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Interprofessional collaboration in ECEC: a review of European countries with different levels of system integration

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ABSTRACT

In various European countries, there is significant variation in the level of early childhood education and care (ECEC) system integration. In these countries, in which the level of system integration varies from split to integrated systems, there is a growing interest in interprofessional collaboration (IPC) between ECEC, school, and family support (family services, welfare, and child protection services) to offer integrated services for children and their families. In a realist review of six countries with varying levels of ECEC system integration (in descending order of integration: Norway, Finland, Sweden, Germany, Flanders (Belgium) and the Netherlands), we analyzed the literature related to IPC between professionals from ECEC, school, and family support. The review showed various IPC mechanisms, including barriers and facilitators, for professionals working in ECEC who face similar challenges in achieving pedagogical continuity and offering integrated services in different countries.

KEYWORDS

Interprofessional collaboration; early childhood education and care (ECEC); childcare; realist synthesis

Introduction

In various countries, there is a tendency towards an integrated system that involves a wide range of services that work with young children and their families. The main idea is that enhancing collaboration among pedagogical professionals, families and other complementary professional groups in early childhood education and care (hereafter: ECEC) will increase the quality of services considering meeting children's needs (EU Council, 2019). This trend is motivated by a growing awareness of the fragmented nature of split systems and the related concern that this state of affairs undermines the

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capacity of the ECEC system to support children in their development. Already in 1996, the European Childcare Network recommended integrated systems of early education and care (0–6 years) as good practice in ECEC (Kascak and Koch 2022).

Conceptually, we can distinguish two types of fragmentation in split systems. First, there is the split between ECEC and education. This split may complicate a smooth transition from ECEC to primary education for children (Haddad 2002; OECD 2017). Successful transitions prepare children for school, improve equity in education outcomes, and ensure that well-being and social-emotional development endure. Conversely, benefits from the early years of schooling can fade out if transitions are not successful (Lazzari et al. 2020). At a different level, the split system may create or maintain social inequalities between care 'versus' education professionals. Especially in ECEC, the dualistic nature of the services, partly as care and partly as education, tends to influence the organizational division of resources (Alila, Ukkonen-Mikkola, and Kangas 2022; Kascak and Koch 2022). Second, there is a split between regular ECEC or education and specialized services like family support services or health sector. This split may complicate the delivery of integrated services by multiple stakeholders from different disciplinary backgrounds to meet the needs of the child and family (WHO, 2010). This split is often the focus in publications devoted to care for children with special needs and the inclusion of families with diverse backgrounds (Bartolo et al. 2019; EU Council, 2019; UNESCO 1994).

The wish to establish a more integrated and inclusive ECEC has stimulated a strong interest in interprofessional collaboration (IPC) in universal, community-based ECEC settings across European states (European Commission/EACEA/Eurydice/Eurostat 2014). The collaboration between ECEC, primary education and family support to offer integrated services for children and their families has thus become a topical issue in various countries (Barnes et al. 2020; European Commission/EACEA/Eurydice/Eurostat 2014). However, integrated services for young children and their families are certainly not self-evident and splits in the ECEC system require new ways of interprofessional collaboration between ECEC professionals and colleagues from other disciplines (Ališauskienė, Hanssen, and Kairienė 2023; Fukkink and Lalihatu 2020).

Professionals in different countries are currently in search of new forms of collaboration and they face challenges in offering integrated services for children in their early years (Haddad 2002; Schoyerer and van Santen 2016; Wei et al. 2022). In this study, integration of services is defined as integration at the center level between ECEC with elementary school and/or family support services to support parents in raising their child and to offer (more) comprehensive services.

ECEC system integration in Europe

Based on the Eurydice report from 2019, EU countries can be placed on a continuum from split to integrated systems (see Figure 1) according to four criteria: is there a unitary setting for care and education; a single authority (i.e. one ministry); highly qualified staff throughout the entire ECEC phase (minimum ISCED level 6); and do education guidelines apply to all settings?

