Interprofessional cooperation between childcare and education in four European cities

Fukkink, R.G.; Ploeger, Sigrid

DOI
10.13140/RG.2.2.16820.37766

Publication date
2021

License
CC BY-ND

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
Interprofessional cooperation between childcare and education in four European cities

Centre of Expertise Urban Education, Faculty of Education & University of Amsterdam
2021
Interprofessional cooperation between childcare and education in four European cities

Author
Ruben Fukkink & Sigrid Ploeger

department
Centre of Expertise Urban Education, Faculty of Education & University of Amsterdam

Date
1-Jul-201

Project type
Urban Education

Version
final

© 2021 Copyright Amsterdam University of Applied Sciences
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or made public in any form or by any means, electronic, mechanical, printouts, copies, or in any way whatsoever without the prior written consent of the Amsterdam University of Applied Sciences.
Summary

This international, comparative, multiple-case study investigates the interprofessional cooperation between primary education and out of school hours care at four sites in four European cities (Aarhus, Denmark; Berlin, Germany; The Hague, Netherlands; and Stockholm, Sweden). Social network analysis is used to map the one-to-one relationships between the professionals involved in the education and childcare organisations. The density of the four networks and the mutuality of the professional contacts reveal striking differences. Significant differences were also found with regard to the satisfaction of those concerned with regard to the current forms of cooperation. The four sites addressed in the study vary considerably and cover practically the entire continuum from strictly separated sectors to fully integrated cooperation, as distinguished in the theoretical model developed by Boon and colleagues (2004). The results are discussed with reference to effective cooperation between childcare and education.
Table of contents

Table of Contents

Summary........................................................................................................................................... 4

Table of Contents ............................................................................................................................. 5

1. Introduction................................................................................................................................ 6

2. Method................................................................................................................................ 12

3. Results................................................................................................................................ 16

4. Discussion.......................................................................................................................... 25

References...................................................................................................................................... 29
1. Introduction

The advent and rapid growth of out of school hours care (OSHC) has made the coordination between this type of care and the primary education system a topical social issue in Western Europe. Cooperation between the system of primary educational and the relatively new system of OSHC provision is not a given (e.g., Fukkink & Boogaard, 2020; Fukkink & van Verseveld, 2020), and both institutions are currently searching for appropriate forms of cooperation in terms of organisational governance and pedagogical practice. Substantive pedagogical cooperation between individual schools and OSHC facilities has met with a number of very different responses in current practice, and therefore very different forms of interprofessional cooperation can also be observed. Within the framework of the European Comenius project ‘One and one equals three’, which was launched in January 2012, the substantive cooperation between professionals from primary schools and OSHC facilities is examined at four sites in different European cities.

The notion of achieving coordination between various educationalists, which is expected to contribute to connecting the different worlds existing ‘around the child’, is embedded within ecological theories and policy (e.g., Forbes, 2012; Institute of Medicine and National Research Council, 2015; Nores & Fernandez, 2018). One question that has recently received increasing attention is how various pedagogical professionals from different organisations and operating from within their own specialisations, work to achieve an integrated range of services within a coordinated system of cooperation (e.g. Littlechild & Smith, 2013; Morrison & Glenny, 2012; Willumsen, 2008).
Typology of interprofessional cooperation

The literature distinguishes between sharply differing models of interprofessional cooperation. In several typologies, the various forms of cooperation are arranged along a continuum from a very low level of cooperation to a very high level of cooperation (see for example Axelsson & Axelson, 2006; Ovretveit, 1996). The typology developed by Boon, Verhoef, O’Hara and Findlay (2004) also distinguishes between various forms of cooperation that differ in terms of their underlying philosophy (e.g. views on interprofessional cooperation, openness to other professionals), structure (e.g. the intersectoral organisation), results (e.g. potential for growth and performance in work; occupational satisfaction) and the working process (e.g. approaching colleagues, sharing knowledge and contact about work or about specific children). The typology developed by Boon and colleagues is more fine-grained than other, partly similar classifications that are presented in the literature. It distinguishes between six models of interprofessional cooperation.

