor
Elsayed, Secilie	Senior advisor
Grødem, Johannes N.	PhD candidate
Hvalby, Lone	PhD candidate
Mikelsen, Kine L.	External affiliate
Rollheim, Jeanette	Senior advisor
Sædberg, Leif Tore	Advisor

Writing, review and/or editing	
Guldbrandsen, Astrid	Associate professor
Helgøy, Kjersti V.	Associate professor
Karlsen, Helene U.	Advisor
Keles, Serap	Professor
Klippen, May Irene F.	Associate professor
Rollheim, Jeanette	Senior advisor
Thijssen, Maximiliaan W. P. T.	Associate professor

We are grateful to the members of the External Researcher Panel, who served as an independent second team in the quality assurance process. While the team at the Knowledge Centre for Education conducted the initial coding of all eligible studies, the External Researcher Panel reviewed and verified these codes and independently assessed the quality of each study.

We also thank the members of the Scientific Advisory Board for helping ensure that this year's report aligns with broader ECEC research and policy agendas. The Board met once in early spring 2025 to discuss the search process. The Board also provided feedback on the draft report.

External Researcher Panel	
Professor Björklund, Camilla *University of Gothenburg*	Sweden
Professor Einarsdóttir, Jóhanna *University of Iceland*	Iceland
Professor Franck, Karianne *Queen Maud University College of Early Childhood Education*	Norway
Associate Professor Frederiksen, Jan T. *University of Copenhagen*	Denmark
Associate Professor Granone, Francesca *University of Stavanger*	Norway
Professor Håberg, Liv I. A. *NLA University College*	Norway
Professor Hansen, Ole H. *Jönköping University*	Sweden
Professor Harju-Luukkainen, Heidi *University of Jyväskylä*	Finland
Associate Professor Højen, Anders *Aarhus University*	Denmark
Senior Researcher Næsby, Torben *University College of Northern Denmark*	Denmark
Associate Professor Ólafsdóttir, Sara M. *University of Iceland*	Iceland
Professor Palmér, Hanna *Linnæus University*	Sweden
Associate Professor Ree, Marianne *University of Stavanger*	Norway
Associate Professor Saha, Mari *Tampere University*	Finland

Scientific Advisory Board	
Professor Bleses, Dorthe *Aarhus University*	Denmark
Professor Einarsdóttir, Jóhanna *University of Iceland*	Iceland
Professor Hansen, Ole H. *Jönköping University*	Sweden
Professor Harju-Luukkainen, Heidi *University of Jyväskylä*	Finland
Professor Hoel, Trude *University of Stavanger*	Norway

Contents

Preface 2
Executive summary 3
Samandrag 3
Acknowledgements 4
List of abbreviations and acronyms 7

1. Introduction 8

2. Method 9
2.1. Literature search 9
2.2. Eligibility criteria 9
2.3. Screening 10
2.4. Coding and quality assessment 10
2.5. Harmonising the data across years 11
2.6. Writing study summaries 11
2.7. Data analysis and presentation 11

3. Results 12
3.1. The scale and spread of the field 12
3.2. The shift to English 13
3.3. How the research is done 14
3.4. What the research sets out to do 15
3.5. Who funds the research 16
3.6. What the research is about 17
3.7. Who is studied and who is heard 19
3.8. How clearly are studies reported 21
3.9. Differences between the Nordic countries 22

4. What frequency counts can and cannot show 23

5. Evidence gap map 24
5.1. Where the evidence concentrates 24
5.2. Where the evidence is thin 24
5.3. Do the gaps persist over time? 25
5.4. What the gaps may imply 25

6. Conclusion 26

7. References 27

Appendices 28
A. Search strategy and search terms 28
B. Databases, journals, and search results 29
C. Inclusion and exclusion criteria 30
D. PRISMA-ScR flow chart 31
E. Coding manual 2024 32
F. Harmonising the data across years 36
G. List of included studies 41
H. Supplementary figures 51



List of abbreviations and acronyms

Abbr./ Acronym	Description
DiVA	Digitala Vetenskapliga Arkivet
ECEC	Early Childhood Education and Care
EGM	Evidence gap map
NB-ECEC	Nordic Base of Early Childhood Education and Care
NORA	Norwegian Open Research Archives
SwePub	Swedish Publications
NAFOL	Norwegian National Research School in Teacher Education
ERIC	Education Resources Information Center
PRISMA	Preferred Reporting Items for Systematic reviews and Meta-Analyses
PRISMA-ScR	Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews



1. Introduction

This report maps empirical research published in 2024 on early childhood education and care (ECEC) for children aged 0–6 in the Nordic countries. It provides an overview of the research, describes the main characteristics of the evidence base, and identifies areas in which comparatively few studies are available. By making systematically identified and assessed Nordic ECEC research easier to find, understand, and use, the report supports professional learning, further research, and policy development.

ECEC is a continuously developing field, and systematic mapping is important for tracking the development of its research base and identifying where further knowledge is needed. A well-mapped evidence base can help researchers, practitioners, and policymakers understand what research is available and where significant gaps remain.

The 2024 mapping has a fully Nordic scope. Previous annual mappings covered empirical research from Denmark, Norway, and Sweden between 2006 and 2023. The present mapping expands this work to include Finland and Iceland, thereby covering all five Nordic countries. Bringing this wider body of research together is intended to strengthen the shared Nordic knowledge base and increase the visibility and accessibility of ECEC research across the region.

The report has two related purposes. First, it maps empirical Nordic ECEC research published in 2024. Second, it places the 2024 research within the context of longer-term developments since 2006. Because Finland and Iceland were included for the first time in 2024, comparisons over time are based primarily on the established three-country series comprising Denmark, Norway, and Sweden.

In this report, the term evidence base refers to the body of available studies and their distribution across topics, methods, countries, and study populations. The report maps the characteristics of this evidence base but does not synthesise the findings of individual studies or draw conclusions about effects, effectiveness, or best practices. It can therefore show which questions Nordic ECEC research has concentrated on, and which areas remain comparatively underexamined, but it cannot determine which practices work. Such conclusions require a synthesis of study findings, which is a separate task from the mapping undertaken here.

The review was conducted by the Knowledge Centre for Education (the Centre), Norway's national centre for systematic reviews in education. The Centre was responsible for the full review process, including searching, screening, coding, quality assessment, analysis, and reporting. To strengthen the methodological quality and Nordic relevance of the review, the Centre collaborated with two external expert groups. The External Research Panel contributed to quality assurance, including the assessment of study quality, while the Scientific Advisory Board provided strategic and policy-oriented guidance. The members of both groups, all of whom are named in the Acknowledgements, were established ECEC researchers from the five Nordic countries and represented a broad range of national contexts, research topics, and methodological expertise.

This main report is intended primarily for policymakers and researchers with an interest in Nordic ECEC research. To support knowledge dissemination to a broader audience, the Centre also produces a shorter report for practitioners, ECEC providers and owners, and other stakeholders. In addition, concise English-language summaries are prepared for all included studies assessed as being of medium or high quality. These summaries are published in the Nordic Base of Early Childhood Education and Care (NB-ECEC) database, where users can search empirical Nordic ECEC research by country, topic, method, and other characteristics. The database also provides access to annual mapping reports dating back to 2006.

The 2024 report addresses three main questions:

1. **What are the main trends** in Nordic empirical ECEC research published in 2024 and how has this research field evolved since 2006?
2. **How are publications distributed** by country, publication language, research design, and methods used?
3. **What topics have been studied** in Nordic ECEC research, and who are the informants and subjects of these studies?

2. Method

This section describes how the 2024 research mapping was conducted and how the study summaries were prepared. Its purpose is to document each stage of the process clearly, thereby supporting transparency and enabling readers to appraise the reliability of the methods and findings. Readers mainly interested in what the research shows may turn directly to Section 3. Section 2 is provided so that the findings can be judged against the process that produced them.

The research was mapped using a scoping review approach (Arksey & O'Malley, 2005). A scoping review systematically maps the literature available on a topic, identifies key concepts and types of evidence, and highlights areas in which comparatively little research is available. This approach is well suited to examining the extent, range, and characteristics of research in a field and was therefore appropriate for a mapping intended to support professional practice, further research, and policy development. The review followed five steps, outlined in Table 1 and described in the sections below.

No.	Description	Where
1	Identifying the research questions	Section 1
2	Searching databases and journals for relevant studies	Section 2.1
3	Screening studies against the inclusion criteria	Section 2.3
4	Charting the data through coding and quality assessment	Section 2.4
5	Collating, summarising, and reporting the results	Section 3

Table 1. The five steps of the scoping review

2.1. Literature search

The mapping was based on systematic searches of national and international databases and educational journals relevant to Nordic ECEC. The searches used both Nordic-language and English search terms. Following the expansion of the mapping from a Scandinavian to a Nordic scope, Finnish- and Icelandic-language search terms were added.

The main searches were conducted on 20 March 2025. The searches in the three international databases were updated on 29 March 2025 to identify any additional records added between the initial search and the completion of the search process.

The Nordic database searches covered Bibliotek.dk, Oria, DiVA, Idunn, Libris, NORA, and SwePub. NORART has been covered through Oria since 2022. NAFOL has been discontinued, while publications from *Paideia* are indexed in other databases included in the search. The searches in Oria and SwePub used both Nordic-language and English search terms. International searches were conducted in ERIC, Scopus, and Web of Science. Together with the Nordic sources, these databases were selected to provide broad and complementary coverage of ECEC research.

Manual searches were also conducted in two journals: *Barn – forskning om barn og barndom i Norden* and *Nordisk tidsskrift for pedagogikk og kritikk*, in accordance with previous years' strategy, as these are considered journals of particular relevance and we have experienced that relevant articles from these journals have not always been identified through the general searches. Titles and abstracts were screened to identify studies that addressed the review questions and met the predefined eligibility criteria.

To improve the completeness of the mapping, both the Scientific Advisory Board and the External Research Panel were consulted to identify relevant publications that database and journal searches may have missed. No additional procedures such as reference-list searching or citation searching were used.

All retrieved records were imported into EPPI-Reviewer Web (version 6) (Thomas et al., 2023). Duplicate records were identified using EPPI-Reviewer's automated deduplication function. A deduplication threshold of 0.85 was applied. Records with a duplicate similarity score above the 0.85 threshold were automatically treated as duplicates and removed. Records flagged as possible duplicates below this threshold were manually reviewed, and one version of each confirmed duplicate was retained.

The search terms and an example of a database-specific syntax are presented in Appendix A. The number of records retrieved from each source and the results of the updated searches are presented in Appendix B.

2.2. Eligibility criteria

The review followed an explicit search strategy with predefined inclusion and exclusion criteria and is reported in line with the PRISMA extension for Scoping Reviews (PRISMA-ScR, Tricco et al., 2018).

The eligibility criteria were kept consistent with those used in previous years' mappings (see, e.g., Guldbrandsen et al., 2025). In summary, studies were eligible if they reported empirical research on ECEC for children aged 0–6 in ECEC settings in the Nordic countries, and were published in 2024 as journal articles, reports, book chapters, or PhD monographs. Studies were excluded if they focused only on schooling beyond ECEC, fell outside the Nordic countries, used empirical data only illustratively, or were primarily theoretical or policy discussions. Bachelor's and master's theses, popular-science pieces, textbooks, policy documents, and evaluation reports were also excluded. The full inclusion and exclusion criteria are listed in Table C1 (Appendix C).

2.3. Screening

Screening was carried out in EPPI-Reviewer Web (version 6) (Thomas et al., 2023) in two distinct stages. First, two researchers independently screened the titles and abstracts of all records identified through the searches, without seeing each other's decisions. Records that did not meet the inclusion criteria based on their title and abstract were excluded at this stage. The reviewers then independently assessed the full texts of the remaining studies. At each stage, disagreements about whether a study met the inclusion criteria were discussed and resolved jointly. Before each screening stage, the reviewers piloted the criteria on a 10 percent sample of the relevant records to identify ambiguities, calibrate their interpretation of the criteria, and refine the screening guidance before assessing the remaining records. The number of studies excluded at each stage, together with the reasons for exclusion at the full-text stage, is shown in the PRISMA-ScR flow diagram in Appendix D.

As in previous years' mappings, the main reasons for exclusion at full-text stage were that the publication fell outside the ECEC age range or setting (wrong topic), was not empirical or used empirical data only illustratively, fell outside the Nordic countries, or was a publication type outside the review's scope. The counts for each reason are given in the flow diagram in Appendix D.

2.4. Coding and quality assessment

Each included study underwent coding and quality assessment involving two researchers: one from the Centre and one from the External Research Panel. They used a structured coding and assessment framework (see Appendix E) covering general study characteristics, including country, publication language, research design, and methodology, as well as topic-specific characteristics such as the study's purpose, themes, and areas of ECEC addressed. Coding and assessment were carried out in EPPI-Reviewer Web (version 6) (Thomas et al., 2023).

The coding and quality-assessment processes followed different procedures. Study characteristics were initially coded by a researcher from the Centre and subsequently verified by a researcher from the External Research Panel, who had access to the initial coding and revised it where necessary. This constituted single-reviewer coding with full second-reviewer verification rather than independent duplicate coding. Quality assessments, by contrast, were completed independently by both reviewers: the External Research Panel researcher conducted the assessment without access to the Centre researcher's ratings.

The quality assessment indicates how completely and transparently each publication reports the information required to understand and appraise the study. In assigning a rating, reviewers considered whether the publication clearly reported its aims and research questions, its background and rationale, its design, its context and sample, its data-collection and analysis methods, and its results and conclusions, together with relevant ethical considerations. It is therefore principally an assessment of reporting quality rather than a definitive assessment of the overall value of the underlying research or its findings.

Each publication was assigned an overall rating of high, medium, or low quality according to NB-ECEC-specific criteria focusing mainly on reporting quality, but also considering ethics, research design and reliability, validity and trustworthiness (see Appendix E – Quality Assessment). Note that the quality assessment is based on what is presented in the included study document. All eligible publications were included in the descriptive mapping and analyses, including those assessed as being of low quality. Publications assessed as having medium or high quality were included in the NB-ECEC database, tagged according to key characteristics (topic, setting, etc.), and accompanied by summaries in English.

The ratings should not be interpreted as definitive judgements about the soundness of the underlying research, the importance of its findings, or the contribution it makes to the field. A study may have been carefully designed and rigorously conducted but receive a lower rating if the publication does not provide sufficient methodological detail. This may occur, for example, when journal word limits restrict the amount of information that can be reported.

Where the two reviewers disagreed, a third researcher made the final decision. Third-party adjudication was required for 26 of the 336 studies assessed, corresponding to approximately 8 percent.

Researchers who were new to the project received training in the coding and quality-assessment framework. Calibration meetings and a shared team channel were used to discuss methodological questions, clarify the coding guidance, and promote consistent application of the criteria.

All researchers completed a conflict-of-interest declaration and identified publications they could not assess impartially, including their own publications and publications arising from projects in which they had been involved. Publications were allocated to avoid these conflicts and, where relevant, to match reviewers' language competence.

2.5. Harmonising the data across years

The mapping combines annual data from 2006 to 2024. During this period, the coding framework changed several times, and different teams conducted some of the earlier reviews. Apparent changes over time could therefore reflect differences in coding categories or practices rather than changes in the ECEC research field.

To improve comparability, historical study records were translated into the 2025 NB-ECEC reference codebook. The harmonisation was conducted at the study level using the coding evidence already recorded for each study. The original publications were not systematically recoded.

The workflow combined predefined mapping rules, AI-assisted comparison, validation checks, and manual review. Direct correspondences were mapped using deterministic rules. Where interpretation was required, GPT-5.4-mini compared the historical coding evidence with the current codebook and proposed provisional mappings. The AI tool was used only to suggest, never to decide: the research team retained responsibility for the mapping rules, the review of uncertain cases, validation, and every final decision. No category was assigned based on an AI suggestion alone.

Historical categories were mapped to current categories only when the available evidence supported the same underlying meaning. Where earlier categories were broader, the closest defensible current category was used without assigning a level of detail unsupported by the historical record. Selected mappings were also checked against in-text evidence where publications remained available.

Harmonisation improves comparability but cannot remove all differences in historical coding practice. The resulting figures should therefore be understood as counts under the current reference codebook rather than exact reproductions of the original annual reports. Broad patterns across several years are more reliable than small year-to-year differences. Further details of the harmonisation procedure, validation checks, treatment of uncertainty, and use of AI are provided in Appendix F.

2.6. Writing study summaries

Short summaries were written for every study assessed as high or medium quality, and these are published in the NB-ECEC database. The database does not distinguish between high and medium quality, so both appear together. NB-ECEC already holds summaries of studies published from 2006 to 2023 that meet these standards, and the 2024 summaries are being added to it.

The summaries were drafted with the support of an AI tool, guided by a predefined prompt that set out what each summary should contain and how it should be structured. The tool used was Copilot, the University of Stavanger's internal AI service, accessed through individual user accounts under the university's procedures for secure data handling and deletion. Zotero was used alongside it to give the team access to full-text articles without each member needing direct access to EPPI-Reviewer (version 6) (Thomas et al., 2023).

Each summary briefly describes the study's purpose and research questions, its design, and its results, and is tagged by predefined categories such as context, methods, topic, and country, so that users can find and grasp the essence of a study quickly. Every summary was then checked against the full-text and proofread before publication.

2.7. Data analysis and presentation

The coded data were analysed descriptively using Python 3.14.6. The analyses examined the number and distribution of publications by year, country, publication language, research design, method, topic, and study population.

The publication was used as the main unit of analysis. When several publications were based on the same research project, sample, or dataset, each publication was counted separately.

Annual publication counts from 2006 to 2024 were compared to identify broad developments in the size and characteristics of the Nordic ECEC research field. The trend analysis was descriptive and was not used to test statistical differences.

3. Results

The 2024 mapping identified 336 eligible publications on Nordic ECEC (see Appendix G). Across the full period from 2006 to 2024, the dataset contains 2,769 publications.

Before turning to the figures, two features of the data govern how every result in this section should be read. First, the 2024 mapping includes Finland and Iceland, which entered the review fully that year, whereas earlier mappings covered Denmark, Norway, and Sweden. The 2024 totals are therefore not comparable with pre-2024 totals, and any comparison over time should be read from the Scandinavian-only panels rather than from the full Nordic figures. Second, several categories are not mutually exclusive. A study that covers more than one country is counted once for each country, and the same applies to themes, methods, informants, and actors, where more than one code can be assigned to a single study. Percentages in these sections therefore show the share of studies coded with a given category, and they are not expected to sum to 100.

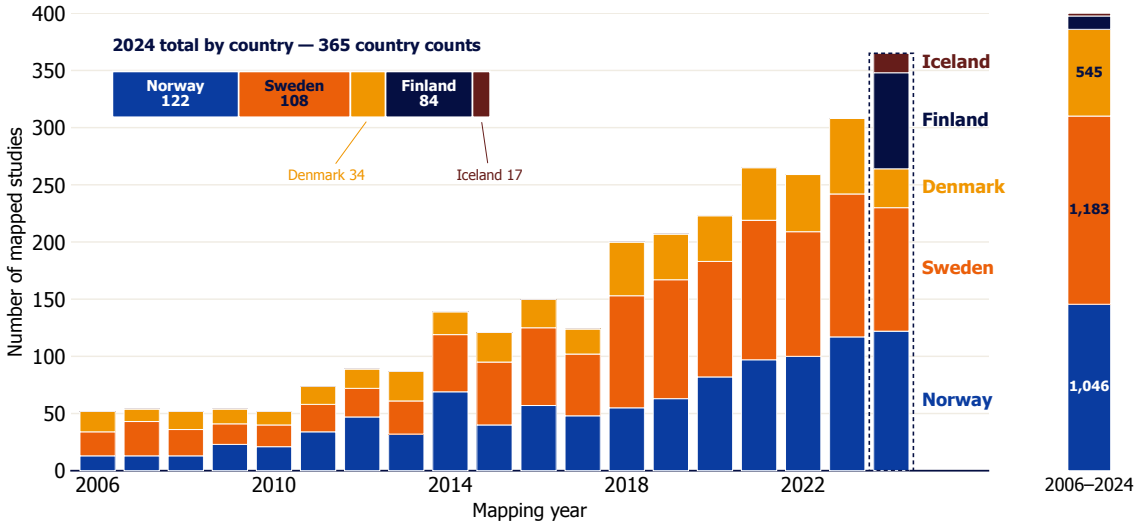


Figure 1. Country composition over time

Note: Country coverage of the mapping, 2006–2024. Each study is counted once for every country it covers, so totals exceed the number of studies. The 2024 bar reflects the entry of Finland and Iceland into the mapping, so it is not comparable with earlier years.

3.1. The scale and spread of the field

In 2024, Norway and Sweden were the largest country categories in the mapping. Norway was covered in 122 studies, Sweden in 108, Finland in 84, Denmark in 34, and Iceland in 17. Ten studies also included data from non-Nordic countries.

Figure 1 shows how the country composition of the mapping has changed since 2006. Each bar is a mapping year, and the coloured segments stack the number of studies covering each country, so the height of a bar is the total number of country-counts that year and each segment is one country's contribution. Reading up a bar shows the balance between countries, and reading across the bars shows how the mapping has grown.

Because the full Nordic total is not comparable over time, the Scandinavian series (Norway, Sweden, and Denmark) offers the clearest evidence of genuine growth in the field. These three countries were covered consistently across the earlier mapping years, and three views of their series are given in Appendix H. Together they show that the growth is real rather than an artefact of the 2024 scope change, but that it is uneven across countries.

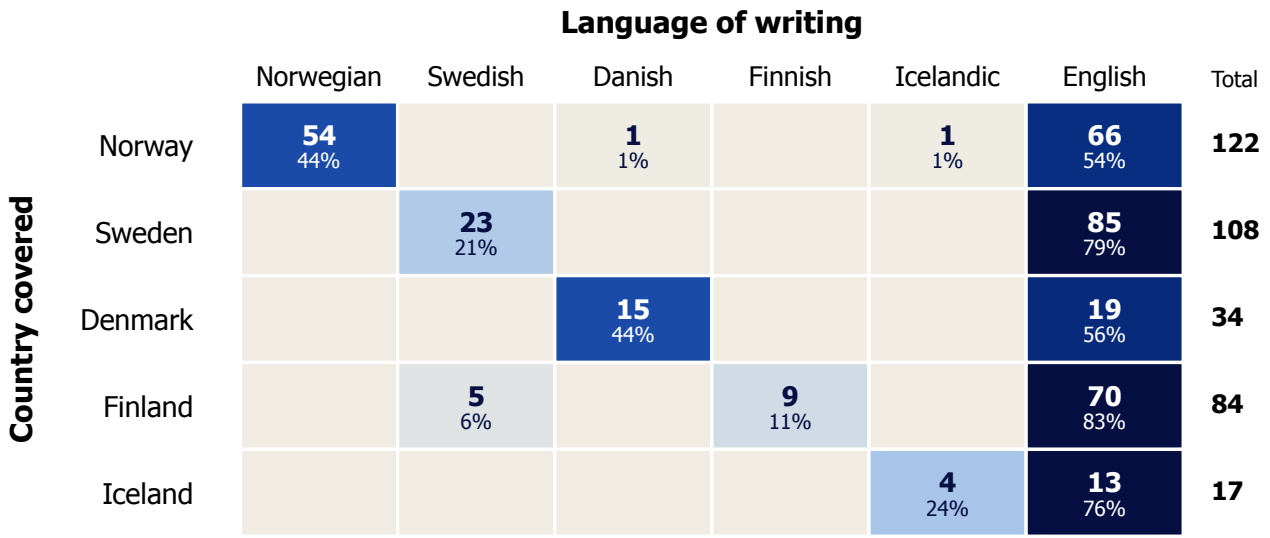


Figure 2. Language of writing by country, 2024

Note: Rows show the country covered and columns show the language of writing. Each cell gives the number of country-language occurrences and, below it, the percentage of occurrences within that country. Language is coded once per publication, but a publication covering more than one country is counted once in each applicable country row. The totals in the figure therefore represent country-language occurrences and exceed the 336 unique publications. The full-period version is provided in Figure H4. Darker colour indicates higher percentage.

Figure H1 groups the years into mapping periods and plots the average number of studies per period, for Norway, Sweden, and Denmark only. It shows sustained growth across the whole period, with the average rising in every step and no sign of the field contracting. Figure H2 indexes each country to its own 2006 level, which shows that the three countries grew at very different rates: Norwegian output multiplied roughly ninefold, Swedish output around fivefold, and Danish output about twofold. These multiples rest on small 2006 counts, however, of between thirteen and twenty-one studies each, so they should be read as broad orders of magnitude rather than precise rates. Figure H3 expresses each country relative to Sweden, which shows that by 2024 Norway and Sweden were close in size, while Denmark remained markedly smaller at roughly a third of Sweden's output. The overall picture is a Scandinavian research base that has expanded consistently since 2006, led by Norway and Sweden, with Denmark a smaller and more slowly growing contributor.

3.2. The shift to English

English was the majority publication language in 2024. Of the 336 publications, 225 were written in English (about 67 percent). Norwegian accounted for 54 publications (of which 42 were Bokmål and 12 were Nynorsk), Swedish for 28, Danish for 15, Finnish for 9 and Icelandic for 5.

Figure 2 shows how these languages were distributed across the countries covered in 2024. English was the most common publication language in every country, although national-language publishing remained substantial. In absolute numbers, national-language publications were most numerous for Norway and Sweden. As a share of each country's output, however, national-language publishing was strongest in Norway and Denmark, where it accounted for 44 percent in each case.

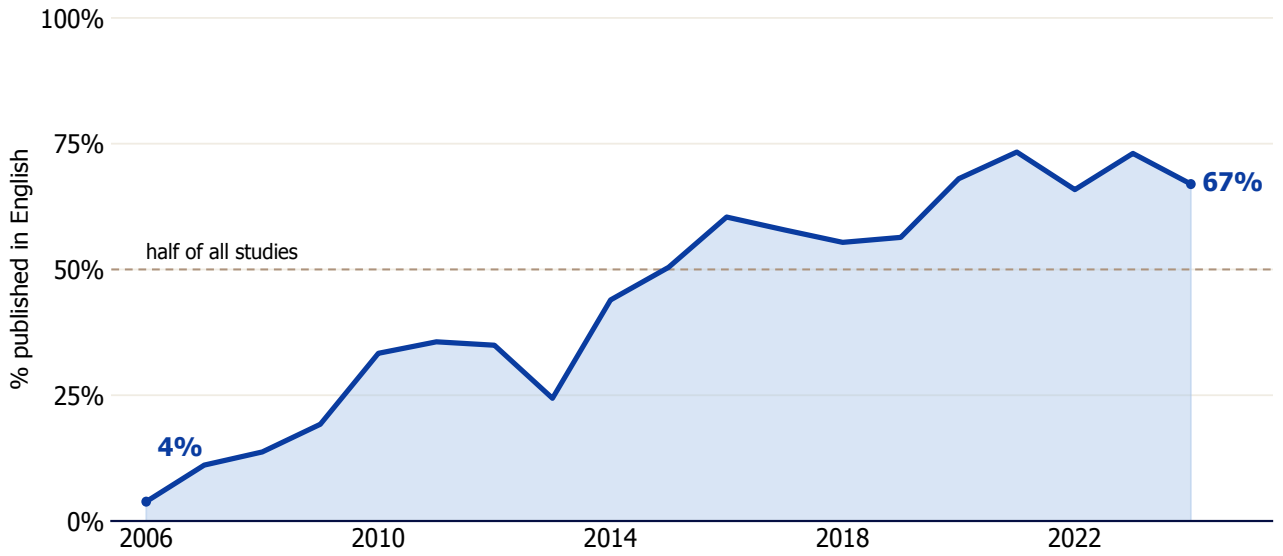


Figure 3. Share of studies published in English, 2006–2024

Figure 3 shows that the prominence of English is not new and has generally increased over the mapping period, although the annual share has fluctuated. English first accounted for most publications in 2015 and remained the majority language thereafter, reaching 67 percent in 2024. Researchers seeking comprehensive coverage of an individual country should therefore consider searching in the relevant Nordic language or languages as well as in English.

