Chapter 5 Children's Play and Social Relations in Nature and Kindergarten Playgrounds: Examples from Norway



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Abstract In kindergarten, outdoor playtime is usually a break from more structured activities. It is leisure time and an opportunity for children to engage in free play with friends. Previous research indicates that time spent outdoors facilitates playful physical activity and that playing in nature inspires children's creativity, imaginations and play across age and gender. In short, play and social relations are crucial for young children's development and cultural formation. This study investigated children's play activities during outdoor playtime in nature and on kindergarten playgrounds. Its empirical materials consisted of video observations of 12 four-year-old's activities in nature and on a kindergarten playground and interviews with two kindergarten teachers. One child, Benjamin was the primary focus, and five more were also included. Two examples of one child's social play in nature and on the playground were analysed to illuminate the different conditions and challenges he encountered. The findings indicate that children's play in nature tends to be more creative and inclusive than that on kindergarten playgrounds, that kindergarten teachers participate more in children's play in nature than on playgrounds and that children are sensitive to and try to engage in what they view as a correct form of discourse with their teachers. The author argues for further research on the subject to learn more about children's social relations, creativity and cultural formation during outdoor playtime in nature.

Keywords Children's play activities · Kindergarten playground · Outdoor playtime · Playgroups · Play spaces in nature · Social relations

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5.1 Introduction

Outdoor playtime is valued in the Nordic countries and internationally in Early Childhood Education and Care institutions. The time outside is seen as a break from more structured activities that occur inside. It is leisure time and an opportunity for children to engage in free play with friends. Kindergartens and kindergarten teachers are central to securing the conditions for children's play in ECEC. Almost all young children in the Nordic countries attend public or private kindergartens, where they spend approximately 7.5 h a day. In the Norwegian Framework Plan for the Content and Tasks of Kindergarten (2017), it is stated 'play shall be a key focus in kindergarten, and the inherent value of play shall be acknowledged. Kindergartens shall make good provision for play, friendship and the children's own culture' (2017, p. 20). It goes on to say that 'kindergartens shall inspire and make room for different kinds of play both outdoors and indoors' (p. 20).

These societal and political statements define play as important for children's development and cultural formation, and they oblige kindergartens to offer good conditions for play. However, the plan does not contain precise descriptions of how kindergartens should meet the obligations, though it is clear that children's play should be prioritised.

Kindergartens are societal institutions, each with a specific history and specific social and physical conditions. Institutional history is reified through children's participation and social interactions in the available activities, which condition their development and cultural formation (Bang, 2009). According to Barker and Wright (1966, 1971 as cited in Bang, 2009), the concept of the human environment can be summarised in three general dimensions: artefacts, social others and self. However, the physical environment is important as well (Fjørtoft, 2001, 2004; Grahn, Mårtensson, Lindblad, Nilsson, & Ekman, 1997). Social play is important for young children, and outdoor play in nature or on playgrounds affords ideal opportunities for it. Several years ago, Swedish landscape architect Grahn et al. (1997) studied children's activities and development in two kindergartens. Their results showed how the conditions for children's play were influencing their activities and their development. Children showed better results in motor function (i.e., balance, agility and strength), health and cognitive skills (i.e., concentration when conditions allowed them to climb, run, build, tumble and hide and have space for their imaginations, independence and social play in small and larger groups (Grahn et al., 1997, p. 96–97). Additionally, they found that children who spend many hours outdoors in all weather and in natural landscapes are better positioned for learning and development than children who spend their outdoor playtime on a playground with limited variations in terrain and equipment. In a natural landscape, where there is enough space for children to find interesting spaces in which to play, their activities are more imaginative and more varied, ranging from wild and noisy to calm and quiet.

¹According to Nordic Statistics, Denmark, Norway, Sweden and Iceland, 97% of children from three to five attend kindergarten, in Finland it is 70% (NOSOSKO, 2014).

There were more disturbances and conflicts on kindergarten playgrounds than in nature, which the researchers attributed to the limited amount of space. Norwegian researchers Sandseter (2009, 2010) and Gurholt and Sanderud (2016) reached the same conclusions, adding that children's curiosity and engagement in explorative activities and risky play enjoy better conditions in nature.