In the parallel model, there is hardly any cooperation, and professionals perform their own tasks independently within a single, common work setting. In the consultative model, professionals advise each other, either in direct contact or in writing. In the collaborative model, employees who normally work independently, share information about specific children, albeit on an ad hoc basis. In the coordinated model, coordination takes place within a team with regard to several children, with a coordinator having responsibility for this process. The multidisciplinary model refers to coordinated cooperation. The team has one leader who organises the cooperation, with individual employees taking their own decisions and making their own recommendations. In the interdisciplinary model, cooperation is coordinated through face-to-face group
consultations, in which joint group decisions are taken about individual children and about the programme. Finally, the *integrative model* refers to integrated cooperation within a multidisciplinary, non-hierarchical team that offers a comprehensive care system. The contacts are mutual, and professionals attribute clear benefits to the contact. Given the structure of the working environment, the continuum associates greater integration in cooperation with greater complexity in networks, with more links between professionals. The work process involves more integration, consultation and synergy between more professionals. Hierarchical control, which is characteristic of the multidisciplinary and coordinated model, undergoes a shift towards greater autonomous cooperation and coordination between individual professionals in the interdisciplinary and integrative models. A validation study of Galboury, Boon, Verhoef, Bujold, Lapierre and Moher (2010) in the context of care, indicates that the framework provides a foundation for empirical research.

**Organisation of cooperation between schools and OSHC facilities**

Different countries have very different ways of organising cooperation between education and OSHC provision (see also the OECD report, Bennett & Taylor, 2006). In the Benoordenhout school and the Triodus OSHC facility in The Hague, Netherlands (which participated in the Comenius project), the responsibilities and operations are separated. Since 2007, primary schools in the Netherlands have been legally obliged to provide OSHC. In most cases, these tasks are contracted out to childcare organisations. The OSHC provision and the primary school thus fall under separate governing bodies, and each has its own buildings and staff with different training. In the Netherlands, there are no guidelines at the municipal or national level that promote substantive cooperation and
a recent, large-scale assessment identified practical cooperation as a weak link (Boogaard & Van Daalen-Kapteijns, 2011).

The *Risskov school in Aarhus, Denmark* cooperates with the OSHC facility to organise a learning programme and an educational recreation programme. In Denmark, the municipality is responsible for defining the goals and content of childcare out of school hours, as well as the cooperation between schools, OSHC facilities and parents. The director of the Risskov school is the head of both the school and the OSHC facility (‘SFÖ’ in Danish). The OSHC facility is managed by a supervisor who reports to the school principal. The educationalists at the OSHC facility have the same level of training as the teachers in the school. Every afternoon, the SFÖ educationalists participate in lessons, in cooperation with the teachers. They also have joint study weeks and meetings. Teachers and educationalists work together to plan how they will schedule the hours allocated hours for these consultations. Children aged between 6–11 years can use the services offered by the SFÖ. Nearly all (98%) of the children in this age category use the OSHC services offered by the Risskov school.

At the *Erika Mann school in Berlin, Germany* the school hours and OSHC provision are planned jointly by teachers and educationalists, in consultation with parents and children. The team is composed of teachers, educationalists and a specialised subject-area teacher. In most cases, two educationalists are present in classes with younger groups, and one in classes with older children. The teachers prepare the educational lessons, while the activities in the OSHC programme (in German: *EFöB, Ergänzende Forderung und Betreuung*) are planned by the educationalists. Topics that are addressed at school are often also offered during the *EFöB* programme. Teachers and educationalists participate in weekly team meetings, in which any important information
is exchanged. In addition, weekly team meetings for each class are organised, which brings together the teachers and educationalists. They are also required to plan individual appointments with each other at least once a month.

The Gustav Vasa school in Stockholm, Sweden organises its own OSHC provision. A teacher and two educationalists are present in the preschool group, who monitor the children through the first and second years of school and share joint responsibility for the children throughout the day. Both groups work according to the same method and with the same goals, with the teachers bearing responsibility for the curriculum and the educationalists being in charge of the recreational programme. Each class has two rooms at its disposal, where both the educational and recreational programmes take place. Starting in the third school year, one teacher and one educationalist is present in the classroom. After school hours, the educationalist takes the children to a dedicated OSHC room. There is no separation between primary school and OSHC until the fourth school year.

**Research design**

In this exploratory study, we investigate intersectoral cooperation of professionals in primary schools and OSHC facilities in four structurally different combinations of a primary school and an OSHC facility in four European cities. The research questions are as follows:

1. How do educational professionals from primary schools and OSHC facilities in four Western European cities cooperate in the realisation of their programmes?