3.3. How the research is done

The 2024 evidence base was predominantly qualitative. Of the 336 publications, 251 were coded as qualitative, corresponding to 75 percent; 51 were quantitative and 28 used mixed methods.[1]

The most frequent primary study design was the case study, coded in 93 publications. Other frequent designs included ethnography in 52 publications, observational analytic designs in 34, discourse analysis in 29 and qualitative descriptive designs in 26. Experimental and quasi-experimental designs together accounted for 16 publications, or approximately 5 percent of the 2024 evidence base. The design profile was therefore dominated by case studies and other designs commonly associated with qualitative and interpretative research.

1 The remaining six publications had originally been coded as reviews. During harmonisation, they were not assigned a code for this variable because "review" describes a type of study rather than a qualitative, quantitative or mixed-methods approach.

Figure 4 compares the 2024 primary-design profile with earlier mapping periods. Together with the methodological classification above, it indicates that the qualitative orientation is long-standing rather than specific to 2024, although the relative prominence of individual designs has changed.

The most frequently coded data-collection method was observation, including field notes, video or sound recordings, which was used in 131 publications. Individual interviews were coded in 111 publications, surveys or questionnaires in 69, group or focus-group interviews in 55, document analysis in 51 and secondary data in 32. Observation and individual interviews were therefore the two most frequent method categories in 2024, while surveys, group and focus-group interviews, document analysis and secondary data contributed additional methodological breadth. Figure 5 compares the proportion of publications using each method across mapping periods. These counts describe the composition of the research base and do not in themselves indicate the quality of the evidence produced.

3.4. What the research sets out to do

The mapping also records the primary purpose of each publication. In 2024, 156 of the 336 publications, or 46 percent, were coded as descriptive, while 105, or 31 percent, were interpretative. Together, these categories accounted for 78 percent of the evidence base. A smaller proportion was explanatory or predictive, comprising 46 publications, while 29 were evaluative.

This distribution is consistent with the predominantly qualitative character of the evidence base. Most of the research was oriented towards describing phenomena and interpreting practices and experiences, rather than evaluating interventions or explaining and

Figure 4. Study design by mapped period

Note: Share of mapped publications by primary study design. The 2024 shares are shown as bars, with earlier mapping periods marked for comparison. Each publication is assigned one primary design, so the shares sum to 100 percent apart from rounding.

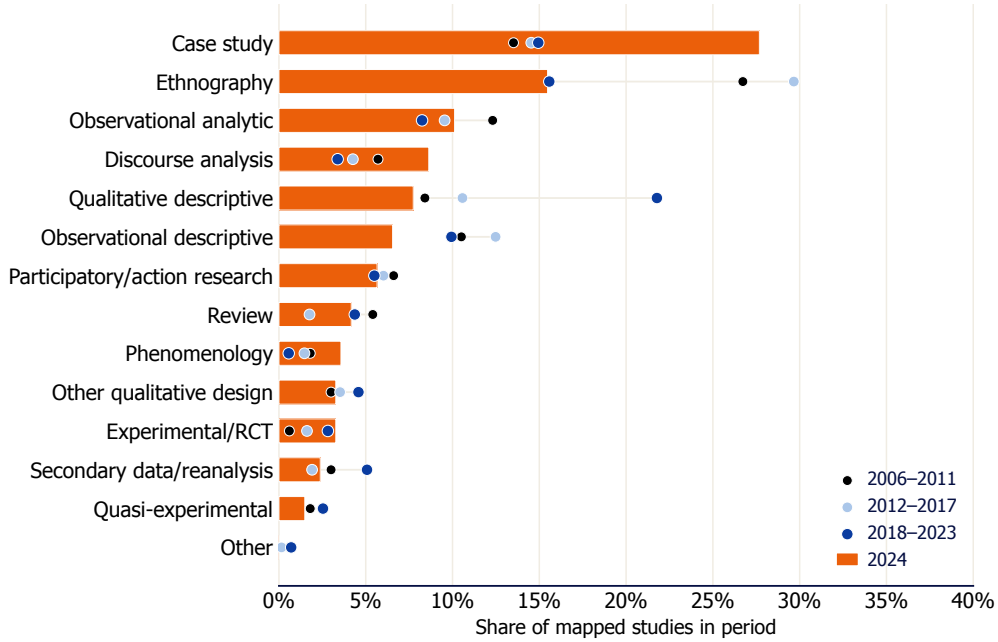
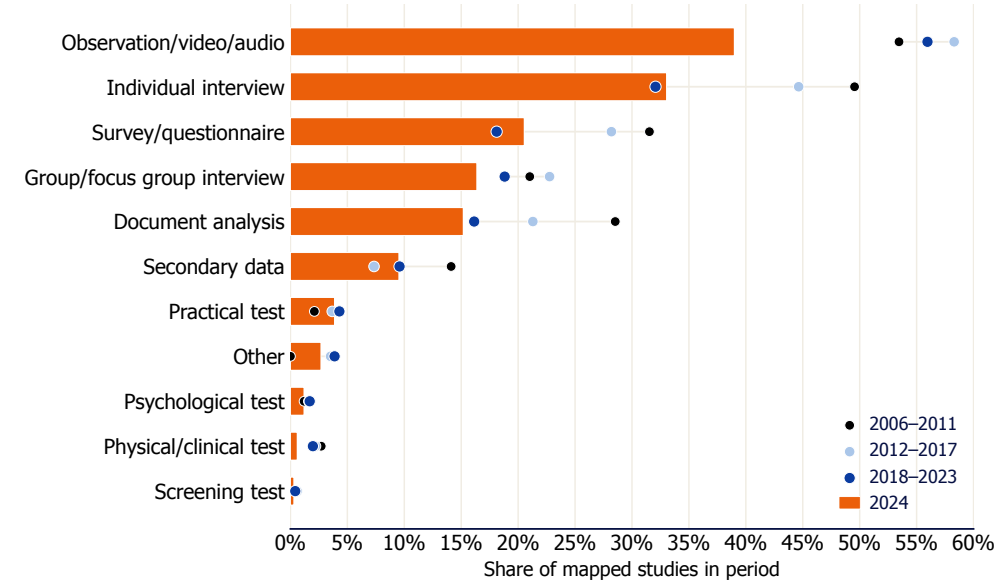


Figure 5. Data collection method by mapping period

Note: Share of mapped publications in each period using each data-collection method. The 2024 shares are shown as bars, with earlier mapping periods marked for comparison. A publication can use more than one method and is counted once in each applicable category, so the percentages do not sum to 100 percent.



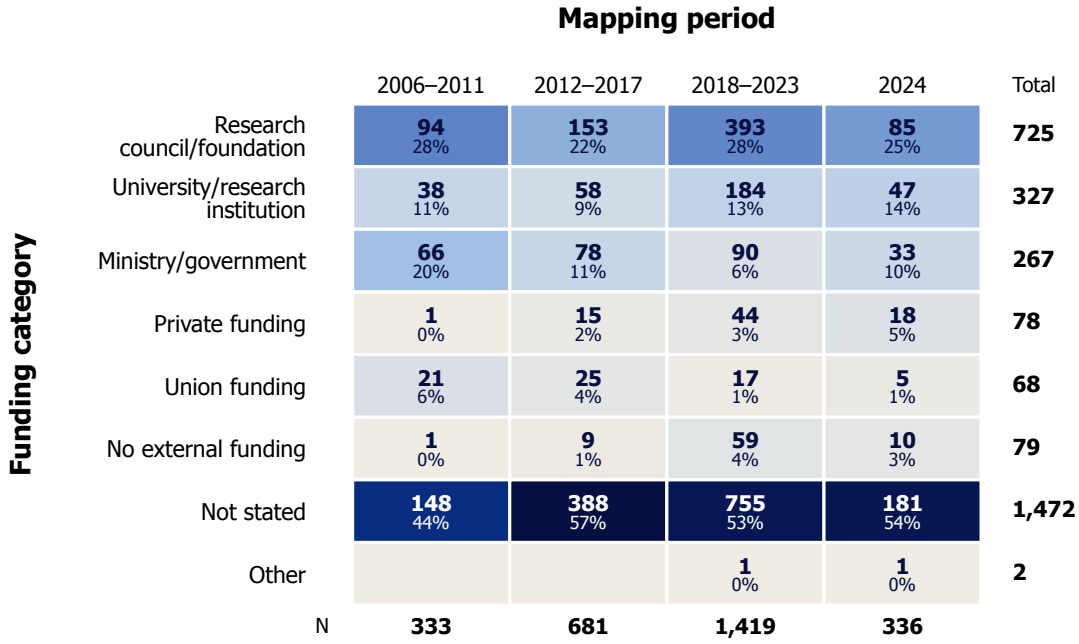


Figure 6. Reported funding source by mapping period

Note: Each cell shows the number of publications coded with the funding category and, below it, the percentage of all mapped publications in that period. A publication may report more than one funding source and is counted once in each applicable category, so the percentages within a period do not sum to 100. "Not stated" indicates that no funding information was reported and is distinct from "No external funding." Darker colour indicates higher percentage.

predicting outcomes. Research purpose should not, however, be equated directly with study design. Although evaluative purposes were less frequent, not every evaluative publication used an experimental design, and not every experimental study was coded as evaluative.

These purposes indicate the types of knowledge that the evidence base is particularly well placed to provide. Research weighted towards description and interpretation can contribute detailed knowledge of ECEC practices, contexts and experiences, support conceptual development, and identify questions for further research. On its own, however, such a profile provides comparatively limited evidence for causal conclusions about which interventions work, for whom and under what conditions. This is consistent with the small number of experimental and quasi-experimental studies identified in 2024.

3.5. Who funds the research

Funding information was not stated for 181 of the 336 publications in 2024, corresponding to 54 percent. A further ten publications explicitly reported receiving no external funding. Among the 145 publications that named at least one funding source, research councils or foundations were the most frequently reported, appearing in 85 publications. Universities or research institutions were named in 47 publications, ministries or government bodies in 33, private funders in 18, unions in five and other funding sources in one. Because a publication could report more than one source, these categories overlap and their counts do not sum to the number of publications that named a funder.

Figure 6 compares the prevalence of each reported funding category across mapping periods. The proportion of publications for which funding was not stated was 44 percent in 2006–2011, 57 percent in 2012–2017, 53 percent in 2018–2023 and 54 percent in 2024. Incomplete funding information is therefore a persistent

feature of the mapped record rather than something specific to 2024.

Because funding was unreported for more than half of the 2024 publications, and because reporting may differ systematically across study types and publication outlets, the named funding sources provide only a partial picture. The results should therefore be interpreted as a profile of reported funding, rather than as a complete account of the funding structure of Nordic ECEC research.

3.6. What the research is about

For readability, the topic and subtopic labels used below and in Figures 7 and 8 are abbreviated versions of the full category names and definitions in the codebook.

The most frequently coded major topic in 2024 was "Professional practice," which appeared in 160 publications, or 48 percent of the evidence base. "Activities & routines" was coded in 125 publications, while "Leadership & organisation" and "Learning & development" appeared in 88 and 87 publications respectively. "Participation & inclusion" was coded in 75 publications, "Governance & policy" in 65 and "Social relations" in 49. Topics are not mutually exclusive, so a publication can be counted under more than one major topic.

Figure 7 shows substantial continuity between 2018–2023 and 2024. "Professional practice" and "Activities & routines" remained the two leading major topics. However, "Professional practice" increased from 41 percent of publications in 2018–2023 to 48 percent in 2024, while "Leadership & organisation" increased from 19 to 26 percent. "Activities & routines" also increased, from 34 to 37 percent. The 2024 profile therefore retained the field's established emphasis on professional and pedagogical practice while giving greater prominence to leadership and organisation.

The least frequently coded major topic was "Physical environment," which appeared in 34 publications, or 10 percent of the evidence base. This does not mean that the physical environment was absent from Nordic ECEC research, but that it was less frequently identified as a major topic than professional practice, activities and routines, leadership, learning and development, participation and inclusion, and governance and policy.

The "Governance & policy" category also requires careful interpretation. It identifies publications explicitly concerned with municipal or state governance, regulation, steering or related policy issues. It does not include the larger body of research on pedagogy, professional practice, leadership or children's experiences that may nevertheless inform policy. Its prevalence should therefore be read as the amount of research explicitly focused on governance and policy, not as a measure of the total amount of policy-relevant research.

The subtopic coding provides a more detailed picture of the 2024 evidence base. "Pedagogical approaches" was the most frequent subtopic, coded in 92 publications. "Leadership/management" appeared in 54 publications, "Play/play practices" in 48, "Language/communication" and "Children's agency/rights" in 40 each, and "Professional development" in 38.

Figure 8 shows that "Pedagogical approaches" remained the most prominent subtopic, increasing slightly from 25 percent of publications in 2018–2023 to 27 percent in 2024. More substantial increases occurred for "Leadership/management," from 7 to 16 percent, and "Children's agency/rights," from 7 to 12 percent. "Professional ethics/values" also increased, from 4 to 8 percent, while "Play/play practices" remained stable at 14 percent. The clearest subtopic change in 2024 was therefore the greater prominence of leadership and organisational management.

Publications covering Finland had a broadly similar profile to the full 2024 evidence base, but with some differences. At the major-topic level, "Activities & routines" and "Participation & inclusion" were less frequent, while "Social relations" was somewhat more prominent. At the subtopic level, "Working environment" appeared more frequently, while "Play/play practices" was less prominent. The remaining leading subtopics, including "Pedagogical approaches," "Leadership/management," "Children's agency/rights" and "Professional development," were relatively close to the wider 2024 profile.

The Icelandic profile showed larger apparent differences. "Professional practice," "Leadership & organisation," "Governance & policy," "Participation & inclusion" and "Social relations" were all more prominent than in the overall 2024 evidence base, whereas Learning & development was less frequent. At the subtopic level, particularly high shares were observed for "Pedagogical approaches," "Leadership/management," "Play/play practices," "Children's agency/rights," "Communication/interaction" and "Friendship/peer relations." These comparisons should be interpreted cautiously because the Icelandic profile is based on only 17 publications.

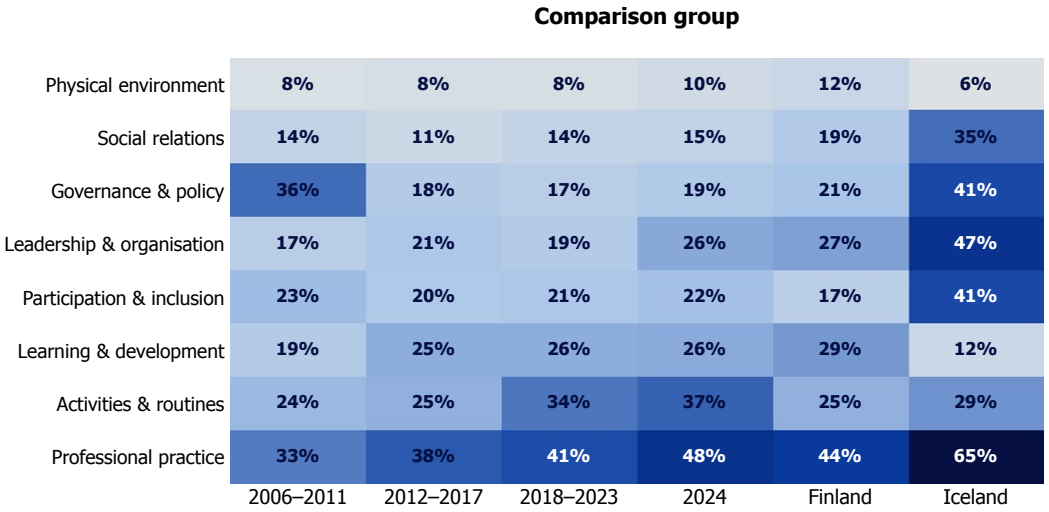


Figure 7. Major topics by mapping period

Note: Each cell shows the percentage of mapped publications in the displayed group that were coded with the major topic. Period columns include all publications mapped in the stated years. The Finland and Iceland columns include 2024 publications covering those countries. Topics are not mutually exclusive, so a publication may be counted under several topics and the percentages do not sum to 100. Topic names have been shortened for readability; the labels correspond to the full B1 category names and definitions in the codebook. Darker colour indicates higher percentage.

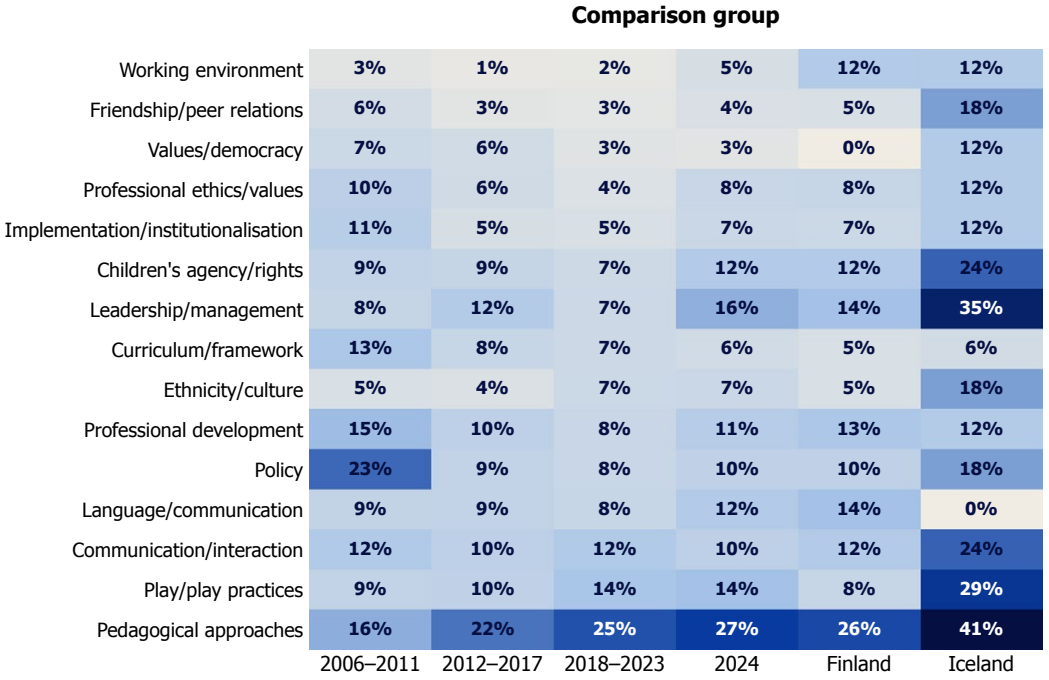


Figure 8. Subtopics by mapping period

Note: Each cell shows the percentage of mapped publications in the displayed group that were coded with the subtopic. The figure presents 15 selected subtopics and excludes residual "Other" categories. Period columns include all publications mapped in the stated years, while the Finland and Iceland columns include 2024 publications covering those countries. Subtopics are not mutually exclusive, so the percentages do not sum to 100. Some subtopic names have been shortened for readability; the full labels and definitions are provided under B1.A–B1.H in the codebook. Darker colour indicates higher percentage.



Appendix H provides two additional views of these patterns. The dumbbell plots compare the share of publications coded with each major topic and subtopic in 2024 directly with the corresponding share in 2018–2023, making the direction and size of change more visible than in the heatmaps. The country-difference plots compare publications covering Finland or Iceland with other 2024 publications not covering the relevant country and express the differences in percentage points. They show that Finland's strongest distinction was the lower prevalence of "Activities & routines," together with a greater emphasis on "Working environment." Iceland showed larger differences, particularly greater emphasis on governance, leadership, participation, social relations and professional practice, alongside lower prevalence of learning and development. At the subtopic level, the largest Icelandic differences concerned leadership, play, pedagogical approaches, communication and peer relations. Given the small Icelandic denominator, these graphs should be used to identify possible patterns rather than firm national differences.

Taken together, the findings suggest that adding Finland and Iceland did not overturn the dominant thematic profile of Nordic ECEC research. The common emphasis on professional practice and pedagogy remained, but the expansion revealed greater variation in the prominence of activities and routines, leadership, governance, participation and social-relational research. Further mapping years will be needed to determine whether these country differences persist.

3.7. Who is studied and who is heard

Educational staff were the most frequently studied group in 2024. They were coded as subjects of study in 246 publications, or 73 percent of the evidence base. Children were subjects of study in 157 publications, or 47 percent. Parents were subjects in 26 publications, governance actors in 14 and other actors in eight. These categories are not mutually exclusive, so a publication can be counted under more than one group. The children category combines all child-age codes, including publications in which the children's age was not reported.

A similar pattern appears in the coding of informants and other direct data sources. Educational staff provided data in 263 publications, or 78 percent of the evidence base. Children provided data in 116 publications, or 35 percent. Parents provided data in 35 publications, governance actors in 12 and other informants or data sources in 16. These categories also overlap because a publication can collect data from more than one group.

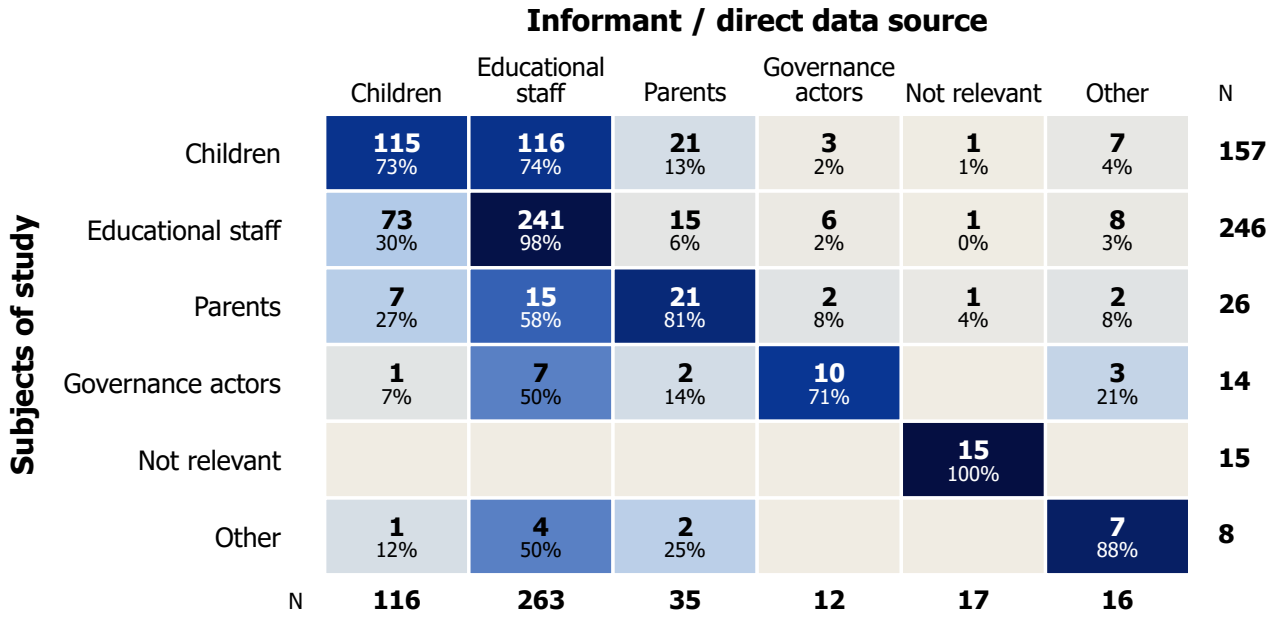


Figure 9. Subjects of study by informant, 2024

Note: Rows show the subjects of study—who the findings are about—and columns show the informants or other direct data sources. Each cell gives the number of publications combining the subject and informant categories and, below it, the percentage of all publications in the relevant subject group. Both variables allow more than one value per publication, so a publication can appear in several cells and the percentages within a row do not sum to 100. The marginal N values are the numbers of unique publications coded with each subject or informant category. Children combine all child-age codes; educational staff combine all staff roles; and governance actors combine municipal and state governance, politicians and trade unions. The full-period version is provided in Appendix H. Darker colour indicates higher percentage.

It is important to distinguish between being the subject of a study and providing data. The subjects-of-study code identifies the actors whose experiences, outcomes, behaviours or circumstances the findings concern, whereas the informant code identifies those from whom data were collected directly. A publication can therefore be about children while collecting some or all of its data from educational staff, parents or other sources. Figure 9 crosses these two variables. For each subject group, the percentages show the proportion of publications that collected data from each informant group.

Among the 157 child-focused publications in 2024, 115, or 73 percent, collected data directly from children, while 116, or 74 percent, collected data from educational staff. These groups overlapped substantially: 83 publications collected data from both children and staff. Nevertheless, 42 child-focused publications, or 27 percent, did not collect data directly from children. The number of publications concerned with children therefore exceeds the number involving children as direct data sources. This distinction may be relevant when considering future research priorities, although the coding does not by itself establish whether the data captured children's own expressed perspectives.

The full mapping period, shown in Appendix H, indicates that this is a long-standing feature of the field. Of the 1,569 child-focused publications mapped between 2006 and 2024, 1,190, or 76 percent, collected data directly from children, while 1,172, or 75 percent, collected data from educational staff. These categories again overlap. In total, 379 child-focused publications, or 24 percent, did not collect data directly from children. By comparison, 1,876 of the 1,921 staff-focused publications, or 98 percent, collected data from educational staff. Children were therefore less consistently included as direct data sources in research about them than staff were in staff-focused research. This pattern concerns direct data collection and should not automatically be interpreted as a measure of whose perspectives or voices were represented.

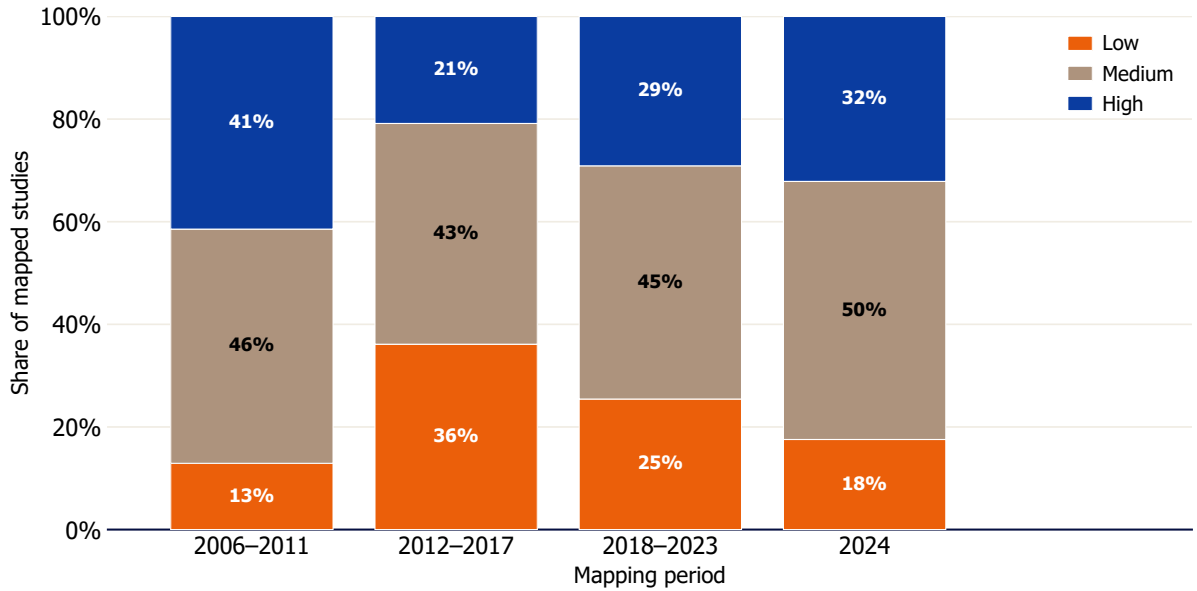


Figure 10. Quality ratings by mapping period

Note: The figure shows the share of mapped publications rated low, medium or high on overall weight of evidence in each mapping period. The three categories sum to 100 percent within each period.