A recent study of 5-year-old children's physical activity in 43 kindergartens in Denmark showed that they engaged in more physical activity when they were outdoors (Olesen, 2014) and another found that their play activities were more diverse when teachers regularly participated and allowed the activities to be rough and wild (Sørensen, 2013). In line with this, Sandseter (2009, 2010) found that it is important for children's well-being and development to include possibilities to engage in risky play, such as climbing trees, in which falling is a risk, or playing in the wilderness, in which getting lost is a risk. Ulset, Vitaro, Brendgen, Bekkhus, and Borge (2017) examined the relations between children's time spend outdoors and their cognitive and behavioural development, finding that outdoortime in preschool supports children's development of attention skills and protects against attention problems and hyperactivity symptoms.

Children in most Norwegian kindergartens spend 1–2 h a day outside on the playground during the winter and more than 4 h in summer (Paulsen et al., 2012 as quoted in Løndal & Fasting, 2016). Children in outdoor kindergartens spend more time outdoor in general than children in other kinds of kindergarten do (Birkeland & Sørensen, this volume, Ulset et al., 2017). Regular trips outside the kindergarten area to other play places, such as forests or parks, provide children with opportunities for a variety of activities depending on the environment and its affordances (Bang, 2009; Fasting, 2015).

In some European countries (e.g. Poland), parents expect and allow their boys to go out and play in the dirt, but their girls are expected to play more quietly (Sadownik, this volume). In the Anji province in China, outdoor play is encouraged (He, this volume) more than it is in other regions (Birkeland & Sørensen, this volume), though recognition of its relevance is growing. Playful outdoor physical activity is a good opportunity for children to be with friends and have fun (Sandseter, 2009, 2010; Sørensen, 2013). Fantasy play and role play are also important ways of acquiring competences and learning about one self and the social world (Fleer, 2012; Sørensen, 2017).

Just as physical environments shape children's outdoor experiences, kindergarten teachers and the pedagogical practice do as well. In a study on kindergarten teachers' interaction styles, Løndal and Greve (2015, p. 469) found three main approaches to teachers' involvement with children: a surveillance approach, an initiating and inspiring approach and a participating and interactional approach. The surveillance style is often practiced when outdoor playground time is defined as time for children's undisturbed free play alone or with peers and supervised by one or two kindergarten teachers. Earlier research (Sørensen, 2013, 2017) revealed that most children spend their outdoor playtime engaged in play activities and having fun with other children. Often, during outdoor playtime, kindergarten teachers' take coffee breaks in shifts and do practical work or have meetings with colleagues,

parents or other professionals, meaning that child-teacher ratios are often lower than during the rest of the day. Additionally, kindergarten teachers interact more with children in nature-based play spaces or in other spaces beyond the kindergarten playground than they do on the playground, and therefore all children can be expected to be included in playgroups and social activities when play is experienced beyond the kindergarten (Sørensen, 2017). Based on this research, it is obvious that there is a need for a fuller understanding of how different conditions, environments, people, artefacts and pedagogical practices form the social situations for children's development during outdoor playtime.

This study focuses on a 4-year-old boy named Benjamin and his social situation and cultural formation in outdoor playtime in kindergarten. It is not a study of his individual development; rather, the aim was to investigate how different outdoor play settings (i.e., nature and the kindergarten playground) afford different social activities for children and to examine how their individual learning, development and cultural formation take place through dialogical interplay with the environments, artefacts and other people. The research question is: how do play spaces in nature create conditions for children's play and social relations relative to those of kindergarten playgrounds?

5.2 Theoretical Perspective on Play

The cultural historical theory of child development defines play as a purposeful and meaningful activity for children and the leading form of activity for those of preschool age (Vygotsky, 1966); through play, children learn about themselves and the world around them, and play frames their development and cultural formation. Children learn about the social world and achieve important competences in their interactions with kindergarten teachers and other children (Hedegaard, 2008). Play is the leading source of development in children's preschool years, and therefore, the conditions for play are part of the conditions for children's learning, development and cultural formation in early childhood education (Vygotsky, 1966, 1978). Several Nordic ECEC researchers have spoken in favour of young children's right to play in kindergarten and against school-like activities taking over that important time or efforts to use play as a tool only for learning (Hedegaard, 2014, 2017; Øksnes, 2017; Sommer, 2015, 2018, Tanggaard, 2015). They have also warned politicians and professionals against the consequences of restricting the time and space for play by focusing on school activities because the outcome may be that children are less likely to learn. As a way of protecting the conditions for children's play in kindergarten, Tanggaard (2015) suggested a focus on creativity in pedagogical and didactical practice. According to Tanggaard, creativity is not only related to aesthetical or artistic activity; rather, children are creative when they actively and curiously explore and investigate their environment, engage in fantasy and otherwise use their imaginations.

