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# Four- to six-year-old children's experiences of participating in different physical environments and activities in early childhood education and care institutions in Norway

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## ABSTRACT

Children's well-being in early childhood education and care (ECEC) is associated with their participation in both planning and assessing ECEC activities. The aim of the study presented here was therefore to explore children's experiences of participating in different physical environments and activities in ECEC institutions. Quantitative data were collected from structured conversations with 3693 4–6-year-old children using the Norwegian ECEC Well-Being Monitor from 2014 to 2019. Among the results, children's experiences of participating in ECEC activities were diverse and depended upon the physical environment, although most children experienced higher degrees of participation when outdoors instead of indoors. Furthermore, going hiking and circle time are activities the majority of children have to attend, even if they do not want to. Increased awareness about how children experience opportunities for participating in ECEC activities is important for ECEC institutions and may influence pedagogical thinking and planning in different environments and activities.

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Children's participation; early childhood education and care; physical environment; activities; the ECEC Well-Being Monitor

## Introduction

Children's experiences of participating in everyday life are important to promoting their well-being and democratic values (Holte et al. 2014; Ree, Alvestad, and Johansson 2019). In recognition of that belief, participation is a principle in the Convention of the Rights of the Child (United Nations 1989), paragraph 12, formally introduced into Norway and Norwegian ECEC institutions with the Norwegian Kindergarten Act (Ministry of Education and Research 2006). Likewise, according to the Norwegian Framework Plan for Kindergartens (Norwegian Directorate for Education and Training 2017), children should receive frequent opportunities to participate in both planning and assessing activities in their ECEC institutions. The aim of our study was to explore how children have experienced participation in different physical environments and activities in ECEC institutions in Norway.

In Norway, about 90% of 1- to 6-year-old children are enrolled in ECEC institutions, and the majority spend full days there (41–45 h) each week (Statistics Norway 2020). Most of Norway's 5700 ECEC institutions have access to various outdoor environments and natural areas (Lysklett 2013; Norwegian Directorate of Education and Training 2020; Norwegian Directorate of Health 2012; Statistics Norway 2020), and children spend 70% of the time outdoors in the summer and

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30% in the winter (Moser and Martinsen 2010). On a regular day, children engage in various activities, some initiated by themselves (e.g. free play) and some by the staff (e.g. circle time and hiking).

Despite the sharpened focus on children's participation in recent years, it remains necessary to know how well their participation is accommodated in different physical environments and activities in ECEC. After all, how children experience participation in their everyday lives can influence pedagogical thinking and planning in ECEC institutions.

### **Children's participation in ECEC institutions**

Participation, called *medvirkning* in Norwegian, can be defined as a physical and mental space that affords an opportunity for self-expression and interacting with others (Bae et al. 2006, 8). The concept of participation encompasses the possibility of being seen and listened to by others as well as the freedom to make decisions (Bratterud, Sandseter, and Seland 2012; Holte et al. 2014). To ensure that opportunity in ECEC, it is crucial to maintain responsive ECEC staff who listen and understand children's expressions of interest and their desires in everyday situations and activities (Bratterud, Sandseter, and Seland 2012; Næs and Mordal 1997). For children, days in ECEC consist of a broad range of playtime and staff-initiated activities occurring in different physical environments. In all such activities, it is essential to see and listen to each child in order to promote and facilitate their participation.

### **Children's participation and health in ECEC**

For all children who attend ECEC institutions, it is also essential to promote their physical and mental health, learning and development (Holte et al. 2014). Participating in everyday life is strongly correlated with happiness or quality of life known as *well-being* (Holte et al. 2014), an abstract term related to both social and cultural phenomena (Fattore, Mason, and Watson 2009; Mashford-Scott, Church, and Tayler 2012). According to Fattore, Mason, and Watson (2009), three overarching, interconnecting dimensions especially influence children's subjective feeling of well-being: a positive sense of self, agency over their everyday lives and a feeling of security and safety in relationships with adults and peers. Beyond that, five hallmarks of participation have been identified as being essential for children, one of which is the 'freedom to choose and refuse community' (Ree, Alvestad, and Johansson 2019). Freedom of choice related to participating in activities is especially important to children's well-being, as is their involvement when those activities are planned and executed (Ree, Alvestad, and Johansson 2019). In turn, children's well-being in ECEC institutions depends upon the degree to which they are allowed to engage in decision-making about matters affecting their everyday life in different ECEC environments and activities. In support of that idea, Sandseter and Seland (2016b) found a positive correlation between children's subjective well-being in ECEC institutions and their freedom to decide where to move, to choose activities and to negotiate with staff. Thus, in studying their well-being, children need to be asked about their personal, subjective and internal feelings about phenomena in their everyday lives, whether in ECEC or otherwise (Koch 2018; Mashford-Scott, Church, and Tayler 2012).