3.8. How clearly are studies reported

The 2024 quality assessment rated 108 of the 336 publications as high quality, 169 as medium and 59 as low. In total, 277 publications, or 82 percent, were rated medium or high.

Figure 10 compares the distribution of ratings across mapping periods. The proportion rated medium or high has varied considerably. It was 87 percent in 2006–2011, declined to 64 percent in 2012–2017, increased to 75 percent in 2018–2023 and reached 82 percent in 2024. The 2024 evidence base therefore sits within the higher end of the historical range, although it remains slightly below the level observed in the earliest mapping period.

These changes should not automatically be interpreted as changes in the underlying quality of Nordic ECEC research. They may also reflect differences between periods in the types of publications mapped, the completeness of reporting, and publication conventions. As set out in the method section, the ratings represent an overall weight-of-evidence judgment based on the assessment dimensions. The ratings do not directly measure the practical importance of a publication, guarantee that its conclusions are correct or provide a standalone ranking of the strength of causal evidence.



3.9. Differences between the Nordic countries

The inclusion of Finland and Iceland makes it possible, for the first time, to assess whether patterns identified in the earlier Scandinavian mappings extend across the Nordic region. These comparisons must be interpreted cautiously: 2024 is the first fully Nordic year, country counts differ substantially, and the Icelandic profile is based on only 17 publications. Multi-country publications are included in each relevant country profile.

The comparison reveals a shared Nordic core. Qualitative research formed a majority in every country, "Professional practice" was among the leading topics, and educational staff were the most common informants. Observations and interviews were also widely used. The qualitative, professionally oriented and staff-informed profile identified in earlier mappings therefore remains visible when Finland and Iceland are included.

At the same time, the expansion reveals some differences. Finnish publications placed less emphasis on "Activities & routines" and somewhat more on "Social relations" than publications covering Norway and Sweden. They also made greater use of surveys and mixed methods, while discourse analysis was comparatively prominent. Icelandic publications appeared more strongly oriented towards "Leadership & organisation," "Governance & policy," "Participation & inclusion," and "Social relations," while "Learning & development" was less prominent. These Icelandic patterns are suggestive rather than conclusive because of the small number of publications.

Differences in study purpose and reported funding are shown in Appendix H. Finland retained the predominantly descriptive and interpretative orientation of the wider evidence base, but explanatory or predictive studies were somewhat more frequent: 19 percent of Finnish publications, compared with 14 percent of all 2024 publications. The corresponding share was 24 percent for Iceland, while interpretative studies were less frequent at 24 percent, compared with 31 percent overall. Evaluative research remained uncommon in both countries. The Icelandic differences should again be treated cautiously because each publication represents approximately six percentage points.

Funding information was reported more consistently in publications covering Finland and Iceland. Funding was not stated in 37 percent of Finnish and 41 percent of Icelandic publications, compared with 54 percent of the full 2024 evidence base. Finnish publications also more frequently reported support from research councils or foundations, ministries or government bodies, and private funders. Research-council or foundation funding was reported in 32 percent of Finnish publications, compared with 25 percent overall, while ministry or government funding was reported in 15 percent and private funding in 12 percent. Among Icelandic publications, research councils or foundations and universities or research institutions were the most frequently named sources, although the small number of publications limits firm conclusions.

Adding Finland and Iceland therefore broadened, but did not overturn, the overall profile of the field. Their inclusion gave greater visibility to surveys, mixed methods, explanatory research, leadership, governance and social-relational topics, as well as to publications with more complete funding information. The findings support the existence of a recognisable Nordic ECEC research field, but not a homogeneous one. Further mapping years will be needed to determine whether the Finnish and Icelandic differences represent persistent national patterns or features of the 2024 evidence base.

4. What frequency counts can and cannot show

The central point for interpreting this report is that its numbers describe the research literature, not the state or quality of early childhood education and care provision. They show what has been published, identified and coded, not what is happening in ECEC settings or which approaches are effective.

The reported numbers are exact tallies of the publications captured by the mapping, conditional on its search strategy, eligibility criteria and coding decisions. They are not statistical estimates derived from a random sample. For example, the finding that “Professional practice” was coded in 160 publications and “Activities & routines” in 125 records the composition of the mapped literature. It does not estimate some unknown parameter. Conventional standard errors, confidence intervals and significance tests are therefore not used.

The absence of sampling error does not mean that the counts are free from uncertainty. Publications may be missed by the searches, eligibility decisions may involve judgement, and some publications can plausibly be assigned to more than one category. Coding frameworks and their application may also change over time. Small differences between categories, periods or countries should consequently not be assumed to represent meaningful differences in the research field. Broad and persistent patterns are more informative than movements involving only a few publications.

Many variables are also multi-select. A publication covering two countries is counted once in each country profile, and a publication using several methods, addressing several topics or collecting data from several informant groups contributes to each applicable category. The resulting percentages show the share of publications coded with a category; they are not mutually exclusive partitions and therefore do not necessarily sum to 100 percent. Denominators also differ between figures. Readers should use the denominator specified in each figure note rather than adding categories or comparing marginal totals informally.

The expansion to Finland and Iceland in 2024 creates an additional limitation for historical comparisons. Earlier mapping years cover Norway, Sweden and Denmark, whereas 2024 covers all five Nordic countries. Full Nordic totals for 2024 cannot therefore be compared directly with earlier overall totals. Trends in publication volume are assessed using the Scandinavian series, while Finland and Iceland enter the analysis mainly as 2024 country profiles. The Icelandic profile is based on only 17 publications, meaning that one publication changes a reported share by approximately six percentage points. Differences involving Iceland should therefore be regarded as suggestive rather than established national patterns.

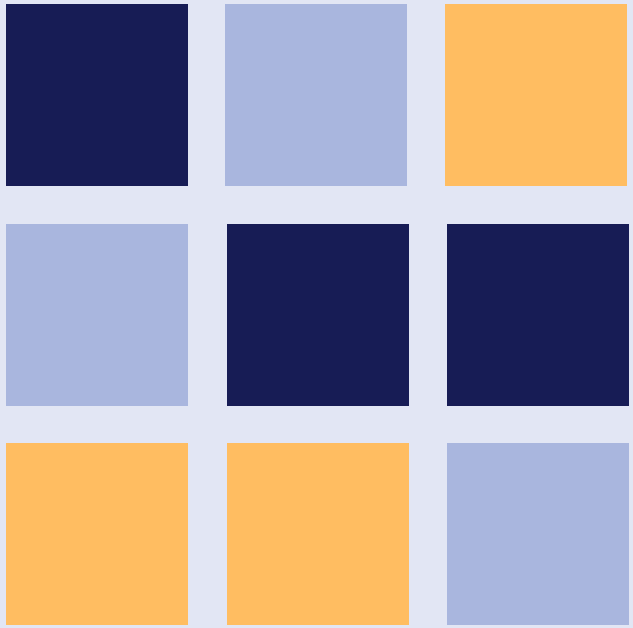
The quality ratings also require careful interpretation. They represent an overall weight-of-evidence judgement. The ratings reflect both the clarity and completeness of reporting and methodological considerations such as recruitment, data collection, analysis, ethics, design appropriateness and generalisability or transferability. They do not directly measure the practical importance of the findings, guarantee that a publication’s conclusions are correct or provide a standalone measure of causal strength.

Historical comparisons are further affected by harmonisation. Earlier records were produced under different coding frameworks and review arrangements and were subsequently mapped onto the current categories. Harmonisation improves comparability but cannot eliminate every difference in definitions, coding practice or data completeness. Apparent changes may therefore reflect both developments in the literature and changes in how publications were classified.

Finally, the mapping reflects what is findable, eligible and codable within its scope. Research published outside the searched sources, languages and publication formats is not represented. The unit is also the publication: where several publications arise from the same underlying study or research project, each may be counted unless the records have been linked or consolidated. Publication counts should therefore not automatically be interpreted as counts of independent studies or bodies of evidence.

5. Evidence gap map

An evidence gap map (https://nb-ecec-egm.onrender.com/) provides a structured view of where research activity is concentrated and where it is comparatively sparse by crossing the topics studied with another dimension such as study design. In this report, the cells represent mapped publications rather than findings or effect estimates. A densely populated cell therefore indicates that a topic has received substantial research attention, but not necessarily that the available evidence is methodologically strong, consistent or conclusive. Similarly, a sparse cell identifies a relative gap in the mapped literature, not automatically a research priority.



5.1. Where the evidence concentrates

The clearest pattern is the concentration of research around ECEC professionals and everyday pedagogical practice. Professional practice was the most frequent major topic in 2024, followed by “Activities & routines”, “Leadership & organisation”, and “Learning & development”. It is notable that we in 2024 see a substantial increase in the category “Leadership & organisation”, likely driven by the inclusion of Finland and Iceland. This topic has been highlighted as a gap in previous years mappings (see, e.g., Guldbrandsen et al., 2025). At the subtopic level, “Pedagogical approaches” was particularly prominent.

The methodological profile reinforces this orientation. Three quarters of the publications were qualitative, while case studies, ethnography, observation and interviews were among the most common designs and methods. The most densely populated parts of the map therefore concern professional and pedagogical practice examined through qualitative, observational and interview-based research.

5.2. Where the evidence is thin

Four relative gaps are visible. First, child-focused research does not always collect data directly from children. Of the 157 publications concerned with children, 115 collected data from children and 116 collected data from educational staff. These groups overlapped substantially: 83 publications collected data from both. Nevertheless, 42 child-focused publications, or 27 percent, did not collect data directly from children. Child-focused research is therefore more extensive than research involving children as direct data sources. This should not automatically be interpreted as a measure of children’s expressed perspectives, since direct data may include observation, testing or assessment as well as interviews and other participatory methods.

Second, evidence designed to estimate causal effects is limited. Experimental and quasi-experimental designs together appeared in 16 publications, or approximately 5 percent of the 2024 evidence base. The map therefore contains relatively little research capable of addressing questions about whether an intervention caused an observed outcome. Other evaluative and observational studies may still contribute evidence about implementation, associations and possible effects, but they generally provide a weaker basis for causal conclusions.

Third, research explicitly focused on “Governance & policy” was less common than research on professional practice, pedagogy, leadership and learning. It appeared in 65 publications, or 19 percent of the evidence base. This is a relative rather than an absolute gap: much practice-focused research may also be relevant to policy, even when governance is not its primary coded topic.

Fourth, some topics and groups received comparatively little attention. Physical environment was the least frequent major topic, appearing in 34 publications, or 10 percent. Parents and governance actors were also much less frequently represented as subjects or informants than educational staff and children.

Country coverage presents a different kind of gap. Finland was represented by 84 publications in 2024 and is therefore not sparsely covered within that year. However, both Finland and Iceland lack the historical series available for Norway, Sweden and Denmark. Iceland was also represented by only 17 publications in 2024, limiting the reliability of its country profile.

5.3. Do the gaps persist over time?

Several patterns appear to be long-standing. Qualitative research accounted for approximately 64 percent of publications in 2006–2011, 71 percent in 2012–2017, 73 percent in 2018–2023 and 75 percent in 2024. The field's qualitative orientation has therefore persisted and gradually strengthened.

The distinction between child-focused research and direct data collection from children is also visible across the full mapping period. Approximately 24 percent of child-focused publications from 2006–2024 did not collect data directly from children, compared with 27 percent in 2024. The concentration on professional practice and pedagogy has similarly continued, although professional practice became more prominent in 2024.

These findings suggest continuity in several areas of concentration and relative scarcity. They do not establish that every gap identified in earlier mappings has remained unchanged. Historical comparisons are affected by revisions to the coding framework and the subsequent harmonisation of older records. A definitive assessment of whether previously identified gaps have closed would require a systematic comparison with the questions and recommendations in earlier mapping reports.

5.4. What the gaps may imply

The map identifies several areas in which additional research could broaden the evidence base: research that involves children more consistently and meaningfully as direct participants; experimental, quasi-experimental and other rigorous evaluations; work on the physical environment and on governance and regulation; and further years of Finnish and Icelandic coverage to support credible Nordic comparisons.

These are indications of relative scarcity, not conclusions about which research should receive priority. Research priorities also depend on the importance of the underlying questions, the needs of practitioners and policymakers, the quality of the existing evidence and the feasibility and ethics of different study designs. The EGM shows where the mapped literature is concentrated and where it currently offers fewer studies; it does not determine where investment will necessarily produce the greatest benefit.

6. Conclusion



The mapping answers the three research questions by showing both substantial growth and considerable continuity in Nordic empirical ECEC research. Within the comparable Scandinavian series, publication output increased markedly between 2006 and 2024, while English became the dominant publication language. National-language publishing nevertheless remains an important part of the evidence base and would be missed by English-only searches. In 2024, Norway and Sweden accounted for the largest country profiles, followed by Finland, Denmark and Iceland, although multi-country publications were counted in each applicable country.

The methodological profile remained predominantly qualitative and oriented towards description and interpretation. Case studies, observation and interviews were common, while experimental and quasi-experimental designs remained rare. The field therefore expanded and became more international without undergoing a fundamental shift in its dominant research approaches.

Research was concentrated on professional practice, pedagogy, educational activities and leadership. Educational staff were both the most frequently studied group and the most common source of data. Children were also a major focus, but 42 of the 157 child-focused publications did not collect data directly from children. Parents, governance actors and the physical environment received comparatively less attention.

Adding Finland and Iceland did not overturn the shared Nordic profile, but it revealed meaningful variation. Finnish research made somewhat greater use of surveys and mixed methods, while the small Icelandic evidence base placed greater emphasis on leadership, governance, participation and social relations. These differences remain provisional because only one fully Nordic mapping year is available.

Overall, the evidence base has grown and broadened, while its qualitative, professionally oriented and staff-informed character has remained relatively stable. The findings should be interpreted as a map of research activity rather than a synthesis of what the research concludes. Continued fully Nordic mapping will be needed to establish whether the Finnish and Icelandic patterns persist and whether the methodological and substantive gaps identified in 2024 begin to narrow.



7. References

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology. 8*(1), 19–32. https://doi.org/10.1080/1364557032000119616.

Guldbrandsen, A., Ree, M., Friestad, N. K., Helgøy, K. V., Klippen, M. I. F., Thijssen, M. W. P., Forsström, S. E., & Njå, M. B. (2025). *Empirical research on Scandinavian early childhood education and care in 2022 and 2023: Review of research and assessment* (Report No. 1/2025). Knowledge Centre for Education, University of Stavanger. https://www.uis.no/nb/forskning/kunnskapssenter-for-utdanning

Thomas, J., Graziosi, S., Brunton, J., Ghouze, Z., O'Driscoll, P., Bond, M., & Koryakina, A. (2023). *EPPI–Reviewer: Advanced software for systematic reviews, maps and evidence synthesis* [Computer software]. EPPI Centre, UCL Social Research Institute, University College London.

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., & Straus, S. E. (2018). PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Annals of Internal Medicine, 169*(7), 467–473. https://doi.org/10.7326/M18-0850.

Appendices

A. Search strategy and search terms

To illustrate our approach in line with PRISMA-ScR reporting guidelines (Tricco et al., 2018), the full search strategy for one database is reproduced in Figure A1, showing the Scopus search. The same English-language terms were used across all databases, adapted to each database's syntax and field structure.

Searches in the Nordic databases (ORIA, SwePub, DiVA, NORA, Libris, Bibliotek.dk, and Idunn) combined these English terms with Nordic-language equivalents, again adapted to each database's syntax. Truncation (wildcard) operators were used to capture variant word forms. The Nordic-language terms were as follows: barnehage, familiebarnehage, åpen barnehage (Norwegian); förskola, öppen förskola, pedagogisk omsorg, annan pedagogisk verksamhet (Swedish); daginstitution, dagpleje, vuggestue, børnehave (Danish); päiväkoti, perhepäivähoito, avoin varhaiskasvatustoiminta, varhaiskasvatus, esiopetus (Finnish); and leikskóli (Icelandic).

```
TITLE-ABS-KEY(("child care center" OR "child care centre" OR "child
development center" OR "early education centre" OR "child development
centre" OR "child* academic development" OR "crèche" OR "day care"
OR "daycare" OR "day-care" OR     "early child* care" OR "early child*
education" OR "early child* intervention*" OR "early child* program*"
OR "early child* services" OR "early education* provision" OR ecc OR
ecec OR ece OR kindergarten OR "nursery school" OR "pre K" OR "pre
kindergarten" OR "pre school" OR "pre-K" OR "pre-kindergarten" OR
"pre-primary education" OR preschool OR "pre-school" OR toddler*))
AND PUBYEAR = 2024 AND (LIMIT-TO(AFFILCOUNTRY, "Sweden") OR LIMIT-
TO(AFFILCOUNTRY, "Denmark") OR LIMIT-TO(AFFILCOUNTRY, "Norway") OR
LIMIT-TO(AFFILCOUNTRY, "Finland") OR LIMIT-TO(AFFILCOUNTRY, "Iceland"))
AND (LIMIT-TO(DOCTYPE, "ar")) AND (LIMIT-TO(LANGUAGE, "English")) AND
(  LIMIT-TO(SRCTYPE, "j"))
```

Figure A1. Search string Scopus

B. Databases, journals, and search results

Table B1 lists the databases and journals searched for the 2024 mapping, with the search dates and the number of hits from each source. The searches were carried out in March 2025 and returned 5,586 records in total. After 2,313 duplicates were removed, 3,273 records remained for screening.

Source	Language	Date (dd.mm.yyyy)	Hits
ERIC[a]	English	20.03.2025 and 29.03.2025	1,095
WoS[b]	English	20.03.2025 and 29.03.2025	1,286
Scopus[c]	English	20.03.2025 and 29.03.2025	2,398
Oria[d]	Nordic and English	20.03.2025	456
SwePub[e]	Nordic and English	20.03.2025	200
DiVA[f]	Nordic and English	20.03.2025	21
NORA[g]	Nordic	20.03.2025	46
LIBRIS[h]	Nordic	20.03.2025	32
Bibliotek.dk[i]	Nordic	20.03.2025	32
Idunn[j]	Nordic	20.03.2025	7
BARN[k]	Nordic and English	20.03.2025	9
NTPK[l]	Nordic and English	20.03.2025	4

Table B2. Databases and journals searched for the 2024 mapping

Note: Searches in DiVA were affected by technical problems. Paideia was not searched separately, because it is covered by other databases. NORART is covered by Oria, and NAFOL, a research school, closed in 2022. [a]ERIC (Education Resources Information Center; provided by the U.S. Department of Education) indexes international education research literature. [b]WoS (Web of Science; Clarivate) is a multidisciplinary citation database of peer-reviewed research. [c]Scopus (Elsevier) is a multidisciplinary abstract and citation database. [d]ORIA (Norwegian academic libraries) is a shared search service for the holdings of Norwegian research and university libraries. [e]SwePub (National Library of Sweden) indexes research publications from Swedish higher education institutions. [f]DiVA (Digitala Vetenskapliga Arkivet) is a Nordic institutional repository of research and student publications. [g]NORA (Norwegian Open Research Archives) is an aggregated search service for Norwegian open-access research. [h]Libris (National Library of Sweden) is the Swedish national union library catalogue. [i]Bibliotek.dk (Danish Agency for Culture and Palaces) is the shared catalogue of Danish libraries. [j]Idunn (Scandinavian University Press) is a platform for Nordic academic journals and books. [k]BARN (Nordic Centre for Childhood Research; Norwegian University of Science and Technology) is a Nordic journal of childhood research. [l]NTPK (Nordisk tidsskrift for pedagogikk og kritikk) is an open-access Nordic journal of education and critique.

C. Inclusion and exclusion criteria

Table C1 sets out the full inclusion and exclusion criteria used to screen studies for the 2024 mapping. These criteria are summarised in the main report; the complete version is reproduced here for reference and transparency. Apart from the geographic scope, which expanded to all five Nordic countries in 2024, the criteria are consistent with those applied in previous years' mappings.

Criteria	Inclusion	Exclusion
Study topic	Focus on early childhood education and care (ECEC), including educational and social-science perspectives on ECEC provision	Focus on primary, lower-secondary, or upper-secondary schooling
Target group	Children aged 0–6 within ECEC settings	Children older than 6, or settings outside ECEC
Country	Norway, Sweden, Denmark, Finland, or Iceland	Countries outside the Nordic region
Type of evidence	Empirical research using qualitative, quantitative, mixed-methods, or review designs, with the methodological process (from data collection to analysis) described	Publications using empirical data only illustratively, or theoretical and policy discussions
Publication type	Published, available journal articles, reports, book chapters and PhD monographs	Bachelor's and master's theses, popular-science pieces, textbooks, policy documents, and evaluation reports, unless directly relevant to ECEC practice
Publication year	2024	Before or after 2024

Table C3. Inclusion and Exclusion Criteria

D. PRISMA-ScR flow chart

Figure D1 presents the PRISMA-ScR flow diagram for the 2024 mapping, showing the number of records identified, screened, and excluded at each stage, together with the reasons for exclusion. The diagram follows the PRISMA extension for Scoping Reviews (Tricco et al., 2018).

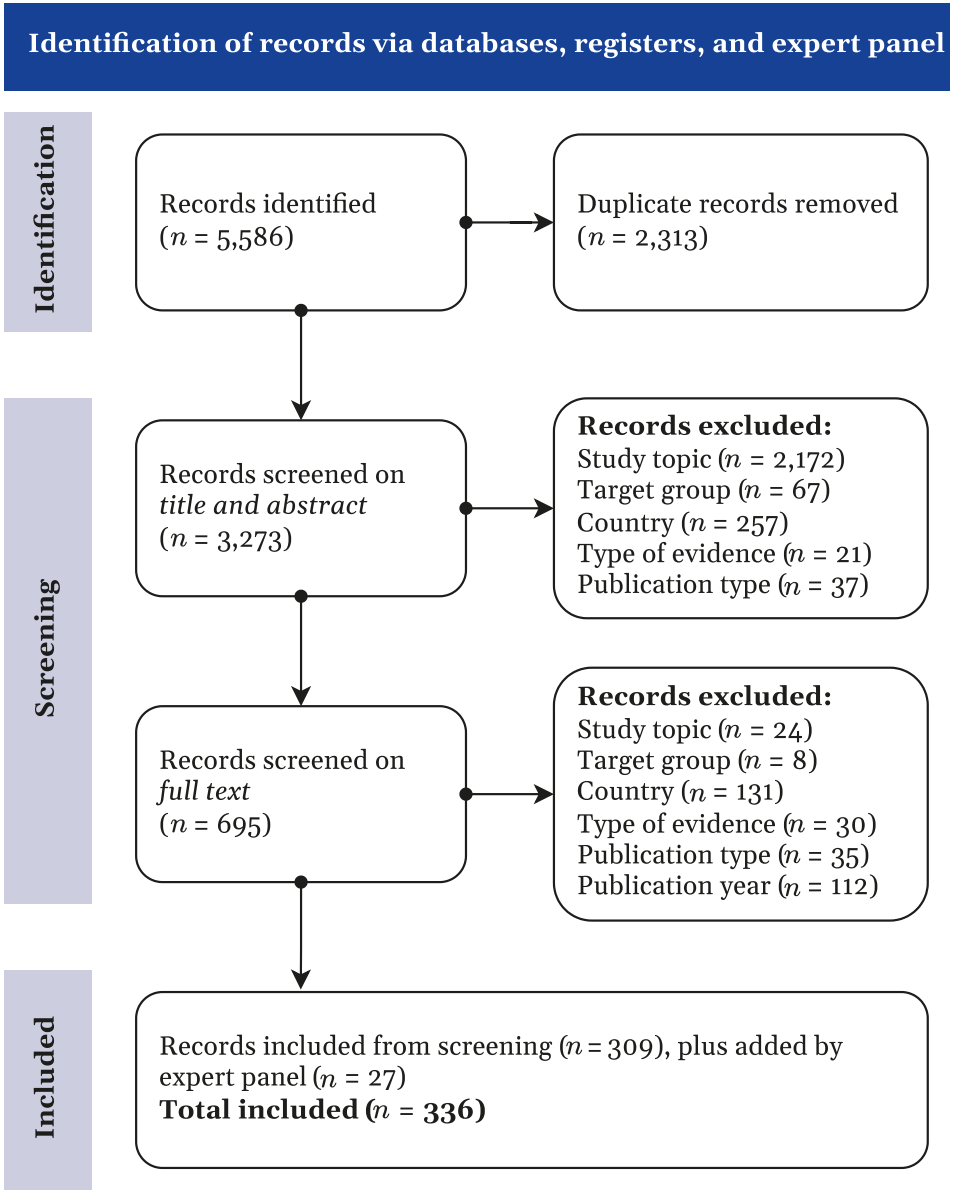


Figure D1. PRISMA-ScR flow diagram for the 2024 mapping
Note: *n = number of records.*

E. Coding manual 2024

Administrative details	
Publication year	• 2024
Type of publication	• Journal article • Thesis/dissertation • Book chapter • Report • Review/research mapping • Other (please specify)
Publication language	• English • Danish • Norwegian • Swedish • Icelandic • Finnish
What is the purpose of the study?	• Description • Exploration of relationships • "What works" • Mapping/synthesizing research
Do authors report how the study was funded? (multiple coding allowed)	• Research council/research foundation, please state the name of the funder • Ministry/government/local government, please state the name of the funder • University/research institutions, please state the name of the funder • Private funding, please state the name of the funder • Union funding, please state the name of the funder • Not stated • Other, please specify

Note: The coding manual as is was practiced by the coding team. After coding the data has been harmonized (See Section F) to allow for cleaner comparison across years. Some items have therefore been modified and do not appear in the figures exactly as in the coding manual.