5.3 Children's Learning, Development and Cultural Formation

The youngest children are dependent on caring social relations with their parents (Stern, 1977, 1985), and from ages three to six, which is their preschool epoch, interactions and social relations with peers are crucial to their well-being, learning and development (Schaffer, 1999; Sommer, 2003, 2015). Creative, social and imaginary play are meaningful activities for the child and have positive effects on children's learning, development and cultural formation (Bozhovich, 2009; Fleer, 2009; Schousboe, 2013; van Oers, 2013; Vygotsky, 1966). Nature and outdoor life have positive influences on children's development, including motor development as a result of engaging in play and movement on varying terrain and physical and mental health as a result of the fresh air and calm environments (Sandseter, 2009). Additionally, nature and outdoor life positively influence cognitive development because of the possibilities of exploring and learning about different phenomena in nature, such as plants, animals and insects (Grahn et al., 1997; Ulset et al., 2017). Additionally, children can discuss philosophical questions about life and death (Lipponen, 2019) with engaged and available kindergarten teachers when, for example, they see small creatures or dead animals.

Children's motives in play are meaningful to them even if they may be unknown to their teachers. In cultural-historical theory, a motive is more than an object that a person desires; it is part of a culturally meaningful practice and is embedded in a societal practice, such as kindergarten. A motive can emerge in play and can be a wish to be with friends, have fun or engage in risky or imaginary play. Motives and motivation are not properties of a person or factors that determine actions but are representative of 'a dynamic relation between person and practice' (Hedegaard & Chaiklin, 2005, as cited in Fleer, 2012, p. 91).

5.4 Studying children's Outdoor Play Activities and Social Relations

This study investigated children's play activities and social relations during outdoor playtime in order to understand how conditions differ in nature and on kindergarten playgrounds and how these differences influence children's play, social relations and cultural formation. The case study was qualitative, and the data collection methods were video observations and interviews. In employing the interaction-based observation method (Hedegaard, 2008; Sørensen, 2019), the researcher captured children's activities, physical movements and dialogue. The empirical materials consisted of 4 h of video observations of the children's activities in nature and on the kindergarten playground with Julie and Sara during autumn 2015 and spring 2016. The use of a video camera allowed the researcher to focus on one or more children and to interact with them without having to take notes. Ethical reflections

on the use of video observation in child research were necessary to respect of children's privacy (Sørensen, 2014). Three semi-structured interviews were conducted with the kindergarten teachers responsible for the children to get insights into the reflections and considerations behind the pedagogical practices related to outdoor playtime, the teachers' understandings of the social relations in children's playgroups and their thoughts about their involvement with children both in nature and at the kindergarten (Flick, 2002).

5.4.1 The Kindergarten

This study took place at an outdoor kindergarten in a suburban area of Western Norway. The kindergarten has 90 children from 1 to 6 years old divided into six groups. The kindergarten's pedagogical practice was based on traditional Norwegian values that include a close connection to and passion for nature and an active outdoor lifestyle. Children spent most of their time outdoors. Three days a week, from around 9:30 a.m. to 2:30 p.m., they went on tours to other play spaces, such as natural playgrounds, sports arenas and public parks. Before leaving for the tour every morning, the children waited for everybody to be ready and played for a while on the playground; before their parents arrived to take them home in the afternoon; they spent time on the playground primarily engaged in self-initiated play but sometimes also in teacher-organised play activities. The remaining two days of the week were spent at the kindergarten; most of the days were spent on the playground, and meals were served outside unless it was very cold and rainy. When parents enrolled their children in the outdoor kindergarten, they received information about its pedagogical practice and values. They were told that children were allowed to engage in risky play (i.e., climbing trees and playing close to water or around a campfire). They were also informed of the very likely possibility of children coming home with dirty clothes.

The children and their teachers valued outdoor playtime, viewing it as a break from indoor activities and a good possibility for free play. Additionally, it contributed to fulfilling the aims of the Framework Plan for the Content and Tasks of Kindergarten (2017): 'Kindergarten shall be a safe and challenging place in which the children can experiment with different aspects of interaction, community and friendship' (p. 11) and 'kindergarten shall be an arena for daily physical activity, and it shall promote joy of movement and motor development in the children' (p. 11).

