

Engaging toddlers in interactions during meals: group-related joint attention

Os, Ellen: Førstelektor, Institutt for barnehagelærerutdanning, OsloMet – storbyuniversitetet, Norge.
E-mail: ellen.os@oslomet.no

PEER REVIEWED ARTICLE, VOL. 18(SPECIAL ISSUE), p. 1-17, PUBLISHED 4TH OF JUNE 2019



Abstract: Knowledge on how caregivers engage and interact with groups of toddlers in childcare settings is limited. Practice in toddler care is often based on individual approaches even though childcare is a group setting. This study focused on how caregivers created joint attention with toddlers in 12 groups during mealtimes. The results showed that some caregivers took the lead and engaged their groups in sustained joint attention episodes. The children in these groups seemed to be engaged in interactions that involved multiple children and had a rich variety of content. Other caregivers seemed unengaged, and their groups had few, brief interactions that mostly did not meet the criteria for joint attention. In these groups, the interactions largely consisted of rules and regulations.

Keywords: Caregiver-toddler interactions, group-related joint attention, mealtimes, toddler childcare

Introduction

Caregivers' interactions with children are core aspects of quality in early childhood education and care (ECEC) (Bjørnstad et al., 2012; Dalli et al., 2011; Helmerhorst et al., 2014; Helmerhorst, Riksen-Walraven, Deynoot-Schaub, & Fukink, 2015; La Paro, Williamson, & Hatfield, 2014). Interactions are regarded as especially vital for toddlers' (children 12–36 months old) well-being, development, learning and feelings of security, but research has found that interactional quality is poorer in classrooms for toddlers than older children (Bjørnstad et al., 2012; Dalli et al., 2011; Helmerhorst et al., 2015; La Paro et al., 2014). A possible explanation is that toddler childcare emphasises individual approaches based on knowledge about interactional processes in home settings (Ahnert, Pinquart, & Lamb, 2006; De Schipper, Tavecchio, & Van Ijzendoorn, 2008; Helmerhorst et al., 2014). Degotardi (2017), however, proposed a model for collaborative learning processes in infant and toddler care based on joint attention taking into account childcare as a group setting rather than merely a gathering of individual children. Group-related approaches might contribute to individual toddlers' wellbeing, learning, peer relations, feelings of security, and togetherness in groups (Os, 2013; Os & Eide, 2013; Winger & Os, 2010). Degotardi's (2017) model, therefore, is applied in this study and will be presented later.

In ECEC, much of the day is spent in routine activities, among them meals (Early et al., 2010). Mealtimes are group gatherings repeated several times a day, underscoring their importance. Johansson and Berthelsen (2014) stated that in toddler groups, meals should be valued as pedagogical events in which children and caregivers share thoughts, ideas and questions.

The aim of this study was to contribute to knowledge concerning the quality of caregivers' interactions with children in toddler groups from a group-related perspective. Due to the tendency to emphasise interactions between individual children and caregivers in toddler care (Os, in progress), there is a gap in knowledge on how caregivers engage groups of toddlers in interactions. This study focused on differences in joint attention among caregivers and groups of toddlers during meals. The content embedded in interactions was also analysed. A focus on the connections between the characteristics of caregivers' interactions and toddlers' engagement and the content in interactions might increase understanding of the complexity of interactions in toddler care and raise caregivers' awareness of the importance of engaging groups in joint attention. In this study, three research questions were addressed:

These concerned if differences in caregivers' tailoring of joint attention in interactions during mealtimes in 12 Norwegian ECEC toddler groups could be identified. What characterised the differences in caregivers' interactions? What content was emphasised in the interactions?