2. How do the professionals involved perceive the intersectoral cooperation?
We have studied the cooperation by conducting a social network analysis of the working relationships (Borgatti, Mehra, Brass, & Labianca, 2009; Wasserman & Faust, 1994). Furthermore, the theoretical framework developed by Boon and colleagues (2004) was used to characterise the cooperation in various sites.
2. Method

Sample

This comparative study focuses on interprofessional cooperation between primary schools and OSHC facilities. Based on the methodological principle of maximum variation sampling (see Stake, 2006), we have investigated this cooperation through a heterogeneous sampling of four locations that display clear differences in cooperation (cf. Gaboury et al., 2010). All the professionals at each of the sites where there was a combination of a school and an OSHC facility were invited to participate. In all, our investigation yielded data on 64 primary school employees and 81 employees of the OSHC facilities. The participants were distributed as follows across the four sites: 31 participants in The Hague (11 from the Benoordenhout school and 20 from the childcare organisation Triodus); 23 participants from Aarhus (5 from the Risskov Skole and 18 from the SFÖ programme); 50 participants from Berlin (22 from the Erika Mann Grundschule and 28 from the EFöB programme), and 41 participants from Stockholm (27 responsible for the regular curriculum and 14 for the OSHC activities of the Gustav Vasa School. In the remainder of the text, we use the names of the cities to refer to the four sites.

Measures

Working relationships between schools and OSHC facilities. We developed a special questionnaire to ask the staff of both the schools and the OSHC organisations about the cooperation with professionals from the other organisation. Respondents were asked about four components of cooperation: “Which colleagues from the partner institution have ever approached you?”, “Which colleagues from the partner institution do you ever
approach?”, “With which colleagues from the partner institution do you have contact about work-related activities?” and “With which colleagues from the partner institution do you have contact about specific children?” The answer format was dichotomous: respondents either cooperated with a colleague from the partner institution or they did not. Respondents had free choice in the number of professionals that they could list. The questionnaire listed several professionals based on an inventory of all staff members. Because the study focuses on cooperation between education and OSHC provision, we did not consider cooperation between colleagues within their own areas of work. If several employees had the same job description, they were included within the same job category.

Perceived effectiveness and satisfaction. Respondents were asked about their perceptions regarding the effectiveness of and satisfaction with the contact along a five-point Likert scale that ranged from -2 to +2. The first question was “How satisfied are you with the cooperation between the primary school and OSHC organisation?”, the second question was “To what extent has the effectiveness increased/decreased since you have had contact with these colleagues?”. 

Perception of cooperation. The job satisfaction of employees was further mapped using a selection of scales from the VBBA questionnaire developed by Van Veldhoven, Meijman, Broersen and Fortuijn (2002). The wording of the questions was modified slightly in accordance with the form of the respondents’ cooperation with staff members from the partner institution. We drew upon eight subscales: relationship with colleagues (Cronbach’s α = .84), relationship with direct supervisor (.97), task-related problems (.73), task ambiguity (.91), information (.86), input (.92), communication (.95) and contact options (.88).
Analyses

For each site, we determined the density of the network, which indicates the extent to which the professionals in question maintain one-to-one working relationships with each other. This density measure, which ranges from 0 (there are no dyadic relationships between the professionals surveyed) and 1 (all possible dyadic relationships occur), reflects the proportion of dyadic relationships. Because this study focuses on cooperation between education and OSHC provision, cooperation with immediate colleagues within the same sector was left out of consideration; scores for these relationships were consistently set to 0. The density indicates the complexity of the structure of cooperation: a shift to the right on the continuum developed by Boon and colleagues (2004) should coincide with higher density scores.

We also analysed the working relationships between the various professionals involved in education and childcare according to the statistical $p_1$ model developed by Holland and Leinhardt (see Wasserman & Faust, 1994). This model can be used to characterise the dyadic interactions within a network according to three parameters: the expansiveness, the popularity and the mutuality of the contact. The mutuality parameter reflects the frequency with which staff members from the primary school and from the OSHC facility have contact with each other, thus indicating a ‘two-way street’. The measure is similar to a measure of correlation: low values indicate that there is little mutual contact within a network, and high values indicate frequent mutual contact. This measure provides an indication of the mutual communication and synergy, as included in the classification developed by Boon and colleagues (2004). We expect higher mutuality values in the models to the right of the continuum. We used the network measures for expansiveness and popularity to analyse which employees are active in the
interprofessional cooperation and can thus serve as a sort of bridge between the school and the OSHC facility. All of the network analyses were performed with the program UCINET (Borgatti, Everett, & Freeman, 2002).