### **Play, activities and physical environments in ECEC institutions**

Play is important to promoting not only children's well-being, enjoyment and pleasure but also their cognitive development and learning (Ginsburg 2007; Giske et al. 2018; Howard and McInnes 2013; Kennedy-Behr, Rodger, and Mickan 2015; Sando 2019b; Sandseter and Seland 2017). For those reasons, time and opportunities to develop and maintain friendships via play influence their experiences of participating in everyday life (Corsaro 1985; Greve 2007). Play is moreover essential for children to learn about themselves, other people and the physical environments surrounding them (Lillemyr and Øfsti 1990), the last of which they integrate into their play by seizing the opportunities

that it presents (Storli and Sandseter 2019). Gibson (1979) has referred to a person's perception of possibilities in the surrounding environment as *affordances*, a concept that comprises the environment as well as the materials and other people therein. Both the interpretation and perception of possible affordances are personal, unique and immediate (Kyttä 2004; Storli and Sandseter 2019).

Several studies have shown that the physical environment, whether indoors or outdoors, impacts children's participation and well-being (Bjørgeren 2015, 2017; Hagen 2015; Kemple et al. 2016; Neill 1982; Sando 2019a, 2019b; Storli and Sandseter 2019; Ulich and Mayr 2002). According to Sando (2019b), children's well-being indoors positively correlates with space (e.g. a room) that encourages play involving physical activity and the freedom to use it. In ECEC institutions, time spent outdoors is often devoted to children's spontaneous free play involving a few other children, whereas time spent away from the institution, such as while hiking, is often planned in advance and involves numerous adults and other children (Hagen 2015; Kallestad and Ødegaard 2013; Sandseter and Seland 2016b; Storli and Sandseter 2015). A recent study by Storli and Sandseter (2019) revealed that children play for approximately two-thirds of their free time, whether in or outdoors, thus leaving a third of the time to non-play activity. Tobiassen and Sandseter (2020), however, observed that 50% of this non-play time includes activities that do not promote well-being, learning or social competence.

### **Aim of the study**

The aim of our study was to explore how children experience participating in different physical environments and activities in ECEC institutions. To that purpose, we formulated two research questions:

- How do 4–6-year-old children experience participation indoors and outdoors in ECEC institutions?
- How do 4–6-year-old children experience participation during circle time and hiking in ECEC institutions?

### **Materials and methods**

The data used in our study were collected with the ECEC Well-Being Monitor, an online Norwegian questionnaire made for ECEC institutions to use free of charge in order to obtain knowledge about how 4–6-year-old children experience ECEC (Bratterud, Sandseter, and Seland 2012; Queen Maud University College 2020; Sandseter and Seland 2017).

### **Questionnaire**

The ECEC Well-Being Monitor is a tool that facilitates a structured conversation between a child and an ECEC staff member (e.g. teacher or assistant) about ECEC, specifically about friendships and play, relationships with staff, the physical environment, general well-being, activities engaged in and experiences of participating and being seen and listened to. To access the instrument, ECEC staff members have to register online, agree to the terms of use and provide basic information about their institution (i.e. size, ownership, organisation and profile). To create a safe environment for administering the Well-Being Monitor, staff should be quite familiar with the child in question.

The Well-Being Monitor consists of 50 questions with three or four answer choices, all inspired by the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter and Pike 1984). The questions are divided into six themes: friendships and play, relationships with staff, the physical environment, participation and well-being, activities and experiences of participating (Queen Maud University College 2020).

## Data collection

Between 1 January 2014 and 31 December 2019, 3768 children completed the ECEC Well-Being Monitor, 78 of whom were later excluded from the sample: 33 due to missing information about age, 15 due to missing information about gender and 27 who were less than 4 years old. After those exclusions, 3693 children – 1799 boys and 1894 girls – remained to form the sample. The children did not have to answer all of the questions if they did not want to; thus, the number of answers ( $N$ ) varies somewhat in the results.

We focused on seven questions related to children's participation at their ECEC institutions. Four of the questions related to their experiences of participation indoors versus outdoors, whereas the other three related to their experiences of participating in circle time and hiking. All seven questions had four possible answers: *often*, *sometimes*, *almost never* and *never*. For the purposes of our statistical analyses, we pooled responses of *never* and *almost never* into one category: *never or almost never*.

## Statistical analyses

Children's answers to questions about experiences of participating are presented as descriptive statistics ( $n$ , %). We computed two-way contingency tables to evaluate possible associations between gender and experiences of participating (1) indoor versus outdoor activities, and (2) during circle time and hiking. Because the assumption of minimum expected cell frequency was not violated, we used the chi-square test of independence to assess potential differences between boys and girls. To evaluate the strengths of the associations, we calculated the Cramer's  $V$ , and to evaluate whether age influenced experiences of participation, we calculated Kendall's tau-b correlations. In supplementary analyses, we investigated whether experiences of participating in different physical environments and activities were influenced by (1) friendships and play, (2) relationships with staff or (3) being seen and listened to. Those analyses were conducted with a pooled sample of boys and girls as a means to increase statistical power. We considered  $p$  values less than .05 as indicating statistical significance. All analyses were conducted using Statistical Package for the Social Sciences for Windows version 26.0 (IBM Corp., Armonk, NY).

## Ethical considerations

The study was approved by the Norwegian Centre for Research Data with the condition that the data representing the specific ECEC institution would not be analysed due to the increased risk of identifying individuals in institutions with small populations of children. Because ECEC staff members conducted the conversations with the children, no direct contact occurred between the children and the researchers.