Administrative details	
In which country or countries was the study carried out? (multiple coding allowed)	• Denmark • Norway • Sweden • Finland • Iceland • Other OECD countries, please specify
Is the study qualitative or quantitative? Or is it mixed-methods research?	• Qualitative • Quantitative • Mixed methods research • Review/mapping (please specify)
What is the design of the study? (multiple coding allowed)	• Action research • Discourse analysis • Document study • Case-control study • Case study • Ethnographic study • Evaluation study • Phenomenological study • Hermeneutic study • Attitude study • Cohort study • Comparative analysis • Quasi-experiment • Longitudinal study • Observational studies • RCT study • Systematic review/mapping • Cross-sectional study • Other (please specify)

Administrative details	
Which actors and their conditions are explored? (multiple coding allowed)	• Educational staff: Leadership/management (kindergarten director or pedagogical leaders) • Educational staff: Practitioner • Children between 0–1 year • Children 1 year • Children 2 year • Children 3 year • Children 4 year • Children 5 year • Children 6 year • No information provided on the age of the children • Parent • Governance: Municipal • Governance: State government • Politician • Other, please specify • Trade union • Not relevant, this study is a research mapping/review
Who informs the study? (multiple coding allowed)	• Educational staff: Leadership/management (kindergarten director or pedagogical leaders) • Educational staff: Practitioner • Children between 0–1 year • Children 1 year • Children 2 year • Children 3 year • Children 4 year • Children 5 year • Children 6 year • No information provided on the age of the children • Parent • Governance: Municipal • Governance: State government • Politician • Other, please specify • Trade union • Not relevant, this study is a research mapping/review

Topics	
Main topic? (multiple coding allowed)	• Children's learning and development • Children's social relations • Educational activities and routines • Physical environment, space, and layout • Children's opportunities for participation • Pedagogical professionalism and professional understanding • Leadership and organisation in ECEC settings • Municipal and state governance • Other, please specify
The context of the study (multiple coding allowed)	• Kindergarten (the youngest children 0–3) • Kindergarten (the oldest children 3–6) • Childminders • Not reported
If the study focuses on children's learning and development, which specific aspect does it address? (multiple coding allowed)	• Physical development or motor skills • Cognitive competence • Language or communication (incl. dialogue, multilingualism) • Literacy (reading, read-aloud, writing) • Mathematics • Science • Entrepreneurship • Well-being
If the study focuses on children's social relationships, which specific aspect does it address? (multiple coding allowed)	• Attachment or bonding • Social-emotional competence • Communication or interaction • Friendship or peer relations (incl. bullying) • Group or social systems
If the study focuses on educational activities and routines, which specific aspect does it address? (multiple coding allowed)	• Play or play practices • Physical activity or bodily awareness • Creative arts (drama, music, drawing) • Digital technologies or ICT • Health or hygiene • Food or meals • Outdoor life or nature activities • Educational routines or gatherings • Sustainability or environmental awareness

Topics	
If the study focuses on physical environment, space and layout, which specific aspect does it address? (multiple coding allowed)	• Indoor learning spaces or layout • Outdoor learning spaces or layout • Books or library resources
If the study focuses on children's opportunities for participation, which specific aspect does it address? (multiple coding allowed)	• Children's agency or rights (incl. participation) • Diversity: Ethnicity or culture • Diversity: Gender or identity • Disability or special needs • Values, democracy or social formation
If the study focuses on pedagogical professionalism and professional understanding, which specific aspect does it address? (multiple coding allowed)	• Professional ethics or values • Pedagogical or didactical approaches • Assessment or documentation • Learning processes or learner-centred practice • Professional development or continuing education • Collaboration, care or special pedagogy
If the study focuses on leadership and organization in ECEC settings, which specific aspect does it address? (multiple coding allowed)	• Leadership or organizational management • Group management • Parent collaboration • Interdisciplinary collaboration • Quality assurance in ECEC • Transition from ECEC to school • Specific pedagogical approaches • Working environment (staff well-being etc.)
If the study focuses on municipal and state governance, which specific aspect does it address? (multiple coding allowed)	• Curriculum or framework • Policy • Finance (economy or parental payment) • Documentation or reporting • Implementation or institutionalization • Historical or labour-market • Time or scheduling

Quality assessment	
Is the context of the study adequately described?	• Yes • No
Are the aims of the study clearly described	• Yes • No
Is there an adequate description of the sample used in the study?	• Yes • No
Is there an adequate description of how the sample was identified and recruited?	• Yes • No
Is there an adequate description of the method used in the study to collect data?	• Yes • No
Is there an adequate description of the data analysis?	• Yes • No
Is the study reported with sufficient transparency?	• Yes • No
Do the authors explicitly state where the full original data are stored?	• Yes • No
Do the authors avoid selective reporting bias or address the study's limitations?	• Yes • No

Quality assessment	
Are there any ethical concerns/problems about the way the study was conducted?	• Yes • No
Was the choice of research design appropriate for addressing the research question(s) posed?	• Yes • No
Have sufficient attempts been made to establish the repeatability, reliability, validity, or trustworthiness of data collection methods or tools?	• Yes • No
Have sufficient attempts been made to establish the repeatability, reliability, validity, or trustworthiness of the data analysis?	• Yes • No
To what extent are the research design and methods employed able to rule out any other sources of error/bias which would lead to alternative explanations for the findings of the study?	• Yes • No
Does the author address the generalizability, area of validity, and/or implications of the study?	• Yes • No
In light of the above, does your opinion differ from the authors over the findings or conclusions of the study?	• Yes • No

F. Harmonising the data across years

F.1. Why harmonisation was needed

The annual NB-ECEC reviews cover research published between 2006 and 2024. During this period, the coding framework changed several times. Questions were added or removed, categories became more detailed, and some definitions changed.

Without harmonisation, apparent changes in the research field could partly reflect changes in the coding framework. For example, a topic might appear to increase simply because it became a separate category in a later review. Conversely, an older category might appear to decline because it was divided into several more specific categories.

To support comparison over time, the historical records were therefore translated into a shared structure based on the current reference codebook. This provides a common basis for analysing the full period and a stable framework for future mapping cycles.

Harmonisation improves comparability, but it cannot make all years perfectly equivalent. The original reviews were conducted at different times, sometimes by different providers and under different guidance. Coders may therefore have interpreted similar categories differently. The harmonised dataset should be understood as a transparent reconstruction of the historical review data, not as the product of one coding exercise carried out by one team.

F.2. How the coding framework changed over time

The coding framework developed gradually rather than through one single revision.

From 2006 to 2012, the reviews used an EPPI-Centre extraction tool combined with questions developed specifically for ECEC research. These reviews collected information on study aims, context, design, methods, results, quality, actors, activities, institutions and age groups, but the structure differed from that used in later NB-ECEC reviews.

The 2013 review marked an important transition because responsibility moved from the Danish Clearinghouse for Educational Research to SFI-Campbell. The contemporary report recognised that changes in provider and method could affect comparisons with earlier years.

From 2014, the reviews used a more structured coding form. By 2016–2017, the framework was organised around three broad sections covering general study information and methods, ECEC topics and characteristics, and quality or reporting.

The framework was relatively stable from 2018 to 2020. A more substantial revision followed in 2021. Categories were updated to reflect the contemporary Scandinavian ECEC context, reduce ambiguity and expand the quality assessment. Changes included revised topic categories and new or revised questions on institutions, parental collaboration, sustainability, ethnic minorities, limitations and validity.

The changes made in 2022 and 2023 were more limited. The main revision concerned publication year, distinguishing when a publication first became available from the year assigned in its final bibliographic record.

These developments make harmonisation necessary, but they also explain why comparisons across major framework transitions, particularly around 2013 and 2021, require additional caution.

F.3. What harmonisation can and cannot achieve

Harmonisation reduces the risk that trends are caused simply by changes in category names or the organisation of the coding form. It allows studies from different review cycles to be analysed using a common set of variables.

It cannot, however, remove all differences in coding practice. Categories such as study purpose, topic, design and methodological orientation require judgement. One review team may have applied a category more broadly than another or assigned several topics where another team selected only the dominant one.

Harmonisation also cannot create detail that was not recorded historically. Some older coding forms contained less information than the current codebook. A specific current code was assigned only where the historical evidence supported that level of detail. Where the evidence was insufficient, the value was left blank, retained under “Other” or flagged for review rather than being assigned with false precision.

For this reason, broad patterns across several years are generally more reliable than small differences between adjacent years. Trends should also be interpreted more confidently where categories remained stable and clearly defined than where categories changed substantially or required considerable coder judgement.

F.4. How the harmonisation was carried out

The harmonisation was conducted at the level of the individual publication record. Historical values were mapped into the current reference codebook one record at a time rather than by adjusting aggregate annual totals. This made it possible to document and review the evidence supporting each decision.

The process combined five elements:

1. **Rule-based mapping**. Historical values with a clear current equivalent were translated using predefined rules. This applied particularly to stable categories such as language, country and some data-collection methods.

2. **AI-assisted initial review**. Where a direct rule was insufficient, an AI model compared the historical coding evidence with the current codebook and proposed a harmonised value and rationale.

3. **Structured multi-agent review**. More difficult cases were reviewed from different perspectives. One model emphasised continuity with the historical coding, another applied the current codebook more strictly, and a reconciliation stage resolved disagreements where possible.

4. **Validation and manual inspection**. The dataset was checked for missing or unexpected values, unresolved "Other" categories, inconsistencies between parent topics and subtopics, and conflicts between assigned codes and their supporting explanations. Researchers manually reviewed cases where sufficient historical evidence was available, but the automated workflow remained uncertain.

5. **Editorial synthesis**. For mappings that required interpretation, an editorial stage converted the technical audit trail into a concise explanation. This stage did not change the assigned value or introduce new evidence. Its purpose was to make the reasoning readable while preserving uncertainty and traceability

AI was therefore used as a controlled analytical aid rather than as an independent decision-maker.[2] The available categories, decision rules, validation procedures and treatment of uncertain cases remained under the control of the research team.

2 All Python scripts and other materials are available on request.

F.5. Principles used in mapping historical values

Mapping decisions were based on substantive meaning rather than similarity in wording. A historical value was transferred to a current category only when the available evidence indicated that the two represented the same underlying concept.

Historical labels were not always retained. Some older labels were broader or had been used differently across review cycles. For example, a study previously labelled as ethnographic was mapped to the current ethnography category only where the historical evidence supported ethnography as the main study design. Where the evidence instead pointed to interviews, a bounded case study, discourse analysis, action research or descriptive observation, a different current design could be assigned.

Such changes should not be understood as corrections of the original review. They reflect the translation of older coding evidence into a later and more specific framework.

Three principles guided this process:

- Use the most specific category supported by the evidence.
- Avoid assigning detail that was not available in the historical record.
- Preserve meaningful historical information under “Other” where no defensible current equivalent existed.

The same principles were applied to topic coding. Broad historical topics were preserved where appropriate, while detailed subtopics were assigned only when supported by the original coding evidence.

The final dataset distinguishes between:

- Direct matches, where the historical and current values are effectively equivalent;
- Deterministic mappings, where a predefined rule translates the historical value; and
- Non-deterministic mappings, where interpretation was required and a written explanation is provided.

This distinction enables users to see which values were carried forward routinely and which required greater judgement.

F.6. Why this approach was chosen

The chosen approach balances comparability, detail and transparency.

First, translating all years into a common structure provides a stronger basis for examining changes in ECEC research over time. It reduces the risk that developments in the coding form are mistaken for developments in the literature.

Second, the approach retains more useful detail than would be possible if all years were reduced to only the broadest shared categories. This allows the dataset to describe not only the volume of research but also its purposes, topics, methods, countries, populations and settings.

Third, the approach documents uncertainty. Historical evidence, mapping rules, AI-assisted reasoning, manual decisions and validation results are retained so that the basis for important coding decisions can be reviewed.

The approach is also proportionate to the project’s purpose. The aim was to make the existing annual review data more comparable, not to replace the original reviews or conduct a completely new review of every publication from 2006 onward.

The resulting dataset can support both longitudinal analysis and an evidence gap map. Because historical records are represented through a common structure, future updates or revised coding decisions can also be incorporated transparently.

F.7. Alternatives considered

Several alternative approaches were considered.

Analysing each year using its original codebook would have preserved the historical categories but made comparisons difficult. Differences between years could not readily be separated from changes in the coding form.

Reducing all years to the broadest categories shared across the entire period would have improved comparability but removed much of the detail needed to understand changes in research focus and methodology.

Recoding every publication from the original full text would have produced the most internally consistent dataset in principle. In practice, it would have required a completely new review of the 2006–2024 evidence base and substantial additional resources. It would also have introduced a new layer of reviewer judgement rather than making use of the historical coding evidence already available.

Treating harmonised values as fully equivalent across all years would have overstated the precision that harmonisation can achieve. Relying entirely on AI-generated mappings would likewise have been inappropriate because the task required explicit rules, validation and human oversight.

The selected approach was therefore judged to offer the best balance between longitudinal comparability, retention of useful information, feasibility and methodological transparency.

F.8. How the harmonised results should be interpreted

The harmonised dataset provides the best available basis for comparing the mapped literature over time, but it is not an exact reproduction of the original annual report tables.

Totals may differ from those reported historically because the harmonised values use the definitions in the current reference codebook. Differences are most likely for variables that changed over time or required substantial interpretation, including study purpose, study design, topics and data-collection methods.

The explanatory fields in the dataset indicate how each value was produced:

- a blank explanation generally indicates a direct match or a blank harmonised value;
- a deterministic explanation indicates that a predefined mapping rule was used;
- a fuller written explanation indicates that the mapping required interpretation.

Users should focus primarily on broad and sustained patterns. Small changes between individual years should be interpreted cautiously, especially around major changes to the coding framework and for categories involving considerable coder judgement.

For policy use, the key benefit of harmonisation is that it permits a more consistent view of how the documented ECEC research base has developed. It retains meaningful information about countries, methods, topics, participants and settings while making the remaining uncertainty visible.

The harmonised dataset should therefore be viewed as a transparent reconstruction of the annual mapping data: stronger and more comparable than the un-harmonised historical files, but not a substitute for the original publications or reports.

F.9. Additional validation using full-text evidence

After the main harmonisation was completed, an additional validation step was carried out for publications whose full texts were available. Its purpose was to test selected harmonised values against evidence from the publications themselves.

This was not a full recoding exercise. It was a targeted and conservative check intended to identify cases where the publication clearly confirmed, contradicted or refined the harmonised value.

Documents were first matched to study records using title and front-matter evidence. Ambiguous matches were excluded because linking the wrong document to a study would create a substantial risk of incorrect recoding.

For safely matched publications, targeted evidence packets were prepared using relevant passages from the title, abstract, aims, methods, sample, data-collection



description, funding statement, findings and conclusion. The validation focused particularly on funding, study design, timing, data-collection methods, subjects, direct data sources and topics.

The review took place in two stages. An AI-assisted adjudication model first identified possible changes. A stricter verification model then checked each proposed substantive change against the exact cited passages. A change was accepted only where the full-text evidence directly supported it under the current reference codebook.

The procedure prioritised precision over the number of changes identified. Where the available passages were ambiguous or provided only indirect support, the existing harmonised value was retained. An unchanged value therefore means that the evidence did not meet the threshold for correction; it does not prove that the value is beyond question.

This additional step allowed clearly supported corrections to be made while reducing the risk of overcorrection. Every accepted change remained traceable to specific full-text evidence, strengthening both the accuracy and auditability of the final dataset.

G. List of included studies

Aabro, C., & Thingstrup, S. H. (2024). Lokale praktiseringer af den styrkede pædagogiske læreplan. *Forskning i pædagogers profession og uddannelse, 8*(2), 58–66. https://doi.org/10.7146/fppu.v8i2.150377

Aadland, K. N., Lervåg, A., Andersen, J. R., Howard, S. J., Ommundsen, Y., & Aadland, E. (2024). Effects of a staff physical activity professional development intervention on preschoolers' mental health and self-regulation: The active learning Norwegian preschool(er)s (ACTNOW) cluster randomised controlled trial. *Psychology of Sport and Exercise, 75*, 102705. https://doi.org/10.1016/j.psychsport.2024.102705

Ackesjö, H., & Wernholm, M. (2024). Barn som experter: Övergångar i en digital barndom. In H. Ackesjö & K. Herrlin (Eds.), *Att undervisa barn i skolstartsålder* (pp. 157–176). Gleerups Utbildning AB. https://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-125848

Aerila, J. A., Tyrer, M., Harju-Luukkainen, H., Repo, E., & Goyi, G. G. (2024). Implementing multilingual pedagogy in Finnish ECEC groups – from monolingual practices towards more systematic approaches. *International Journal of Multilingualism, 22*(4), 2421–2438. https://doi.org/10.1080/14790718.2024.2418862

Ahlström, S. W., Janeslätt, G., Gustavsson, C., Harder, M., & Almqvist, L. (2024). Intervention in time processing ability and everyday functioning for preschool children in need of special support: A randomized controlled study. *Journal of Occupational Therapy, Schools, & Early Intervention, 18*(4), 673–686. https://doi.org/10.1080/19411243.2024.2403363

Ahola, R., & Valkonen, S. (2024). Työhyvinvointi ja pitovoima muuttuvassa varhaiskasvatustyössä. *Journal of Early Childhood Education Research, 13*(3), 105–140. https://doi.org/10.58955/jecer.146503

Ahrenkiel, A., & Holm, L. (2024). Puderummet som sprogmiljø. *Forskning i Pædagogers Profession og Uddannelse, 8*(1), 57–66. https://doi.org/10.7146/fppu.v8i1.144788

Alasuutari, M., Ruutiainen, V., & Karila, K. (2024). Enrolling the child in private early childhood education and care in the context of universal service provision. *Education Inquiry, 15*(1), 126–146. https://doi.org/10.1080/20004508.2023.2282792

Alemanji, A. A. (2024). As soon as they see you coming, they feel they need to protect their child: Black male kindergarten teacher's experience of racism in Finland. *Educational Practice and Theory, 46*(1), 49–69. https://doi.org/10.7459/ept/460104

Alm Fjellborg, A., & Forsberg, H. (2024). Förskola, boende och segregation. In H. Forsberg, E. Larsson, & A. Alm Fjellborg (Eds.), *Förskolans expansion och marknadisering* (pp. 127–154). Studentlitteratur AB. https://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-536707

Aluf, A., & Tkachenko, E. (2024). Acts of bridging in communication with newly arrived Ukrainian children in the Norwegian ECEC context. *Journal of Early Childhood Education Research, 13*(1), 249–273. https://doi.org/10.58955/jecer.130028

Anatoli, O. (2024). Swedish-English preschool as a site for the collaborative discovery of bilingual meanings. *Journal of Early Childhood Education Research, 13*(1), 92–121. https://doi.org/10.58955/jecer.129823

Andersson, A., & Fälth, L. (2024). Förskolebarns motivation att lära sig svenska som andraspråk. In D. Berghner, H. Nilsson, Å. Trulsson, & C. Silander (Eds.), *Mångfaldens möten: Interkulturalitet, utbildning och lärande* (pp. 159–176). Linnaeus University Press. https://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-130805

Andersson, E. (2024). Constructing and governing freedom – physical environments as a discursive practice in Swedish early childhood education. *Children's Geographies, 22*(5), 747–761. https://doi.org/10.1080/14733285.2024.2366827

Annerbäck, J., Manni, A., Löfgren, H., & Mårtensson, F. (2024). Toddlers' engagements with preschool playgrounds: Ethnographic insights from Sweden. *Children's Geographies, 22*(5), 810–825. https://doi.org/10.1080/14733285.2024.2386242

Anton, A. C., & Aerila, J. A. (2024). «We have a great deal of influence»: Finnish early childhood in-service teachers' agency for culturally sustaining pedagogy. *Teachers and Teaching, 32*(2), 308–326. https://doi.org/10.1080/13540602.2024.2422860

Augustsson, C., Högman, J., & Löfdahl Hultman, A. (2024). Teachers' experiences with physically inactive children and their strategies to promote physical activity in early childhood education settings. *Health Education Journal, 83*(7), 771–783. https://doi.org/10.1177/00178969241280767

Backman, A. (2024a). Fictionalised non-fiction picturebooks for preschoolers: Children's responses to imaginary constructs in designed reading activities. *Children's Literature in Education, 55*, 377–398. https://doi.org/10.1007/s10583-022-09510-y

Backman, A. (2024b). When the sun is out of the picture: Exploring a variation theory key to children's imagination in a picturebook reading activity. *Early Childhood Education Journal, 52*, 1655–1666. https://doi.org/10.1007/s10643-023-01595-4

Bäckström, I., Ingelsson, P., Mårtensson, A., & Snyder, K. M. (2024). Quality in preschools through systematic quality work – a principal's perspective. *Quality Assurance in Education, 32*(2), 257–273. https://doi.org/10.1108/QAE-08-2023-0135

Barken, M. E., Engtrø, R., & Dale, T. S. (2024). Regional ordning for kompetanseutvikling i barnehagen – forventninger til de ulike aktørene. In J. H. Midtsundstad (Ed.), *Samskaping av kunnskap og kompetanse: Et tverrfaglig bidrag til regional kompetanseutvikling i barnehagen, skolen og UH-sektoren* (pp. 133–151). Universitetsforlaget. https://doi.org/10.18261/9788215063348-24-07

Barry, K. M., Avraam, D., Cadman, T., Elhakeem, A., El Marroun, H., Jansen, P. W., Nybo-Andersen, A.-M., Strandberg-Larsen, K., González Safont, L., Soler-Blasco, R., Barreto-Zarza, F., Julvez, J., Vrijheid, M., Heude, B., Charles, M.-A., Gomajee, A. R., & Melchior, M. (2024). Early childcare arrangements and children's internalizing and externalizing symptoms: An individual participant data meta-analysis of six prospective birth cohorts in Europe. *The Lancet Regional Health – Europe, 45*. https://doi.org/10.1016/j.lanepe.2024.101036

Belseth, K. (2024). "I was born in this country!" The importance of implementing discussions about Black Lives Matter in early childhood education and care. *Global Education Review, 11*(3), 1–11.

Benerdal, M., & Larsson, M. (2024). Understanding datafication in Swedish ECEC through three evaluation imaginaries. *Contemporary Issues in Early Childhood, 25*(3), 304–321. https://doi.org/10.1177/14639491241273923

Bergene, A. C., & de Besche, T. (2024). *Deltakerundersøkelsen for barnehageledere 2023: Resultater fra en spørreundersøkelse til deltakere på styrerutdanningen* (NIFU-rapport 2024:9). NIFU Nordisk institutt for studier av innovasjon, forskning og utdanning. https://hdl.handle.net/11250/3132027

Bergroth, M., Harju-Autti, R., & Alisaari, J. (2024). Staff self-assessment of ECEC practices in meeting language diversity in Finland. *Journal of Early Childhood Education Research, 13*(1), 42–67. https://doi.org/10.58955/jecer.130031

Bernsen, A. S. (2024). «Jeg kommer med gull» – om lekende interaksjonsformer og barns ulike uttrykksmåter. *FormAkademisk, 17*(1), 1–28. https://doi.org/10.7577/formakademisk.5764

Bernsen, A. S., & Thoresen, E. (2024). Processmodell for utforskende praksis – barn som medskapere. *BUKS - tidsskrift for børne- og ungdomskultur, 40*(69), 17–35. https://doi.org/10.7146/buks.v40i69.150383

Berta, O. G., Sæterstad, T., Tollnes, I. J., & Bøe, M. (2024). Alle må med: Styreres erfaringer med å etablere og utvikle profesjonelle læringsfellesskap i barnehagen. *Nordisk barnehageforskning, 21*(3), 340–359. https://doi.org/10.23865/nbf.v21.631

Bjørgen, K., Sivertsen, A. H., & Kippe, K. (2024). Profesjonspraksis i møte med barnehagebarns fysiske aktivitet. *Nordisk barnehageforskning, 21*(3), 492–512. https://doi.org/10.23865/nbf.v21.651

Bjørhusdal, E., Juuhl, G. K., & Thingnes, J. S. (2024). Language policy on the ground in Norwegian kindergartens. *Linguistics and Education, 81*, 101294. https://doi.org/10.1016/j.linged.2024.101294

Björklund, C., & Palmér, H. (2024). The challenges of mathematizing in Swedish early childhood education. *Journal of Early Childhood Education Research, 13*(2), 167–186. https://doi.org/10.58955/jecer.138122

Björk-Willén, P., & Cekaite, A. (2024). Skratt, gråt och beröring i socialt samspel: Barns känslor och moraliska socialisation i förskolan. *Barn – forskning om barn og barndom i Norden, 42*(2), 19–35. https://doi.org/10.23865/barn.v42.5569

Bleses, D., Jensen, P., Højen, A., Willemsen, M. M., Slot, P., & Justice, L. M. (2024). Examining the effects of an infant-toddler school readiness intervention in center- and family-based programs: Are results generalizable? *Early Childhood Research Quarterly, 67*, 252–264. https://doi.org/10.1016/j.ecresq.2024.01.001

Bøe, M., & Hognestad, K. (2024b). Pedagogiske lederes arbeidsroller. *Nordisk barnehageforskning, 21*(2), 387–307. https://doi.org/10.23865/nbf.v21.457

Bøe, M., & Hognestad, K. (2024). Enactments of distributed pedagogical leadership between early childhood centre directors and deputy directors in Norway. *Southeast Asia Early Childhood Journal, 13*(1), 157–170. https://doi.org/10.37134/saecj.vol13.1.10.2024

Bøe, M., & Kristiansen, E. (2024). Hall of mirrors to enhance a network professional learning community for ECEC centre leaders. *International Journal of Educational Management, 38*(6), 1786–1800. https://doi.org/10.1108/IJEM-12-2023-0633

Børhaug, K., & Lotsberg, D. Ø. (2024). Profil som konkurransestrategi i norsk barnehage. *Nordisk barnehageforskning, 21*(2), 226–244. https://doi.org/10.23865/nbf.v21.465

Brandt, L. A. (2024). Aldersbestemte pædagogikkers betydning for børns legekultur: Danske og norske pædagogers refleksioner om legekulturen i aldershomogene og aldersheterogene dagtilbud. *BUKS - Tidsskrift for Børne- & Ungdomskultur, 40*(69), 145–158. https://doi.org/10.7146/buks.v40i69.150391

Brandt, L. A., & Menning, S. F. (2024). Age segregation in ECEC: Tracing arguments and reanimating the critique of developmentalism. *Pedagogy, Culture & Society, 32*(4), 1051–1068. https://doi.org/10.1080/14681366.2024.2355098

Brandvik, C. L., Meshkovska, B., Schultz, G. I. G., & Garnweidner-Holme, L. (2024). Implementing a nutrition education intervention in eastern Norwegian kindergartens: Barriers and facilitators. *BMC Nutrition, 10*(103), 1–10. https://doi.org/10.1186/s40795-024-00908-z

Bråten, M., Steen Jensen, R., & Svalund, J. (2024). Lederutdanning for barnehagestyrere i et karriereperspektiv. *Nordisk barnehageforskning, 21*(2), 100–117. https://doi.org/10.23865/nbf.v21.463

Brenne, A. S., & Amot, I. (2024). Developing professional ethical care through co-creation in ECEC in Norway: A qualitative study. *Journal of Childhood, Education & Society, 5*(2), 226–237. https://doi.org/10.37291/2717638X.202452408

Brunborg, G. S., Bjørknes, R., & Bang, L. (2024). Personal barriers to reporting child maltreatment among early childhood education and care professionals. *International Journal on Child Maltreatment: Research, Policy and Practice, 7*(2), 221–240. https://doi.org/10.1007/s42448-023-00190-9

Buskqvist, U., & Johansson, E. (2024). From digital competence to digital capacity. *Nordic Journal of Digital Literacy, 19*(1), 39–51. https://doi.org/10.18261/njdl.19.1.4

Cameron, D. L., & Kovac, V. B. (2024). Parents' perspectives on their child's involvement in bullying in preschool. *Child Care in Practice, 31*(4), 614–629. https://doi.org/10.1080/13575279.2024.2371375

Carlbaum, S., & Rönnberg, L. (2024). Exporting preschool quality assurance: Ideational power and legitimation of a Scandinavian edu-business. *Scandinavian Journal of Educational Research, 69*(7), 1–14. https://doi.org/10.1080/00313831.2024.2434816

Carlsen, K. (2024). A realistic nostalgia for the future – exploring materials and material utterings in a preschool for sustainability. *Tímarit um uppeldi og menntun, 33*(1), 135–150. https://doi.org/10.24270/tuuom.2024.33.8

Catucci, E. (2024). 'It is not that we decide that 'now we do that': A case study on preschool teachers´ didactical leadership as expressed during collegial meetings. *Early Years, 44*(2), 237–250. https://doi.org/10.1080/09575146.2022.2113039

Catucci, E., Berg, B., & Ärlemalm-Hagsér, E. (2024). There are plenty of opportunities for play and learning – Swedish preschool teachers' perspectives on using the outdoor environment as a pedagogical resource. *Cogent Education, 11*(1), 2369971. https://doi.org/10.1080/2331186X.2024.2369971