Procedure

Frequent consultation took place between all the partners in the European project. At each site, there was also frequent contact between the researcher and the site coordinators with regard to the questionnaires and the delineation of the target group. The questionnaires were translated from Dutch into English, in consultation with the coordinator. The questionnaires were completed individually (see also Ploeger & Fukkink, 2013; 2018).
3. Results

The network results revealed sharp differences between the four sites studied. With regard to all four aspects addressed in the study, the density of the network was clearly the greatest for the site in Stockholm, followed by Berlin and Aarhus. The site in The Hague consistently showed the lowest scores (see Figure 1 and Table 1); this site, which scores low in density, nevertheless scored higher on mutuality of contacts, because the few contacts existing within this network are actually two-way (see Table 2). In Aarhus, the network of cooperation is tightly organised, with all of the disciplines being involved in the contact, although the contact is one-way relatively often. In Berlin, there is a large network, with considerable contact taking place between the staff of the school and the staff of the OSHC facility. All disciplines play a role in the cooperation, and these contacts are often reciprocal. Stockholm has the largest network of cooperation. The cooperation between the primary school and the OSHC facility operates through many different links, and it is tightly organised with frequent two-way communication.
Figure 1

Site The Hague

Site Stockholm
Further analysis of the four networks revealed additional differences. In the network of The Hague, the director is one of the key figures in contacts with the partner institution. At this site, the contact between the primary school and OSHC facility takes place largely between the school principal and the staff of the headquarters of the OSHC provider. This contact also appears to come from both sides. The contact thus flows primarily between managers, and not through the professionals in the workplace. There is some contact between the educationalists and the teacher of the kindergarten groups, albeit in one direction only. Moreover, several of the staff members reported no contact with the partner institution. In Aarhus, the educationalists in the childcare facility for young children
play a key role in the contact between the school and the OSHC facility. Educationalists in the groups for younger children are consulted by many colleagues. The educationalists of older children often initiate such contact themselves. In the network in Berlin as well, educationalists from both the lower and upper sections play a central role in the cooperation between the school and the OSHC programme. The educationalists thus have a high popularity value on all four components, and they are thus often cited as partners.

**Perceived effectiveness and satisfaction with the cooperation**

The four sites differed significantly from each other with regard to effectiveness, as perceived by the staff \( (p < .001) \), as well as in terms of staff satisfaction \( (p = .002) \). There is no overall difference between the staff of the school and the staff of the childcare facility with regard to either perceived effectiveness \( (p = .34) \) or satisfaction \( (p = .21) \). On average, the staff members at all sites have a positive opinion regarding the effectiveness of the cooperation between school and childcare out of school hours (see Table 3). Staff members at the Risskov primary school in Aarhus also perceived a sharp increase in effectiveness as a result of cooperation with the SFÖ programme. At this site, however, the staff members at the OSHC facility (average: -0.87) were clearly less positive than their counterparts in the primary school were. The employees of the recreational programme in Stockholm also perceived an increase in effectiveness, as did their colleagues in the school programme. The site in the Netherlands brings up the rear. The staff at both the school and the childcare facility perceived the mutual cooperation as moderately effective.
The employees in Sweden were the most satisfied with the cooperation between school and childcare facility. The mean values reported by the staff of the school and the OSHC facility are very close together. When considering average satisfaction levels by sector (education or OSHC), the highest scores were reported by the staff of the Risskov school in Aarhus. In contrast, however, the employees of the childcare facility in Aarhus were the least satisfied. For Aarhus, therefore, there is a clear discrepancy between the two teams, with regard to both the perceived effectiveness of and satisfaction with the cooperation. The staff members of the Benoordenhout school in The Hague were only moderately satisfied with the cooperation and they again showed the lowest scores.

Table 3
Descriptives for perceived effectiveness and satisfaction with the cooperation with the partner institution: by location and broken down by sector

<table>
<thead>
<tr>
<th>Site:</th>
<th>The Hague</th>
<th>Aarhus</th>
<th>Berlin</th>
<th>Stockholm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.16</td>
<td>0.52</td>
<td>0.87</td>
<td>0.88</td>
</tr>
<tr>
<td>Primary school</td>
<td>0.00</td>
<td>0.00</td>
<td>1.20</td>
<td>0.00</td>
</tr>
<tr>
<td>Childcare</td>
<td>0.25</td>
<td>0.52</td>
<td>0.56</td>
<td>0.71</td>
</tr>
<tr>
<td>Contentment</td>
<td>0.48</td>
<td>0.96</td>
<td>0.22</td>
<td>1.04</td>
</tr>
<tr>
<td>Primary school</td>
<td>-0.09</td>
<td>1.04</td>
<td>1.20</td>
<td>1.10</td>
</tr>
<tr>
<td>Childcare</td>
<td>0.80</td>
<td>0.96</td>
<td>-0.87</td>
<td>0.06</td>
</tr>
</tbody>
</table>