Talking to children about their psychosocial health and well-being related to their ECEC institutions generally requires special attention from staff. Each child's well-being and feelings have to be met with respect and care, and vulnerable children require taking special considerations. In our study, ECEC staff members were instructed to contact professionals if any concern about children's psychosocial health or well-being arose, and all teachers using the ECEC Well-Being Monitor were encouraged to carefully read the enclosed 'Guide for Implementing the Conversation'. Both children and their parents had to approve the use of the ECEC Well-Being Monitor, and for any reason at any time, children could choose not to answer one or several questions or to stop answering questions altogether.

## Results

Baseline characteristics of the sample appear in [Table 1](#).

[Table 2](#) shows how the children responded to questions about their experiences of participating in indoor and outdoor activities at their ECEC institutions. A higher proportion of children reported

**Table 1.** Baseline characteristics of the study population.

|   | Overall, <i>N</i> (%) | Boys, <i>N</i> (%) | Girls, <i>N</i> (%) |
|---|-----------------------|--------------------|---------------------|
| Total                                       | 3693 (100%)           | 1799 (48.7%)       | 1894 (51.3%)        |
| Year of data collection                     |                       |                    |                     |
| 2014  | 397 (10.8%)           | 210 (52.9%)        | 187 (47.1%)         |
| 2015  | 287 (7.8%)            | 147 (51.2%)        | 140 (48.8%)         |
| 2016  | 597 (16.2%)           | 295 (49.4%)        | 302 (50.6%)         |
| 2017  | 390 (10.6%)           | 191 (49.0%)        | 199 (51.0%)         |
| 2018  | 1076 (29.1%)          | 503 (46.7%)        | 573 (53.3%)         |
| 2019  | 946 (25.6%)           | 453 (47.9%)        | 493 (52.1%)         |
| Age (year of participation – year of birth) |                       |                    |                     |
| 4 years old                                 | 732 (19.8%)           | 350 (47.8%)        | 382 (52.2%)         |
| 5 years old                                 | 1748 (47.3%)          | 855 (48.9%)        | 893 (51.1%)         |
| 6 years old                                 | 1213 (32.8%)          | 594 (49.0%)        | 619 (51.0%)         |

that staff members often decide what they will do in indoor activities (17.0%) than in outdoor ones (7.8%). While outdoors, however, a higher proportion of children reported often being able to opt out of activities organised by the staff (35.9%) than while indoors (20.0%). The results were similar between boys and girls. Although chi-square tests of independence indicated gender-based differences in responses to Question 1 ( $\chi^2 = 9.665$ ,  $p = .008$ ), Question 2 ( $\chi^2 = 7.820$ ,  $p = .020$ ) and Question 3 ( $\chi^2 = 8.076$ ,  $p = .018$ ), the strengths of the associations were weak (Cramer's  $V < .053$ ). To assess the possible association between age and experiences of participation, Kendall's tau-b correlations were calculated. Results revealed that a higher proportion of older children reported that staff never or almost never decide what they should do, whether indoors ( $\tau_b = -.069$ ,  $p < .001$ ) or outdoors ( $\tau_b = -.071$ ,  $p < .001$ ). In addition, a higher proportion of the older children reported that they could never or almost never opt out of engaging in activities organised by staff, again whether indoors ( $\tau_b = -.053$ ,  $p < .001$ ) or outdoors ( $\tau_b = -.034$ ,  $p = .026$ ). Although significant, the correlation coefficients imply only weak associations.

Table 3 shows how the children responded to questions about their experiences of participation during circle time and hiking in their ECEC institution. Most children answered that they could never or almost never decide not to participate in circle time (67.6%) or hiking (72.5%). When hiking, 56% of the children answered that they could never or almost never participate in deciding where to go, and the results were similar between boys and girls. That result was confirmed by non-significant chi-square values ( $p < .05$ ). Meanwhile, a higher proportion of older children reported that they could never or almost never choose not to join circle time ( $\tau_b = -.119$ ,  $p < .001$ ) or hiking ( $\tau_b = -.108$ ,  $p < .001$ ). While hiking, a higher proportion of older children answered that they could never or almost never decide on where to go ( $\tau_b = -.059$ ,  $p < .001$ ). Although significant, the correlation coefficients again imply weak associations.

In supplementary analyses conducted in a pooled sample of boys and girls to increase statistical power, we investigated whether their children's experiences of participating in different physical environments and activities were influenced by friendships and play, relationships with staff or being seen and listened to. These analyses were conducted in a pooled sample of boys and girls to increase statistical power. All analyses yielded largely similar results (data not shown).

## Discussion

The results of our study paint a varied picture of how children experience participation in different physical environments and activities in ECEC institutions in Norway. Most children reported a high degree of participation when outdoors but not indoors, and most also reported experiencing little freedom of choice when it comes to circle time and hiking. By age, 6-year-old children reported a higher degree of participation indoors compared with their 4- and 5-year-old peers.

