

Daniela Bulgarelli (Ed.)

Perspectives and research on play for children with disabilities

Collected papers

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8 Inclusive Play and Disability in Early Childhood Education and Care Services. The Experiences of Italian Practitioners

Abstract: Italian mainstream Early Childhood Education and Care (ECEC) services are characterized by their inclusive approach. The current study aimed at collecting the educators' experiences in promoting inclusion in everyday activities with children with disabilities in nursery schools, using a questionnaire specifically designed for this purpose. The main goal was describing the strategies practitioners used to foster inclusive play and the difficulties they faced in preventing or overthrowing the barriers to participation in play. A deductive content analysis was performed on the answers to two open questions, to investigate the themes of types of play, adult's role in supporting play and didactic strategies to promote inclusive play. The role of toys as barriers or facilitators to play and the perceived need for training about the theme of play for children with disabilities were also reported.

8.1 Italian inclusive child care services: education for all

In Italy, since their birth, children with disabilities can enter mainstream Early Childhood Education and Care (ECEC) services. The nursery school (called *nido d'infanzia*) for children from 0 to 3 years of age was established in 1971 by the Law n. 1044: it was a municipal facility, supported also by national funding. The law explicitly stated that the nursery school was meant to take care of the children, to support the families and to facilitate the labour market entry of mothers; moreover, it aimed at involving qualified professionals, and at fostering children's harmonious development.

In 1992, the Law n. 104 aimed at regulating the school integration of persons with disabilities; in this document, the nursery school was part of the educational system in which persons with disabilities could be included since their birth. Thus, the nursery school was mainly conceived as a crucial means to guarantee every child's full cognitive, affective, social and relational development. Compared to the situations in other European countries, the Italian legislation about inclusive education for very young children with disabilities was ground-breaking and anticipated similar trends that emerged later in other countries.³¹

³¹ Interesting sources of information about legislation and policy regarding young children with disabilities in Europe are retrievable on the website of the European Agency for Special Needs and

Recently, in 2015, the Law n. 107 reformed the structure of educational services and established an integrated system for children from 0 to 6 years, that aimed to guarantee equal opportunities of education, relationships and care for all children and to conciliate parents' life and work duties. Nevertheless, currently, the facilities in Italy are still split into services for children up to 3 years of age and children between 3 and 6 years. Three types of service are available for children up to 3 years (Bulgarelli, 2018a; Fortunati & Parente, 2018).

- Nursery school (*nido d'infanzia*): in 2016, 10,559 nursery schools were present in Italy. The 61% were private and the 39% were public. About the 11% of the public services were given in entrusted management, i.e. the public organization gave a budget to a private company (mainly in the third sector) to manage the facility.
- Integrative service (*Servizio integrativo*) was established in 1997, by the Law n. 285/1997. This kind of facility was meant to better reach a vast majority of children, thanks to differentiated services as play spaces, centres for children and families and home-based small facilities, where a trained adult takes care of 3-5 children. In 2016, the integrative services were 2,551, 81.3% private and 18.7% public.
- Spring class (*Sezione primavera*) was established by the Law n. 296/2006. It was a special class for children between 24 and 36 months within the kindergarten that usually are attended by children between 3 and 6 years.

The receptiveness of the facilities for children up to 3 years strongly varied across the country (Fortunati & Parente, 2018): the North of Italy is divided into 9 regions and the enrolment rate varied between 43.5% and 24.3%; the Centre of Italy is composed by 4 regions, with rates varying between 44.4% to 28.1%; the South is made of 6 regions and 2 islands and the enrolment rate varied between 25.0% to 6.8%. In Europe, the average rate of school enrolment at age two is 40% (OECD, 2017): three Italian regions are close to this percentage, while many of them are far below. In 2015, the Law n. 107 established that, compatibly with the economical and structural resources of the country, the integrated system should aim at involving the totality of children in ECEC; at the moment, the Legislative Decree n. 65/2017 aimed at enrolling at least the 33% of children under 3 years of age, and to set ECEC services on the 75% of the Italian cities.

In line with international standards of quality monitoring (OECD, 2015), each ECEC service needs a national accreditation to become operative, that certifies the quality according to a series of criteria, also addressing some indicators of inclusion, as the users' satisfaction, the families' participation in the educational project of the

Inclusive Education (<https://www.european-agency.org/country-information>) and on the website of the Disability Rights Education and Defense Fund (<https://dredf.org/legal-advocacy/international-disability-rights/international-laws/>).

service and the availability to host children with disabilities (Centro Nazionale di Documentazione e Analisi per l'Infanzia e l'Adolescenza, 2013).