Meals in toddler groups

Rhyner, Guenther, Pizur-Barnekow, Cashin, and Chavie (2013) found that meals' semi-structured nature creates opportunities for interactions in which children actively participate. Research has reported various potential benefits from interactions during mealtimes in ECEC. Conversations during meals are recognised as an opportunity space for developing language (Grøver Aukrust & Snow, 1998; Snow & Beals, 2006), and peer talk presents a double opportunity space (Blum-Kulka, Huck-Taglicht, & Avni, 2004; Ehrlich & Blum-Kulka, 2010). In addition to language practice, participating in peer talk gives opportunities for togetherness among peers while creating, sharing and negotiating meanings (Johansson & Berthelsen, 2014; Os, 2013; Ødegaard, 2006).

Making the most of these opportunities and potentials is challenging (Hallam, Fouts, Bargreen, & Perkins, 2016; Klette, Drugli, & Aandahl, 2016; Os, 2013; Os & Bjørnstad, in progress). Johansson and Berthelsen (2014) found that intersubjectivity between toddlers and teachers during

meals is rare. Mealtimes in toddler groups are described as quiet and non-conversational (Hallam et al., 2016). The interactions that occur are primarily directed at fostering compliance and obedience to rules (Hallam et al., 2016; Johansson & Berthelsen, 2014).

Studies in Norwegian toddler groups have indicated low to moderate interactional quality during meals (Klette et al., 2016; Os & Bjørnstad, in progress). In a study on 168 caregivers' interactions with toddlers, Os & Bjørnstad (in progress) found that during meals, the quality of the structure, communication of expectations and support for autonomy are higher than other aspects of interactions. Sensitivity and verbal communication are at moderate levels, while support for peer relations and development are at inadequate levels. Interactional quality during meals seems to differ across groups and caregivers (Bae, 2009; Emilson & Folkesson, 2006; Os, 2013; Os & Bjørnstad, in progress).

Engagement and joint attention

Engagement in interactions is regarded as important for children's experiences in childcare (Hooper & Hallam, 2017; Ridley, McWilliam, & Oates, 2000). Research in Norwegian toddler groups has reported that some children have limited contact with their caregivers and peers and seem to be unengaged and lonely (Eide & Winger, 2018). Children's engagement seems to vary among classrooms, and higher levels of engagement are found in high-quality classrooms (Eide & Winger, 2018; Hooper & Hallam, 2017; Raspa, McWilliam, & Maher Ridley, 2001; Ridley et al., 2000).

Due to the asymmetric relations between caregivers and children, caregivers largely define the nature of interactions, which affects children's engagement (Bae, 2009; Emilson & Folkesson, 2006; Johansson, 2004). According to Bae (2009, 2012), children participate more in interactions when teachers are open, responsive and playful than in communication with controlling and restrictive teachers. Emilson and Folkesson (2006) stated that children's engagement presupposes that there is something to participate in.

Children's engagement in interactions has been associated with joint attention between children and adults (Cain, Rudd, & Saxon, 2007; Degotardi, 2017). Tomasello (1999, p. 97) defined joint attention as social interactions in which children and adults jointly attend to a third thing, showing awareness of one another's attention. Episodes of joint attention might be initiated by making sounds or verbal utterances or looking at, pointing to or showing objects (Barton & Tomasello, 1991; Tomasello, 1999, p. 62).

The definitions and research on joint attention in interactions have usually concerned caregiver-child dyads and have not taken into account childcare as a group setting (Degotardi, 2017). The concept of joint attention, though, is still applicable to polyadic interactions. Barton and Tomasello (1991) found that compared to dyadic conversations, triadic joint attention episodes among a toddler, mother and older sibling last longer, and the toddler takes more turns. Research has also reported joint attention episodes between infant peers before their first birthdays (Redder & White, 2017; Selby & Bradley, 2003). Although Ahnert et al. (2006) recommended group-focused sensitivity to enhance children's attachment in childcare, less is known about how caregivers in group settings manage to involve toddlers in joint attention while simultaneously safeguarding individual children. Degotardi's (2017) model for joint attention can contribute to increased understanding of joint attention in groups.