**Table 2.** Children's experience of participation while being indoor and outdoor in ECEC.

|   | Overall N (%) | Boys N (%)   | Girls N (%)  | 4 years old N (%) | 5 years old N (%) | 6 years old N (%) |
|---|---------------|--------------|--------------|-------------------|-------------------|-------------------|
| 1. Do the staff decide what you should do indoor?                                 |               |              |              |                   |                   |                   |
| Never/almost never  | 1243 (33.7%)  | 604 (34.9%)  | 639 (34.6%)  | 204 (29.1%)       | 592 (34.9%)       | 447 (37.7%)       |
| Sometimes   | 1709 (46.3%)  | 792 (45.7%)  | 917 (49.6%)  | 342 (48.8%)       | 803 (47.4%)       | 564 (47.6%)       |
| Yes, often  | 629 (17.0%)   | 337 (19.4%)  | 292 (15.8%)  | 155 (22.1%)       | 300 (17.7%)       | 174 (14.7%)       |
| 2. Can you choose not to participate in activities that the staff decide indoor?  |               |              |              |                   |                   |                   |
| Never/almost never  | 1356 (36.7%)  | 650 (38.2%)  | 706 (38.9%)  | 227 (32.9%)       | 646 (38.8%)       | 483 (41.5%)       |
| Sometimes   | 1423 (38.5%)  | 663 (38.9%)  | 760 (41.9%)  | 307 (44.6%)       | 652 (39.2%)       | 464 (39.9%)       |
| Yes, often  | 738 (20.0%)   | 390 (22.9%)  | 348 (19.2%)  | 155 (22.5%)       | 366 (22.0%)       | 217 (18.6%)       |
| 3. Do the staff decide what you should do outdoor?                                |               |              |              |                   |                   |                   |
| Never/almost never  | 2466 (66.8%)  | 1170 (66.8%) | 1296 (69.7%) | 429 (61.3%)       | 1173 (68.5%)      | 864 (72.1%)       |
| Sometimes   | 857 (23.2%)   | 419 (23.9%)  | 438 (23.5%)  | 208 (29.7%)       | 394 (23.0%)       | 255 (21.3%)       |
| Yes, often  | 288 (7.8%)    | 162 (9.3%)   | 126 (6.8%)   | 63 (9.0%)         | 146 (8.5%)        | 79 (6.6%)         |
| 4. Can you choose not to participate in activities that the staff decide outdoor? |               |              |              |                   |                   |                   |
| Never/almost never  | 898 (24.3%)   | 427 (25.0%)  | 471 (26.1%)  | 154 (22.1%)       | 429 (25.8%)       | 315 (27.3%)       |
| Sometimes   | 1292 (35.0%)  | 614 (35.9%)  | 678 (37.5%)  | 280 (40.2%)       | 577 (34.7%)       | 435 (37.7%)       |
| Yes, often  | 1325 (35.9%)  | 668 (39.1%)  | 657 (36.4%)  | 262 (37.6%)       | 659 (39.6%)       | 404 (35.0%)       |

**Table 3.** Children's experience of participation during circle time and hiking in ECEC.

|  | Overall N (%) | Male N (%)   | Female N (%) | 4 years old N (%) | 5 years old N (%) | 6 years old N (%) |
|--|---------------|--------------|--------------|-------------------|-------------------|-------------------|
| 5. Can you choose not to participate at circle time if you do not want to? |               |              |              |                   |                   |                   |
| Never/almost never   | 2497 (67.6%)  | 1218 (71.1%) | 1279 (70.3%) | 412 (57.8%)       | 1217 (73.2%)      | 868 (75.0%)       |
| Sometimes  | 698 (18.9%)   | 329 (19.2%)  | 369 (20.3%)  | 177 (24.8%)       | 301 (18.1%)       | 220 (19.0%)       |
| Yes, often   | 337 (9.1%)    | 165 (9.6%)   | 172 (9.5%)   | 124 (17.4%)       | 144 (8.7%)        | 69 (6.0%)         |
| 6. Can you choose not to participate at trips/hikes if you do not want to? |               |              |              |                   |                   |                   |
| Never/almost never   | 2677 (72.5%)  | 1271 (74.8%) | 1406 (77.3%) | 468 (66.2%)       | 1288 (77.0%)      | 921 (80.8%)       |
| Sometimes  | 588 (15.9%)   | 295 (17.4%)  | 293 (16.1%)  | 153 (21.6%)       | 275 (16.4%)       | 160 (14.0%)       |
| Yes, often   | 255 (6.9%)    | 134 (7.9%)   | 121 (6.6%)   | 86 (12.2%)        | 110 (6.6%)        | 59 (5.2%)         |
| 7. Can you participate in deciding where to go for trip/hikes?             |               |              |              |                   |                   |                   |
| Never/almost never   | 2069 (56.0%)  | 982 (56.5%)  | 1087 (59.1%) | 361 (50.9%)       | 1019 (60.2%)      | 689 (58.6%)       |
| Sometimes  | 1164 (31.5%)  | 571 (32.8%)  | 593 (32.3%)  | 221 (31.2%)       | 540 (31.9%)       | 403 (34.3%)       |
| Yes, often   | 344 (9.3%)    | 186 (10.7%)  | 158 (8.6%)   | 127 (17.9%)       | 133 (7.9%)        | 84 (7.1%)         |

### ***Children's experiences of participating indoors and outdoors***

The children reported a high degree of participation when spending time outdoors, which aligns with the findings of Sandseter and Seland (2016a). The high level of participation outdoors strengthens the perception of the outdoor physical environment as promoting children's psychosocial health and well-being (Atwool 2006; Deci and Ryan 2012; Holte et al. 2014). In that dynamic, affordances are essential (Gibson 1979), and the outdoors is likely to hold more potential affordances than indoor environments (Kyttä 2004), which are often fixed, if not permanent, and organised by adults (Nordtømme 2016; Sando 2019b). Nevertheless, children in other studies have reported feeling free to use rooms, toys and equipment indoors whenever they wanted to (Sandseter and Seland 2016a), and the free use of such resources is essential to children's engagement attendance and well-being, for it provides a feeling of agency (Fattore, Mason, and Watson 2009; Ree, Alvestad, and Johansson 2019). Despite this free use policy seen in other studies, our results indicate that this is insufficient for children to experience a high degree of participation indoors. The outdoor environment, by contrast, has been shown to provide greater complexity and affordances (Gibson 1979; Kyttä 2004), which may increase children's perception of their agency and freedom of choice.