Summarizing, as regulated by law and accordingly to the UN Convention on the Rights of the Child, Italian educational system fosters inclusion. Educators are trained to assume a child-centred approach, this means that they accompany the children along their development and learning, respecting their individuality. On the other side, participation in activities and relationships is a key point in ECEC services and, as children with disabilities are included in mainstream facilities, the staff is challenged to find customized ways to meet each child's special needs.

8.2 Organizational aspects of ECEC services in Italy

In terms of organization of the space, the nursery schools are made of several rooms and area that are set up according to their function: entrance with one cupboard per child, classrooms (children play and do activities there, and also have lunch if a refectory is not included in the service), toilets for children and toilets for adults, rooms for the nap (that can also be used as laboratory for specific activities), kitchen and storage area, spaces for staff, outdoor spaces with green areas, administrative office.

Each group of children has a personal class; both the group of children and the room they mainly live in are called *sezione* (i.e. section). Children in the first year belong to a class where the ratio between educators and children is 1/6. For children between 12 and 36 months, two types of organization are possible: the class can be *horizontal* (children in the second year and in the third year of life belong to two different groups), or *vertical* (the class is attended by children between 13 and 36 months). Usually, one service encompasses at least three classes. The ratio between educators and children varies from 1/8 for children from 13 to 24 months and 1/10 for children from 25 to 36 months (ISPESL, 2005). Thus, work groups in the nursery school are made by 2-3 educators, up to 4-5 colleagues in the same class, depending on the number of children.

By law, the coordinator and the staff have to prepare a public document to describe the educational objectives and the practices and procedures to achieve them. At the beginning of the year, the staff plans the activities, and realizes them throughout the year. The educational planning is renewed every year, and each service usually chooses a common theme to link all the activities. Surveillance, play, education and caring are all tasks of the educators.

The ordinary opening hours in the services is 7.30–17.30. The organization of the day is quite similar across the services and quite stable throughout the educational year (September–July). The organization of the service is based on the alternation between daily routines (eating, cleaning, sleeping) and activities (play and creative ateliers): the underlying educational idea is that children develop their motor,

communicative, social, emotional and cognitive competences by getting involved in relationships with adults and peers and by experiencing the environment (materials, spaces, etc.). As an example, during lunch, children practice fine motor abilities (using the cutlery or helping with setting the table). Educators and children sit at the table together; chatting about food allows to practice language and, also, to discuss about personal preference (“what I like and what I don’t like”), physical properties of food (colour, consistency, taste), culture (“the food we eat at home is the same we eat in the service?”), etc. Then, eating together solves the task of learning social rules as ‘staying together at the table’.

The typical day is organized in several phases:

- 7.30–9.30: children arrive, educators shortly talk with the parents; the room for welcoming is usually organized in structured corners (books, Lego bricks, little house with dolls, etc.) where children freely get involved in different activities.
- 9.30–10.00: song to welcome the group and snack with fruits and/or bread.
- 10.00–11.00: structured activities directly managed by the educators (manipulation, drawings, taking care of the vegetable garden, playing with water, sand, etc.).
- 11.00–11.30: routine in the toilet.
- 11.30–12.30: lunch.
- 13.00–15.00: nap; children who get up first, are then involved in free activities in the class.
- 15.00–15.30: routine in the toilet.
- 15.30–16.00: afternoon snack (merenda).
- 16.00–17.30: children leave; educators shortly talk with the parents; children leaving later can be involved in structured activities or can freely play and interact with others in the class.

The daily organization is stable and changes when children and educators go on class trips. In the frame of this quite strict agenda of the day, the educators pursue an inclusive educational approach. On one side, all children should have the possibility to participate in the routines and activities together with the peers. On the other side, the educators dedicate some time to each specific child: the time devoted to the routines (lunch, cleaning and nap) could be the occasion for individualized interactions while, during the group activities and the free play time, the educators could specifically focus on a child to observe his/her participation and inclusion in the group of peers.

8.2.1 The role of play in Italian ECEC services

Play is a range of voluntary activities that are internally motivated and are associated with enjoyment and pleasure (Garvey, 1990). Currently, several classifications of

play activities are available; they are mainly derived from Piaget (1962) and Parten's proposals (1932) yet the literature is confusing: in some cases, different terminologies refer to similar types of play while, in others, same labels are attributed to different concepts of play (Bulgarelli & Bianquin, 2017). To create a common language, the COST Action "LUDI–Play for Children with Disabilities"³² proposed a classification of types of play, with respect to the cognitive and social dimension (Bulgarelli & Bianquin, 2017). The cognitive dimension, derived from Piaget and Smilansky (1990), includes:

- Practice play: it refers to body actions or experimentation and to visual and tactile experimentation of objects.
- Symbolic play: it happens when new significations are given to objects, persons, actions or events: children symbolically use objects as they were something else, they produce pretend play and make-believe activities.
- Constructive play: it consists in gathering, combining, arranging and fitting more elements to form a whole, and achieve a specific goal.
- Rule play: it consists in games with a specific code and rules accepted and followed by the players.