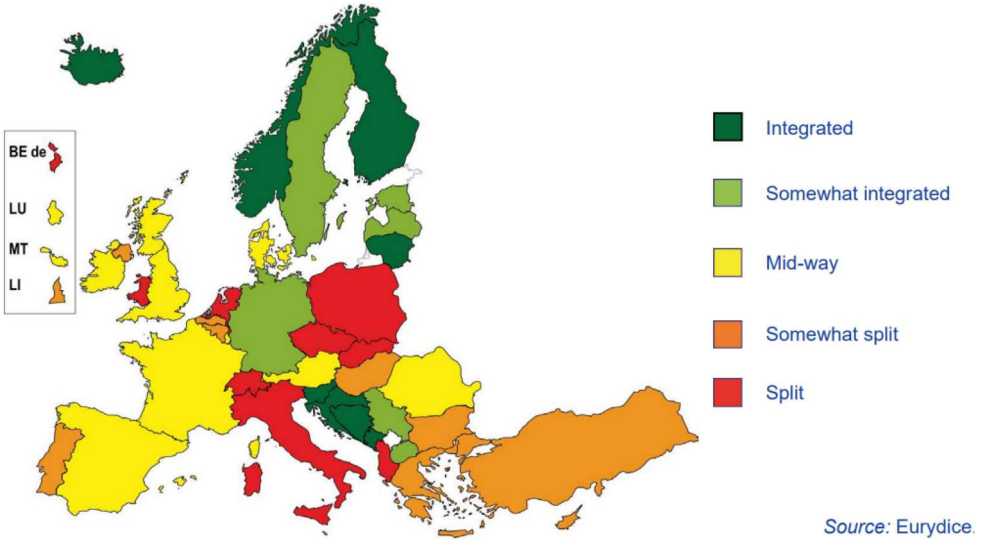

Figure 1. Degree of ECEC system integration 2018/19. Source: Eurydice Brief 2019: Key data on early childhood education and care in Europe.

It should be noted that there have been recent changes in some countries after the publication of the Eurydice report. Italy has recently reformed its ECEC system and there is now unified legislation and educational guidelines for children from 0 to 6 years centralized at the national level under the Ministry of Education (see Lazzari and Balduzzi 2023). In 2019, Romania introduced a new curriculum for children from birth to 6 years, along with changes for ECEC staff who fall under the auspices of the Ministry of Education (see Oberhuemer and Schreyer 2024).

Countries with fully integrated systems meet all four criteria. For example, there is an integrated system in Finland and Norway according to all Eurydice criteria. In contrast, in countries with split systems, the typical split between ECEC and education is apparent in all areas: there are separate settings, different ministries responsible for younger and older children, higher qualification requirements for core practitioners in pre-primary education than in childcare settings for younger children, and no educational guidelines for younger children. Flanders and the Netherlands belong to this category as countries with an 'almost split' and 'split system' respectively.

Other countries share multiple but not all characteristics with countries with an integrated system. For example, in some countries, there is no top-level requirement for staff to be highly qualified across the entire phase of ECEC (e.g. Sweden) or some children make a transition from a setting for younger to a setting for older children with highly qualified core practitioners across the entire ECEC phase (e.g. Germany). In other countries, a single ministry may be responsible for ECEC and education and education guidelines apply across the entire phase of ECEC, but some or all children need to change settings and highly qualified core practitioners (at ISCED level 6) are not employed across the entire preschool phase (e.g. Denmark).

This categorization underlines that there is not a dichotomous distinction between split versus integrated systems. 'The issue is not a simple binary choice of "split" versus "integrated"', as Kaga, Bennett, and Moss (2010, 12) concluded, and integration is better understood as a continuum. Also, Kagan and Roth (2017, 149) have emphasized that programs and services, along with the infrastructure and boundary-spanning efforts, together constitute the system.

Present study

In this study, we explore the barriers and facilitators of IPC from the literature from a system perspective (Kagan and Roth 2017) for a selection of European countries that represent the continuum from split to integrated systems. We aim by way of a realist synthesis (Reeves 2015) to identify mechanisms which promote or hinder IPC in integrated children's ECEC services and to develop a contextualized understanding of IPC practices in European countries with different ECEC systems. Our questions are:

(1) Which themes, barriers and facilitators are distinguished in the literature on interprofessional collaboration for ECEC professionals in countries with different levels of ECEC system integration?
(2) Which mechanisms of interprofessional collaboration operate in the ECEC context from these countries?
(3) Are there differences in IPC themes, barriers and facilitators or mechanisms in the literature from integrated vs. not-integrated ECEC systems?

Method

A realist synthesis offers a contextualized approach to explore complex practices, like IPC (Fukkink and Lalihatu 2020; Reeves 2015). The flexible approach aims to synthesize the empirical findings from studies with a diversified approach in terms of methodology (e.g. quantitative or qualitative studies) and different frameworks. In this type of review, the focus is on identifying in each publication 'what works' for IPC (referred to as mechanisms with specific outcomes), but also under which circumstances (referred to as contexts).

Procedure

Researchers with an academic interest in ECEC from Belgium, Germany, the Netherlands and Norway collaborated for a period of three years (Summer 2020 – Spring 2024). In the first online meetings, the goals of the study were introduced by the Dutch coordinator. Each team subsequently searched national databases for studies with a similar profile and coded the literature (see Coding of Studies). Following methodological recommendations from the literature (Pawson et al. 2005), we discussed the preliminary findings with all partners. All researchers met during a 2-day research meeting in Amsterdam to present findings from the national literature and to discuss the aggregated findings.