5.4.2 Children

Benjamin is the focus child in the examples of social play, and his efforts to initiate and participate in play with other children while in nature and on the playground were analysed from his perspective. In social play situations, Anna, Laura, John, Peter and Tom from the group of 12 four-year-old children were also included.

5.4.3 Kindergarten Teachers

Two kindergarten teachers, Julie and Sara, both had deep roots in the Norwegian tradition of recognising outdoor life as important to cultural formation. They both had several years of experience at the outdoor kindergarten.

5.4.4 The Empirical Material

The analyses of the video observations utilised Vygotsky's theory of play and child development (1966) and Hedegaard's model (2008) for analysing children's social situation of development in which the personal, institutional and societal levels are interrelated as the conditions for children's everyday lives in kindergarten. In the analyses, children's play activities and social relations were examined in relation to conditions in nature and on the playground. The interviews were analysed to reveal the kindergarten teachers' understandings of their societal responsibility for children's cultural formation, how Norwegian values and traditions were incorporated into their pedagogical practice and how outdoor playtime was organised as part of the pedagogical practice.

5.5 Benjamin's Play Activities and Participation in Playgroups

Two examples of Benjamin's play activities and his participation in playgroups in nature and on the playground are presented here to illuminate how easily he established shared imaginary play with Anna in nature but struggled to be included in play on the playground first with Laura and then with John, Peter and Tom. The analyses adopted Benjamin's perspective to see how different conditions, environments and artefacts offered different possibilities for his play and inclusion. In the first example, Benjamin and Anna found a challenging path in a small forest leading to a fine spot they called The King's Place for imaginary play, and some of the other children came and joined their play. In the second example, Hey, don't push me,

Benjamin and Laura were engaged in a social play activity on the playground until Laura physically and verbally rejected Benjamin. After the rejection, Benjamin made many attempts to find other playmates before he was accepted as a participant in another group. The examples were chosen because Benjamin had an active role in the social situation and took the initiative several times, but his social interactions differed in the two play spaces, and the differences seemed to be related to the conditions.

5.5.1 Example 1. The King's Place

On this day in October, the 12 children and two teachers left the kindergarten and walked to a public park with a small forest. Benjamin and Anna walked into the wilderness through some tall grass and wild bushes. Benjamin and Anna climbed up a big tree. They found themselves a place to sit, and Benjamin made sounds as if he was shooting and flying. 'Now we're here,' he said. I (the observer) asked them where they were. Anna answered, 'At school.' Benjamin answered, 'On Iceland', and he continued, 'This spaceship...' and then 'I'm the king.' Anna added, 'I'm a king too.' 'Yes', said Benjamin, 'we are kings of the entire world.' Three other children joined them in the tree. Benjamin pointed at me and said to Anna: 'She's a baby.' I answered with some baby sounds, giggling, and they both looked at me, laughing. Benjamin made his spaceship send some meatballs² in my direction.

When Benjamin and Anna were together in their adventurous play and mutually positive interactions, they shared the intentions of playing an imaginary game in nature and they interacted with the artefacts offered by the conditions. During their dialogue, they created the King's Place together, building on the environment and each other's ideas and fantasies in which almost anything was possible because the environment and artefacts were open to their creative and fantastical interpretations. They might not have shared the same inner imagining of The King's Place, but they did share the imaginary play. Additionally, through their playful interactions, they created a common imagination in dialectic interplay with the environment; they created their own social situation (Hedegaard, 2008).

During their play and social relation, they confirmed each other's imaginations. Their play and imaginations were verified by the other children's interest and by an adult, namely me, watching and filming them while I was smiling and joining in. They could tell they had created something special, which had a positive effect on their cultural formation.

²I presume that Benjamin's inspiration to shoot with meatballs stem from an animation movie for children: *Cloudy with a chance of meatballs*. Sony Pictures Entertainment, 2009.

5.5.1.1 'What Does She Want to Hear From Us?'

Julie, one of the teachers, was also interested in the imaginary play at The King's Place, so she asked Anna and Benjamin what they were playing and what they were doing in their play. Anna told her about the shortcut and explained that it was some kind of a secret path through the wilderness, very challenging with tall grass and wild bushes. Anna also told her about The King's Place. Benjamin told her about how safe this place was for them to play in, with branches to hold on to so they would not fall.