Cekaite, A., & Wirzén, M. (2024). Social and emotional functions of institutional touch in the relational care of young children. *Child & Family Social Work*, 1–11. https://doi.org/10.1111/cfs.13161

Christensen, I. R. (2024). The call for an "educational footprint" in conceptualizing mental health and psychosocial support: The case of Norwegian kindergarten teachers. *Frontiers in Psychology, 15*, 1339332. https://doi.org/10.3389/fpsyg.2024.1339332

Clark, A. (2024). "What's time got to do with it?": The relationship with time in early childhood practice and research. *Early Childhood Folio, 28*(1), 3–7. https://doi.org/10.18296/ecf.1135

Damber, U., & Randevåg, L. (2024). Perceptions of conditions that characterize projects as a development strategy: A phenomenographical study of eleven Swedish preschool development projects. *Early Childhood Education Journal, 53*(7), 2755–2765. https://doi.org/10.1007/s10643-024-01776-9

Dardanou, M., & Brito, R. (2024). Family involvement in early childhood education and care: Insights from Portuguese and Norwegian curriculum frameworks. *Social Sciences, 13*(12), 694. https://doi.org/10.3390/socsci13120694

Dietrichson, J., & Klokker, R. H. (2024). Predicting preschool problems. *Children and Youth Services Review, 161*, 107655. https://doi.org/10.1016/j.childyouth.2024.107655

Dolk, K. (2024). Ansvarsfull läsning. Att använda barnböcker för att närma sig känsliga ämnen i förskolan. *Nordisk barnehageforskning, 21*(3), 288–305. https://doi.org/10.23865/nbf.v21.553

Donner, P., Lundström, S., & Heikkilä, M. (2023). A case study of young children's play negotiations in free play. *Early Years, 44*(3–4), 889–902. https://doi.org/10.1080/09575146.2023.2266590

Drevsholt, K. M., & Jensen, M. W. (2024). Epistemisk marginalisering af flersprogede børn i børnehaven og behovet for translanguaging. *Nordisk barnehageforskning, 21*(1), 68–91. https://doi.org/10.23865/nbf.v21.382

Durbeej, N., Ssegonja, R., Salari, R., Dahlberg, A., Fabian, H., & Sarkadi, A. (2024). Preschool-level socio-economic deprivation in relation to emotional and behavioural problems among preschool children in Sweden. *Scandinavian Journal of Public Health, 52*(8), 978–987. https://doi.org/10.1177/14034948231218040

Dýrfjörð, K. (2024). The preschool teachers' union in Iceland: A critical analysis of influence and challenges. *Early Years, 44*(5), 1046–1061. https://doi.org/10.1080/09575146.2024.2420214

Dýrfjörð, K., Magnúsdóttir, B. R., & Bjarnadóttir, V. S. (2024). Principals' financial and pedagogical challenges when choosing programs and educational materials: The scope of the private education industry for preschools. *Education Inquiry, 15*(1), 47–62. https://doi.org/10.1080/20004508.2023.2291887

Eliasson, S., Peterson, L., & Lantz-Andersson, A. (2024). The interrelation between everyday and scientific conceptualization in preschool technology activities. *Journal of Research in Childhood Education, 40*(2), 209–223. https://doi.org/10.1080/02568543.2024.2425374

Ellebæk, L. S., & Bernstorff, B. (2024). Pædagogers betydning for børn med lavmælte handlingers deltagelsesmuligheder i legefællesskaber. *Barn – forskning om barn og barndom i Norden, 42*(2), 51–66. https://doi.org/10.23865/barn.v42.5640

Elm, A., Bergström, P., & Pettersson, D. (2024). The introduction of a software application intended for quality work in four Swedish preschools. *Education and Information Technologies, 29*, 24921–24940. https://doi.org/10.1007/s10639-024-12803-y

Eriksen, M. (2024). Barnehagelæreren som pedagog – i møte med forventninger. *Nordisk barnehageforskning, 21*(3), 1–18. https://doi.org/10.23865/nbf.v21.569

Eriksson, C. (2024). Att kuratera en kontext för en förskolepraktik i offentliga rum – en annan direkt demokrati uppstår. *Nordisk barnehageforskning, 21*(3), 79–99. https://doi.org/10.23865/nbf.v21.495

Fabian, H., Fält, E., Dahlberg, A., Salari, R., & Durbeej, N. (2024). Not attending preschool was linked to challenges in peer relationships. *Acta Paediatrica, 113*(12), 2534–2542. https://doi.org/10.1111/apa.17367

Fimreite, H., Fjellanger, L. I., Hofslundsengen, H., & Pedersen, L. (2024). Barnehagelærarar si forståing av rettleiing etter kollektiv vidareutdanning i eigen barnehage. *Norsk pedagogisk tidsskrift, 108*(4), 310–322. https://doi.org/10.18261/npt.108.4.3

Fimreite, H., & Glosvik, Ø. (2024). Professional development among preschool teachers: Meta-conversations about peer counseling. *Sage Open, 14*(2), 1–12. https://doi.org/10.1177/21582440241256541

Fjæra, K. E., Lekhal, R., Helseth, S., Hagen, M., & Lekhal, S. (2024). The effect of the association between food budget and food quality on adherence to national guidelines in kindergartens, and the impact of budget limit on the food quality. *Food & Nutrition Research, 68*, 9524. https://doi.org/10.29219/fnr.v68.9524

Fjæra, K. E., Lekhal, R., Helseth, S., Småstuen Hagen, M., & Lekhal, S. (2024). Enhancing adherence to recommended food practices in Norwegian kindergartens: The role of knowledge and application of national guidelines for food and meals. *Health Education Journal, 83*(5), 519–530. https://doi.org/10.1177/00178969241249977

Fjällström, S., Paananen, M., & Karila, K. (2024). Neighborhood-based factors predicting attendance of early childhood education and care in a universal system: A case of Finland. *Scandinavian Journal of Educational Research, 68*(7), 1473–1487. https://doi.org/10.1080/00313831.2023.2250375

Fjeld, M., & Giæver, K. (2024). Walking through kindergarten semiotic landscapes with multilingual children: A way to explore participation and engagement. *Journal of Early Childhood Education Research, 13*(1), 173–195. https://doi.org/10.58955/jecer.129353

Fonsén, E., Ruohola, V., Modise, M. R., Mampane, S. T., Phatudi, N. C., Kupila, P., Liinamaa, T., & Elhassan, H. A. M. (2024). Leadership discourses in early childhood education during the COVID-19 pandemic in South Africa and Finland. *South African Journal of Childhood Education, 14*(1), a1456. https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1445185&scope=site

Fridberg, M., & Redfors, A. (2024). Thematic teaching of augmented reality and education for sustainable development in preschool–the importance of 'place'. *Education Sciences, 14*(7), 719. https://doi.org/10.3390/educsci14070719

Frid, M., Jonsson, E., Johansson, L., & Pettersson, Å. (2024). "Tänka framåt, tänka bakåt, tänka runt och tillbaka" – rörelser i ett utvecklingsprojekt om undervisning i förskolan. *Forskning och utveckling i förskola och skola, 3*(1), 5–20. http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-105266

Frid, M., & Westman, S. (2024). Entering the assemblage of (un) teaching. *Policy Futures in Education, 22*(5), 970–983. https://doi.org/10.1177/14782103231209095

Frödén, S., & Tellgren, B. (2024). Guiding children towards individual and collective growth. Educative participatory experiences in a preschool setting. *International Journal of Early Years Education, 32*(2), 334–348. https://doi.org/10.1080/09669760.2020.1742670

Gath, M. E., Herold, L., Hunkin, E., McNair, L. J., Redder, B., Rutanen, N., & White, E. J. (2024). Infants' emotional and social experiences during and after the transition to early childhood education and care. *Journal of Early Childhood Research, 22*(1), 88–105. https://doi.org/10.1177/1476718X231195706

Ghazali, A., Ashari, Z. M., & Hardman, J. (2024). A scoping review on STEM education: The best practices recorded through previous studies in early childhood education setting. *International Journal of Education in Mathematics, Science and Technology, 12*(3), 810–835. https://doi.org/10.46328/ijemst.3880

Gitz-Johansen, T. (2024). Singing and emotional development in day-care: A case study from a Steiner Waldorf day-care centre. *Nordisk barnehageforskning, 21*(3), 19–36. https://doi.org/10.23865/nbf.v21.534

Gjesdal, B. E., Eikhaug, R., & Holovchuk, S. (2024). Suksesskriterier og barrierer for bruk av digitale verktøy i barnehagen. In A. Ø. Halsnes & L. K. Ryland (Eds.), *Hånd i hånd i barnehagelærerutdanningen: Der lek, fag og praksis møtes* (pp. 75–90). Fagbokforlaget. https://doi.org/10.55669/oa291005

Grabowski, D., Johansen, L. B., Nannsen, A. Ø., Andersen, A., Kristensen, K., Iken, M. K., … DeCosta, P. (2024). Diabetes management support in preschool and primary school: A qualitative ideation study presenting recommendations for improved communicative practice. *Healthcare, 12*, 225. https://doi.org/10.3390/healthcare12020225

Granevald, V. S. (2024). Exploring factors related to special needs educators' work-related well-being in preschool settings. *European Journal of Special Needs Education, 40*(4), 739–754. https://doi.org/10.1080/08856257.2024.2421111

Granevald, V. S., Vinterek, M., & Strömsten, L. M. J. (2024). Exploring the job demands and resources and work-related sense of coherence of preschool educators working with children in need of special support. *Journal of Early Childhood Education Research, 13*(3), 141–172. https://doi.org/10.58955/jecer.137959

Greve, A., Skundberg, Ø., & Østrem, S. (2024). Smittevern og biopolitikk i barnehagens hverdagsliv. *Barn – forskning om barn og barndom i Norden, 42*(1), 70–85. https://doi.org/10.23865/barn.v42.5600

Grönman, S., Lindfors, E., & Rönkkö, M.-L. (2024). Design thinking in early childhood education and care. A literature review and consideration from the perspective of young learners' craft, design, and technology education. *International Journal of Technology and Design Education, 35*, 857–877. https://doi.org/10.1007/s10798-024-09944-z

Grøver, V., Gustafsson, J.-E., Rydland, V., & Snow, C. E. (2024). Are there sustained effects of a preschool shared-reading intervention addressing dual language learners? *Scientific Studies of Reading, 28*(4), 441–462. https://doi.org/10.1080/10888438.2024.2335925

Gulz, A., & Haake, M. (2024). Scaffolding attention and perseverance skills in a diverse population of preschool children in Sweden. *Learning and Individual Differences, 113*, 102488. https://doi.org/10.1016/j.lindif.2024.102488

Gunnarsdottir, B., & Bateman, A. (2024). Moments of togetherness: Humour and playful interactions in the toddler peer group. *Early Years, 45*(3–4), 655–670. https://doi.org/10.1080/09575146.2024.2404109

Gustafsson Nyckel, J., Johansson, E. M., Lager, K., & Nilsson, M.-H. Z. (2024). The travelling and embedding of discourses on quality in early childhood education and care. *Ethnography and Education, 20*(3), 181–198. https://doi.org/10.1080/17457823.2024.2414296

Håberg, L. I. A., & Synnes, H. H. (2024). The importance of the teachers' role in imaginative play. *BUKS - Tidsskrift for Børne- & Ungdomskultur, 40*(69), 119–132. https://doi.org/10.7146/buks.v40i69.150389

Halsnes, A. Ø. (2024). Hand i hand med leiken: Barnehagelæraren som leikande profesjonsutøvar. In A. Ø. Halsnes & L. K. Ryland (Eds.), *Hånd i hånd i barnehagelærerutdanningen: Der lek, fag og praksis møtes* (pp. 15–28). Fagbokforlaget. https://doi.org/10.55669/oa291001

Hanhikoski, E., Alasuutari, M., Collin, K., Liinamaa, T., & Sevón, E. (2024). (Un)expected emotions and teamwork: Narratives of early childhood education practitioners. *Nordic Journal of Working Life Studies, 14*(2), 71–89. https://doi.org/10.18291/njwls.144191

Hanhikoski, E., & Sevón, E. (2024). Early childhood education and care teachers' narratives of their professional identity. *Journal of Early Childhood Education Research, 13*(2), 55–77. https://doi.org/10.58955/jecer.129076

Hansell, K., & Still, J. (2024). Språköverskridande samarbete inom småbarnspedagogik. *Nordisk barnehageforskning, 21*(3), 445–466. https://doi.org/10.23865/nbf.v21.551

Hansen, H., & Vallberg Roth, A.-C. (2024). STREAM-didaktik i förskola med litteracitet(er) i fokus mellan att öppna för det okända och söka efter det kända. *Utbildning & Lärande, 18*(1), 49–74. https://doi.org/10.58714/ul.v18i1.13015

Harju, K., Vuorisalo, M., Paananen, M., & Rutanen, N. (2023). Children's transitions in early childhood education and care: Various combinations of dis-/continuities. *Early Years, 44*(3–4), 735–750. https://doi.org/10.1080/09575146.2023.2232951

Harris, A., Jones, M., Azorín, C., Southern, A., Griffiths, J., & Ástvaldsdóttir, I. (2024). Leading for deeper learning: International perspectives. *Journal of Educational Administration, 62*(1), 122–137. https://doi.org/10.1108/JEA-02-2023-0042

Haugland, E. S., Nilsen, A. K. O., Vabø, K. B., Pesce, C., Bartholomew, J., Okely, A. D., Tjomsland, H. E., Aadland, K. N., & Aadland, E. (2024). Effects of a staff-led multicomponent physical activity intervention on preschooler's fundamental motor skills and physical fitness: The ACTNOW cluster-randomized controlled trial. *International Journal of Behavioral Nutrition and Physical Activity, 21*, 69. https://doi.org/10.1186/s12966-024-01616-4

Hedefalk, M., Sumpter, L., & Eriksson, H. (2024). Matematiska och etiska resonemang i förskolan – didaktisk modellering som intervention. *Forskning om undervisning och lärande, 12*(2), 68–84. https://doi.org/10.61998/forskul.v12i2.23608

Heikkilä, A., & Reunamo, J. (2023). The years children spent in early education in relation to their social relations and objects of attention. *European Early Childhood Education Research Journal, 32*(2), 339–351. https://doi.org/10.1080/1350293X.2023.2254534

Heikkilä, M. (2024). A story of the "kitchen furniture" in ECEC–challenging norms and ideas around gender and play. *Education Sciences, 14*(12), 1351. https://doi.org/10.3390/educsci14121351

Heikkinen, K.-M., Ahtiainen, R., Fonsén, E., & Kallioniemi, A. (2024). Leadership as a profession in early childhood education and care. *Educational Research, 66*(3), 347–363. https://doi.org/10.1080/00131881.2024.2371352

Heilala, C., Lundkvist, M., Santavirta, N., & Kalland, M. (2023). Work demands and work resources in ECEC – turnover intentions explored. *European Early Childhood Education Research Journal, 32*(3), 481–494. https://doi.org/10.1080/1350293X.2023.2265597

Heilala, C., Lundkvist, M., Santavirta, N., & Kalland, M. (2024). The impact of perceived leadership quality, moral stress and participation on turnover intentions in ECEC sector. *Journal of Early Childhood Education Research, 13*(3), 56–74. https://journal.fi/jecer/article/view/144983

Heiskanen, N., Karhu, A., Koivula, M., Savolainen, H., Moisio, P., Vauhkonen, V., & Närhi, V. (2024). The effects of ProVaka and Papilio interventions on children's behavior and educator feedback: A cluster-randomized controlled trial in early childhood education and care. *Journal of Early Childhood Education Research, 13*(2), 247–272. https://doi.org/10.58955/jecer.132008

Heiskanen, N., Karhu, A., Savolainen, H., & Närhi, V. (2023). Implementing positive behaviour intervention and support in Finnish early childhood education and care: Leadership team's perspective. *European Journal of Special Needs Education, 39*(2), 265–280. https://doi.org/10.1080/08856257.2023.2207057

Heiskanen, N., Saha, M., Pesonen, H., Viljamaa, E., Poikola, M., Nevala, P., & Karna, E. (2024). The ultimate responsibility? The analysis of the position of special education teachers when the child is left without support in early childhood education. *Journal of Research in Special Educational Needs, 25*(3), 460–472. https://doi.org/10.1111/1471-3802.12737

Helland, S. H., Bjørkkjaer, T., Vejrup, K., & Øverby, N. C. (2024). Enhancing core components for a digital "healthy eating" resource in early childhood and care settings: Staff's perceptions and needs. *BMC Public Health, 24,* 3000. https://doi.org/10.1186/s12889-024-20456-2

Helland, S. H., Vejrup, K., & Overby, N. C. (2024). "I'm not sure whether I will implement it": Exploring barriers and facilitators to implementing a digital "healthy eating" resource in early education and care settings–teachers' perspectives. *BMC Public Health, 24*, 1499. https://doi.org/10.1186/s12889-024-19014-7

Hjelt, H., Karila, K., & Kupila, P. (2023). Time and temporality in early childhood education and care work. *Scandinavian Journal of Educational Research, 68*(4), 633–646. https://doi.org/10.1080/00313831.2023.2175246

Hogstad, I. J., & Røkholt, E. G. (2024). Små barns mulighet til å delta i sorgpraksiser i hverdagslivet i barnehagen. *Nordisk barnehageforskning, 21*(3), 186–204. https://doi.org/10.23865/nbf.v21.493

Holflod, K. (2024). Perspektiver på legedeltagelse og legepraksis i grønlandske børnehaver – mellem risikofyldte, grænseudforskende og farlige lege. *BUKS - tidsskrift for børne- og ungdomskultur, 40*(68), 195–212. https://doi.org/10.7146/buks.v40i68.143525

Holmberg, Y., & Nilsson, M.-H. Z. (2024). Music-specialized teachers' reasoning on music practice in preschool: Music knowledge, courage, and visions. *Nordisk barnehageforskning, 21*(3), 403–424. https://doi.org/10.23865/nbf.v21.539

Homme, A., & Eide, H. M. K. (2024). Hva gjør pedagogene i barnehagen? Barnehagelærernes arbeidsdeling i møte med skjerpet pedagognorm. *Nordisk barnehageforskning, 21*(2), 118–139. https://doi.org/10.23865/nbf.v21.432

Homme, A., Ludvigsen, K., & Danielsen, H. (2024). Layering and institutional change: Framework plan revision in Norwegian early childhood education and care. *Journal of Educational Change, 25*, 635–653. https://doi.org/10.1007/s10833-024-09512-1

Hovde, H. (2024). Songsamling i barnehagen. Literacypraksis med 1–3-åringar. In L. I. A. Håberg, G. K. Juuhl, S. J. Helset, & E. Brunstad (Eds.), *I skriftkulturens grenseland – tidleg literacy i barnehage, fritid og skule* (pp. 11–34). Cappelen Damm Akademisk. https://doi.org/10.23865/noasp.229.ch1

Høyland, R., & Hofslundsengen, H. C. (2024). Ressurs og mangel: Barnehagelærarars oppfatningar av det komplekse språkarbeidet i den fleirspråklege barnehagen. *Nordisk barnehageforskning, 21*(1), 133–153. https://doi.org/10.23865/nbf.v21.367

Hreinsdóttir, A. M. (2024). Sameiginlegir leikheimar barna og leikskólakennara. *Netla*. https://doi.org/10.24270/netla.2024/1

Hreinsdóttir, A. M., & Einarsdóttir, J. (2024). Félags- og tilfinningahæfni: Lykill að farsæld barna. Um þróunarverkefni í fimm leikskólum. *Netla*. https://doi.org/10.24270/netla.2024/12

Hreinsdóttir, A. M., Pálsdóttir, P., & Grétarsdóttir, S. (2024). Leikur og þátttaka barna í leikskólastarfi: Stuðningur deildarstjóra og annars starfsfólks. *Netla*. https://doi.org/10.24270/netla.2024/1

Hultberg Ingridz, K. (2024). Responser som grund för gemensamt innehåll. Om undervisning i förskola. *Nordisk barnehageforskning, 21*(3), 165–185. https://doi.org/10.23865/nbf.v21.554

Hulth, M. (2024). "It can be an abuse, even though both have consented": Swedish preschool practitioners' discussions about teaching (sexual) consent to preschoolers. *Children & Society, 40*(1), 117–131. https://doi.org/10.1111/chso.12883

Husted, M., Madsen, K. D., & Jørgensen, N. J. (2024). Naturforhold og trædesten til pædagogik for bæredygtighed i dagtilbud. *Forskning i pædagogers profession og uddannelse, 8*(2), 15–23. https://doi.org/10.7146/fppu.v8i2.150372

Irgens, T. B., Ryland, L. K., & Egeland, O.-V. (2024). Risikolek – en fare eller nødvendighet? In A. Ø. Halsnes & L. K. Ryland (Eds.), *Hånd i hånd i barnehagelærerutdanningen: Der lek, fag og praksis møtes* (pp. 29–42). Fagbokforlaget. https://doi.org/10.55669/oa291002

Isotalo, S., Ukkonen-Mikkola, T., Lämsä, J., & Rutanen, N. (2024). Early childhood education and care teachers' gaze behavior across pedagogical episodes in toddler groups in Finland. *International Journal of Early Childhood, 57*, 1–23. https://doi.org/10.1007/s13158-023-00387-6

Iversen, L. (2024). Personalets betydning når ekskludering skjer i barnehagens lekefellesskap. *Nordisk barnehageforskning, 21*(3), 227–246. https://doi.org/10.23865/nbf.v21.563

Janninger, L., Salvesen, P. E., & Åmot, I. (2024). Barnehagelederes rolleforståelse i implementeringen av en statlig initiert prosess. *Nordisk barnehageforskning, 21*(2), 20–41. https://doi.org/10.23865/nbf.v21.428

Jannok Nutti, Y., Johansson, V. M., & Westman Kuhmunen, A. (2024). Enhancing storytelling about Skábma traditions in early childhood education and care as part of a Sámi decolonising process. *Nordisk tidsskrift for pedagogikk og kritikk, 10*(3), 129–143. https://doi.org/10.23865/ntpk.v10.5357

Jäntti, A.-M., & Mononen, R. (2024). LukiMat ja Mavalka: Matemaattisten taitojen tuen tarpeen tunnistaminen esiopetuksessa. *Journal of Early Childhood Education Research, 13*(2), 1–29. https://doi.org/10.58955/jecer.130937

Järventausta, E., Paananen, M., Karila, K., & Tammelin, M. (2024). Sociomaterial production of parents' positions in the ECEC institution. *Contemporary Issues in Early Childhood*, 1–14. https://doi.org/10.1177/14639491241293472

Jensen, G. (2024). Styrking av barns medvirkning og psykiske helse i nordsamisk barnehage. *Tidsskrift for psykisk helsearbeid, 21*(4), 302–312. https://doi.org/10.18261/tph.21.4.3

Johansen, W., Tangen, S., & Arfa, S. (2024). *Å lykkes i barnehage og skole: Barn og elever med autismespekterforstyrrelser og deres foreldres erfaringer med barnehage og skoletilbud i Trondheim kommune*. Norges teknisk-naturvitenskapelige universitet. https://hdl.handle.net/11250/3175380

Johansson, E., & Forssten Seiser, A. (2024). Principals' professional learning as praxis-oriented change – leading digitalisation in preschool education. *Research in Educational Administration and Leadership, 9*(1), 1–38. https://doi.org/10.30828/real.1416955

Johansson, E., Walker, S., Lunn, J., Whiteford, C., Karlsudd, P., Puroila, A.-M., Piskur, B., & Einarsdóttir, J. (2024). Educators' and parents' perspectives about belonging in early years education in Europe. *International Journal of Early Childhood, 57*, 331–355. https://doi.org/10.1007/s13158-024-00400-6

Jonsdottir, F., & Einarsdóttir, J. (2024). Pedagogical challenges and practices in multicultural classrooms: A praxeological study. *Educational Action Research, 32*(1), 127–143. https://doi.org/10.1080/09650792.2022.2064891

Jørgensen, E. B., Birkelund, R., & Høybye-Mortensen, M. (2024). Når børn mistrives: Hvilke coping-mekanismer er på spil i samarbejder på tværs? *Tidsskrift for professionsstudier, 20*(38), 84–93. https://doi.org/10.7146/tfp.v20i38.152192

Jørgensen, H. H., & Koch, A. B. (2024). Pædagogers betydning for børns oplevelser af leg: "Du må ikke grille en baby". *Nordisk tidsskrift for pedagogikk og kritikk, 10*(5), 34–47. https://doi.org/10.23865/ntpk.v10.5978

Juuhl, G. K. (2024). Boka mi – ein meiningsfull literacypraksis på småbarnsavdeling. *Nordic Journal of Literacy Research, 10*(4), 67–82. https://doi.org/10.23865/njlr.v10.6153

Juutinen, J., Ólafsdóttir, S. M., & Einarsdóttir, J. (2023). Children's belonging constructed through material relations in multicultural early education settings. *Scandinavian Journal of Educational Research, 68*(5), 878–889. https://doi.org/10.1080/00313831.2023.2196540

Jylänki, P., Sääkslahti, A., & Aunio, P. (2024). Intervention effects on low performing preschoolers' early mathematical skills: Adding fundamental motor skill practice as a supporting method. *Trends in Neuroscience and Education, 35*, 100227. https://doi.org/10.1016/j.tine.2024.100227

Kahriman-Pamuk, D., & Borg, F. (2024). Sustainability, play and children´s agency: A comparative study of the Swedish and Turkish preschool curricula. *European Early Childhood Education Research Journal, 33*(4), 659–675. https://doi.org/10.1080/1350293X.2024.2415948

Kahriman-Pamuk, D., & Samuelsson, I. P. (2024). Nurturing sustainability in toddlerhood: Investigating preschool teachers' views and daily practices in a Swedish preschool. *Children, 11*, 1412. https://doi.org/10.3390/children11121412

Kamola, M., Granone, F., Grøsvik, K., & Reikerås, E. (2024). High-quality strategies for supporting children's problem-solving skills: A study on coding toy activities in Norwegian ECECs. *European Early Childhood Education Research Journal, 32*(5), 814–833. https://doi.org/10.1080/1350293X.2024.2319783

Kangas, J., Sundstedt, M., Kaihovirta, H., & Harju-Luukkainen, H. (2024). Talking lion and bird – translanguaging and embodied learning in bilingual ECEC in Finland. *Nordisk barnehageforskning, 21*(1), 92–113. https://doi.org/10.23865/nbf.v21.368

Kaveri, G., Hu, A., Almeida, S. C., & Gomes, J. (2022). Crisis and adaptability: A model of early childhood teacher resilience across five countries. *Early Years, 44*(2), 314–327. https://doi.org/10.1080/09575146.2022.2139357

Keränen, V., & Ylitapio-Mäntylä, O. (2024). Big and small, girls and boys: Intersecting gendered touch practices in early childhood educators' discourses. *Gender and Education, 36*(2), 135–147. https://doi.org/10.1080/09540253.2023.2282985

Kess, R., & Einarsdóttir, J. (2023). Educators' narratives about everyday work of early childhood education and care in the culturally diverse North. *Early Years, 44*(2), 419–433. https://doi.org/10.1080/09575146.2022.2163621

Kippe, K., & Lagestad, P. (2024). The effect of activity videos on preschool children and preschool employees' physical activity level during preschool time. *Physical Activity and Health, 8*(1), 167–181. https://doi.org/10.5334/paah.345