Search and selection of studies

The Dutch research team created a search profile and performed a first search with English descriptors in PubMed, PsychINFO, Web of Science and Scopus to obtain

studies from each country published in English; results were shared with all members (the search profile is available on request). Hereafter, the national teams translated the English search profile and complemented it by adding language – or nation-specific keywords. The research team from Norway conducted a search for the Nordic countries including Norway, Sweden, Denmark, Finland and Iceland.

Studies that met all following six criteria were included: published between 2012 and 2022 to include relatively recent studies; the study is not a review itself; the study reports empirical data; the focus is on IPC in ECEC/elementary school; the target group is children between 0 and 7 years; the focus in on the professional context (i.e. no pre-service education only). Realist synthesis emphasizes the importance of including underrepresented literature formats to address publication bias and the inclusion of both articles from peer-reviewed journals and other scientific reports ('grey literature'). In total, 32 studies were included (Finland: 4; Flanders: 1; Germany: 7; Netherlands: 13; Norway: 4; Sweden: 3; see Figure 2). Sixteen of these articles were published in a peer-reviewed journal (Finland: 4; Flanders: 0; Germany: 4; Netherlands: 2; Norway: 3; Sweden: 3) (see Appendix A). The sixteen publications from the grey literature reported that the participants received information prior to the study and their participation was voluntary; explicit information about informed consent and/or approval by an ethical committee was found in three reports.

Coding of studies

An extensive coding scheme was developed (the coding scheme is available on request). We identified for each report Context-Mechanism-Outcome (CMO) configurations (see Reeves 2015). CMO configurations are a heuristic tool to explore mechanisms (M) that, within a certain context (C), are hypothesized to operate and result in outcomes (O). In our review, they offered a contextualized understanding of causal mechanisms in an interprofessional team with contexts at societal, organization, team or individual levels. CMO configurations were identified based on the explicit reasoning of the authors in the included reports; the mechanisms were based on the main findings from the abstract, results or discussion section. Multiple contexts or multiple outcomes were possible for a specific mechanism if the authors explicitly linked multiple contexts and/or outcomes to a specific mechanism.

Using the Gears model of Mulvale, Embrett, and Razavi (2016), we coded C, M and O at six levels: macro policy (1), meso policy (2), micro team structure (3), micro team processes (4), micro team attitudes (5) and, finally, individual level (6); the latter level could refer to individual professionals, parents or children. In addition, we coded whether C, M and O were framed in the report as positive ('+'), neutral ('±') or negative ('−'); for example, a specific context (C) may promote ('+') or hinder ('−') IPC.

In line with Fraser et al. (2018), we identified specific IPC themes like sharing records with information at the child level and interprofessional meetings (see Figure 3 for an overview). These meetings with professionals from different disciplinary backgrounds may be regular weekly meetings or special workgroups. Following Fukkink and Lalihatu (2020), we identified facilitators and barriers, like (in)adequate communication, (in)adequate support, or (un)clear roles, which are frequent themes in the literature related to interprofessional collaboration.