*Note: Theoretical values are between -2 and 2.
Perception of cooperation

The results from the VBBA scales revealed no statistically significant differences between the primary schools and the OSHC facilities ($p = .10$), and there is no interaction effect between location and sector ($p = .08$). The only significant differences with regard to the perception and assessment of the cooperation are between the four sites. On all nine of the scales, scores for the site in The Hague were significantly lower than those for the other three sites ($p < .001$). The staff members from Aarhus were the most satisfied with the current cooperation between their elementary school and OSHC provision. Stockholm scored the highest for ‘relationship with direct supervisors’ and ‘input’. Of the four participating organisations, the employees of the Gustav Vasa school in Stockholm were the most positive about the opportunities that they experienced to provide input within the cooperation with the partner institution. They were also positive about the extent to which they were able to consult the direct supervisors of the partner institution. The Berlin site had average scores on all the scales. The staff members from The Hague perceived little or no cooperation with the staff from the partner institution. They also experienced the most problems with the tasks related to the partner institution.

Synthesis of the results

In order to aggregate the 11 different scores from this study (i.e. the network analysis with four measures of density and four measures of mutuality; satisfaction; perceived effectiveness, and VBBA satisfaction scores) into a summary score, values were assigned to the different variables. Each of the four sites was assigned a ranking score for each variable (1 for the site with the highest score and 4 for the site with the lowest score). Within this small sample, the variables together formed an internally consistent
scale (Cronbach’s $\alpha = .93$). The average ranking score, which provides an indication of the integration between primary schools and OSHC facilities, was highest for the location in Stockholm (1), followed by Berlin (2) and Aarhus (3). The Hague ranked fourth (4).

Table 4
Average perception of cooperation at four locations (VBBA measure)

<table>
<thead>
<tr>
<th>Site</th>
<th>The Hague</th>
<th>Aarhus</th>
<th>Berlin</th>
<th>Stockholm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship with colleagues</td>
<td>1.94</td>
<td>3.50</td>
<td>3.03</td>
<td>3.27</td>
</tr>
<tr>
<td>Relationship with supervisors</td>
<td>1.77</td>
<td>3.21</td>
<td>2.91</td>
<td>3.24</td>
</tr>
<tr>
<td>Task-related problems*</td>
<td>1.05</td>
<td>2.07</td>
<td>2.11</td>
<td>2.00</td>
</tr>
<tr>
<td>Task ambiguity*</td>
<td>1.90</td>
<td>3.18</td>
<td>2.61</td>
<td>2.83</td>
</tr>
<tr>
<td>Information</td>
<td>1.61</td>
<td>3.00</td>
<td>2.70</td>
<td>2.83</td>
</tr>
<tr>
<td>Input</td>
<td>1.22</td>
<td>2.30</td>
<td>2.28</td>
<td>2.61</td>
</tr>
<tr>
<td>Communication</td>
<td>1.99</td>
<td>3.27</td>
<td>2.76</td>
<td>2.93</td>
</tr>
<tr>
<td>Contact options</td>
<td>1.83</td>
<td>3.35</td>
<td>2.98</td>
<td>3.03</td>
</tr>
</tbody>
</table>

Note: Scores range from 1 to 4; * Task-related problems and Task ambiguity are negative variables (high scores indicate less satisfaction)
<table>
<thead>
<tr>
<th></th>
<th>The Hague</th>
<th>Aarhus</th>
<th>Berlin</th>
<th>Stockholm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density: incoming contact</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Density: outgoing contact</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Density: contact about work</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Density: contact about specific child</td>
<td>2.5</td>
<td>4</td>
<td>2.5</td>
<td>1</td>
</tr>
<tr>
<td>Mutuality: incoming contact</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Mutuality: outgoing contact</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Mutuality: contact about work</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Mutuality: contact about specific child</td>
<td>2.5</td>
<td>4</td>
<td>2.5</td>
<td>1</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>1</td>
<td>3</td>
<td>1,5</td>
<td>1,5</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>VBBA</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Mean rank</strong></td>
<td><em>4th</em></td>
<td><em>3rd</em></td>
<td><em>2nd</em></td>
<td><em>1st</em></td>
</tr>
</tbody>
</table>
4. Discussion