The social dimension, derived from Parten includes:

- Solitary play: The child plays alone and independently even if surrounded by other children
- Parallel play: The children play independently at the same activity, at the same time, and in the same place.
- Associative play: The child is still focused on a separate activity but there is a considerable amount of sharing, lending, taking turns, and attending to the activities of the peers.
- Cooperative play: Children can organize their play and/or activity cooperatively with a common goal and are able to differentiate and assign roles.

Play, in both the cognitive and social dimensions, has a crucial role in Italian nursery schools (Bondioli, 1987; Borghi, 2015), because it is conceived as the main drive for motor, cognitive, affective and social development (Piaget, 1962; Vygotskij, 1976). Part of the structured activities are focused on play proposals made by the practitioners, who suggest play scenarios and help the children getting involved in the situation and interacting with each other. Besides, during the day, children can spontaneously play by themselves or with peers.

³² The Action TD1309 "LUDI–Play for Children with Disabilities" was a European network of researchers and practitioners involved in the study of play of children with disabilities from multidisciplinary point of views. The network was financed by the COST Association between 2014 and 2018. For more detailed information, please check the introduction to this book and the websites http://www.cost.eu/COST_Actions/tdp/TD1309 and <http://ludi-network.eu>.

As discussed elsewhere (Bianquin, 2018), the adult can support play assuming three different roles: observer of play, in order to better know the child's behaviour, skills and preferences; activator of play, in order to organize space, materials and conditions to let play exist and evolve; partner in play activities. All these roles refer to the scaffolding process, where a temporary support is provided to learners to help them completing a challenging task; effective scaffolding is tuned to the learners' needs, is adjusted in response to their achievements, and gradually fades (Wood, Bruner, & Ross, 1976). Thus, to better support play in spontaneous and structured activities, educators are invited to observe the children to better know them and to better plan their play proposals. Professionals are invited to assume the role of activators, by specifically setting up the play spaces in each class (the little house, the costume corner, the construction corner, etc.) and in the outdoors. Moreover, toys and play materials need to be specifically selected: different toys better suite different types of play; educators are also invited to regularly change the toys and materials in the class, to keep the children interested in play and to renew the possible activities (Bondioli, 1987; Bulgarelli, 2018a; Perino, 2014). Last but not least, educators often become play partners both during the structured activities and the spontaneous play moments, and provide explicit and implicit feedbacks also based on their evaluation of children's play ability and preferences.

8.2.2 Ongoing training for the ECEC service staff

The training of the nursery school staff is mandatory and should be ongoing (Legislative Decree n. 65/2017). Regional laws regulate the organization of the training and the service coordinator is responsible for the contents that are proposed to the staff (Bulgarelli, 2018a). Usually, coordinators vary the training programme over the years, to cover the needs of the service and/or the staff's perceived needs.

The ongoing training for educators usually focuses on helping them to build on and become aware of the specificity of their professional skills: deep knowledge about child development, evidence-based practice to interact with children, expertise in organizational issues, expertise in interacting with the children and the parents, etc. The most effective training paths very often allow to develop a reflective approach towards the educational practice: educators become aware of the motivations, beliefs and theoretical approach underlying and guiding their intervention (Bobbio & Traverso, 2016; Schön, 1983).

8.3 Play and disabilities in Italian early child care services: an explorative study

The current study aimed at collecting the educators' work experiences with children with disabilities in nursery schools, using a questionnaire specifically designed for this purpose, given that no such tool was already available in Italy. The main goal was describing the strategies educators used to foster inclusion and the difficulties they faced in preventing or overthrowing the barriers to participation and inclusion.

As previously discussed, play is one of the most important activity in the ECEC services and it is conceived as the main drive for child development. For these reasons, play has to be at the centre of an inclusive educational approach, which is fully in line with the LUDI perspective of the need to support play for the sake of play in children with disabilities (Besio, 2017). Thus, part of the data collected in the study refer to play: they are the focus of the analyses reported in the current paper.

8.3.1 Participants

Ninety-three female workers (91 educators and 2 coordinators³³) from 10 services participated in the study (see Table 1). Nine facilities were placed in a big town (more than 500.000 inhabitants) and one service in a small town (less of 30.000 inhabitants) in the North of Italy.

In terms of education, 46.2% of educators held a high-school diploma (N = 43), 48.4% were graduates (N = 45) and 5.4% held a *post lauream* degree (specialization or Ph.D., N = 5). One of the two coordinators was 41, was graduated and has been working since 5 years; the other coordinator was 56, held a high-school degree and her length of service was 32 years.