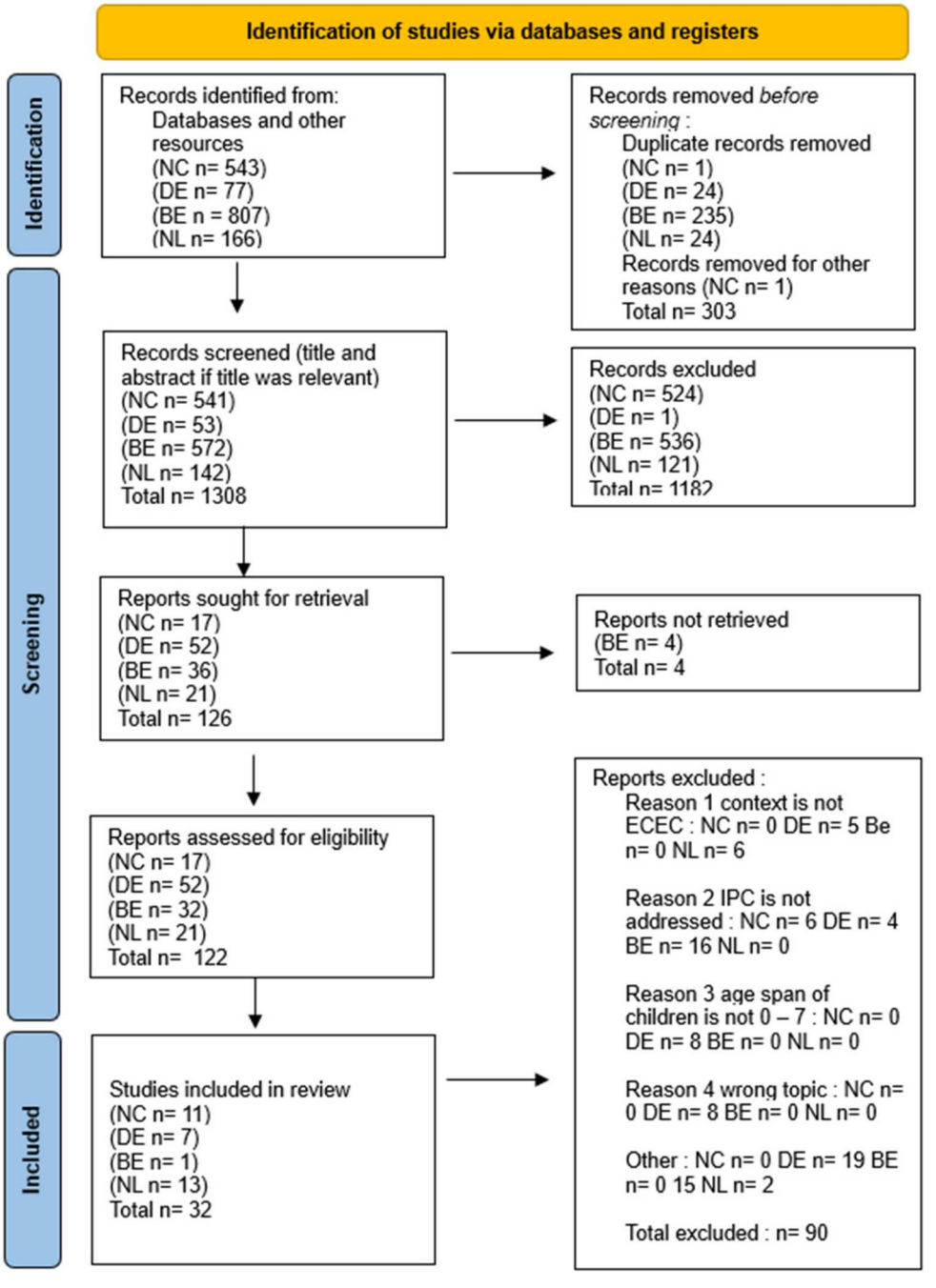

Figure 2. PRISMA flow chart.

Analysis

The dataset included all studies and all codes for each country, including a Eurydice score. The CMO configurations with directions and Gears levels were compiled into an Excel database, including peer review status, country and the Eurydice score. The

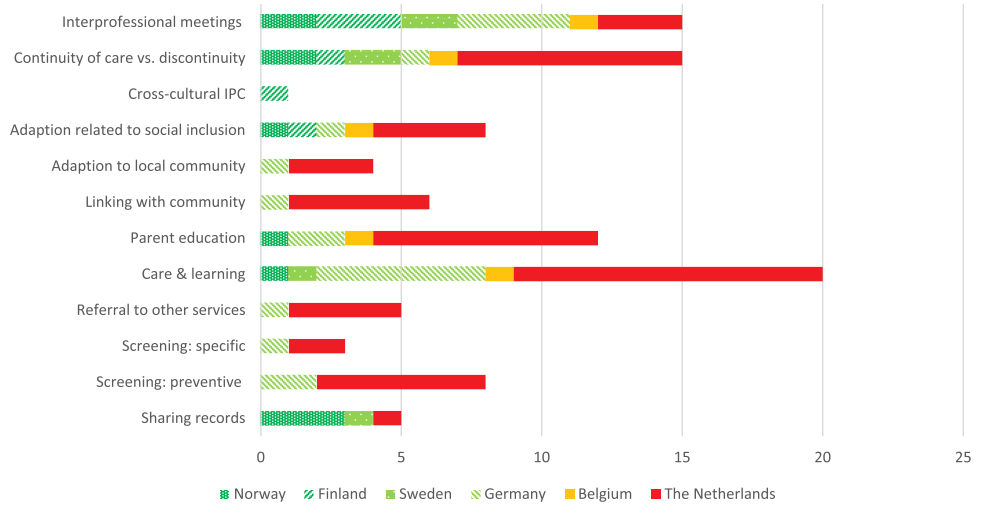

Figure 3. Frequency of IPC themes per Country (in descending order of Eurydice levels).

total frequency for each IPC theme, facilitators and barriers was calculated for each level of system integration. For research question 3, we identified for each level, frequent IPC themes, facilitators and barriers. Finally, we explored differences between studies from peer-reviewed journals versus other reports.

Results

All 32 publications reported descriptive studies (i.e. non-experimental studies without intervention). Sixteen studies were published in a peer-reviewed journal, the other studies were grey literature. Almost all studies were conducted in an ECEC setting (31), followed by studies with a dual focus on both ECEC and elementary education (24). The large majority of studies investigated a regular setting (29). Six studies investigated special education and four inclusive ECEC (8 studies investigated multiple settings). Thirty studies reported outcomes on the professional level and a large majority of studies included the voice of the professionals. Five studies included the voice of the parents; three reported outcomes on the family level (i.e. both child and parent). Only one study included data at the child level.