Another important difference between indoor and outdoor environments is the relatively large degree of physical space available outdoors. The outdoors provides children with numerous possibilities to move freely and to engage in running, climbing, rolling and bicycling, all of which are activities that most children prefer (Bratterud, Sandseter, and Seland 2012). By contrast, most ECEC institutions impose restrictions on the space made available for some activities, especially indoors, which can reduce children's freedom of choice, agency and, in turn, sense of participation.

In our study, 6-year-old children reported a higher degree of participation than their 4- and 5-year-old counterparts. Added to the high degree of children's participation in outdoor environments, that result has ramifications from a pedagogical standpoint given the reduction of outdoor learning experiences that occurs as age and level of education increase (Waite 2010; Waite, Rogers, and Evans 2013). In that light, the result underscores the importance of the pedagogical approach taken and using the outdoors as a setting for promoting children's learning, experiences of participation and, in turn, well-being. However, the observed age-based difference in how children perceive their participation may be explained by the relative maturity of their understanding of what it means to participate.

### ***Organisation of time indoors versus outdoors***

In ECEC institutions, time spent outdoors is often dedicated to children's free play, whereas staff-organised activities are often emphasised indoors (Kallestad and Ødegaard 2013). When children are free to choose what to do and with whom to play, their implied agency may strengthen their feeling of participation as well as promote their development, learning and sense of well-being (Corsaro 1985; Greve 2007; Öhman 2012). Although that trend likely differs between ECEC institutions, our study was not designed to clarify how time and indoor versus outdoor activities are organised. Even so, the result indicates that time spent outdoors is organised in a way that emphasises children's experience of participation.

### ***Implications of children's participation in different environments***

Most children in our study reported experiencing a high degree of participation outdoors, whereas few reported a similar experience while indoors. The organisation of time and activities are important in this matter, and increased emphasise on children's participation needs to be addressed especially indoors. The nature of free play accommodates children's engagement, participation and freedom to choose where, with what and with whom to play (Öhman 2012). Along with children's high and relatively consistent engagement and in free play (Storli and Sandseter 2019; Tobiassen and Sandseter



2020) that finding emphasises the importance of time for free play for children in ECEC institutions, both indoors and outdoors.

For most children, affordances available indoors and outdoors, in combination with the availability and freedom to use them, are likely to promote a feeling of participation and agency. However, some children may struggle to realise and use those affordances, especially outdoors (Gibson 1979; Kytä 2004), and the number of choices may be overwhelming as well. At the same time, participation depends upon not only a high number of choices and the freedom to choose but also being listened to and seen by others (Bae 2012; Holte et al. 2014). Some children, however, may struggle to listen to others, speak their minds and/or express themselves. To promote the participation of all children both indoors and outdoors, it is important to identify and support those children. Nevertheless, several studies have reported little interaction and communication between children and staff in free play situations (Kallestad and Ødegaard 2013; Sandseter and Seland 2016a; Seland 2009) or else communication outdoors being reduced to a helping hand from staff when needed (Hagen 2015). Children who do not speak their minds or who struggle to engage in play might slip under the staff's radar, especially in large outdoor areas. In response, to give all children a feeling of being seen and listened to, staff members need to be available and present for all children. For some children, it may also be helpful to reduce the extent of choices (e.g. play materials available, number of children in the same area and the size of the area). However, because most children enjoy engaging in free play, restrictions are likely to negatively affect their experiences of participation and general well-being (Ree, Alvestad, and Johansson 2019; Sando 2019a; Sandseter and Seland 2016a; Sandseter, Storli, and Sando 2020). The staff at ECEC institutions thus has to balance positive and negative aspects with the needs of all children, which requires considerable awareness from the staff.

### ***Children's experiences with participating in circle time and hiking***

The organisation of activities in ECEC institutions may serve a great impact on children's experiences of participation. For that reason, to ensure children's participation when planning and organising activities, staff members need to pay attention to all children and, in the process, see and listen to them (Fattore, Mason, and Watson 2009; Ree, Alvestad, and Johansson 2019). Results from our study indicate that most children did not experience any freedom of choice about their participation in circle time and hiking. However, including children in planning activities such as circle time and hiking is entirely possible and can give them a sense of ownership over specific activities (Ree, Alvestad, and Johansson 2019). Such consideration benefits from a pedagogical approach and philosophy that emphasises children's voices and takes their considerations into account.