The workers filled out 100 questionnaires: five educators completed two questionnaires each, because they reported their experiences with two different children with disability. Seventy-four out of 100 questionnaires were referred to 55

33 In the Italian system, every service includes a coordinator, who is responsible for the administrative and educational aspects of the service; s/he supports the staff in taking decisions about the educational and organizational aspects of the activities. The team of educators plans and realizes the organization of spaces and materials, and the everyday activities (routines linked to food, diapers and sleep, educational ateliers, day trips in the neighbourhood or special places, etc.). The educators take care of the children: greet them in the morning, play with them, clean them and change diapers, put them in bed for the nap, comfort them when crying, etc. They take care of the group of peers, facilitating the relationships and interactions among the children. They also take care of the relationship and communication with the families, thanks to everyday short talks and programmed meetings. Auxiliary personnel are in charge of cleaning the spaces and supporting the educators during the routines, when needed.

Table 1: Characteristics of the service and participants.

Service	Town	Workers filling the questionnaire				
		N	Mean age in years (SD)		Mean length of service in years (SD)	
On-site service in company	Big Town	12	33,33	(5,82)	10,68	(6,25)
Municipal	Small Town	16	41,13	(10,81)	14,19	(10,13)
Entrusted management_1	Big Town	19	37,42	(9,20)	11,45	(6,78)
Entrusted management_2	Big Town	10	33,40	(7,29)	8,25	(4,71)
Entrusted management_3	Big Town	3	36,33	(1,53)	10,67	(1,15)
Entrusted management_4	Big Town	13	37,69	(8,51)	11,00	(6,48)
Entrusted management_5	Big Town	8	34,38	(7,41)	8,69	(5,09)
Entrusted management_6	Big Town	8	35,88	(4,67)	10,50	(4,11)
Private_1	Big Town	1	26,00	--	6,00	--
Private_2	Big Town	3	27,33	(2,52)	4,33	(2,08)
Total		93	36,26	(8,43)	10,78	(6,80)

children with disabilities. In fact, 15 children were the focus of at least two different questionnaires: two or more educators answered reporting their experience with the same child. Twenty-six questionnaires were completed exclusively in the sections about the personal data and the training perceived needs, because the educators had never been working with children with disabilities. These 26 educators worked in the big town involved in the study, and their average length of service was 8.3 years (SD = 5.9; min = 1, max = 19).

8.3.2 The Questionnaire “The Child with Disability in ECEC Service”

The questionnaire “The Child with Disability in ECEC Service” was designed in 2017, to collect educators’ work experiences about inclusion (Bulgarelli, 2018a; 2019). The

fillers were asked to report their experiences about a specific child with disability they were working with in the current year or in the past.

The tool consisted of six open questions and 24 multiple choice questions, organized into seven sections.

- a) Respondent's personal data.
- b) Characteristics of the service attended by the child.
- c) Characteristics of the child and his/her disability.
- d) Information about the activities attended by the child in the service.
- e) Barriers and facilitators to the child's inclusion.
- f) Relationship with the child's parents.
- g) Respondent's perceived needs with respect to training on the theme of disabilities.

Six questions directly refer to play and their responses are analysed and discussed in the current paper:

1. Think about the moments of spontaneous play in the service: did you and the colleagues of yours use specific strategies for the child's play? Which ones? (open question).
2. Think about the moments of structured activities in the service: did you and the colleagues of yours use specific strategies for the child's activity? Which ones? (open question).
3. Which kind of difficulties you had to face with the child with disabilities? (multiple choice question)
 - a. Toys and materials for play were not adequate for the child's needs.
4. Was the type of toys a barrier or a facilitator?
5. Have you ever participated in a specific training on children with disabilities? If yes, on which topic?
6. If you could participate in a training focused on the theme of children with disabilities, which topic would you like to be addressed? (multiple choice question).
 - a. Strategies to adapt materials and toys to the child's needs.

Data were collected between June and July 2017.

8.3.3 Data analyses

A deductive content analysis was performed on the answers to the two open questions (Elo & Kyngäs, 2007), which consists in subjectively interpreting the content of texts through the coding of the underlying themes (Hsieh & Shannon, 2005). The answers were divided into units of meaning, later called "sentences", that were categorised using the system reported in Table 2: cognitive types of play, presence of social play, role of the adult in supporting play (observer, activator, partner) and didactic

strategies. Two independent observers³⁴ coded the sentences. The percentage of agreement was 68%. The disagreements were discussed and solved to reach a full consensus.