Frequent IPC themes

The most frequent IPC theme in the literature was *care and learning*, followed by *interprofessional meetings* and *continuity vs. discontinuity of care* (see Figure 3). In the peer-reviewed articles, the same themes emerged, whereas in the grey literature *parent education* was also a prominent theme. Besides the IPC themes from our coding scheme, almost half of the studies addressed unique other themes, which were predominantly related to the transition from ECEC to school and joining different professional worlds (e.g. getting to know each other).

Frequent facilitators and barriers

In total, we identified 88 facilitators and 75 barriers for IPC in all reports (i.e. 54 vs. 46%). In the peer-reviewed articles, we identified 30 facilitators and 45 barriers (40 vs. 60%),

whereas the grey literature reported 58 facilitators and 30 barriers (66 vs. 34%); hence, the grey literature was somewhat more positive in this respect. The most reported facilitator was *adequate communication*, followed by *adequate support* and *trust/positivity* (see Figure 4). The most reported barrier was *disagreement about professional role*, followed by *lack of support* and *low levels of professional development.*

CMO configurations

In total, 57 CMO configurations were identified in the literature by the national teams (see Appendix B). Related to contexts, 25 were positive, 11 were neutral and 21 were negative (44, 19 and 37% respectively); in the peer-reviewed articles, the percentages were 48, 15 and 37 vs. 52, 26 and 22 for other reports. Twenty-eight mechanisms were positive (49%), five mechanisms were neutral (9%) and 24 were negative (42%); in the peer-reviewed articles, percentages were 44, 4 and 52 vs. 55, 15 and 30 for other reports. For outcomes, 26 were positive (46%), six were neutral (11%) and 25 were negative (44%); the figures were 37, 11 and 52% for peer-reviewed vs. 56, 11 and 33% for other reports.

In sum, the identified CMO configurations included positive and negative mechanisms, contexts and outcomes in similar proportions; neutral elements were a minor category. Overall, authors addressed thus both the positive and negative characteristics of IPC in their reports; this pattern was visible in both peer-reviewed and other publications, although IPC mechanisms were slightly more positive in peer-reviewed articles than other reports.

The CMO configurations included contexts at five Gears levels (Mulvale, Embrett, and Razavi 2016), varying from the highest macro level (i.e. national policy) to the level of team attitude. The level of the mechanisms varied between meso and micro level and often involved team dynamics and team attitudes. The levels of outcomes varied from micro level (e.g. teams process) to individual level. This pattern reflects the broad

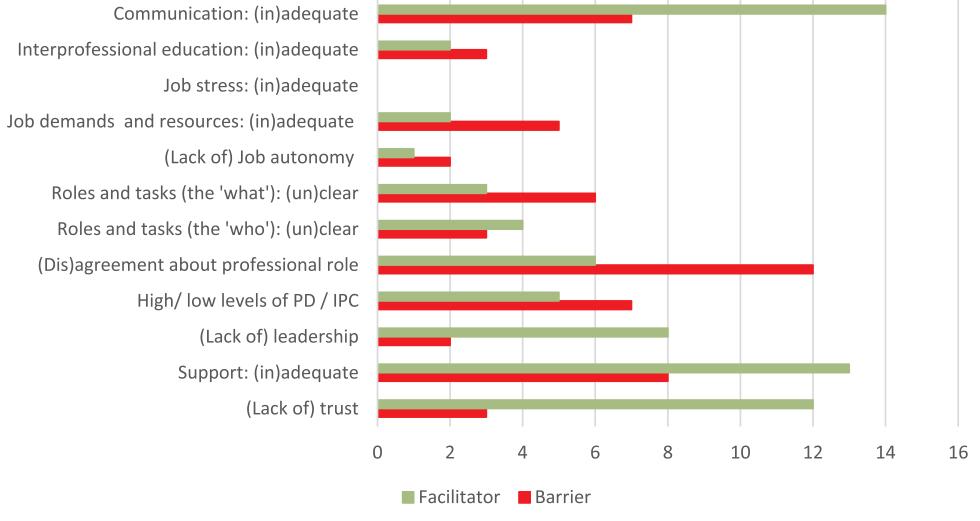

Figure 4. Frequency of IPC themes as barrier or facilitator.

scope of the literature with a general emphasis on 'what works' for individual professionals and collaborating teams, taking into account various barriers and facilitators, also at macro level (e.g. obstructive regulations at national level). In both peer-reviewed and grey literature, this same pattern emerged.