Julie was close enough to see their play and wanted to show her interest in learning about it, and she asked them what they were doing. In their conversation with her, Benjamin and Anna referred to two categories of risky play (Sandseter, 2009)³: play with the risk of getting lost and play at heights. Using their imagination, the children could feel the real risk of getting lost in the tall grass and wild bushes, even though they were not so far away from the group. The path they took was more exciting than the ordinary and easy path, and it was a good example of how nature offers conditions for children's exploration and imaginary play with their peers. To assure Julie of how secure they were, Benjamin demonstrated that he was conscious of the risk of playing at heights and had decided it would be safe enough for them. It was interesting that Anna and Benjamin understood Julie's question differently. Anna told her about their exciting play, and Benjamin told her about the safety of their play spot.

5.5.2 Example 2: 'Hey, Don't Push Me!'

The second example is from a morning on the kindergarten playground. Benjamin was playing with Laura on the slide; they seemed to be enjoying themselves. Only one kindergarten teacher, Sara was present on the playground. She was busy, both supervising the playground and preparing a warm meal to cook on the fire and serve the children at lunch.

Benjamin and Laura went down the slide side by side and climbed up together in what seemed to be a positive relation with a common understanding of the activity. The first conflict occurred when Laura pushed Benjamin so he went down alone and she remained sitting at the top. Benjamin seemed unhappy about this; he had a sad look on his face but did not say anything. He climbed back up and sat beside Laura again. She pushed him down the slide one more time, and this time, with an aggrieved voice, he shouted, 'No!' He climbed up again, and when he got to the top, he told Laura, 'Hey, don't push me!' He tried to continue the sliding activity, but Laura kept pushing him away. Then Benjamin changed his play activity and began

³In her research, Sandseter described six categories of risky play: 1) play at great heights, 2) play at high speed, 3) play with harmful tools, 4) play near dangerous elements, 5) rough-and-tumble play and 6) play where the children can get lost.

to run up the slide. He tried several times, variating the lengths of his strides but without success. After having watched Benjamin's efforts, Laura came down from the top and tried to run up the slide. She took a long inlet and ran at full speed up the slide until Benjamin slid into her. It was not clear whether Benjamin's move was deliberate or accidental. Laura said, 'Don't, Benjamin! Benjamin!' with anger in her voice, and she continued: 'Now I'm leaving!' She walked away from the slide, and Benjamin followed her for a while before giving up.

Benjamin's and Laura's play and social situation changed from harmony to conflict, and then Laura left Benjamin. In my interpretation, Benjamin's intention was to be with Laura and play with her, and Laura's intention was to see how Benjamin would react to her quite repellent behaviour. Going down the slide and climbing back up could have become boring after a while, which might have been why she decided to push him. The teacher did not notice the conflict, and none of the children alerted her.

After Laura left Benjamin, he tried to get into a playgroup with John, Peter and Tom, who were playing with some small cars. 'I'm going to the airport', Peter said, and the children discussed where the drive should begin and where they were driving. Benjamin stood beside John, with Tom and Peter nearby. John looked at the three other boys and shouted, 'Come on, Tom and Peter!' Benjamin followed them. John turned around, and in a quiet and friendly voice, he said, 'We want to play by ourselves for a little while, Benjamin.' A few seconds later, John said to Benjamin: 'Well, do you want to play by yourself?' Do you want to play by yourself?' I could not hear Benjamin's answer, but John said, 'Then go away.' John turned around and said to Tom and Peter: 'Benjamin wants to play alone.'

Trying to become a member of the other playgroup was not easy for Benjamin. John seemed to be the leader, and he did not want Benjamin to join. Maybe he had some negative experiences with Benjamin, or maybe he wanted to maintain his play as it was. Tom and Peter did not seem to care; they did not actively invite or exclude Benjamin. John only asked Tom and Peter to come with him. He changed his message to Benjamin from 'we want to play by ourselves' to 'Benjamin wants to play alone' in order to indicate that it was Benjamin's decision not to play with them. However, Benjamin did not give up. He was patient and persistent, and after a while, he participated in the car play activity.

Laura later joined the car play, and she, Benjamin and Peter ran after the cars driving down the hill. John sat on the ground, watching the cars go down the hill and children returning them. Peter informed me, the observer: 'We're running a car race.' I tried to get more information, but they ignored me. After some time and effort, Benjamin finally seemed to be included as a member of the playgroup.