8.4 Results and discussion

8.4.1 Strategies to support play in structured and spontaneous situations

Sixty-nine persons answered to Question 1: “Think about the moments of spontaneous play in the service: did you and the colleagues of yours use specific strategies for the child’s play? Which ones? (open question).” The “moments of spontaneous play” referred to that part of the day when children are free to organize their games and play activities. The 69 answers were divided into 96 sentences, that were analysed to reveal the presence of common contents; more than one topic could be present in each sentence (see Table 2).

Seventy-two persons answered to Question 2: “Think about the moments of structured activities in the service: did you and the colleagues of yours use specific strategies for the child’s activity? Which ones? (open question).” Play is one of the most usual structured activity in the services. The 72 answers were divided into 134 sentences, that were analysed to reveal the presence of common contents; more than one topic could be present in each sentence (see Table 2).

The content analysis showed that cognitive types of play were mentioned in 60 sentences (26.1%) and practice play was the most common type the respondents referred to. As an example, the sentences P46_3 shows items of three types of play (practice, symbolic, constructive):

Sentence P46_3: “The child started [...] having an interest in [...] Lego bricks, wooden bricks, cubes, eggs in their box, mosaic sticking game, drawings, books, kitchen boxes, shoes in the costume corner, modelling clay, play corn.”

Symbolic and constructive play were poorly mentioned, respectively 3 and 7 times each. From a developmental point of view, practice play is common in the first and second years of life; symbolic play structures in the second year and first types of constructive play emerges in the third year (for a brief review, see Bulgarelli, 2018b). Thus, this result is expected, also taking into account that children with disabilities may show a delayed development. Nevertheless, it is worth noticing that the respondents were more likely to write about toys and games, and rarely described

³⁴ The author would like to thank dr. Nicole Bianquin for her contribution to the content analysis.

Table 2: Main topics addressed in the answers to Question 1: “During spontaneous play, did you use specific strategies for the child’s play? Which ones?” and Question 2: “During structured activities, did you use specific strategies for the child’s activity? Which ones?”.

Categories	Subcategories	Question 1 Spontaneous play (96 sentences)	Question 2 Structured activities (134 sentences)	Total
Cognitive types of play	Practice play	21	29	50
	Symbolic play	1	2	3
	Constructive play	4	3	7
Social play	Child plays with peers	7	9	16
Role of play observer	Adult observes play	2	5	7
Role of play activator	Adult follows child’s preferences	11	15	26
	Adult as physical support	0	1	1
	Adult supports attention	16	13	29
	Adult enlarges activity	8	2	10
	Adult explains	5	5	10
	Adult selects environment	13	11	24
	Adult selects toys	6	12	18
	Adult facilitates interaction	5	0	5
	Adult as play partner	3	0	3
Didactic strategies	Ratio 1 adult / 1 child	5	13	18
	Small group	8	32	40
	Rehabilitation activities	1	6	7
	No strategies	11	4	15

which kind of play children were used to make with those materials: thus, it is not possible to know for sure if Lego bricks were used to just stick pieces together (practice play), to purposely build an object (constructive play), or to use the built object in a pretend play scenario (symbolic play). For these reasons, the coders decided that reference to Lego or wooden bricks was coded as “constructive play” and the reference to costume or theatre figures was coded as symbolic play.

It was not possible to precisely determine which kind of social play the children with disabilities were usually involved in, thus a general category was used (social play—the child plays with peers) that emerged in 16 sentences (7.0%):

Sentence A02_1: “The child was really well integrated, he loved staying with the others and making things together with the peers.”

One-hundred and thirty-three sentences reported about the adult assuming the role of play observer (N = 7, 3.0%), play activator (N = 123, 53.5%) or play partner (N = 3, 1.3%). Observing children’s play is a crucial step in the process of supporting play: in fact, observation allows a deeper knowledge about the child’s activities and preferences; it allows to act as play activator by addressing the child’s needs; and, last but not least, it is the baseline to start from to enlarge the child’s play and make it more complex and rich. Yet, the role of play observer was only mentioned in 7 sentences and the practitioners could lack awareness about its importance:

Sentence A71_2: “In various observations, the team noticed that the child prefers activities such as: sand, pouring game at the table, painting.”

The majority of sentences reported about the adult assuming the role of play activator (N = 123; 53.5%). In this role, the practitioners supported the child’s attention and explained the activity:

Sentence A19_0: “The practitioner placed side by side to the child, showing him how to do, and trying to sustain/capture his attention.”

As a play activator, the adult selected the environment and the types of toys:

Sentence A54_1: “We set the environment and the space to let the child explore.”

Sentence P34_2: “We gave him toys to stimulate him at a cognitive level, such as bricks, books, little cars.”

As a play activator, the adult also enlarged the activity:

Sentence P03_0: “Given that, during free play, he tended to search only for strings and small chains, and he tended to play with them for hours, [...] we guided him to choose other toys.”