Exploration of the positive mechanisms (i.e. promoting positive outcomes) revealed some common themes across countries. First, several reports stressed that a prerequisite for IPC is the involvement of all professionals in a joint responsibility. Secondly, IPC is promoted by an interprofessional dialogue and by building trust and positive relations between professionals. Finally, IPC is stimulated by the proximity of professionals (e.g. sharing a building and meeting each other regularly face-to-face). An exploration of the negative mechanisms (i.e. promoting negative outcomes), revealed the following themes: perceived inequality between professionals, differences between professional culture, obstructive laws and regulations, and a lack of communication and collaboration.

Exploring relationships between IPC-related themes and ECEC system integration

In the literature from countries with the highest levels of integration (Norway and Finland), *interprofessional meetings* were often addressed as a theme, followed by *sharing records* and *continuity of care.* Interprofessional teams are common in integrated systems and empirical studies from these countries have focused on the dynamics of these teams. A challenge in these teams is to share records because all professionals need to take into account General Data Protection Regulation. In countries with partially integrated systems (Germany and Sweden), *care and learning* were addressed most frequently, followed by *interprofessional meetings.* In the German and Swedish studies, interprofessional meetings were an important theme with a focus on professionals experiences' with connecting care and learning in integrated centers. A specific German theme was the shortage of staff with the required qualifications and the related concern about teams which have recently included career changers. The report from Flanders discussed the context of multiple-employed professionals with a contract with both a childcare provider and a school (in Flamish/Dutch: *combinatiefuncties*). This newly introduced professional is assumed to be a boundary-crosser between ECEC and education, but the (almost) split Belgium system is not yet fully prepared to integrate these new professionals smoothly, according to the authors. Finally, the Dutch literature (i.e. a split system) has focused on innovative pilot projects (in Dutch often described as *integrale kindcentra*) with relatively high levels of IPC at local level. The fact is that some boards and directors have started to integrate childcare and elementary school in a bottom-up approach, and these innovative centers have attracted the attention of Dutch authors.

Exploring relationships between barriers and facilitators and ECEC system integration

The most frequently mentioned facilitator for IPC in countries with the highest level of integration (Norway and Finland) was *adequate communication*, followed by *adequate*

support and *leadership*. Similarly, in countries with partially integrated systems (i.e. Sweden and Germany), the most frequently mentioned facilitator of IPC was *adequate support*, followed by *leadership* and *adequate communication*. The article from Flanders (almost split system) revealed four facilitators: *trust and positivity*, *adequate support*, *leadership* and the importance of *high levels of professional development/IPC skills*. In the Dutch literature (split system), *trust* was the most frequently mentioned facilitator for IPC, followed by *adequate communication* and *agreement about professionals role*. It seems that adequate communication, support and leadership are facilitators in countries with (partially) integrated systems, whereas trust among interdisciplinary professionals is – along with other themes – an important theme in (partially) split systems.

The most frequently reported barrier for IPC in countries with the highest level of integration (Norway and Finland) was *lack of communication*, followed by *low levels of professional development/IPC skills*. In countries with partially integrated systems (Sweden and Germany), *different opinions about professional role* was the most frequently reported barrier, followed by *lack of support*. The article from Flanders (almost split system) revealed various barriers: *different opinions about professional role, ambiguity about roles and tasks ('the who'), ambiguity about roles and tasks ('the what'), lack of job autonomy, job demands high, interprofessional education low* and *lack of communication*. In the Dutch literature (split system), *different opinions about professional role* was the most frequently reported barrier, followed by *lack of support*.

To conclude, different barriers were addressed in the literature. A common barrier for IPC in countries without an integrated system was different opinions about each others' professional role in interprofessional teams, whereas communication and IPC-specific skills were themes in the countries with integrated systems only.

Exploring relationships between CMO configurations and ECEC system integration

The CMO configurations from the Norwegian literature (i.e. an integrated system) involved predominantly negative mechanisms. Various professionals from different disciplines collaborate in Norway and the included studies reported findings that reflect the concern with varying levels of pedagogical discontinuity in the transition from ECEC to school due to significant regional variation in Norway despite its integrated system at the national level. The CMO configurations from the Finnish literature reported predominantly positive outcomes. In a context of system integration that is similar to Norway, the Finnish reports emphasized that differences in professional culture between ECEC and primary education can be overcome when there is a mutual recognition of disciplinary differences and time to foster interprofessional practices.