In addition to interactions without joint attention, Degotardi (2017) identified three types of joint attention in interactions between caregivers and children in infant and toddler classrooms: fragmented, fluid and stable joint attention. Interactions characterised as fragmented joint attention are brief and disjointed and rarely exceed two turns. Caregivers do not include peers in these episodes but disperse their attention among individual children, which can be associated with serial dyads (Schaffer & Liddell, 1984). Fluid and stable joint attention both have potential for polyadic interactions.

Degotardi's (2017) model emphasises an important but often overlooked aspect of toddler childcare: it is a group setting. This insight concerning the group nature of toddler care settings is used as the theoretical basis for analysis in this study.

Method

This study was part of the research project 'Searching for Qualities'¹ and consisted of a *qualitative* analysis of individual caregivers' interactions with toddler groups during mealtime. It drew on data from larger *quantitative* research measuring 168 Norwegian caregivers' interactional skills with the Dutch *Caregiver Interaction Profile (CIP) scales*², designed to assess caregivers' interactions with groups of children up to four years old (Helmerhorst et al., 2014)³.

The CIP scales are regarded as a valid, trusted measurement of ECEC interactional quality (Elicker, Ruprecht, & Anderson, 2014; OECD, 2015). The scales are based on developmental theory, attachment theory and research finding that caregivers' interactions contribute to children's wellbeing, development and learning (Helmerhorst et al., 2014). The scales have been proven to be valid in both Dutch (Helmerhorst et al., 2015) and Norwegian contexts (Bjørnstad et al., accepted for publication).

The CIP consists of six subscales measuring *sensitive responsiveness*, *respect for autonomy*, *structuring and limit setting*, *verbal communication*, *developmental stimulation* and *fostering positive peer interactions* based on approximately 8-minute video recordings of one caregiver in four everyday situations. The subscales give ratings for each of these situations on a scale from 1 (lowest) to 7 (highest) classified into three quality levels: *inadequate* ($M < 3.5$), *moderate* ($3.5 \leq M < 4.5$) and *adequate-to-good* ($M \geq 4.5$). Higher scores require that caregivers are aware of all the children in their proximity (Helmerhorst et al., 2014; Helmerhorst et al., 2015), which probably has contributed to the lower scores in Norwegian ECEC (Os & Bjørnstad, 2016, in progress).

The sample in the *qualitative* study presented in this article was selected from the total sample of caregivers participating in the *quantitative* CIP study. The results from the *quantitative* study numerically expressed the quality of the measured aspects of the 168 caregivers' interactions with toddlers (see Bjørnstad et al., accepted for publication; Os & Bjørnstad, in progress). However, these numerical expressions did not give detailed information about the particulars of the interactions. To illuminate these, a strategic sample of 12 caregivers from 12 toddler groups at 12 centres was selected from the total CIP sample ($N=168$)⁴ for this in-depth, qualitative study on video recordings of mealtime interactions. The caregivers were selected based on their CIP scores. In the total sample, the highest score was 5,7 ($N=1$), and 11 caregivers had scores of 5,2 or more. The lowest score was 1,2 ($N=1$), and 10 caregivers had scores of 2,2 or less. Based on examination of 21 video recordings of lunch in the toddler groups, 12 caregivers were selected: six with high CIP scores and six with low CIP scores. For this analysis, 12 cases were thought to be sufficient to explore possible patterns in interactions during meals and to be manageable for conducting in-depth qualitative analysis. Considerations during the sampling process included whether the video recordings contained rich information about the similarities and variations in the interactions within and between the high- and low-scoring groups and the variations in the structural arrangements of the meals (i.e. staff-to-child ratio, seating, spatial characteristics and food served). To strengthen the study's validity, the sample included caregivers representing a variety of interactions in both the high- and low-scoring groups.

¹ This research was funded by the Research Council of Norway.

² The CIP data were collected through the cooperation of the research projects 'Searching for Qualities' and 'Better Provision for Norway's Children in ECEC'.

³ For more detailed information about the CIP and its application and procedures in the Norwegian study, see Os & Bjørnstad (in progress) and Bjørnstad et al. (accepted for publication).