As a play activator, the adult facilitated the communication and interaction among peers:

Sentence A99_0: “We encourage her to share her things with the others. We teach her [...] to touch or call the peers to catch their attention.”

The physical support was almost never mentioned ($N = 1$), but such strategy is crucial for children with physical and motor disabilities. The type of strategies used by the adult partly varied according to the situation: during spontaneous play, the educators were more likely to enlarge the activity, facilitate peer interaction and become a play partner; during the structured activities, the practitioners were more likely to observe play and select toys and materials.

The role of play partner was rarely mentioned as well (3 sentences); this was also the case of the role of peers, as social play was marginally reported. Three reasons for this result could be hypothesized: children with disabilities actually played mainly alone; the respondents took for granted that children usually played with somebody else (adult or peer); play was intended as being mainly a cognitive skill. More research is needed to solve this issue.

With respect to the didactic strategies, the respondents' writings were coded according to four contents (Table 2). Selecting a small group of peers ($N = 40$, 17.4%) and being side by side to the child with disability (ratio 1 adult per 1 child; $N = 18$, 7.8%) were the most reported strategies to allow a higher participation in play activities. Small groups of children were selected to facilitate the interaction, and to contain the noise:

Sentence P44_0: "We always tried to split into small groups, to keep the girl within a group of younger peers, who were calmer and less noisy."

In 7 sentences, the educators reported that the child was involved in activities that were proposed by the therapists.

Sentence A33_2: "Sometimes, [we proposed] individualized and specialized activities as suggested by the health service that took the child in charge."

It is worth noticing that this mainly happened during the time devoted to structured activities; it seems that the time for spontaneous and free play was preserved in the services, and this condition is crucial to let play for the sake of play happen. Nevertheless, during the time devoted to structured activities, usually a special needs educator is present in the service and s/he can individually help the child. In one sentence, the respondent reported that the whole group of peers was involved in the special activities for the child with disability, showing a nice example of participation. In another sentence, the respondent wrote that the child was individually involved in specific activities in a separate room. In inclusive contexts, educators have to find an adequate balance between the time the child with disability spends with the peers and the time s/he spends alone with adults. In fact, those moments "outside the classroom" can be useful to support the development of skills that the child needs to better engage with peers. Such debate, in Italy, usually concerns primary and secondary school context (Cottini & Vivanti, 2013) but it can also be applied to ECEC context.

The respondents usually reported to use no strategies to promote inclusion (N = 15). This answer was more frequent with respect to the spontaneous play time. On one side, some educators stated that they used no strategies because they observed that the child with disability was nicely participating in the activities with the peers. On the other side, often this aspect was not specified and the lack of strategies to facilitate participation and inclusion could be alarming. It is possible that practitioners did use strategies they were not aware of; or that they did not use strategies at all. To address such issue, training specifically devoted to reflecting on the way practitioners are used to foster inclusion and participation of children with disabilities could be helpful.

8.4.2 Toys: barriers or facilitators?

Multiple choice question 3 was: “Which kind of difficulties you had to face with the child with disabilities?”. Option 2 (out of 7) was: “Toys and materials for play were not adequate for the child’s needs.”

Seventy-four persons filled this question and only 7 practitioners chose the option 2. They belonged to four different nursery schools and filled the questionnaire referring to six different children: three of them had an Autistic Spectrum Disorder (ASD), two a motor disability and one an intellectual disability.

Both those types of disability pose challenges to the choice of the toy. Objects suitable for children with ASD should be interesting but should avoid triggering stereotyped and repetitive behaviours; moreover, children who are highly sensitive to noise or lights, could face personal difficulties with specific toys that typically-developing children find nice and funny. Children with motor disability usually need accessible toys, adapted to the child’s muscle tension, abilities in grasping, pinching, holding, or coordination ability. Thus, the types of toys that are already available in the services could not meet the child’s needs, and the practitioners should be ready to buy new objects or to adapt them, if possible.

Question 4: “Was the available type of toys a barrier or a facilitator to inclusion?”. Seventy-four persons filled this question: four people left the box empty; 41 declared that the toys were a facilitator, nine that they were mainly a barrier, and 19 crossed the option “neither a barrier nor a facilitator” (see Table 3).

Thus, the practitioners considered the toys and play materials useful to support the children’s participation in everyday activities in the service. Obviously, a toy could not be defined as a barrier or as a facilitator in the absolute sense: it depends on the features of the object, of the environment and on the characteristics of the players—their preferences, playfulness and cognitive, motor and social skills. When choosing the toys to better support the children’s play and, consequently, their participation and inclusion, the practitioners should also take into consideration some advices specifically linked to each type of disability, as reported in Perino & Besio (2017).