In the literature from Sweden, CMO configurations with positive and negative outcomes were equally distributed. In the Swedish context, unclarity about guidelines and lack of a shared vision hindered collaboration between professionals. The literature from Germany predominantly reported CMO configurations with a negative outcome, emphasizing the perceived complexities of IPC in the German context. IPC pertained to the transition from ECEC to school (as in other countries), but also to the increase of lateral entrants (in German: *Quereinsteiger*) with non-educational backgrounds in school teams due to a shortage of qualified staff. The studies with a focus on transition

reported differences in perspectives and culture and paradigm between ECEC caregivers and teachers, but they also indicated that collaboration may be stimulated with adequate support at team level. The studies with a focus on lateral entrants emphasized the complexities of working together in these mixed teams, particularly when there is lack of guidance from the school. However, outcomes were positive if the team members with different qualifications work in a differentiated approach and with clear responsibilities.

The study from Flanders clearly emphasized the complexities of IPC in the context of an almost split system. Successful IPC between childcare and school would require a different and new legislative framework, according to the authors, and more equal working conditions for professionals working in different ECEC settings.

Finally, there was a clear paradox for the Netherlands: despite the split system according to all Eurydice criteria, the literature reported predominantly positive IPC mechanisms with both positive contexts and positive outcomes. An explanation is that many Dutch studies have focused on innovative local practices to foster new ways of collaboration between ECEC, school and/or family support services in a split system at national level.

For (partially) integrated systems (Norway, Finland, Sweden, Germany), the Gears levels for the contexts varied from the macro level (policy) to the micro level of team attitudes, whereas for countries with a (almost) split system (Flanders, the Netherlands) the levels were slightly more restricted and varied between macro level (policy) to micro level of the team process (i.e. without including the level of team attitudes).

In sum, the literature from all included countries reported CMO configurations with both positive and negative outcomes, regardless of the level of system integration. Relatedly, the literature from all countries reported challenges in the daily practice of IPC. The Nordic literature primarily focused on the dynamics of IPC and team processes, whereas team structure with new professionals with a different role and/or qualification was a more prominent theme for the German and Flemish context. The Dutch literature is characterized by a broad focus on innovative initiatives to integrate childcare and school in a split system, addressing various themes. Finally, the lower team level was only addressed in the literature from countries with an integrated system.

Discussion

In our review, we synthesized findings from the literature from six EU countries which represent different levels of ECEC system integration across the continuum from split to integrated ECEC systems (Eurydice 2019). Our findings show that ECEC staff across different European countries with different levels of system integration collaborate with other professionals to create pedagogical continuity from ECEC to school for young children and to offer integrated service to families. This overall finding is apparent in publications across the included countries and both in reports from peer-reviewed journals as the grey literature.

Barriers and facilitators were mentioned in the literature with similar frequencies. The most frequent facilitator for IPC in ECEC settings across countries was adequate communication, followed by adequate support, trust, leadership and agreement about each others' professional role. The most frequently mentioned barrier was different opinions about professional role, similar to the review of Fukkink and Lalihatu (2020). Other typical barriers to IPC were (in descending order): inadequate support, inadequate

communication, relatively low levels of IPC and IPC-related professional development. Communication and (dis)agreement about one's professional role and (in)adequate support were frequently mentioned as both barrier and facilitator in all types of literature, which shows, that they are, for better or worse, vital factors for collaboration between professionals with different backgrounds.

IPC in the ECEC context seems to 'work' in settings where professionals get the time and space to create a common understanding. Secondly and related to this, effective IPC requires interprofessional dialogue, building trust and positive relationships between professionals. Leadership can support this team process. Finally, the literature from all countries stressed the relational dimension of IPC and pointed to the basic need of professionals for proximity and support from the management.

Our findings related to the importance of positive relations between staff and support are in line with the literature. Professionals should have sufficient time to foster communication and strong interpersonal relationships in order to create an inclusive organisation (see also Fukkink and Lalihatu 2020). Similar findings have been reported in review studies in inclusive ECEC in regard to children with special needs (Langner and Fukkink 2022; Seaton et al. 2021; Wei et al. 2022). Both Langner and Fukkink (2022) and Wei et al. (2022) underline the importance of joined efforts on organisation, team and individual levels. Our review adds to the previous literature a system level that promotes IPC, which suggests that adequate communication is a robust mechanism in systems with different levels of ECEC integration.

Different systems, different IPC?

We found some relationships between the literature from the included countries with different levels of system integration and the frequency of IPC-related themes, specific barriers and facilitators and the levels of the identified IPC mechanisms.

Care and learning were the core theme in both (partially) integrated and (almost) split systems and can be considered as the cornerstone of IPC in ECEC. This applied to all included countries. However, *interprofessional meetings* were a more prominent theme for (partially) integrated systems. For (almost) split systems, *parent education*, *screening of children* and *linking ECEC with the community* were popular themes. These findings suggest that the literature in countries with a (somewhat) split system focuses on specific content-related topics professionals aim to include in their IPC (the what). In the literature from (more) integrated systems, the literature focuses on ways of collaboration (the how).