The conditions on the playground were not so inspiring for imaginary play. The slide was a piece of equipment that only allowed for going down or running up. Sliding down was easy, but running up was not. Playing with the small cars became a competition among the children. Based on my analysis and interpretations of this video observation, I concluded that Benjamin intended to interact and play with some other children on the playground. He wanted to be physically active, using his body and exploring the possibilities the conditions offered. The relationship between

Benjamin and Laura seemed to be equal in the beginning, but after Laura rejected Benjamin, he tried to establish their play relation again but did not succeed. Then he tried to be included in the new playgroup by following their ideas and their way around the playground to find a place to play. He compromised and let the other children decide the content and actions of the activity, and after several attempts, he managed to be included. Benjamin was alone and persistent in his efforts, not asking the teacher (or the observer) for help. In nature, the teacher was interacting with Benjamin and Anna, but on the playground, she was busy and not involved in their activities.

The examples are not representative of all children in outdoor kindergartens; however, situations such as these are common. The examples illuminate the social situations of a child who is a popular playmate when the conditions are open and there is room for creative play and the interpretation of natural artefacts and environment but who struggle to be accepted as member of a playgroup when the conditions and artefacts are less open to fantasy and imagination.

Interviews with the teachers revealed that they enjoyed being in nature and sharing their passion for outdoor life with the children. They valued experiences in nature as more important for children's cultural formation and future lives than traditional indoor school activities, such as drawing, writing names and counting numbers. When the teachers took the group to other play spaces outside the kindergarten, they appreciated having time to engage in play and other activities with the children without the interferences of work and meetings. They also had time to talk to the children about societal or scientific topics with the purpose of teaching them and preparing them for the future. Due to safety, there were more kindergarten teachers for the group of 12 children when they went beyond the playground, and there were no meetings or other disturbances, so they had more time and better opportunities to interact with the children and engage in their activities.

5.6 Discussion

'In play a child is free. But this is an illusory freedom' (Vygotsky, 1966, p. 10). The findings in this study show how outdoor playtime on playgrounds can be a painful arena for children striving to be accepted. Benjamin had to be very persistent to be included in a playgroup on the playground with a teacher supervising but not intervening. In nature, however, he was a popular playmate with fantastical ideas for imaginary play, attracting other children to become member of his very open and inclusive playgroup. These findings indicate that play spaces in nature offer better conditions for creative and inclusive activities and that nature facilitates children's play outside their usual playgroups. Additionally, nature provides conditions for a variety of play that contributes to children's cultural formation. Sharing imaginings and creative ideas in social relations facilitates new relations and friendships, which is positive for children's well-being, learning, development, cultural formation and awareness of diversity.

Another finding is that the ways kindergarten teachers interact with children tend to be more participatory in natural conditions, whereas on the playground, the approach is more one of monitoring, as teachers need to supervise a larger area with many children and be ready for an intervention if any of the children get into serious trouble.

Play on playgrounds is valued as an opportunity for children to learn to get along in larger groups without needing the close support of adults; they can handle smaller problems by themselves and become more robust. In addition, kindergarten teachers value the outdoor lifestyle and aim for children to become more accustomed to it, though it can be difficult sometimes (i.e., when children are cold or tired but still have to carry their backpacks and continue walking because the teachers expect the experience to help them overcome larger problems or challenges later in life).

5.7 Conclusion

The aim of this study was to investigate how outdoor environments in nature and on kindergarten playgrounds are associated with children's social relations and imaginary play. I examined how nature creates and affords better and more inclusive conditions for children's play and social relations and how their learning, development and cultural formation takes place through dialogical interplay with environments, artefacts and other people.

By interpreting the empirical materials to find patterns in the situated complexities of the institutional practice (Hedegaard, 2008), I found different conditions for children's play activities and social relations in nature than on the kindergarten playground, specifically in relation to their inclusion in playgroups. In nature, the environment and artefacts are more open to children's imaginations than the equipment and artefacts of a kindergarten playground. The teachers have more time and fewer tasks in nature, and they can be more involved and focused on children's activities and well-being.

Allowing children to engage in social play in nature tends to have positive all-round effects on their development. They practice their movements, imitate others' movements, plan how to master new challenges, learn to try more than once, find that they are able to do what they intend and feel the success of overcoming new challenges. Environments that can support children's creativity and curiosity offer possibilities for a variety of play activities. With enough well-educated kindergarten teachers aware of how to relate to children in a respectful way and with warmth and interest, children will experience better conditions for learning, development and cultural formation.

This study's empirical material illustrated how complicated it can be for a child to participate in a playgroup on a playground compared to in nature. When struggling to find somebody to play with, play is not a pleasure and is not free at all; rather, it is an experience characterised by a conflict, rejection and compromise when trying to adapt to a playgroup from a position of little or no power.