Kivimäki, M., Karila, K., & Alasuutari, M. (2023). Enrichment and safety – the parents of young children constructing early childhood education and care institution in Finland. *European Early Childhood Education Research Journal, 32*(4), 577–590. https://doi.org/10.1080/1350293X.2023.2274537

Kiviranta, L., Lindfors, E., Rönkkö, M.-L., & Luukka, E. (2023). Outdoor learning in early childhood education: Exploring benefits and challenges. *Educational Research, 66*(1), 102–119. https://doi.org/10.1080/00131881.2023.2285762

Klarsgaard, N. N. T. (2024a). Whiteness and bodies out of place: A critical discussion of early childhood educators' regulatory language practice in a Danish context. *Nordisk tidsskrift for pedagogikk og kritikk, 10*(3), 99–112. https://doi.org/10.23865/ntpk.v10.5879

Klarsgaard, N. N. T. (2024b). Young white children's (not so) innocent wonderings about skin color. *Contemporary Issues in Early Childhood,* 1–14. https://doi.org/10.1177/14639491241297282

Kleemann, C. (2024). Transspråking i en samisk barnehageavdeling. *Nordisk barnehageforskning, 21*(1), 47–67. https://doi.org/10.23865/nbf.v21.380

Klippen, M. I. F., Moser, T., Reikerås, E., & Guldbrandsen, A. (2024). A review of trends in Scandinavian early childhood education and care research from 2006 to 2021. *Education Sciences, 14*(5), 478. https://doi.org/10.3390/educsci14050478

Koivula, M., Palojärvi, A., Moate, J., & Mård-Miettinen, K. (2024). Creating early language education affordances in two pre-primary education classrooms. *Journal of Early Childhood Education Research, 13*(1), 122–148. https://doi.org/10.58955/jecer.129612

Korkou, M., Castilla, J. E. M., Tarigan, A. K. M., & Sageidet, B. M. (2024). Travel patterns and factors explaining green space use for outdoor learning among school and preschool children. *Journal of Place Management and Development, 18*(2), 163–191. https://doi.org/10.1108/JPMD-08-2024-0085

Krempig, I. W., & Enoksen, E. (2024). Cultural education in nature through the lens of Sámi practitioners. *Education Sciences, 14*, 1246. https://doi.org/10.3390/educsci14111246

Kucirkova, N., & Kamola, M. (2024). The significance of children's olfactory experiences in a Norwegian kindergarten: An olfactory researcher-practitioner collaboration. *Educational Action Research, 32*(4), 586–605. https://doi.org/10.1080/09650792.2023.2240391

Kuukka, A., Salonen, E., & Sevon, E. (2024). Children's bodily positioning in accounts of naptime in early childhood education and care: A Foucauldian perspective. *European Early Childhood Education Research Journal, 33*(4), 631–644. https://doi.org/10.1080/1350293X.2024.2412127

Kvamme, I. (2024). *Den statlige styringen av barnehagen: Konsekvenser for politikk, profesjon og pedagogikk* (Doctoral dissertations at University of Agder, no. 503) [Doctoral dissertation, University of Agder]. Universitetet i Agder. https://hdl.handle.net/11250/3165103

Kvandal, K., Berland, J. E., & Langeland, W. (2024). 1, 2, 3 Alle sammen med? Inkluderende fellesskap gjennom lekne barnehageansatte. In A. Ø. Halsnes & L. K. Ryland (Eds.), *Hånd i hånd i barnehagelærerutdanningen: Der lek, fag og praksis møtes* (pp. 43–58). Fagbokforlaget. https://doi.org/10.55669/oa291003

Kvilhaugsvik, H., Eide, H. M. K., Danielsen, H., & Sataøen, S. O. (2024). Standardisation and diversification – policy tools to govern early childhood education and care. *Scandinavian Journal of Educational Research, 69*(5), 989–1003. https://doi.org/10.1080/00313831.2024.2369864

Kyrkjebø, T. (2024). Barnehagens digitale praksis og bruk av digital teknologi i arbeid med de yngste (1–3 år): En sosiologisk orientert diskursanalyse. *Nordisk barnehageforskning, 21*(3), 425–444. https://doi.org/10.23865/nbf.v21.479

Laaninen, M., Kulic, N., & Erola, J. (2024). Age of entry into early childhood education and care, literacy and reduction of educational inequality in Nordic countries. *European Societies, 26*(5), 1333–1362. https://doi.org/10.1080/14616696.2024.2310694

Lagerlöf, P. (2024). "Children say playing and adults say working": Children negotiating regulations on digital media in a Swedish preschool. *Children & Society, 40*(2), 312–327. https://doi.org/10.1111/chso.12904

Lähdesmäki, S., Maunumäki, M., & Nurmi, T. (2023). Play is the base! ECEC leaders' views on the development of digital pedagogy. *Early Childhood Education Journal, 52*, 1897–1910. https://doi.org/10.1007/s10643-023-01530-7

Lehto, R., Lehto, E., Saha, M., Moazami-Goodarzi, A., Sääksjärvi, K., Leppänen, M., Vepsäläinen, H., Nissinen, K., Erkkola, M., & Sajaniemi, N. (2022). Early childhood education and care context and cortisol from saliva and hair among 3–6-year-old children. *Early Years, 44*(2), 267–282. https://doi.org/10.1080/09575146.2022.2130879

Lennartsdotter, M. (2024). *Professionell komplexitet i svensk förskola: Pedagogers berättelser om förändrade villkor och uppdrag* (Karlstad University Studies, 2024:25) [Doctoral dissertation, Karlstad University]. https://doi.org/10.59217/efcz4430

Lindh, C., & Mansikka, J.-E. (2024). Implementering och utveckling av pedagogisk dokumentation. En aktionsforskning med fyra daghemsgrupper i Finland. *Nordisk barnehageforskning, 21*(3), 381–402. https://doi.org/10.23865/nbf.v21.538

Lindström, C., Pramling, N., & Simonsson, M. (2024). Professionell högläsning i förskolan: Förskollärares resonemang om en samtida didaktisering. *Nordisk barnehageforskning, 21*(3), 143–164. https://doi.org/10.23865/nbf.v21.481

Linnavalli, T., Martikainen, S., Belfrage, F., & Kalland, M. (2024). SAGA: Results of a second trial testing a mentalizing-based reading intervention on children and staff in early childhood education. *Frontiers in Education, 9*, 1284474. https://doi.org/10.3389/feduc.2024.1284474

Linnsand, P., Nygren, G., Hermansson, J., Gillberg, C., & Carlsson, E. (2024). Intervention in autism based on Early Start Denver Model in a multiethnic immigrant setting–experiences of preschool staff involved in its implementation. *Frontiers in Child and Adolescent Psychiatry, 3,* 1341729. https://doi.org/10.3389/frcha.2024.1341729

Lipponen, L., Rajala, A., Hilppö, J., & Pursi, A. (2024). Change laboratory as a tool to address moral-ethical tensions in the work of early childhood education professionals. *Teaching and Teacher Education, 142,* 104547. https://doi.org/10.1016/j.tate.2024.104547

Lopez-Agudo, L. A., & Marcenaro-Gutierrez, O. D. (2024). Enrolment in the first stage of early childhood education and students' academic performance: A cross-country analysis. *School Effectiveness and School Improvement, 35*(4), 365–386. https://doi.org/10.1080/09243453.2024.2358226

Löthman, C., & Puskás, T. (2024). Pathways to educational integration: Affordances and constraints on migrant children's participation in Swedish preschool teaching activities. *Early Years, 45*(5), 736–751. https://doi.org/10.1080/09575146.2024.2412717

Loukkola, P., Puroila, A.-M., & Uitto, M. (2024). Lasten varhaiskasvatussuunnitelma keskustelut ihmissuhteiden kutoumina. *Journal of Early Childhood Education Research, 13*(2), 133–166. https://doi.org/10.58955/jecer.129102

Lundberg, A., Lindh, C., & Collberg, P. (2024). Are newly qualified preschool teachers ready for today's mandate? Principals' views in Sweden. *Journal of Early Childhood Teacher Education, 45*(3), 352–370. https://doi.org/10.1080/10901027.2024.2349050

Lund, H. H. (2021). "We are equal, but I am the leader": Leadership enactment in early childhood education in Norway. *International Journal of Leadership in Education, 27*(6), 1228–1253. https://doi.org/10.1080/13603124.2021.1969039

Lund, H. H. (2024a). A balancing act: Navigating policy as street-level bureaucrats. A study of pedagogical leadership in early childhood education in Norway. *Nordisk barnehageforskning, 21*(2), 166–185. https://doi.org/10.23865/nbf.v21.454

Lund, H. H. (2024b). "We try to give a good life to the children"-refugee parents and ECE professionals experiences of the early childhood education partnership in Norway. *Frontiers in Education, 9*, 1331771. https://doi.org/10.3389/feduc.2024.1331771

Lund, K., Redfors, A., & Jonsson, A. (2024a). Can we play with science? Preschool teachers' discussion about play-responsive teaching and how science content can be introduced into play with support of digital tools. *Early Years, 45*(3–4), 426–440. https://doi.org/10.1080/09575146.2024.2365182

Lund, K., Redfors, A., & Jonsson, A. (2024b). Preschool teachers' experiences of using projected images and videos in attempted play-responsive science teaching. *Early Childhood Education Journal, 53*, 2677–2686. https://doi.org/10.1007/s10643-024-01777-8

Lund, O., Blume, M., & Jensen, J.-O. (2024). Bevægelsespraksisser i dagtilbud. *Forskning i Pædagogers Profession og Uddannelse, 8*(2), 81–90. https://doi.org/10.7146/fppu.v8i2.150379

Lundqvist, J. (2024). Involvement of children with disabilities in peer play at inclusive preschools: Three studies with a single case research design. *International Journal of Special Education, 39*(1), 136–148. https://doi.org/10.52291/ijse.2024.39.13

Lundqvist, J., & Arvidsson, P. (2024a). A change towards preschool inclusion: A case study. *Journal of Disability Studies in Education, 4*(1), 75–97. https://doi.org/10.1163/25888803-bja10029

Lundqvist, J., & Arvidsson, P. (2024b). Digital technology, young children with disabilities, and preschool inclusion: An observation study in the context of the Swedish preschool. *Nordic Studies in Education, 44*(1), 41–53. https://doi.org/10.23865/nse.v44.5684

Lundqvist, J., Franzén, K., Wetso, G.-M., Sandström, M., Larsdotter Bodin, U., & Runström Nilsson, P. (2024). *Digitala verktyg och differentierad undervisning i tidiga skolår: Ett storskaligt utvecklings- och forskningsprojekt för lärarprofessionen i framtidens förskola och skola (2019–2021).* Mälardalens universitet. https://urn.kb.se/resolve?urn=urn:nbn:se:mdh:diva-68408

Lundqvist, J., Sandström, M., Franzén, K., Wetso, G.-M., Larsdotter Bodin, U., & Runström Nilsson, P. (2024). A school improvement project about digital technology and differentiated instruction: Outcomes and a project model. *Utbildning & Lärande, 18*(1), 75–94. https://doi.org/10.58714/ul.v18i1.14540

Lytje, M., Dyregrov, A., & Gjestad, R. (2024). Evaluating bereavement response plans in daycare: A comparative analysis of support systems in Denmark and Norway. *Illness, Crisis & Loss, 33*(3), 702–716. https://doi.org/10.1177/10541373241268047

Magnusson, L. O. (2021). 'Look, my name! I can write' – literacy events and digital technology in the preschool atelier. *Journal of Early Childhood Literacy, 24*(2), 253–275. https://doi.org/10.1177/14687984211058943

Maison, L. M. (2023). "Who owns time?": Reflecting on the temporal dimension of sustainability with Zapatista and Norwegian educators. *Pedagogy, Culture & Society, 32*(5), 1413–1431. https://doi.org/10.1080/14681366.2023.2183239

Manni, A., Annerbäck, J., Löfgren, H., & Mårtensson, F. (2024). Encounters with ice and snow in preschool outdoor practices – and the becoming of (un)sustainability values. *Journal of Adventure Education and Outdoor Learning, 26*(1), 49–64. https://doi.org/10.1080/14729679.2024.2422412

Manni, A., Annerbäck, J., Löfgren, H., Mårtensson, F., & Fröberg, A. (2024). Places, spaces and encounters with nature – socio-material discourses in Swedish preschools. *International Journal of Early Years Education, 33*(3), 545–563. https://doi.org/10.1080/09669760.2024.2307361

Mansikka, J.-E., Londén, M., Holm, G., Saloranta, M., & Nordström, A. (2024). Language as a medium for inclusion and exclusion: Supporting multilingualism in a Swedish minority language ECEC setting in Finland. *Journal of Early Childhood Education Research, 13*(1), 319–342. https://doi.org/10.58955/jecer.130135

Martikainen, S., Kalland, M., Linnavalli, T., Kostilainen, K., Aittokoski, M., Reunamo, J., Vasileiou, Z., & Tervaniemi, M. (2023). Supporting social-emotional development in early childhood education and care – a randomized parallel group trial evaluating the impact of two different interventions. *Scandinavian Journal of Educational Research, 68*(5), 1069–1087. https://doi.org/10.1080/00313831.2023.2204119

Martín-Bylund, A. (2024). Inte ett rätt sätt. Professionellt (transspråkande) omdöme vid språkundervisning i förskolan. *Nordisk barnehageforskning, 21*(1), 154–173. https://doi.org/10.23865/nbf.v21.379

Marttila, J., Fukkink, R., & Silvén, M. (2023). Early childhood education professionals' mentalization: A pilot study. *Early Years, 44*(3–4), 631–648. https://doi.org/10.1080/09575146.2023.2215477

Masoumi, D., & Bourbour, M. (2024). Framing adequate digital competence in early childhood education. *Education and Information Technologies, 29*, 20613–20631. https://doi.org/10.1007/s10639-024-12646-7

Moate, J., Lempel, L., Palojärvi, A., & Kangasvieri, T. (2024). Teacher development through language-related innovation in a decentralised educational system. *Professional Development in Education, 50*(4), 730–745. https://doi.org/10.1080/19415257.2021.1902838

Moberg, E. E. (2024). Minecraft and Super Mario as enacted in a preschool setting: Children's engagements with digital popular culture beyond player–interface–screen ecologies. *Contemporary Issues in Early Childhood, 26*(3), 398–411. https://doi.org/10.1177/14639491231225225

Moen, K. (2024). Majoritets- og minoritetsnorske foreldres holdninger til religion i barnehagen. *Prismet, 75*(4), 213–228. https://doi.org/10.5617/pri.12024

Moilanen, J. H., Juutinen, J., & Siippainen, A. (2024). Lasten osallisuuden mahdollisuudet kuvataiteen traditioissa. *Kasvatus & Aika, 18*(1), 5–22. https://doi.org/10.33350/ka.127154

Moilanen, T., Bjorbækmo, W., & Håkstad, R. B. (2024). Lek i barnehagen for barn med store motoriske funksjonshindringer: En intervju- og observasjonsstudie. *Fysioterapeuten, 5*(24), 14–19.

Montalvan Castilla, J. E. (2024). Children's understanding and STEM-related experiences of solar energy and technologies in a smart kindergarten in Norway. *European Early Childhood Education Research Journal, 33*(2), 194–210. https://doi.org/10.1080/1350293X.2024.2413861

Montalvan Castilla, J. E., Korkou, M., Sageidet, B. M., & Mawira Tarigan, A. K. (2024). Urban green spaces in early childhood education and care: Insights from teachers in Stavanger, Norway. *European Early Childhood Education Research Journal, 33*(4), 709–726. https://doi.org/10.1080/1350293X.2024.2412782

Mörk, S. B., & Sigurðardóttir, I. Ó. (2024). „Með fagvitund að vopni": Upplifun leikskólakennara af hlutverki sínu í framvarðasveit í heimsfaraldri. *Tímarit um uppeldi og menntun, 33*(1), 37–54. https://doi.org/10.24270/tuuom.2024.33.3

Moxnes, A. R., & Aslanian, T. K. (2024). Touch: Romanticised micro-moments from a farm kindergarten. *Contemporary Issues in Early Childhood, 27*(1), 101–112. https://doi.org/10.1177/14639491241260913

Muhonen, H., Saranko, L., Sulkanen, M., Alasuutari, M., & Lerkkanen, M.-K. (2024). Kaksivuotisen esiopetuksen kokeilun opettajien käsityksiä viisivuotiaiden lasten esiopetuksen ja varhaiskasvatuksen eroista. *Journal of Early Childhood Education Research, 13*(2), 215–246. https://doi.org/10.58955/jecer.131857

Munck, C., & Marschall, A. (2024). Pedagogical boundary work: When the welfare state becomes entangled with family affairs. *Early Years, 45*(3-4), 671–685. https://doi.org/10.1080/09575146.2024.2404516

Myklebust, H., & Høisæter, S. (2024). «Han har tre bein på kvar side!» – Om barns møte med det naturfaglege språket. In L. I. A. Håberg, G. K. Juuhl, S. J. Helset, & E. Brunstad (Eds.), *I skriftkulturens grenseland – tidleg literacy i barnehage, fritid og skule* (pp. 123–151). Cappelen Damm Akademisk. https://doi.org/10.23865/noasp.229.ch5

Myrstad, A. (2024). Å flette og veve med samiske kunnskapsforståelser i barnehagen. *Speki. Nordic Philosophy and Education Review, 1*(2), 137–151. https://doi.org/10.5617/speki.11576

Næsby, T., & Pedersen, B. S. (2024). Being, becoming og belonging. Dannelse i børneperspektiv. *UCN Perspektiv,* (15), 27–36. https://doi.org/10.17896/UCN.perspektiv.n15.567

Niikko, A., & Ugaste, A. (2024). The meaningful experiences of Estonian and Finnish ECEC teachers during COVID-19. *Journal of Early Childhood Teacher Education, 46*(2), 449–464. https://doi.org/10.1080/10901027.2024.2440755

Nikkola, T., Kangas, J., & Reunamo, J. (2024). Children's creative participation as a precursor of 21st century skills in Finnish early childhood education and care context. *Learning and Individual Differences, 111*, 102437. https://doi.org/10.1016/j.lindif.2024.102437

Nilsen, M. (2024). Digital childhoods and multilingual identities: Preschool children's interactions with a picture book app. *Children & Society, 40*(2), 328–345. https://doi.org/10.1111/chso.12902

Nilsson, M.-H. Z., & Holmberg, Y. (2024). Discourses in Swedish preschool music teachers' conversations: Proficiency, subordination and resistance. *Music Education Research, 26*(5), 546–555. https://doi.org/10.1080/14613808.2024.2397338

Niu, S. J., Malinen, O.-P., Ruokonen, I., Melasalmi, A., Siklander, S., Wang, X., Zhang, H., Hurme, T.-R., Moilanen, J. H., Li, X., & Wang, L. (2024). A comparative study of early childhood education and care national documents between China and Finland. *Frontiers in Education, 9*, 1392920. https://doi.org/10.3389/feduc.2024.1392920

Nome, D. Ø. (2024). Playing with open-ended material as experiences of democracy: The Waldorf case. Journal of Early Childhood Research, 22(4), 515–526. https://doi.org/10.1177/1476718X241241143

Nordin, P., Svanbäck-Laaksonen, M., & Heikkilä, M. (2024). Pedagogiskt ledarskap för personalen, verksamheten och organisationen – en praktiknära studie med daghemsföreståndare. *Nordisk barnehageforskning, 21*(2), 42–61. https://doi.org/10.23865/nbf.v21.467

Nordmo, B. G. K. (2024). Promotion of 3–5-year-old girls' and boys' physical activity in the outdoor playground of kindergarten, viewed from female and male kindergarten staff's perspective. *European Early Childhood Education Research Journal, 32*(5), 772–787. https://doi.org/10.1080/1350293X.2024.2311076

Norling, M. (2024). The social language environment – domain: ECEC teachers' self-reported ratings of strategies in teaching literacy. *European Early Childhood Education Research Journal, 33*(3), 466–482. https://doi.org/10.1080/1350293X.2024.2389191

Norman, Å., Sedem, M., Ferrer-Wreder, L., Eninger, L., & Hau, H. G. (2024). Insights gained from a cultural adaptation of preschool promoting alternative thinking strategies©: The importance of teachers' cultures as an implementation driver. *Frontiers in Psychology, 15*, 1425936. https://doi.org/10.3389/fpsyg.2024.1425936

Novosel, Y. (2024). *Transspråkandets villkor i en supermångfaldig förskola: En konstruktivistisk grundad teori* [Doctoral dissertation, Stockholm University]. http://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-228525

Nurhonen, L., Saha, M., Fonsén, E., & Paananen, M. (2024). Työn vaatimusten, voimavarojen ja johtamisrakenteiden yhteys päiväkodin johtajien kokemaan työhyvinvointiin. *Journal of Early Childhood Education Research, 13*(3), 1–25. https://doi.org/10.58955/jecer.143249

Nutti, Y. J., & Johansson, V. M. (2024). Being, exploring, and playing outdoors: Young children philosophize through Sámi pedagogical imagination and storytelling. *Global Studies of Childhood, 15*(3), 301–316. https://doi.org/10.1177/20436106241260440

Ohlsson, A., Borg, F., & Gericke, N. (2024). Education for sustainability in preschool: Swedish preschool teachers' perspectives. *Cogent Education, 11*(1), 2353477. https://doi.org/10.1080/2331186X.2024.2353477

Ohlsson, A., Gericke, N., & Borg, F. (2024). Implementing education for sustainability in preschool: Teaching strategies and learning environments. *Journal of Outdoor and Environmental Education.* https://doi.org/10.1007/s42322-024-00181-5

Ohm, M., & Grindheim, L. T. (2024). Taktfull ledelse i barnehagen. *Forskning i pædagogers profession og uddannelse, 8*(2), 51–57. https://doi.org/10.7146/fppu.v8i2.150376

Ólafsdóttir, S. M., Danby, S., & Theobald, M. (2024). Making connections with children: Children's rights, ethics and research methods. *European Early Childhood Education Research Journal, 33*(5), 746–759. https://doi.org/10.1080/1350293X.2024.2437777

Ólafsdóttir, S. M., Hreinsdóttir, A. M., Björnsdóttir, M. S., & Karlsdóttir, K. (2024). Undirbúningstími í leikskólum: Hagur barna. *Netla.* https://doi.org/10.24270/netla.2024/3

Olsen, T. M., Barken, M. E., Brandt, L. A., Dale, T. S., & Guribye, E. (2024). *Barnehagelærere og styreres erfaringer med regional ordning for kompetanseutvikling i barnehagen (REkomp) som utviklingsarena*. Universitetet i Agder. https://hdl.handle.net/11250/3122585

Olsson, M. (2024). Risk eller frisk? Tvärprofessionell samverkan för att förebygga att barn i förskola och skola hamnar i svårigheter. *Utbildning & Lärande, 18*(1), 115–133. https://doi.org/10.58714/ul.v18i1.17878

Olsson, M., Ericson, J., Randell, E., & von Ahlefeld Nisser, D. (2023). Between an educational task and an idea for treatment: Multiprofessional collaboration for supporting children "at risk" – a coordinator role in pedagogical practice. *Scandinavian Journal of Educational Research, 68*(4), 765–778. https://doi.org/10.1080/00313831.2023.2185809

Ongoro, C. A., & Fanjiang, Y.-Y. (2024). Digital game-based technology for English language learning in preschools and primary schools: A systematic analysis. *IEEE Transactions on Learning Technologies, 17*, 202–228. https://doi.org/10.1109/TLT.2023.3268282

Os, E., Winger, N., & Hernes, L. (2024). «Sånn må det være nå.» Barns handlingsrom i barnehager under koronapandemien. *Barn – forskning om barn og barndom i Norden, 42*(1), 52–69. https://doi.org/10.23865/barn.v42.5598

Otterborn, A., Sundberg, B., & Schönborn, K. (2024). Towards a digital preschool community: Applying activity theory to explore teachers' views and use of digital tools in science activities. *Nordic Studies in Science Education, 20*(2), 158–175. https://doi.org/10.5617/nordina.10350

Ovati, T. S. R., Rydland, V., Grøver, V., & Lekhal, R. (2024). Teacher perceptions of parent collaboration in multi-ethnic ECEC settings. *Frontiers in Education, 9*, 1340295. https://doi.org/10.3389/feduc.2024.1340295

Pakarinen, S., Hansell, K., & Kvist, M. (2024). Teachers' reflections on linguistic diversity in the linguistic and semiotic landscapes of Swedish-medium ECEC units in Finland. *Journal of Early Childhood Education Research, 13*(1), 196–220. https://doi.org/10.58955/jecer.130115

Palla, L. (2023). The need for speed: Identification of 'the deviant' as the ultimate goal for high returns in early childhood education and care. *Critical Studies in Education, 65*(4), 366–385. https://doi.org/10.1080/17508487.2023.2292540

Palla, L., & Eng, J. (2023). Child sexual assault or curious play? Adults negotiating appropriate behaviour in terms of age, gender and sexuality when responding to an incident in Swedish early childhood education. *Sex Education, 24*(5), 694–706. https://doi.org/10.1080/14681811.2023.2253532

Palmér, H., Björklund, C., & Landgren, L. (2024). Matematikundervisning i förskolan – toddlare urskiljer kardinalitet genom att spela lotto. *Forskning om undervisning och lärande, 12*(3), 7–21. https://doi.org/10.61998/forskul.v12i3.26662

Palojärvi, A., Palviainen, Å., Koivula, M., Mård-Miettinen, K., & Rutanen, N. (2024). Changes in an early childhood education and care teacher's practical theory in language pedagogy as a nexus. *Nordisk barnehageforskning, 21*(3), 247–266. https://doi.org/10.23865/nbf.v21.521

Parviainen, P., Eklund, K., Koivula, M., Liinamaa, T., & Rutanen, N. (2024). Enhancing teachers' pedagogical awareness of teaching early mathematical skills – a mixed methods study of tailored professional development program. *Early Education and Development, 35*(5), 1103–1125. https://doi.org/10.1080/10409289.2024.2336661

Pawlowski, C. S., Vibild Lammert, A., Schipperijn, J., & Toftager, M. (2024). Nature-based or traditional kindergarten to develop fundamental motor skills? A pilot study. *Journal of Motor Learning and Development, 12*(1), 198–210. https://doi.org/10.1123/jmld.2023-0054

Pedersen, L., Fimreite, H., & Hofslundsengen, H. (2024). Norwegian ECEC teachers' play practices with children aged 2–3 years. *Early Years, 45*(3–4), 441–455. https://doi.org/10.1080/09575146.2024.2371122

Pedersen, L. H. (2024). Digital leg i dagtilbud: Praksiseksempler fra et legekulturelt og praksisorienteret perspektiv. *BUKS - tidsskrift for børne- og ungdomskultur, 40*(68), 155–170. https://doi.org/10.7146/buks.v40i68.143609

Peltoperä, K., Rautamies, E., & Lang, S. N. (2024). Constructing closeness in educational collaboration in extended hours ECEC. *Early Childhood Education Journal, 54*, 93–105. https://doi.org/10.1007/s10643-024-01798-3

Peltoperä, K., & Ukkonen-Mikkola, T. (2023). Relational expertise among Finnish educators working in extended hours ECEC. *Scandinavian Journal of Educational Research, 68*(7), 1357–1370. https://doi.org/10.1080/00313831.2023.2230226

Petursdóttir, S. S. (2024). Starting preschool: The importance of a good start. *Tímarit um uppeldi og menntun, 33*(1), 185–201. https://doi.org/10.24270/tuuom.2024.33.11

Pitkäniemi, H., Hirvonen, R., Heikka, J., & Suhonen, K. (2024). Teacher efficacy, its sources, and implementation in early childhood education. *Early Childhood Education Journal, 53*, 1705–1715. https://doi.org/10.1007/s10643-024-01713-w