Table 3: Answers to question 4 “Was the available type of toys a barrier or a facilitator to inclusion?” per type of child’s impairment.

Type of disability ³⁵	Toy evaluated as			N of answers
	<i>Facilitator</i>	<i>Neither/nor</i>	<i>Barrier</i>	
Visual impairment	3	1	0	4
Hearing impairment	2	2	0	4
Physical impairment	5	4	1	10
Intellectual disability	13	2	2	17
Autism Spectrum Disorder	13	9	5	27
Other disabilities	5	1	1	7
	41	19	9	69


8.4.3 Training on disabilities and toys

One-hundred practitioners filled the questionnaire section dedicated to the training activities. Answering to Question 5, 33 declared to have been involved in trainings about disabilities in the past and the specific topics of those courses are reported in Table 4. Forty-three practitioners out of the 74 who stated to have been working with children with disabilities, had never attended a specific training. On one side, the professional skills of the educators should be sufficient to meet the children with disabilities’ special needs. In fact, a child centred approach, by definition, is focused on adapting contexts, materials, activities and relational approach to each person’s necessities. On the other side, some conditions of severe disability pose great challenges to the educational staff. Thus, it is likely that those who had attended specific training about the theme of disability needed to further build skills to better support the child’s inclusion in the service.

The multiple choice Question 6 investigated the perceived training needs: “If you could participate in a training focused on the theme of children with disabilities, which topic would you like to be addressed? Ninety-nine answered to this question and 68 chose the option 5 (out of 10): “Strategies to adapt materials and toys to the child’s needs.” Thus, the practitioners felt they need more support and time to reflect on the use of objects to build on children’s play skills.

³⁵ The LUDI classification of type of disabilities is used here (Bianquin & Bulgarelli, 2017).

Table 4: Topics of the training about the theme of disability attended by the practitioners in the past.

Topic of the training about the theme of disability	N		
General presentation about atypical development	13		
Characteristics of some disabilities	20		Autism Spectrum Disorder 14
How to adapt environment/objects to children's special needs	13		Intellectual disability 5
How to adapt routines to children's special needs	12		Visual impairment 4
How to adapt interaction to children's special needs	9		Physical impairment 2
Relationship with children's parents	10		Hearing impairment 2
Presentation of institutions taking care of children with disabilities	8		
Supervision and support about specific cases	10		
Special education	2		

NB: the respondents could choose more than one option

8.5 Conclusion

The current study focused on an explorative research about the inclusion of children with disabilities in Italian nursery schools and the practice educators used to foster inclusive play. Strategies to support play were investigated, through a self-report questionnaire administered to the educators and coordinators of the services.

Selecting a small group of peers and being side by side to the child with disability were the most reported strategies to allow a higher participation in play activities. The adult could assume three different roles: play observer, play activator or play partner; most of the answers focused on the role of play activator, who mainly supported the child's attention and explained the activity, selected the environment and the types of toys, enlarged the activity, facilitated the communication and interaction among the peers. Moreover, the educators reported that toys and play materials were useful to support the children's participation in everyday activities. The pattern of answers differed between two conditions: when the respondent referred to the time devoted to spontaneous play and to the time devoted to structured activities. It seems that free play was preserved and this condition is crucial to let children explore play possibilities and express play preferences.

The results allowed to make some reflections about the practice to foster inclusion, participation and play in nursery schools. Yet, the questionnaire cannot allow to deepen the reasons for some respondents' critical answers, that potentially addressed a lack of self-awareness and reflective approach. Future research is needed to better investigate such critical aspects. The current results also showed that specific training about children with disabilities is needed to better support educators in their inclusive practices.