This study also revealed that children are quite sensitive to the demands of their teachers and try to engage in what they view as a correct form of discourse while demonstrating their awareness of different adults' roles and functions. We saw how at The King's Place, Anna and Benjamin tried to adjust their comments to what they expected Julie wanted to hear, while their dialogue with the researcher was more playful.

Finally, based on findings of this study, an argument can be made in support of giving young children time to play in nature with space for creative and meaningful activities and with kindergarten teachers present because of the positive effect this has on their social relations, cultural formation, learning and development. Because play, social relations and friendship are so important in children's lives, there is a need for further research focusing on the conditions for play (Hangaard, Rasmussen, & Øksnes, 2017) and the influence of play in their cultural formation, learning and futures.

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References

- Bang, J. (2009). An environmental affordance perspective on the study of development Artefacts, social others, and self. In M. Fleer, J. Tudge, & M. Hedegaard (Eds.), Childhood Studies and the Impact of Globalization: Policies and Practices at Global and Local Levels. World Yearbook of Education. New York: Routledge.
- Birkeland, Å., & Sørensen, H. V. (this volume). Time regulation as institutional condition for children's outdoor play and cultural formation in kindergarten. In L. T. Grindheim, H. V. Sørensen, & A. Rekers (Eds.), Outdoor learning and play: Pedagogical practices and children's cultural formation. Cham, Switzerland: Springer.
- Bozhovich, L. I. (2009). The social situation of child development. *Journal of Russian and East European Psychology*, 47(4), 59–86.
- Fasting, M. L. (2015). Klatring i trær og hyttebygging: om barns lek og lekesteder ute. *Nordic Early Childhood Education Research Journal*, 10(6), 1–12.
- Fjørtoft, I. (2001). The natural environment as a playground for children: The impact of outdoor play activities in pre-primary schoolchildren. Early Childhood Education Journal, 29(2), 111–117.
- Fjørtoft, I. (2004). Landscape as playscape: The effects of natural environments on children's play and motor development. *Children, Youth and Environments, 14*(2), 21–44.
- Fleer, M. (2009). A cultural-historical perspective on play: Play as a leading activity across cultural communities. In I. Pramling-Samuelsson & M. Fleer (Eds.), Play and learning in early childhood settings. New York: Springer.
- Fleer, M. (2012). The development of motives in children's play. In M. Hedegaard, A. Edwards, & M. Fleer (Eds.), Motives in children's development. Cambridge University Press.
- Flick, U. (2002). An introduction to qualitative research. Los Angeles: Sage.
- Framework Plan. (2017). Framework Plan for the content and tasks of kindergartens. Oslo, Norway: Minestry of Education and Research.
- Grahn, P., Mårtensson, F., Lindblad, B., Nilsson, P., & Ekman, A. (1997). *Ute på dagis*. Alnarp, Sweden: MOVIUM.
- Gurholt, K. P., & Sanderud, J. R. (2016). Curious play: children's exploration of nature. *Journal of Adventure Education and Outdoor Learning*, 16(4), 318–329.

Hangaard Rasmussen, T., & Øksnes, M. (2017). Legeforskningens position og fremtid i Norden. In M. Øksnes & T. Hangaard Rasmussen (Eds.), *Lek*. Oslo, Norway: Cappelen Damm.