### ***Implications of organised activities***

Our results additionally show that children reported having little freedom of choice over circle time and hiking. Several other studies have also highlighted children's reduced well-being when they have to engage in activities that do not want to (Bae 2009; Fattore, Mason, and Watson 2009; Holte et al. 2014; Koch 2018). Against that trend, Sandseter and Seland (2016a) found that more than 90% of children in their study were satisfied with activities organised by the staff. It is possible that fun and/or engaging content in those activities mitigated some of the negative effects of reduced freedom of choice. At any rate, in activities such as circle time and hiking, children's participation can be activated in several ways (e.g. asking them where to go, eat and/or play) in order to reduce their feeling of obligation.

## ***The balance of participation***

Children’s experiences of participating in organised activities could pose some dilemmas for staff at ECEC institutions. On the one hand, the staff is responsible for the activities, the content and desired outcomes with reference to the NFPK (Norwegian Directorate for Education and Training 2017). On the other, children have the right to participate, to express their opinions and to be seen and listened to by the staff. ECEC staff members thus have to balance the NFPK with each child’s feelings, self-worth and sense of ownership achievement. Several researchers have highlighted the importance of talking to and observing children, giving them the opportunity to express themselves and allowing them to participate in planning activities in order to increase their well-being (Fattore, Mason, and Watson 2009; Løkken and Søbstad 2013; Mashford-Scott, Church, and Tayler 2012; Murray 2019). For ECEC staff, striking a balance between those considerations may be quite challenging, however. If a child does not want to join circle time, for example, then the staff needs to assess ways of accommodating the child’s decision. Because a child’s well-being in a particular situation has to be considered in light of the aim and purpose of the planned activity, a balance between the individual and the group perspective also needs to be achieved. Although the NFPK’s criteria suggest that children need to attend organised activities, if a child does not want to, then the staff needs to listen to the child regardless of the criteria. Those sorts of situations call for careful consideration by ECEC staff.

## ***Strengths and limitations of the study***

The strengths of our study include assessing children’s subjective experiences of participation by hosting a structured conversation involving numerous participants from a wide range of ECEC institutions in geographically varied locales. A limitation of our study, however, was its cross-sectional design. Without longitudinal data, it is impossible to establish whether our findings represent associations or true cause and effects. Although we conducted supplementary analyses to assess whether our results were influenced by factors related to friendships and play, relationships with staff and being seen and listened to, we cannot rule out residual confounding due to unknown or unmeasured factors. Another limitation is that the children’s answers may be influenced by their relationships and level of trust with the ECEC practitioner. Because the momentary mood and feelings of the children and staff may have positively or negatively influenced the answers given, whether the children’s answers represent stable beliefs or simply their feelings at the time of data collection remains unknown. The ECEC Well-Being Monitor contains 50 questions, and both the children and staff may have found it tedious such that the answers given became less accurate over time. Even so, our study provides novel data within a field that is rarely studied.

## **Conclusion**

The chief aim of our study was to explore 4–6-year-old children’s experiences of participating in different physical environments and activities in ECEC institutions, particularly in Norway. Outdoor environments seem to facilitate children’s experiences of participating better than indoor environments, which implies room for improving children’s participation in indoor activities. Children reported little freedom of choice regarding organised activities such as circle time and hiking, and ECEC staff therefore need to strike a balance between accommodate each child and the group of children as a whole. The results additionally imply that having a safe outdoor environment and permitting free play are important to increasing children’s experiences of participating and, in turn, their well-being, and that implication is likely important both in Norway and internationally. Last, the study revealed the need for special awareness of children’s ability to participate in indoor environments and in planned activities. However, further studies are needed to identify and examine what children themselves find

to be important to promoting their experiences of participating in different activities in different physical environments.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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## References