Related to identified conditions for IPC, *trust and positivity* was a more prominent facilitator in the literature, in particular the grey literature, from (almost) split systems. Further, *lack of interprofessional education* was a more prominent barrier in the grey literature from (almost) split systems. This latter finding makes sense because different levels of qualification for ECEC vs. school define a split system and an integrated, interprofessional approach in vocational training seems absent in this context.

Our explorative analysis of IPC-related mechanisms with corresponding contexts and outcomes did not show that the literature from countries with (partially) integrated models report more frequently positive mechanisms and outcomes, compared to the literature from (almost) split system countries: 'positive' and 'negative' mechanisms

were equally discussed for both systems. Hence, our hypothesis was not supported. We did not find level differences either for mechanisms or outcomes. However, the contexts ranged from the highest policy level to the micro level of team attitudes for more integrated systems (i.e. five levels), whereas for countries with a split system the levels varied between the macro level and the micro level of the team process (i.e. four levels). Put differently, the range of levels was somewhat more restricted for split systems and a focus on teams was only visible in the literature from integrated systems.

Eurydice and related overviews of key indicators for ECEC in the EU provide information about ECEC systems at the national level, which may suggest fairly homogenous settings within countries. Our review reveals that there is important local or regional variation within the included countries, which nuances general claims at the national level. For example, Norway has an integrated ECEC system, but because much responsibility is delegated to the municipality level (Urban et al. 2023) there is important local variation in ensuring a smooth transition from ECEC to primary education. In the Netherlands, which is a prime example of a split system, the implementation of measures for the transition from childcare to school is also left to the discretion of the local setting. In some places, innovative practices of highly integrated services have emerged, which have attracted the attention of researchers, resulting in various Dutch publications. These two opposite trends from Norway and the Netherlands (i.e. a critical focus on local variation in an integrated system vs. a positive focus on innovative practices in a split system) resulted in a leveling effect in our review. However, the EU indicators are a useful framework for cross-comparative purposes, as in our study, and they may also assist an in-depth approach at the local level, helping to understand ECEC from a variety of viewpoints and levels.

Limitations and future research

The voice of professionals was central in the large majority of studies. In the different studies, IPC was an important and common theme, but there was variation in the format and content of the measurements (e.g. survey, interview, focus group) and, of course, in national contexts. In future studies, we need to gain more knowledge about children's and parents' experiences with IPC during the preschool and school period. This line of research should not only investigate the perceptions of professionals, parents and children separately, but should connect IPC processes of professionals with outcomes at child and family levels. An important question is: does a higher level of IPC predict higher levels of wellbeing of children and greater satisfaction of parents?

The included EU countries are geographically close and are complementary for ECEC system integration as the organizing principle in this comparative study. Despite the inclusion of various levels according to the Eurydice (2019) definition, generalization to other EU countries may not be warranted. Traditionally, European countries have been divided into the Continental European (Bismarckian), Nordic (Social Democratic universal), Southern European (Mediterranean) and Central/Eastern model (Karila 2012), and it seems interesting to include countries from Southern Europe and Central/Eastern Europe in future comparisons.

While the concept of split vs. integrated system is not new, the Eurydice (2019) classification of some countries is subject to some debate. Some countries show important regional differences, like Germany with its complex federal structure and Denmark with a large role for municipalities. It should also be noted that there have been some recent shifts since the publication of the last Eurydice report, although not for the included countries from our review. In addition, the Eurydice report of 2019 encompasses the time frame of the selected articles from our literature review (2013–′22) and, hence, they were aligned from this perspective.

Our review reported a comparative study in a concise format with an analysis of aggregated data. A publication with an extensive overview of individual countries may shed more light on the unique context of the different ECEC systems in different countries and how this affects IPC in practice. Complementary research with in-depth studies of individual countries is needed to understand IPC in ECEC from the perspective of different stakeholders.

Implications for practice

Our configurations of mechanisms in IPC, with corresponding contexts and outcomes, suggest some concrete ways to strengthen the interprofessional collaboration at the level of professional, team and system. Specifically, interprofessional dialogue at team level and supportive leadership can promote positive attitudes of professionals towards IPC. This enables professionals to overcome differences and create a shared foundation that contributes to higher levels of IPC. Laws and regulations should ensure that directors and staff at organisation and team level can directly focus on the vision and ambitions of integrated services in their local context, rather than focusing on lacking preconditions at national level.

Different contexts, similar challenges?

In the context of the European Union, the collaboration of various professionals with diverse backgrounds takes shape in diverse national contexts for ECEC. Although working under different conditions, professionals from different countries share the challenge of offering more integrated services to young children, which transcends split or integrated systems. The concern about pedagogical discontinuity and the aspiration towards integrated systems are shared by various professional teams from countries with varying levels of ECEC system integration and the literature points at similar barriers and facilitators, acknowledging unique national contexts.

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