- Hedegaard, M. (2008). Developing a dialectical approach to researching children's development. In M. Hedegaard & M. Fleer (Eds.), with J. Bang and P. Hviid *Studying children: A cultural-historical approach*. Maidenhead, UK: Open University Press.
- Hedegaard, M. (2014). The significance of demands and motives across practices in children's learning and development: An analysis of learning in home and school. *Learning, Culture, and Activity, 3,* 188–194.
- Hedegaard, M. (2017). When daycare professionals' values for transition to school do not align with the educational demands from society and school: A practice developing research project for daycare professionals' support to children's transition to school. In A. Edwards (Ed.), *A cultural-historical approach to collaboration* (pp. 247–264). Cambridge, UK: Cambridge University Press.
- Lipponen, L. 2019. Exploring compassion organizing in early childhood education. Paper presentation at the CHACDOC-conference in Bergen.
- Løndal, K., & Fasting, M. L. (2016). Magien i utetiden. In M. Øksnes & E. Sundsdal (Eds.), *Læring*. Oslo, Norway: Cappelen Damm.
- Løndal, K., & Greve, A. (2015). Didactic approaches to child-managed play: Analyses of teacher's interaction styles in kindergartens and after-school programmes in Norway. *International Journal of Early Childhood*, 47, 461–479.
- NOSOSKO. (2014). *Social security in the Nordic countries*. Copenhagen, Denmark: NOSOSCO. Øksnes, M. (2017). "Play is very ordinary, yet very magical" interview with Wendy Russell. In M. Øksnes & T. Hangaard Rasmussen (Eds.), *Lek*. Oslo. Norway: Cappelen Damm.
- Olesen, L. G. (2014). Correlates of objectively measured physical activity in Danish preschool children. Odense, Denmark: The Odense Preschool Study (TOPS).
- Sadownik, A. (this volume). Princesses (don't) run in the mud. Tracing child's perspectives in parental perception of cultural formation through outdoor activities in Norwegian ECEs. In L. T. Grindheim, H. V. Sørensen, & A. Rekers (Eds.), Outdoor learning and play: Pedagogical practices and children's cultural formation. Cham, Switzerland: Springer.
- Sandseter, E. B. H. (2009). Risky play and risk management in Norwegian preschools A qualitative observational study. *Safety Science*, 13(1), 1–12.
- Sandseter, E. B. H. (2010). 'It tickles in my tummy': Understanding children's risk-taking in play through reversal theory. *Journal of Early Childhood Research, Vol, 8*(1), 67–88.
- Schaffer, H. R. (1999). Social udvikling. Copenhagen, Denmark: Hans Reitzel.
- Schousboe, I. (2013). Cultural and historical influences of conceptions and uses of play. In I. Schousboe & D. Winther-Lindqvist (Eds.), *Children's play and development*. The Hague, The Netherlands: Springer.
- Sommer, D. (2003). Barndomspsykologi. Copenhagen, Denmark: Hans Reitzel.
- Sommer, D. (2015). Tidligt i skole eller legende læring? Evidensen om langtidsholdbar læring og udvikling i daginstitutionen. In J. Klitmøller & D. Sommer (Eds.), *Læring, dannelse og udvikling*. Copenhagen, Denmark: Hans Reitzel.
- Sommer, D. (2018). Tidlig start-pædagogik i den fremtidsparate daginstitution et alternativ. In D. Sommer & J. Klitmøller (Eds.), *Fremtidsparat? Hinsides PISA nordiske perspektiver på uddannelse*. Copenhagen, Denmark: Hans Reitzels Forlag.
- Sørensen, H. V. (2013). *Børns fysiske aktivitet i børnehaver.* PhD thesis, University of Southern Denmark. (Children's physical activity in kindergarten).
- Sørensen, H. V. (2014). Ethics in researching young children's play in preschool. In M. Fleer & A. Ridgway (Eds). Visual methodologies and digital tools for researching with young children. Springer.
- Sørensen, H. V. (2017). Hvad foregår der på legepladsen? In M. Øksnes & T. Hangaard Rasmussen (Eds.), *Lek.* Oslo, Norway: Cappelen Damm.
- Sørensen, H. V. (2019). Studying Children's friendship activities ethically using the interaction based observation method. In A. Edwards, M. Fleer, & L. Bøttcher (Eds.), Cultural-historical approaches to studying learning and development. Singapore, Singapore: Springer.

Stern, D. (1977). *The first relationship: Infant and mother*. Cambridge, MA: Harvard University Press.

Stern, D. (1985). The interpersonal world of the infant. New York: Basic Books, Inc..

Tanggaard, L. (2015). At fremme børns kreativitet: fremtidens fordring. In J. Klitmøller & D. Sommer (Eds.), *Læring, dannelse og udvikling*. Copenhagen, Denmark: Hans Reitzel.

Ulset, V., Vitaro, F., Brendgen, M., Bekkhus, M., & Borge, A. I. H. (2017). Time spent outdoors during preschool: Links with children's cognitive and behavioral development. *Journal of Environmental Psychology*, 52, 69–80.

van Oers, B. (2013). An activity theory view on the development of playing. In I. Schousboe & D. Winther-Lindqvist (Eds.), *Children's play and development*. The Hague, The Netherlands: Springer.

Vygotsky, L. S. (1966). Play and its role in the mental development of the child. *Voprosy Psikhologii*, 12(6), 62–76.

Vygotsky, L. S. (1978). *Mind in society. The development of higher processes*. Cambridge, MA: Harvard University Press.

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