- Atwool, N. 2006. "Participation in Decision-Making: the Experience of New Zealand Children in Care." *Child Care in Practice* 12 (3): 259–267. doi:10.1080/13575270600761727.
- Bae, B. 2009. "Rom for Medvirkning? Om Kvaliteter i Samspillet Mellom Førskolelærer og Barn." *Barn* 9 (1): 9–28.
- Bae, B. 2012. *Medvirkning i Barnehagen: Potensialer i det Uforutsette*. Bergen: Fagbokforlaget.
- Bae, B. B.J. Eide, N. Winger, and A.E. Kristoffersen. 2006. *Temahefte om Barns Medvirkning*. [www.hioa.no](http://www.hioa.no).
- Bjørger, K. 2015. "Children's Well-Being and Involvement in Physically Active Outdoors Play in a Norwegian Kindergarten: Playful Sharing of Physical Experiences." *Child Care in Practice* 21 (4): 305–323. doi:10.1080/13575279.2015.1051512.
- Bjørger, K. 2017. "Bevegelsesglede i Barnehagen: En Kvalitativ Studie av 3–5 Åringers Trivsel, Involvering og Fysiske Aktivitet i Barnehagens Ulike Utemiljø." PhD diss., NTNU, Trondheim.
- Bratterud, Å, E.B.H. Sandseter, and M. Seland. 2012. *Barns Trivsel og Medvirkning i Barnehagen. Barn, Foreldre og Ansattes Perspektiver*. [www.ntnu.no](http://www.ntnu.no).
- Corsaro, W.A. 1985. *Friendship and Peer Culture in the Early Years*. Noorwood, NJ: Ablex.
- Deci, E., and R.M. Ryan. 2012. "Motivation, Personality, and Development Within Embedded Social Context: An Overview of Self Determination Theory." In *The Oxford Handbook of Human Motivation*, edited by R.M. Ryan, 85–107. New York: Oxford University Press.
- Fattore, T., J. Mason, and E. Watson. 2009. "When Children are Asked About Their Wellbeing: Towards a Framework for Guiding Policy." *Child Indicators Research* 2 (1): 57–77. doi:10.1007/s12187-008-9025-3.
- Gibson, J.J. 1979. *The Ecological Approach to Visual Perception*. Boston, MA: Houghton-Mifflin.
- Ginsburg, K.R. 2007. "The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds." *Pediatrics* 119 (1): 182–191. doi:10.1542/peds.2006-2697.
- Giske, R., I.B. Ugelstad, A.T. Meland, E.H. Kaltvedt, S. Eikeland, F.E. Tønnessen, and E.K.L. Reikerås. 2018. "Toddlers' Social Competence, Play, Movement Skills and Well-Being: an Analysis of Their Relationship Based on Authentic Assessment in Kindergarten." *European Early Childhood Education Research Journal*, doi:10.1080/1350293X.2018.1431453.
- Greve, A. 2007. "Vennskap Mellom Små Barn i Barnehagen." PhD diss., Oslo: Høgskolen i Oslo.
- Hagen, T.L. 2015. "Hvilken Innvirkning har Barnehagens Fysiske Utemiljø på Barns lek og de Ansattes Pedagogiske Praksis i Uterommet." *Nordic Early Childhood Education Research* 10: 1–16. doi:10.7577/nbf.1430.
- Harter, S., and R. Pike. 1984. "The Pictorial Scale of Perceived Competence and Social Acceptance for Young People." *Child Development* 55 (6): 1969–1982. doi:10.2307/1129772.
- Holte, A., M. Barry, M. Bekkhus, A. Borge, L. Bowes, and F. Casas. 2014. "Psychology of Child Well-Being." In *Handbook of Child Well-Being: Theories, Methods and Policies in Global Perspective*, edited by A. Ben-Arieh, F. Casas, I. Frønes, and J.E. Korbin, 555–631. Dordrecht, Netherlands: Springer.
- Howard, J., and K. McInnes. 2013. "The Impact of Children's Perception of an Activity as Play Rather Than Not Play on Emotional Well-Being." *Child: Care, Health and Development* 39 (5): 737–742. doi:10.1111/j.1365-2214.2012.01405.x.
- Kallestad, J.H., and E.E. Ødegaard. 2013. "Children's Activities in Norwegian Kindergarten. Part 1: An Overall Picture." *Cultural Historical Psychology* 9 (4): 74–82.
- Kemple, K.M., J. Oh, E. Kenney, and T. Smith-Bonahue. 2016. "The Power of Outdoor Play and Play in Natural Environments." *Childhood Education* 92 (6): 446–454. doi:10.1080/00094056.2016.1251793.
- Kennedy-Behr, A., S. Rodger, and S. Mickan. 2015. "Play or Hard Work: Unpacking Well-Being at Preschool." *Research in Developmental Disabilities* 38: 30–38. doi:10.1016/j.ridd.2014.12.003.
- Koch, AB. 2018. "Children's Perspectives on Happiness and Subjective Well-Being in Preschool." *Children & Society* 32 (1): 73–83. doi:10.1111/chso.12225.
- Kyttä, M. 2004. "The Extent of Children's Independent Mobility and the Number of Actualized Affordances as Criteria for Child-Friendly Environments." *Journal of Environmental Psychology* 24 (2): 179–198. doi:10.1016/S0272-4944(03)00073-2.