8.6 References

- Besio, S. (2017). The need for play for the sake of play. In S. Besio, D. Bulgarelli & V. Stancheva-Popkostadinova (Eds.), *Play development in children with disabilities* (pp. 9–52). Warsaw, PL: De Gruyter Open.
- Bianquin, N. (2018). 5 How can I, as an adult, facilitate play?. In P. Encarnação, S. Ray-Kaeser & N. Bianquin (Eds.), *Guidelines for supporting children with disabilities' play: Methodologies, tools, and contexts* (pp. 50–58). Warsaw, PL: De Gruyter Open.
- Bianquin, N., & Bulgarelli, D. (2017). Conceptual review of disabilities. In: S. Besio, D. Bulgarelli, & V. Stancheva-Popkostadinova (Eds.), *Play Development in Children with Disabilities* (pp. 71-87). Warsaw, PL: De Gruyter Open.
- Bobbio, A. & Traverso, A. (2016). *Contributi per una pedagogia dell'infanzia. Teorie, modelli, ricerche* [Contributions for an infancy education. Theories, models, research]. Firenze, I: Edizioni ETS.
- Bondioli, A. (1987). La dimensione ludica nel bambino da zero a tre anni e nell'asilo nido [Play dimension in the child from zero to three years and in the nursery school]. In A. Bondioli & S. Mantovani (Eds.), *Manuale Critico dell'Asilo Nido*, Milano, I: Franco Angeli.
- Borghi, B. Q. (2015). *Nido d'infanzia. Buone prassi per promuovere il benessere e la qualità della vita dei bambini* [Nursery school. Good practice to promote children's wellbeing and quality of life]. Trento, I: Erickson.
- Bulgarelli, D. (2018a). *Nido inclusive e bambini con disabilità* [Inclusive nursery school and children with disabilities]. Trento, I: Erickson.
- Bulgarelli, D. (2018b). Tipologie di gioco: una tassonomia condivisa per lo sviluppo della ricerca [Types of play: a shared taxonomy to develop research]. In: S. Besio & T. Zappaterra (Eds.), *Children's Play. Multifaceted Aspects*. Firenze, I: ETS.
- Bulgarelli, D. (2019). Il nido d'infanzia come servizio educativo inclusivo. Esperienze dal Piemonte [Inclusive nursery school. Experiences from Piedmont]. *L'integrazione scolastica e sociale*, 18(3), 286–300.
- Bulgarelli, D. & Bianquin, N. (2017). Conceptual review of play. In S. Besio, D. Bulgarelli & V. Stancheva-Popkostadinova (Eds.), *Play development in children with disabilities* (pp. 58–70). Warsaw, PL: De Gruyter Open.
- Centro Nazionale di Documentazione e Analisi per l'Infanzia e l'Adolescenza (2013). *Verso linee guida per il sistema integrato dei servizi educativi. Un documento di riflessione sulla qualità*. [Towards guidelines for an integrative system of childcare services. Reflections on quality]. Retrieved on May 2018: <https://www.minori.it/it/verso-linee-guida-per-il-sistema-integrato-dei-servizi-educativi>
- Cottini, L. & Vivanti, G. (2013, Eds.). *Autismo. Come e cosa fare con i bambini e ragazzi a scuola* [Autism. What to do with children at school]. Firenze, I: Giunti.
- Fortunati, A. & Parente, M. (Eds.) (2018). *Monitoraggio del piano di sviluppo dei servizi socio-educativi per la prima infanzia. Rapporto al 31/12/2016* [Monitoring of development plan of

- childcare services for early infancy. Report at December 2016*]. Dipartimento delle Politiche per la Famiglia. Retrieved on April 2018: https://www.minori.gov.it/sites/default/files/allegati/Rapporto_servizi_educativi_al_31_12_16.pdf
- Garvey, C. (1990). *Play*. Cambridge, USA: Harvard University Press.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- ISPESL – Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro (2005). *Servizi educativi da 0 a 3 anni. Quaderni per la salute e la sicurezza [Childcare services from 0 to 3 years. Booklet on health and security]*. Retrieved on April 2018: http://www.salute.gov.it/imgs/C_17_opuscoliPoster_159_ulterioriallegati_ulterioreallegato_0_alleg.pdf
- OECD (2015). *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*. Paris (F): OECD Publishing. doi: <https://dx.doi.org/10.1787/9789264233515-en>
- OECD (2017). *Education at a glance 2017. OECD indicators*. Paris (F): OECD Publishing. doi: <http://dx.doi.org/10.1787/eag-2017-en>
- Parten, M. B. (1932). Social play among preschool children. *Journal of Abnormal and Social Psychology*, 27, 243–69.
- Perino, O. (2014). *Des espaces pour jouer* [Spaces for playing]. Toulouse, F: Erés.
- Perino, O., & Besio, S. (2017). *Mainstream toys for play*. In S. Besio, D. Bulgarelli & V. Stancheva-Popkostadinova (Eds.), *Play Development in Children with Disabilities* (pp. 181-200). Warsaw, PL: De Gruyter Open.
- Piaget, J. (1962). *Play, dreams and imitation in childhood*. New York, USA: Norton.
- Schön, D. A. (1983). *The reflexive practitioner*. New York, USA: Basic Books.
- Smilansky, S. (1990). *Sociodramatic play: Its relevance to behavior and achievement in school*. In E. Klugman & S. Smilansky (Eds.), *Children's play and learning* (pp. 18-42) New York, NY: Teachers College Press.
- Vygotskij, L. S. (1976). Play and its role in the mental development of the child. In J. S. Bruner, A. Jolly & K. Silva (Eds.), *Play. Its Role in Development and Evolution*, (pp. 537–554). New York, USA: Basic Books.
- Wood, D., Bruner, J., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 17, 89–100.