The cooperation between primary schools and OSHC facilities in the four European locations surveyed exhibited significant differences, which can be linked to theoretical distinctions proposed in the literature concerning interprofessional care. The cooperation between the elementary school and OSHC in the Dutch model in The Hague can best be characterised as parallel (see Boon et al., 2004), although managers within both organisations may be able to ‘shift up’ to closer cooperation (as in the collaborative model) on an ad hoc basis. In general, however, the employees of the primary school and those of the OSHC facility usually work individually within a small and loosely tied network, in which the mutuality of contacts is limited to the managers. Staff members have a low perception of the cooperation. With its separation between the primary school and the out-of-school childcare facility, the site in The Hague stands in stark contrast to the Swedish model exemplified at the site in Stockholm. The cooperation between primary school education and OSHC provision is clearly the most integrated in Sweden. There is a very large network of cooperation, in which the disciplines of the two institutions have many mutual relationships with each other. To the satisfaction of everyone concerned, decisions about specific children are taken in face-to-face consultations between the school and OSHC facility. The cooperation in Stockholm can, therefore, be characterised as interdisciplinary for older children, and even as inclusive for younger children. The Danish model in Aarhus and the similar German model in Berlin fall between these two extremes. The cooperation between the primary school and the OSHC facility in Germany can best be typified as multi-disciplinary. At the German location, there is a large network of cooperation, with high density and mutuality in the contact. Cooperation proceeds in a
highly coordinated manner. The team has one leader who organises the care, with individual employees adding their own input. On the continuum developed by Boon and colleagues (2004), Aarhus can be categorised as collaborative. The network of cooperation is characterised by low density, with little mutuality in the contact between the two institutions, although the members of the primary school staff and the OSHC facility do share information about individual children.

**Limitations and suggestions for future research**

One limitation of this study is that it addresses the cooperation between childcare and education because of its focus on cross-sectoral cooperation. The interprofessional cooperation taking place within these organisations falls beyond the scope of this study. Neither does this descriptive comparative study include a direct link to the pedagogical process quality of programmes and the experiences of the children (see also Morrison & Glenny, 2012; Sloper, 2004).

The operationalisation of conceptual models for intersectoral cooperation is a relatively new area of focus in empirical research (Thannhauser, Russell-Mayhew, & Scott, 2010). The current theoretical models are concise, leaving empirical researchers room for further interpretation in the operationalisation of the broad underlying dimensions (e.g. ‘structure’, ‘process’ and ‘philosophy’ in the framework of Boon and colleagues) for empirical research. The positioning of a specific case on a continuum within a typology is also subject to several degrees of freedom, although the dimensions of Boon et al. did prove applicable within the context of interprofessional cooperation between primary schools and OSHC facilities. Another limitation of this study is that it does not address the philosophy behind the models. Future research should, therefore, clarify whether
closer cooperation between schools and out-of-school childcare facilities is associated with a more holistic view of children and their upbringing of the stakeholders. In addition, we recommend the further embedding of the general typology presented by Boon and colleagues within the specific context of cooperation between education and child care.

**Practical implications**

Cooperation between primary schools and OSHC facilities can be designed in very different ways. One question for the future concerns whether a collaborative model can serve as a minimum or whether models characterised by greater integration might offer a better foundation for effective cooperation between primary schools and OSHC facilities. According to the results of this study, the cooperation in Aarhus, Berlin and Stockholm generated some level of satisfaction and perceived effectiveness for the employees concerned. In addition to the density of the network for cooperation, the level at which it takes place also seems to be of importance. In Berlin and Aarhus, cooperation takes place at the level of operational professionals. At the site in The Hague, cooperation (whether structural or ad hoc) takes place primarily at the management level. Although this allows for some pedagogical coordination, what is lacking is a translation to the broader team, and it does not generate mutual insight into each other’s working methods or satisfaction amongst the professionals. The strictly separated, parallel Dutch model does not seem conducive to educational coordination, and it generates dissatisfaction with mutual relationships. The Swedish system of ‘educare’ in Stockholm clearly performs better in this respect. The full integration of school and afterschool care requires much effort from the different professionals, however. The less intimate but constructive form of cooperation in the Danish and German model seems to strike a balance between
integration and autonomy and is, therefore, an interesting format to explore further in education and child care.
References