- Lillemyr, O.F., and R. Øfsti. 1990. *Leik på Alvor: Teorier om Førskolebarn og Leik*. Oslo: TANO.
- Løkken, G., and F. Søbstad. 2013. *Observasjon og Intervju i Barnehagen*. 4th ed. Oslo: Universitetsforlaget.
- Lysklett, O.B. 2013. *Ute Hele Uka: Natur- og Friluftsbarnhagen*. Oslo: Universitetsforlaget.
- Mashford-Scott, A., A. Church, and C. Tayler. 2012. "Seeking Children's Perspectives on Their Wellbeing in Early Childhood Settings." *International Journal of Early Childhood* 44 (3): 231–247. doi:10.1007/s13158-012-0069-7.
- Ministry of Education and Research. 2006. *Act Relating to Kindergartens (LOV-2005-06-17-64)*. <https://lovdata.no/dokument/NLE/lov/2005-06-17-64>.
- Moser, T., and M.T. Martinsen. 2010. "The Outdoor Environment in Norwegian Kindergartens as Pedagogical Space for Toddlers' Play, Learning and Development." *European Early Childhood Education Research Journal* 18 (4): 457–471. doi:10.1080/1350293X.2010.525931.
- Murray, J. 2019. "Hearing Young Children's Voices." *International Journal of Early Years Education* 27 (1): 1–5. doi:10.1080/09669760.2018.1563352.
- Neill, S.R.S.J. 1982. "Preschool Design and Child Behaviour." *Journal of Child Psychology and Psychiatry* 23 (3): 309–318. doi:10.1111/j.1469-7610.1982.tb00075.x.
- Nordtømme, S. 2016. "På Vei Mot en Rom(S)Lig Pedagogikk: En Fortolkende Studie av Barns Lekeerfaringer Med Rom og Materialitet." PhD diss., Høgskolen i Sørøst-Norge, Norway.
- Norwegian Directorate for Education and Training. 2017. *Framework Plan For Kindergartens*. <https://www.udir.no/globalassets/filer/barnehage/rammeplan/framework-plan-for-kindergartens2-2017.pdf>.
- Norwegian Directorate of Education and Training. 2020. *Early Childhood Education and Care facts*. Norwegian Directorate of Education and Training, [www.barnehagefakta.no](http://www.barnehagefakta.no).
- Norwegian Directorate of Health. 2012. *Måltider, Fysisk Aktivitet og Miljørettet Helsevern i Barnehagen (IS-0345)*. [www.helsedirektoratet.no](http://www.helsedirektoratet.no).
- Næs, T.J., and T.L. Mordal. 1997. *Barns Trivsel i Barnehagen*. Statens Institutt for Forbruksforskning.
- Öhman, M. 2012. *Det Viktigste er å få Leke*. Oslo: Pedagogisk forum.
- Queen Maud University College. 2020. *Barnehagetrivsel*. [www.barnehagetrivsel.no](http://www.barnehagetrivsel.no).
- Ree, M., M. Alvestad, and E. Johansson. 2019. "Hallmarks of Participation - Children's Conceptions of how to get Access to Communities in Norwegian Early Childhood Education and Care (ECEC)." *International Journal of Early Years Education* 27 (2): 200–215. doi:10.1080/09669760.2019.1607262.
- Sando, O.J. 2019a. "The Outdoor Environment and Children's Health: a Multilevel Approach." *International Journal of Play* 8 (1): 1–14. doi:10.1080/21594937.2019.1580336.
- Sando, O.J. 2019b. "The Physical Indoor Environment in ECEC Settings: Children's Well-Being and Physical Activity." *European Early Childhood Education Research Journal* 27 (4): 506–519. doi:10.1080/1350293X.2019.1634238.
- Sandseter, E.B.H., and M. Seland. 2016a. "Children's Experience of Activities and Participation and Their Subjective Well-Being in Norwegian Early Childhood Education and Care Institutions." *Child Indicator Research* 9: 913–932. doi:10.1007/s12187-015-9349-8.
- Sandseter, E.B.H., and M. Seland. 2016b. "Norske 4-6 åringers Trivsel i Barnehagen." *Første Steg: Tidsskrift for Førskolelærere* 1: 42–45.
- Sandseter, E.B.H., and M. Seland. 2017. "4-6 year-old children's experience of subjective well-being and social relations in ECEC institutions." <https://doi.org/10.1007/s12187-017-9504-5>.
- Sandseter, E.B.H., R. Storli, and O.J. Sando. 2020. "The Dynamic Relationship Between Outdoor Environments and Children's Play." *Education 3-13* 1: 1–14. doi:10.1080/03004279.2020.1833063.
- Seland, M. 2009. "Det Moderne Barn og Den Fleksible Barnehagen: En Etnografisk Studie av Barnehagens Hverdagsliv i Lys av Nyere Diskurser og Kommunal Virkelighet." PhD diss., NTNU, Trondheim.
- Statistics Norway. 2020. *Kindergartens: Barnehager, Ansatte og Barn, Etter Eier og Fylke*. <https://www.ssb.no/barnehager>.
- Storli, R., and E.B.H. Sandseter. 2015. "Preschool Teachers' Perceptions of Children's Rough-and-Tumble Play (R&T) in Indoor and Outdoor Environments." *Early Child Development and Care* 185 (11-12): 1995–2009. doi:10.1080/03004430.2015.1028394.
- Storli, R., and E.B.H. Sandseter. 2019. "Children's Play, Well-Being and Involvement: how Children Play Indoors and Outdoors in Norwegian Early Childhood Education and Care Institutions." *International Journal of Play: Outdoor Play and Learning* 8 (1): 65–78. doi:10.1080/21594937.2019.1580338.
- Tobiassen, M.L., and E.B.H. Sandseter. 2020. "Hva Gjør Barna når de Ikke Leker i Barnehagens tid til Frilek?" In *Barnehagens Fysiske Inne- og Utemiljø*, edited by E.B.H. Sandseter and R. Storli, 79–94. Oslo: Universitetsforlaget.
- Ulich, M., and T. Mayr. 2002. "Children's Involvement Profiles in Daycare Centres." *European Early Childhood Education Research Journal* 10 (2): 127–143. doi:10.1080/13502930285209001.
- United Nations. 1989. *The Convention on the Rights of the Child (44/25)*. <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx>.
- Waite, S. 2010. "Losing our way? The Downward Path for Outdoor Learning for Children Aged 2–11 Years." *Journal of Adventure Education and Outdoor Learning* 10 (2): 111–126. doi:10.1080/14729679.2010.531087.
- Waite, S., S. Rogers, and J. Evans. 2013. "Freedom, Flow and Fairness: Exploring how Children Develop Socially at School Through Outdoor Play." *Journal of Adventure Education and Outdoor Learning* 13 (3): 255–276. doi:10.1080/14729679.2013.798590.