Plum, M. (2024). Multi-sensitive attunement: Exploring the relationship between the toddler and the nursery teacher in the institutional arrangement of early childhood education and care. *Pedagogy, Culture & Society, 33*(3), 1019–1032. https://doi.org/10.1080/14681366.2024.2317857

Pollarolo, E., Papavlasopoulou, S., Granone, F., & Reikerås, E. (2024). Play with coding toys in early childhood education and care: Teachers' pedagogical strategies, views and impact on children's development. A Systematic Literature Review. *Entertainment Computing, 50*, 100637. https://doi.org/10.1016/j.entcom.2024.100637

Pramling, N., Myrendal, J., & Shengjergji, S. (2024). Negotiating agency in teacher-children triads of collaborative (re)storytelling: Empirical study and methodological implications. *Learning, Culture and Social Interaction, 49,* 100865. https://doi.org/10.1016/j.lcsi.2024.100865

Prins, K., Saabye Christensen, K., Hvid Thingstrup, S., & Aabro, C. (2024). Lighedsskabende arbejde i daginstitutionen – dilemmaer og blinde vinkler. *Barn – forskning om barn og barndom i Norden, 42*(3–4), 44–60. https://doi.org/10.23865/barn.v42.6081

Puskás, T., Andersson, A., & Slaughter, V. (2024). From a crisis management tool to proactive death education in Swedish preschools. *Contemporary Issues in Early Childhood, 27*(1), 52–65. https://doi.org/10.1177/14639491241246121

Quinones, G., Pursi, A., & Lipponen, L. (2024). Forms of disrespect: Toddler's peer conflicts in early childhood education and care. *Contemporary Issues in Early Childhood, 26*(3), 331–346. https://doi.org/10.1177/14639491231222513

Raittila, R., Vuorisalo, M., & Rutanen, N. (2024). Constructing the space of transition within the early childhood education and care pedagogical environment: A child's resources and positions. *Contemporary Issues in Early Childhood, 26*(3), 412–425. https://doi.org/10.1177/14639491241246120

Ramberg, A. (2024). *Selfies, springfilmer och tjuvjakter: Förskolebarns bildskapande och estetiska utforskande med digitala verktyg* (Dalarna Doctoral Dissertations 41) [Doctoral dissertation, Dalarna University]. https://du.diva-portal.org/smash/record.jsf?pid=diva2%3A1900195&dswid=-6113

Rasmussen, L. S., & Jørgensen, N. J. (2024). Sted, krop og dyb geologisk tid: At læse om klimaforandringer i børnehaven. *Forskning i pædagogers profession og uddannelse, 8*(1), 31–38. https://doi.org/10.7146/fppu.v8i1.144785

Rege, M., Størksen, I., Solli, I. F., Kalil, A., McClelland, M. M., ten Braak, D., Lenes, R., Lunde, S., Breive, S., Carlsen, M., Erfjord, I., & Hundeland, P. S. (2024). The effects of a structured curriculum on preschool effectiveness: A field experiment. *Journal of Human Resources, 59*(2), 576–603. https://doi.org/10.3368/jhr.0220-10749R3

Repo, E., Aerila, J.-A., Tyrer, M., & Harju-Luukkainen, H. (2024). Multilingual learning environments in early childhood education in Finland. *Journal of Early Childhood Education Research, 13*(1), 221–248. https://doi.org/10.58955/jecer.129339

Revilla, Y. L., Raittila, R., Sevon, E., & Rutanen, N. (2024). Newcomer object ownership negotiations when transitioning from home care to early childhood education and care in Finland. *European Early Childhood Education Research Journal, 32*(2), 311–324. https://doi.org/10.1080/1350293X.2023.2250588

Revilla, Y. L., Rutanen, N., Sevón, E., & Raittila, R. (2024). Children under two as co-constructors of their transition from home care to early childhood education and care. *Barn – forskning om barn og barndom i Norden, 42*(1), 86–102. https://doi.org/10.23865/barn.v42.5477

Riad, R., Allodi, M. W., Siljehag, E., & Bölte, S. (2024). Dialogic reading in preschool: A pragmatic randomized trial enrolling additional language learners. *Scandinavian Journal of Educational Research, 69*(4), 772–789. https://doi.org/10.1080/00313831.2024.2348473

Rico-González, M., Martín-Moya, R., Mendoza-Muñoz, M., & Carlos-Vivas, J. (2024). Preschool children's adherence to the 24-hour physical activity guidelines: A systematic review comparing the sexes. *Health Education Journal, 83*(7), 695–704. https://doi.org/10.1177/00178969241269569

Rinta-Paavola, S., Ahtiainen, R., Heikonen, L., & Fonsén, E. (2024). Varhaiskasvatuksen johtajien työhyvinvointia tukevat ja haastavat tekijät pandemia-aikana. *Journal of Early Childhood Education Research, 13*(2), 187–214. https://doi.org/10.58955/jecer.135907

Rissanen, M.-J., Alasuutari, M., & von Bonsdorff, P. (2024). Interactional space for agency: Discussing photography with preschoolers. *Contemporary Issues in Early Childhood*, 1–19. https://doi.org/10.1177/14639491241288863

Røn-Larsen, M., & Stanek, A. H. (2024). Situated pedagogy in Danish daycare–the politics of everyday life. *Social Sciences, 13*(2), 118. https://doi.org/10.3390/socsci13020118

Roponen, H., Fonsén, E., Ukkonen-Mikkola, T., & Ahtiainen, R. (2023). Leading early childhood education centers as professional bureaucracies – social organizational structures in Finnish early childhood education. *International Journal of Educational Management, 38*(1), 286–301. https://doi.org/10.1108/IJEM-06-2023-0287

Roponen, H. M., Fonsén, E., Ukkonen-Mikkola, T., & Ahtiainen, R. (2024). Enhancing understanding of broad-based pedagogical leadership in Finnish early childhood education through cultural artifacts. *Educational Management Administration & Leadership, 54*(3), 1009–1031. https://doi.org/10.1177/17411432241285413

Rydland, H. T., & Christensen, D. A. (2024). Brukartilfredsheit i norske barnehagar. *Norsk statsvitenskapelig tidsskrift, 40*(3), 144–159. https://doi.org/10.18261/nst.40.3.2

Salhus, Ø., Håberg, L. I. A., & Huse, B. (2024). Musikalske tilnærmingar i barnehagen som støtte i barns språkutvikling. In L. I. A. Håberg, G. K. Juuhl, S. J. Helset, & E. Brunstad (Eds.), *I skriftkulturens grenseland – tidleg literacy i barnehage, fritid og skule* (pp. 35–59). Cappelen Damm Akademisk. https://doi.org/10.23865/noasp.229.ch2

Salonen, E., Pursi, A., & Lipponen, L. (2024). Varhaiskasvatuksen aloitus vuorohoidossa: Pienen lapsen suru ja sen kohtaaminen vaihtelevassa sosiaalisessa ympäristössä. *Journal of Early Childhood Education Research, 2*(13), 30–54. https://doi.org/10.58955/jecer.137388

Saure, I. L. (2024). Kunnskapsformidling i sakprosa for barn – ein analyse av sakprosaboka viss eg hadde hale (2019) og observasjon av høgtlesing av boka i ein barnehage. In L. I. A. Håberg, G. K. Juuhl, S. J. Helset, & E. Brunstad (Eds.), *I skriftkulturens grenseland – tidleg literacy i barnehage, fritid og skule* (pp. 61–84). Cappelen Damm Akademisk. https://doi.org/10.23865/noasp.229.ch3

Segerby, C., & Andersson, H. (2024). Vikten av tidiga specialpedagogiska insatser i förskolan för en framgångsrik skolgång. *Nordisk barnehageforskning, 21*(3), 118–142. https://doi.org/10.23865/nbf.v21.492

Selliseth, K. J. (2024). Kindergarten quality: Discourses on digitalisation in two Norwegian kindergartens. Nordisk Välfärdsforskning. *Nordic Welfare Research, 9*(2), 142–153. https://doi.org/10.18261/nwr.9.2.3

Selmer-Olsen, M., Søraunet, G. A., & Schram, M. (2024). «Den øverste sjefen, det vil jeg ikke være» – nyutdannede barnehagelæreres ledervisjoner møter barnehagehverdagen. *Nordisk barnehageforskning, 21*(4), 90–109. https://doi.org/10.23865/nbf.v21.487

Semundseth, M., Munch, C. B. Ø., & Hopperstad, M. H. (2024). Kunsten å kreve. En studie av personalets multimodale kravtekster til foreldre i barnehagens garderobe. *Nordic Journal of Literacy Research, 10*(4), 28–45. https://doi.org/10.23865/njlr.v10.6145

Sevón, E., Mustola, M., & Alasuutari, M. (2023). Dilemmas related to young children's participation and rights: A discourse analysis study of present and future professionals working with children. *Social Sciences, 13*(1), 27. https://doi.org/10.3390/socsci13010027

Shengjergji, S. (2024). «Yeah, I am making new stuff!»: Responsivity to and negotiations of agency during digital storytelling in preschool. *European Early Childhood Education Research Journal, 32*(5), 834–851. https://doi.org/10.1080/1350293X.2023.2301595

Shengjergji, S., Myrendal, J., & Pramling, N. (2024). Responding to children's semiotic repertoires in collaborative digital storytelling. *Early Childhood Education Journal, 53*, 2547–2558. https://doi.org/10.1007/s10643-024-01761-2

Shepley, C., Graley, D., & Lane, J. D. (2024). Preparing preschool educators to monitor child progress. *Infants & Young Children, 37*(1), 20–35. https://doi.org/10.1097/iyc.0000000000000255

Shuey, E. A., & Jamet, S. (2023). Composition of staff teams in early childhood education and care centres in nine countries. *International Journal of Child Care and Education Policy, 18*, 1. https://doi.org/10.1186/s40723-023-00121-8

Sihvonen, P., Lappalainen, R., Herranen, J., & Aksela, M. (2024). Promoting sustainability together with parents in early childhood education. *Education Sciences, 14*(5), 541. https://doi.org/10.3390/educsci14050541

Siippainen, A., & Pitkänen, H. (2024). On the surface and below: A genealogical look at the waves of evaluation in early childhood education and care. *Journal of Education Policy, 39*(6), 919–942. https://doi.org/10.1080/02680939.2024.2344099

Sillanpää, T., & Ylitapio-Mäntylä, O. (2024). Tyttöjen tila lastentarhoissa ja päiväkodeissa 1940–80-luvuilla. *Kasvatus & Aika, 18*(4), 46–65. https://doi.org/10.33350/ka.142548

Simonsson, M., & Cekaite, A. (2024). Förskolepedagogers reflektioner kring att delta i ett aktionforsningsprojekt om flerspråkighet och lek. *Venue*, (28), 3. https://doi.org/10.3384/venue.2001-788X.5481

Skaremyr, E., Hermansson, C., Abraham Getahun, Y., & Lindström, M. (2024). (Re)thinking children's picturebooks as the mirror of contemporary society. *Journal of Early Childhood Education Research, 13*(1), 343–367. https://doi.org/10.58955/jecer.130137

Søe, M. A., Schad, E., & Psouni, E. (2024). "We tend to underestimate the children!" – A qualitative analysis of preschool teachers' views on child-parent-teacher relationship-building during preschool transition. *Scandinavian Journal of Educational Research, 69*(5), 1097–1112. https://doi.org/10.1080/00313831.2024.2394392

Solberg, J. (2024). Barnehagelæreres profesjonsspråk i foreldresamtalen: Faglig nok for hvem? *Forskning og forandring, 7*(1), 92–113. https://doi.org/10.23865/fof.v7.5448

Sollerhed, A.-C. (2024). Early childhood educators' fear of injury risks limits movement and physical activity for children–a risk in itself! *Education Sciences, 14*(7), 755. https://doi.org/10.3390/educsci14070755

Sønsthagen, A. G. (2024). Lærande linjeleiarar si rolle i utviklinga av barnehagen som ein lærande organisasjon. *Norsk pedagogisk tidsskrift, 108*(2), 140–152. https://doi.org/10.18261/npt.108.2.5

Sønsthagen, A. G., & Street, K. (2024). Parent–staff collaboration in Norwegian early childcare centers. *Nordisk Barnehageforskning, 21*(3), 467–491. https://doi.org/10.23865/nbf.v21.541

Still, J. (2024). Uppdraget att undervisa i musik. Förskollärares uppdrag att undervisa i musik med utgångspunkt i den nationella läroplanens innehåll och mål. *Nordisk barnehageforskning, 21*(3), 58–78. https://doi.org/10.23865/nbf.v21.404

Størksen, I., Lenes, R., & Ten Braak, D. (2024). Betydningen av mors og fars inntekt og utdanning for kognitiv, sosial og akademisk utvikling i barnehagen og videre læring. *Nordisk barnehageforskning, 21*(3), 267–287. https://doi.org/10.23865/nbf.v21.607

Storli, R., Sandseter, E. B. H., & Sando, O. J. (2024). Looking beneath the surface: Associations between varied outdoor surfaces and children's diverse play behaviours in early childhood education and care institutions. *Landscape Research, 49*(4), 540–553. https://doi.org/10.1080/01426397.2024.2322131

Strand, B.-M. S., & Johnsen, R. V. (2024). Stilistiske trekk i nordnorske borns rolleleikperformansar: Ein kvantitativ og kvalitativ analyse. In L. I. A. Håberg, G. K. Juuhl, S. J. Helset, & E. Brunstad (Eds.), *I skriftkulturens grenseland – tidleg literacy i barnehage, fritid og skule* (pp. 85–121). Cappelen Damm Akademisk. https://doi.org/10.23865/noasp.229.ch4

Strand, G. M., & Kirkvold, L. (2024). *Kattem-modellen: Overgangspedagoger gir en bedre overgang fra barnehage til skole, piloteringen 2022*. Norges teknisk-naturvitenskapelige universitet. https://hdl.handle.net/11250/3165928

Styf, M., & Arvidsson, C. (2024). Vad är det som SKAver: Didaktiska val i två svenska kommuners systematiska kvalitetsarbete. *Nordisk barnehageforskning, 21*(2), 76–99. https://doi.org/10.23865/nbf.v21.446

Su, J., & Yang, W. (2023). Digital competence in early childhood education: A systematic review. *Education and Information Technologies, 29*, 4885–4933. https://doi.org/10.1007/s10639-023-11972-6

Sundström, J. (2024). Enacting a preschool curriculum: A case study of agentic leadership in Sweden. *Nordisk barnehageforskning, 21*(2), 206–225. https://doi.org/10.23865/nbf.v21.459

Svartaas, E., & Hedlund, M. (2024). Betydningen av samspill mellom barn med og uten funksjonsnedsettelse i barnehagen. *Barn – forskning om barn og barndom i Norden, 42*(2), 36–50. https://doi.org/10.23865/barn.v42.5907

Svinth, L., & Ringsmose, C. (2024). Daglige rutiner og børns deltagelse – den inspirerende praksis ifølge pædagogisk personale. *Paideia*, (28), 61–74. https://tidsskrift.dk/Paideia/article/view/152162

Thijssen, M. W. P. T., Rege, M., Solli, I. F., & Storksen, I. (2024). Cross productivities of executive functions: Evidence from a field experiment. *Journal of Human Capital, 18*(4), 563–589. https://doi.org/10.1086/732483

Tjäru, S., Høyland, R., Hofslundsengen, H., & Magnusson, M. (2024). Invented writing activities in Nordic early childhood education and care – traces of didactics in practice. *Nordic Journal of Literacy Research, 10*(4), 47–66. https://doi.org/10.23865/njlr.v10.6120.

Tjäru, S., Svanbäck-Laaksonen, M., Staffans, E., Still, J., Hirvi, J., Nordin, P., Eriksson, L., & Heikkilä, M. (2024). Helheter i de finländska styrdokumenten för småbarnspedagogik – huvudsak och huvudbry för lärarutbildningen. *Nordisk barnehageforskning, 21*(4), 110–131. https://doi.org/10.23865/nbf.v21.500

Tkachenko, E. (2024). Transspråklige praksiser i nordiske barnehager: En kunnskapsoversikt. *Nordisk barnehageforskning, 21*(1), 27–46. https://doi.org/10.23865/nbf.v21.381

Toivonen, H. (2024). Embodied with data: Early childhood education and care centre director's stories about living with datafication. *Contemporary Issues in Early Childhood, 25*(3), 333–346. https://doi.org/10.1177/14639491241266317

Tollnes, I. J. R., Sørensen, V., Tholin, K. R., Hognestad, K., Hannevig, L. V., Sanda, A. M., Storli, J. B., Kristiansen, A. L., & Bøe, M. (2024). Pedagogisk ledelse i norsk forskningslitteratur innenfor barnehagefeltet – en scoping review. *Nordisk barnehageforskning, 21*(2), 245–265. https://doi.org/10.23865/nbf.v21.455

Tunkiel, K. A., Fodstad, C. D., & Hoel, T. (2024). Reading practices with multilingual children in Norwegian kindergartens: Picturebooks, tangible objects, and playful bodies. *Barnboken, 47*. https://doi.org/10.14811/clr.v47.905

Tuset, E. H. (2024). Barns deltagelse i mataktiviteter og motivasjon til å smake og bruke matord basert på barnehagelærerstudenters praksisoppgave. *Nordisk barnehageforskning, 21*(3), 100–117. https://doi.org/10.23865/nbf.v21.498

Ukkonen-Mikkola, T., Isotalo, S., Chaudhuri, S., Salminen, J., Merjovaara, O., Lindén, C., & Rutanen, N. (2024). With sensitive eyes: ECEC teachers' visual gaze and related reflections on pedagogical actions in toddler groups using eye-tracking glasses. *Frontline Learning Research, 12*(2), 70–98. https://doi.org/10.14786/flr.v12i2.1153

Undheim, M., Kucirkova, N., Unstad, T., & Dardanou, M. (2024). Tracing the ontological beliefs of Norwegian educators concerning technology use in early childhood education and care. *Technology, Knowledge and Learning, 29*, 1627–1643. https://doi.org/10.1007/s10758-024-09733-6

Välimäki, S., Lammi-Taskula, J., Mesiäislehto, M., & Närvi, J. (2024). Growing inequality and diverging paths in early childhood education and care: Educational disparities in Europe. *Journal of International and Comparative Social Policy, 40*(1), 93–108. https://doi.org/10.1017/ics.2024.13

Vallberg-Roth, A.-C., Hansen, H., & Persson, M. (2024). Undervisning i förskola: Enligt skriftliga beskrivningar i samverkansforskning åren 2016 och 2023. *Nordisk barnehageforskning, 21*(3), 306–329. https://doi.org/10.23865/nbf.v21.624

Vartiainen, J., Sormunen, K., & Kangas, J. (2024). Relationality of play and playfulness in early childhood sustainability education. *Learning and Instruction, 93*, 101963. https://doi.org/10.1016/j.learninstruc.2024.101963

Vik, N. E. (2024). Ressursrik, men usikker: Flerspråklige barnehagelærere i Norge. Erfaringer og utfordringer. *Norsk pedagogisk tidsskrift, 108*(3), 280–293. https://doi.org/10.18261/npt.108.3.7

Vretblom, H. (2024). Digital systems for special educational needs documentation in Swedish preschools: New organisational maps for municipalities and professionals. *Scandinavian Journal of Educational Research, 69*(4), 713–728. https://doi.org/10.1080/00313831.2024.2348445

Waddling, J. (2024). *Playing with the global: Family dynamics and international education in a marketised preschool landscape* (Studier i utbildnings- och kultursociologi, 20) [Doctoral dissertation, Uppsala University]. http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-524213

Wahlgren, C. (2024). Visible activities, invisible children: Preschool digital communication in Sweden. *Contemporary Issues in Early Childhood, 0*(0), 1–17. https://doi.org/10.1177/14639491241301739

Wahlgren, C., & Günter, K. P. (2024). Portraits of Swedish natureculture identity – entanglements of (gender) equity and integration in early childhood education. *Gender and Education, 36*(5), 527–544. https://doi.org/10.1080/09540253.2024.2350521

Wang, S., Wang, X., Liang, L., & Xie, H. (2022). Teacher-child interaction domains measured by the CLASS and children's pre-literacy skills: A systematic review and meta-analysis. *Early Education and Development, 35*(3), 431–453. https://doi.org/10.1080/10409289.2022.2159259

Wiggins, S., Cromdal, J., & Willemsen, A. (2024). Daring to taste: The organisation of children's tasting practices during preschool lunches. *Appetite, 198,* 107378. https://doi.org/10.1016/j.appet.2024.107378

Wilhelmsen, T., Bjerknes, A.-L., & Moxnes, A. R. (2024). Pedagogical impacts of kindergartens' response to COVID-19. *Nordisk barnehageforskning, 21*(3), 360–380. https://doi.org/10.23865/nbf.v21.480

Wiseth, H. (2024). Refleksiv dramaturgi som veiviser i kunstpedagogisk arbeid sammen med barnehagebarn. *BUKS - Tidsskrift for Børne- & Ungdomskultur, 40*(68), 35–51. https://doi.org/10.7146/buks.v40i68.143603

Öhman, C. (2024). Utvecklingssamtal i förskolan – en studie om hur vårdnadshavares delaktighet framträder genom förskollärares professionalitet. *Paideia*, (26), 47–57. https://tidsskrift.dk/Paideia/article/view/144869

Öqvist, A., & Cervantes, S. (2024). Principals in preschool management and leadership: A necessary combination to ensure that preschool teachers are given conditions to be responsible for teaching in preschool. *Education Sciences, 14*(11), 1206. https://doi.org/10.3390/educsci14111206

Örberg, M., Olsson, I., & Klang, N. (2024). Viewing inclusion through the lens of democracy–conceptualizations and enactments in three early childhood educational settings. *Journal of Research in Special Educational Needs, 24*(4), 1115–1127. https://doi.org/10.1111/1471-3802.12699

Østrem, A. J. (2024a). Med tingene som landemerker: Gjenstanders betydning for barns jevnaldringsrelasjoner i barnehagen. *Forskning i pædagogers profession og uddannelse, 8*(2), 9, 42–50. https://doi.org/10.7146/fppu.v8i2.150375

Østrem, A. J. (2024b). Å være sammen og å delta: Barns relasjoner i barnehagen. *Norsk pedagogisk tidsskrift, 108*(1), 17–28. https://doi.org/10.18261/npt.108.1.3

Østrem, S. (2024). Kohortbarnehagen: Relasjonskompetanse anvendt i en unntakstilstand. *Norsk pedagogisk tidsskrift, 108*(1), 53–64. https://doi.org/10.18261/npt.108.1.6

Øyeflaten, I., Kjestveit, K., Skagseth, M., Labriola, M., & Holte, K. A. (2024). *Kartlegging av arbeidsmiljøarbeid i 74 barnehager* (rapport nr. 4-2024). NORCE Helse og samfunn. https://hdl.handle.net/11250/3122126

Øyum, L., & Lebesby, K. (2024). Medbestemmelsessystemets direkte medvirkning: Resultater fra et aksjonsforskningsprosjekt i sykehjem og barnehager. *Forskning og forandring, 7*(1), 49–71. https://doi.org/10.23865/fof.v7.5800

H. Supplementary figures

H.1. Growth of the Scandinavian research base

This appendix presents three views of the Scandinavian series (Norway, Sweden, and Denmark), the countries covered consistently across the mapping since 2006. Because Finland and Iceland entered the mapping only in 2024, the full Nordic totals cannot be compared over time, so these figures use the three-country series to show how the research base has grown. Each figure reads the same underlying data through a different lens: absolute growth, growth relative to each country's own starting point, and size relative to Sweden.

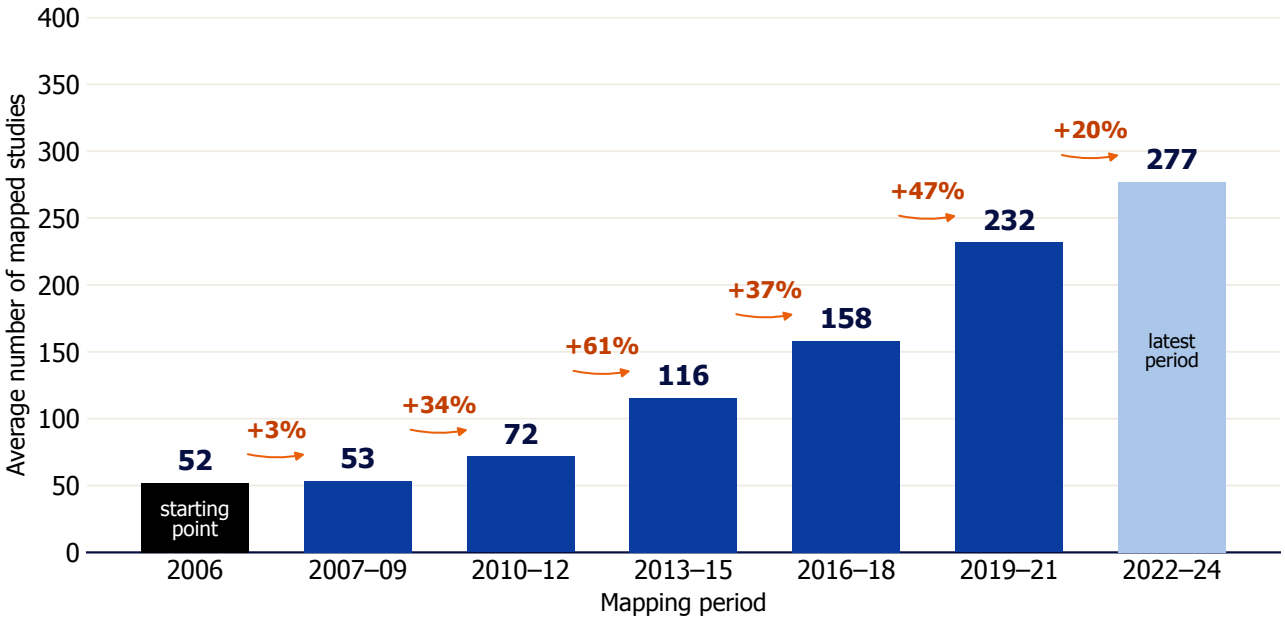


Figure H1. Average number of mapped studies per period, Scandinavian series

Note: Norway, Sweden, and Denmark only. Years are grouped into mapping periods, and the value for each period is the average annual number of mapped studies. The percentage above each block is the change from the previous period. Grouping into periods smooths year-to-year fluctuation and shows the underlying pace of growth. A study is counted once for each country it covers.

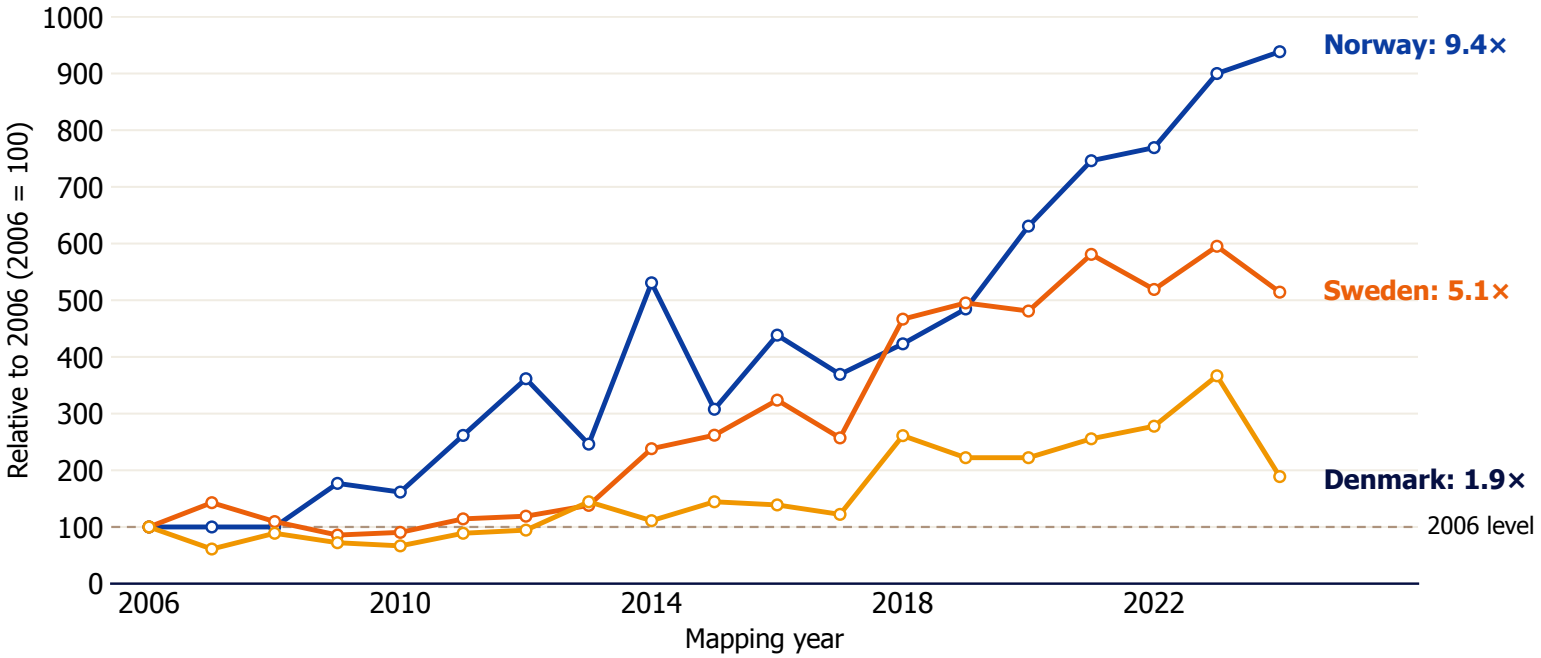


Figure H2. Growth of each country relative to its own 2006 level (2006 = 100)

Note: Each country's mapped study count is expressed as an index, with its 2006 level set to 100, so the lines show how many times over each country's output has multiplied rather than its absolute size. By 2024 Norwegian output had grown roughly ninefold, Swedish output around fivefold, and Danish output about twofold. Because the 2006 counts were small, between thirteen and twenty-one studies per country, these multiples should be read as broad orders of magnitude rather than precise rates.

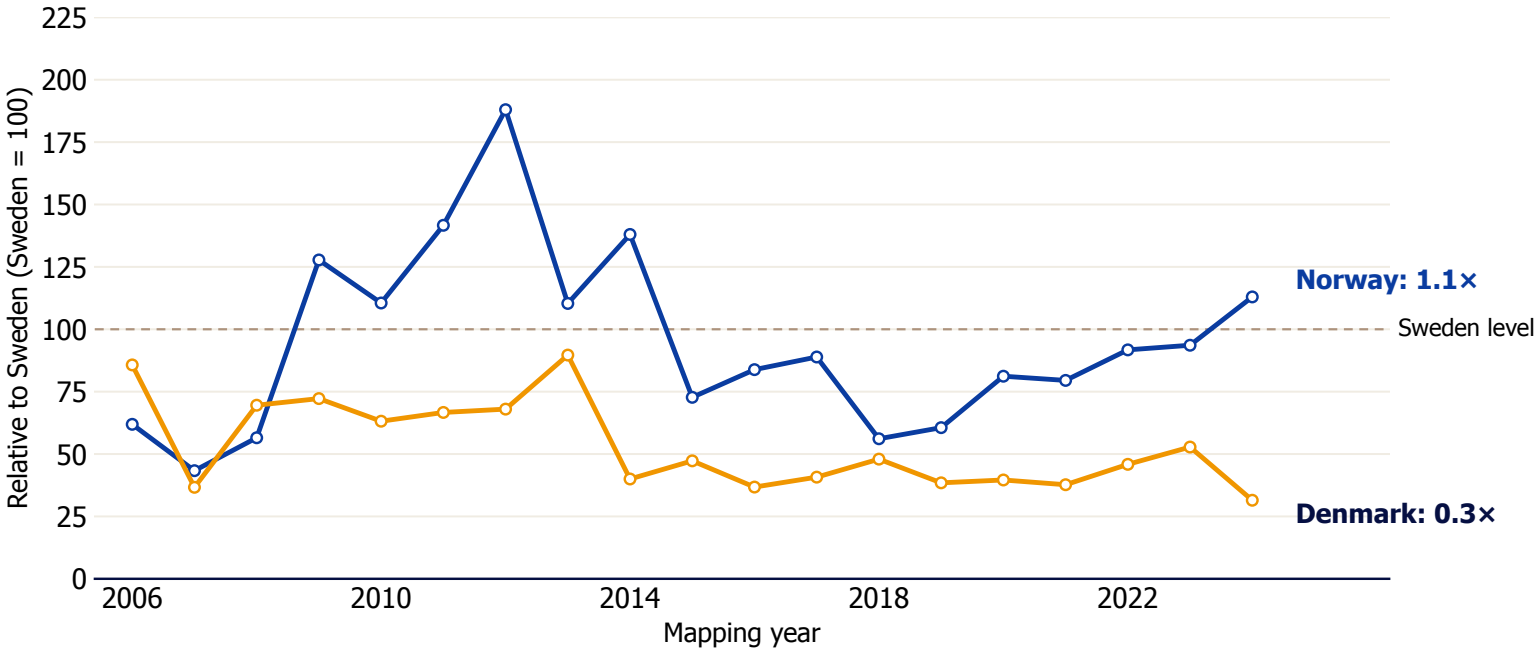


Figure H3. Each country's size relative to Sweden (Sweden = 100)

Note: Each country's mapped study count is expressed relative to Sweden in the same year, with Sweden set to 100. By 2024 Norway was close to Sweden in size, at about 1.1 times Sweden's count, while Denmark stood at roughly a third. A study is counted once for each country it covers.

Country covered	Language of writing: Norwegian	Swedish	Danish	Finnish	Icelandic	English	Total
Norway	**471** 45%	**3** 0%	**4** 0%		**1** 0%	**567** 54%	**1,046**
Sweden	**8** 1%	**390** 33%	**3** 0%			**782** 66%	**1,183**
Denmark	**4** 1%	**1** 0%	**324** 59%			**216** 40%	**545**
Finland		**5** 6%		**9** 10%		**72** 84%	**86**
Iceland					**4** 21%	**15** 79%	**19**

Figure H4. Language of writing by country, 2006–2024

Note: The full-period counterpart to Figure 2. Rows are the country covered and columns the language of writing. Each cell shows the number of studies and, below it, the within-country share (the row percentage). Language is coded once per study, while a study covering more than one country is counted once for each, so a study can appear in more than one row. Row percentages sum to 100 apart from rounding.

H.2. Is the 2024 topic profile different?

The figures in the main text show which topics dominated the 2024 mapping and how the field's focus has moved across periods. Two further questions matter for reading that profile: whether 2024 stands apart from the immediately preceding years, and whether adding Finland and Iceland changed what the mapping is about. The four figures below address each in turn. Together they suggest that the 2024 topic profile is largely a continuation of recent years rather than a departure, and that the two newly added countries broadly share the Scandinavian topic profile, with some differences of emphasis rather than wholesale divergence. This matters because it means the topic patterns described in the main text can be read as features of the field, not artefacts of a single year or of the expanded country coverage.

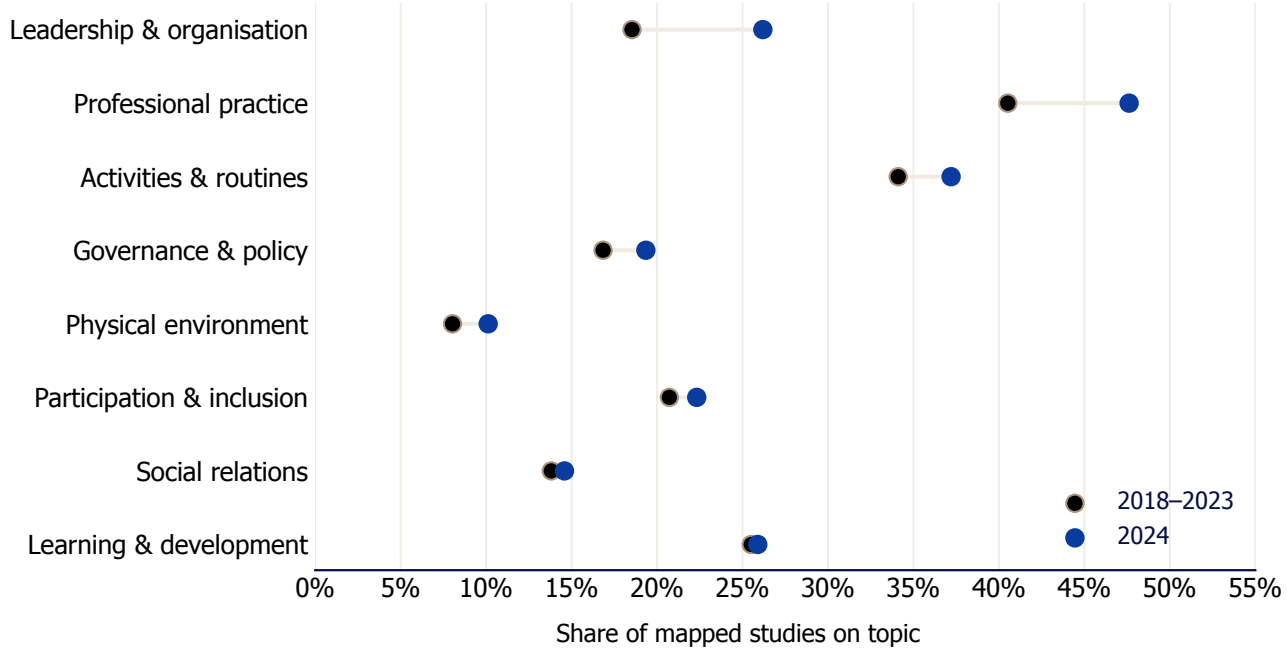


Figure H5. Major topics: 2024 compared within 2018–2023

Note: Each row is a major topic. The two points show the share of mapped studies coded with that topic in 2024 and, for comparison, the average share across 2018–2023, with the gap between them shown as a connecting line. A short line indicates that the topic held a similar place in both periods; a long line indicates a shift in emphasis.

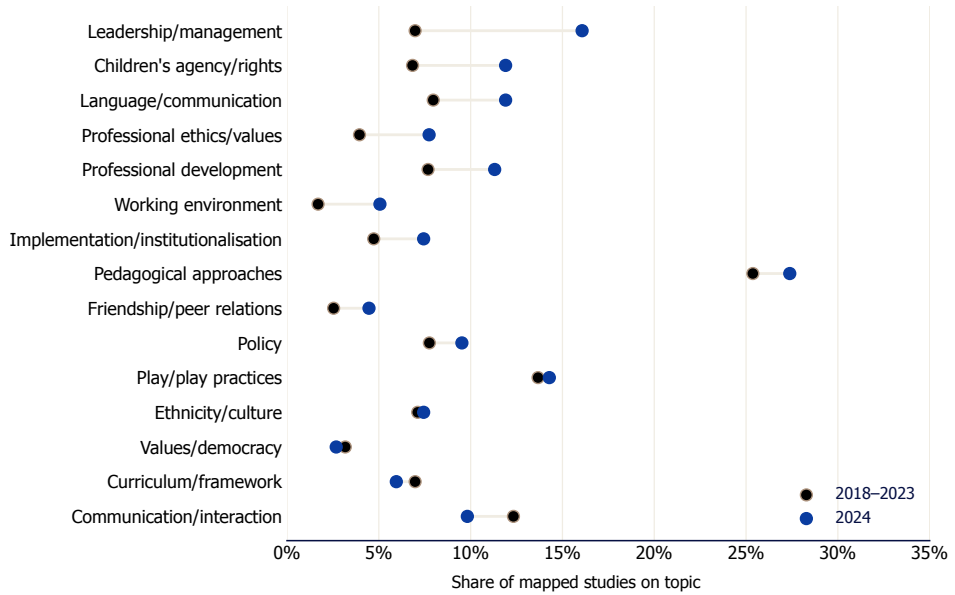


Figure H6. Subtopics: 2024 compared with 2018–2023

Note: As Figure H5, but for the more detailed subtopic coding, showing the most frequently coded subtopics. Each row compares the 2024 share with the 2018–2023 average. Residual "other" subtopic categories are excluded. Subtopics are not mutually exclusive, so shares do not sum to 100.

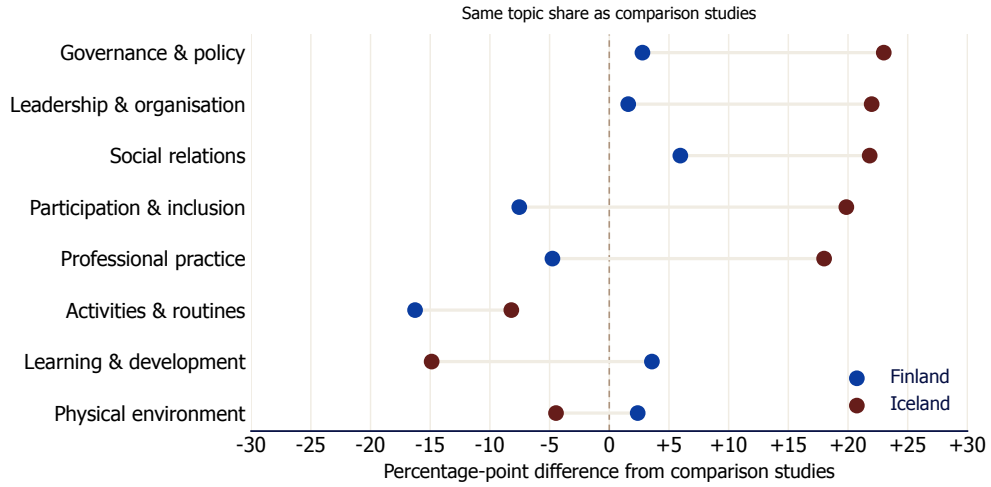


Figure H7. Major topics: How Finland and Iceland differ from the comparison studies

Note: Each row is a major topic. The points show, in percentage points, how far Finland's and Iceland's topic shares sit above or below the shares in the comparison studies.

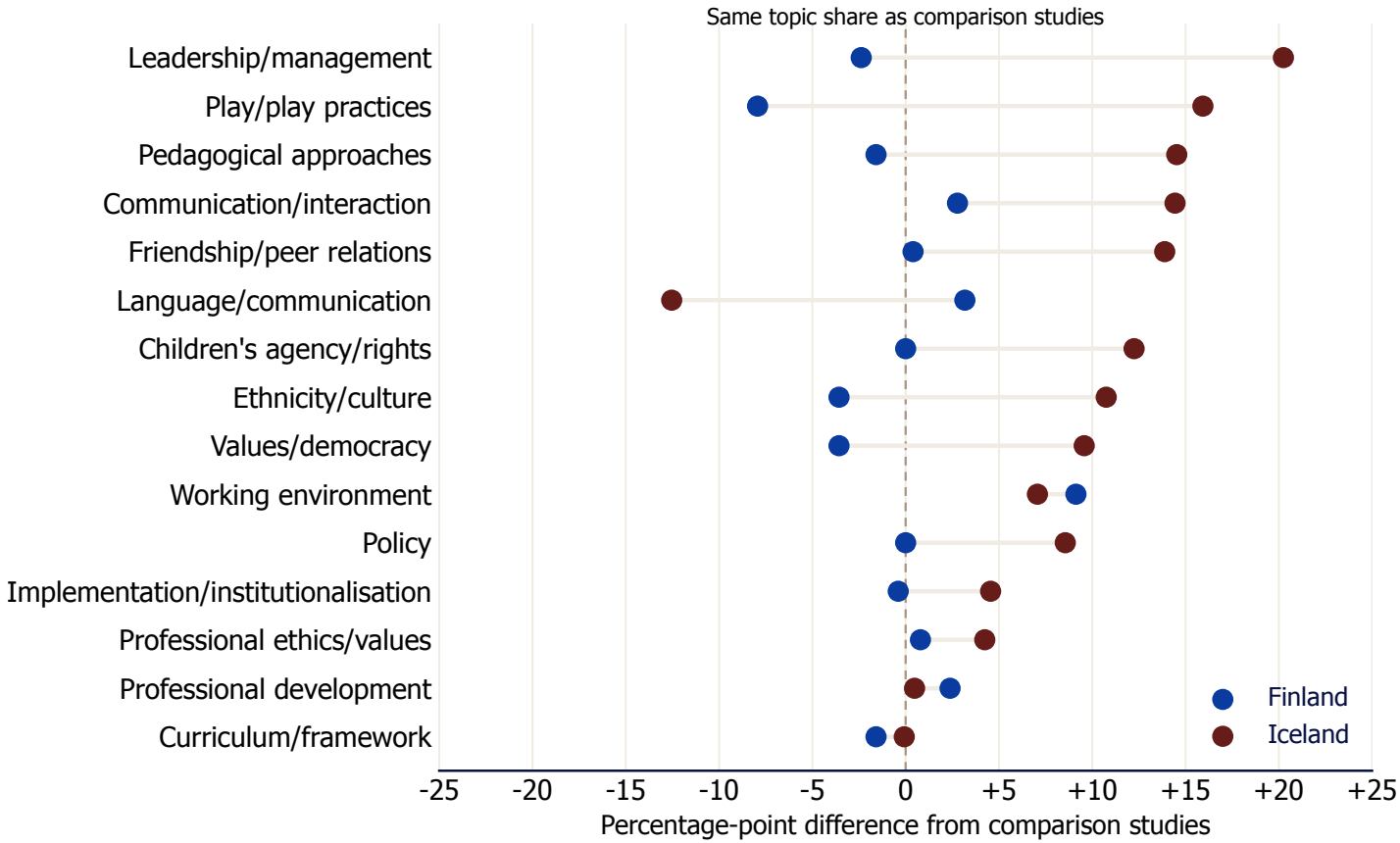


Figure H8. Subtopics: How Finland and Iceland differ from the comparison studies

Note: As Figure H7, but for the more detailed subtopic coding. Each row shows, in percentage points, how far Finland's and Iceland's subtopic shares depart from the comparison studies. Residual "other" categories are excluded.

H.3. Subjects and informants over the full period

Informant / direct data source

Subjects of study	Children	Educational staff	Parents	Governance actors	Not relevant	Other	N
Children	**1,190** 76%	**1,172** 75%	**256** 16%	**59** 4%	**9** 1%	**109** 7%	**1,569**
Educational staff	**756** 39%	**1,876** 98%	**205** 11%	**119** 6%	**9** 0%	**115** 6%	**1,921**
Parents	**73** 28%	**203** 77%	**220** 84%	**37** 14%	**2** 1%	**29** 11%	**263**
Governance actors	**18** 10%	**101** 56%	**36** 20%	**145** 81%	**9** 5%	**39** 22%	**180**
Not relevant		**2** 2%			**105** 96%	**2** 2%	**109**
Other	**49** 33%	**96** 65%	**27** 18%	**19** 13%	**1** 1%	**125** 84%	**148**
N	**1,229**	**2,117**	**362**	**182**	**131**	**212**	

Figure H9. Subjects of study by informant, 2006–2024

Note: The full-period counterpart to Figure 9. Rows are the subjects of a study (who it is about) and columns the informants (who provided the data). Each cell shows the number of studies and, below it, the row percentage, that is, among studies about a given subject, the share drawing on each informant group. Both codes allow more than one value per study, so a study can appear in several cells and rows do not sum to 100. Children aggregate all child-age codes; educational staff aggregate all staff sub-roles.

H.4. Funding and purpose by country

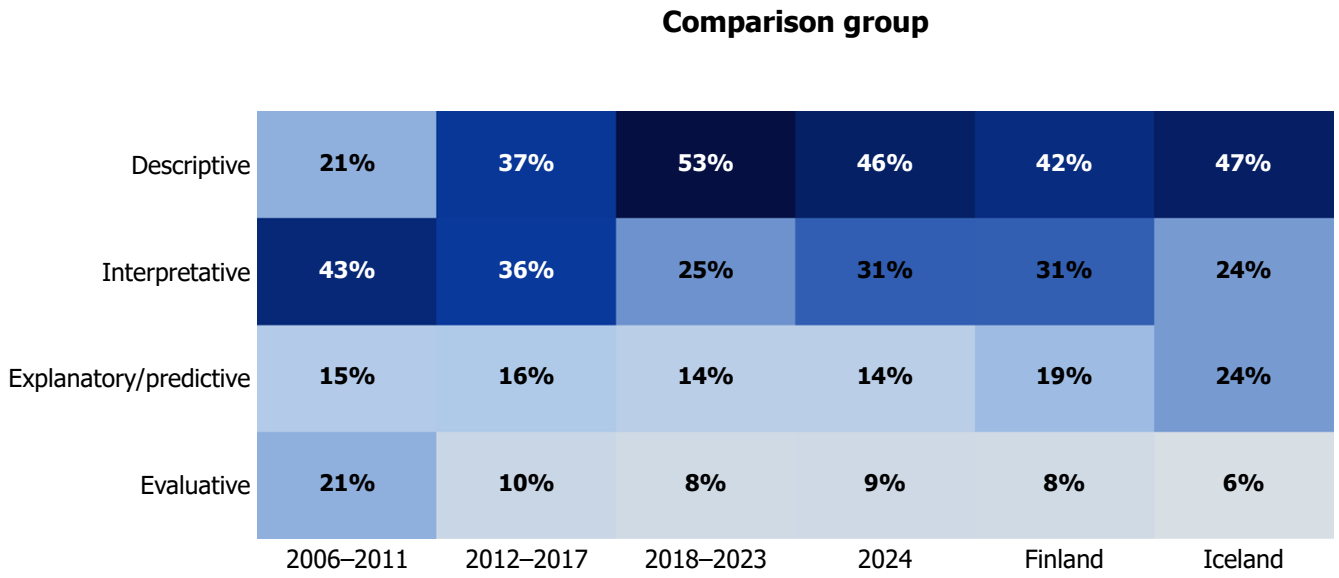


Figure H10. Study purpose by mapping period and country focus

Note: Each cell shows the percentage of all mapped publications in the displayed group that were coded with the study-purpose category. Period columns include all publications mapped in the stated years. The Finland and Iceland columns include 2024 publications covering those countries; multi-country publications are included in each applicable country profile. Study purpose is coded as a single category, so percentages sum to 100 within each column where all publications have a harmonised purpose code. N is the number of publications in the displayed group. Labels have been shortened for readability; full category names and definitions are provided in the codebook. Country comparisons are descriptive, and the Icelandic profile should be interpreted cautiously because of its small number of publications.

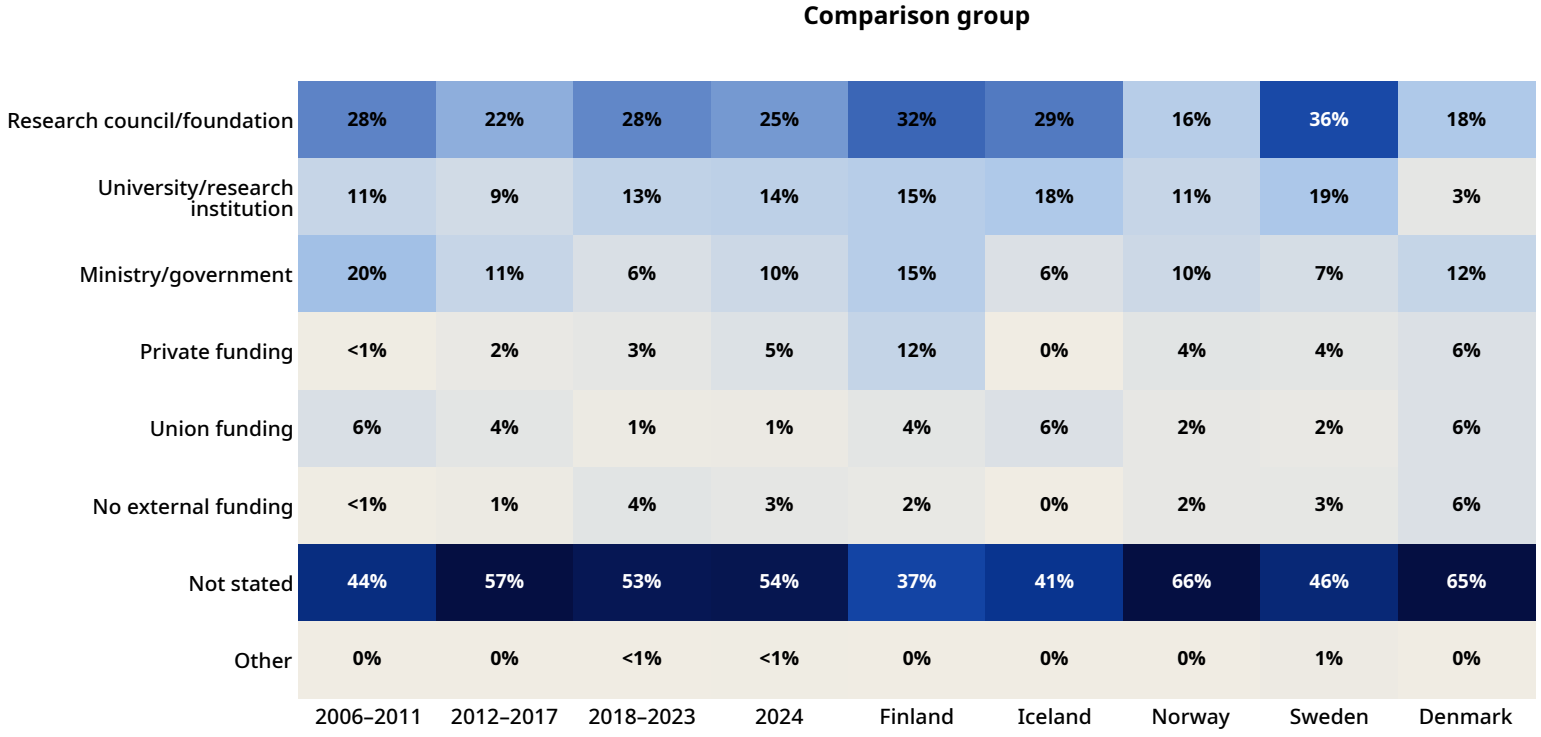


Figure H11. Reported funding by mapping period and country focus

Note: Each cell shows the percentage of all mapped publications in the displayed group that were coded with the funding category. Period columns include all publications mapped in the stated years. The Finland and Iceland columns include 2024 publications covering those countries; multi-country publications are included in each applicable country profile. A publication may report more than one funding source and is counted once in each applicable category, so percentages within a column do not sum to 100. "Not stated" indicates that no funding information was reported and is distinct from "No external funding." N is the number of publications in the displayed group. Labels have been shortened for readability; full category names and definitions are provided in the codebook. Country comparisons are descriptive, and the Icelandic profile should be interpreted cautiously because of its small number of publications.

Knowledge Centre for Education

University of Stavanger

© Knowledge Centre for Education 2026

Distribution:
Knowledge Centre for Education,
University of Stavanger,
4036 STAVANGER

uis.no/nb/forskning/kunnskapssenter-for-utdanning
Tel: 51 83 00 00