⁴ For a description of the total sample and recruitment procedures, see Os & Bjørnstad (in progress) and Bjørnstad et al. (accepted for publication).

Seven of the 12 selected caregivers were educated teachers with bachelor's degrees in early childhood education, while five were assistants whose positions had no requirements for preservice training. Six caregivers (four teachers) had higher CIP scores (high-profile caregivers, 5,2–5,7), and six caregivers (three teachers) had scores indicating inadequacy (low-profile caregivers, 1,2–2,2).

The article author was part of the team conducting the video observations. Four researchers, including the author, were trained in rating the CIP scales by the creators of the scales. The training was completed when the researchers reached 80% interrater reliability within 1-point agreement with expert scores in five situations (Bjørnstad et al., accepted for publication; Os & Bjørnstad, in progress). Interrater reliability was calculated for 10% of the videos during the coding process. Absolute agreement varied from 0,78 to 0,94 for the different subscales. The researchers did not score videos they recorded themselves.

Ethical considerations

The caregivers received written information about the study and signed written consent forms to participate before the video recordings. The parents also received written information and signed letters of consent on behalf of their children. The project followed ethical procedures and was approved by Norwegian Centre for Research Data.

From an ethical perspective, the choices to select the caregivers with the lowest CIP scores and to use the terms *high-* and *low-profile caregivers* can be questioned. The study's original intent was to use a selection of caregivers with high CIP scores to focus on the possibilities in interactions with toddlers. During the research process, it was decided to include caregivers with the lowest scores to determine if their interactional approaches had any differences with those of caregivers with high CIP scores. Although a useful analysis tool, dichotomies might conceal nuances and oversimplify complex processes (cf. Bae, 2004, pp. 92-93). The terms *high-* and *low-profile caregivers* were chosen to emphasise that this study explored caregivers' interactions assessed with a specific measurement, and the results were limited to mealtime interactions assessed by the CIP scales.

Preconceptions and research questions

The study was grounded on research indicating that toddlers' engagement in interactions is associated with high-quality care provision and is essential for their wellbeing, learning and social and cognitive development in ECEC (see Hooper & Hallam, 2017). Due to the asymmetric relationships between caregivers and children, caregivers are assumed to have responsibility for children's opportunities to participate in interactions. A major challenge in contemporary ECEC is to develop pedagogies adapted to group settings and not built on models of individual care. This study addressed the following questions:

- Are there differences in joint attention in high- and low-profile caregivers' mealtime interactions with toddlers in groups?
- What characterises interactions in groups with high- and low-profile caregivers?
- What content is embedded in these interactions?

Analysis

A total of 114 minutes of video recordings, including 7–10 minutes for each caregiver, was analysed. The focus was on the target caregivers' interactions with the groups with whom they were seated during meals.

The analysis did not elaborate the six interactional aspects measured with the CIP scales but focused on one of the scales' underlying premises: caregivers' ability to attend to groups of toddlers. Degotardi's (2017) categorisation of joint attention in groups served as a starting point for the analysis:

1. Non-joint attention: for brief instances, the caregiver and children attend to the same object or theme without signs of mutual awareness of shared attention.
2. Fragmented joint attention: brief and disjointed joint attention with mutual awareness of shared attention exists between the caregiver and children.
3. Fluid joint attention: the caregiver's attention is divided among the children, but the interactions are within a context, and the children show awareness of each other's activities and interactions.
4. Stable joint attention: the caregiver and children are engaged in mutual, sustained interactions with shared, extended content.

The analyses consisted of repeated watching of the video recordings. About 30% of the recordings were transcribed. To strengthen the study's validity, the transcribed video recordings included both sequences that seemed typical for the high- and low-profile caregivers' interactions and contrasting sequences. In addition, sequences containing both complex interactions and sparser interactions were transcribed. Detailed notes were taken on the structural organisation, children's and caregivers' engagement and initiatives, caregivers' responses to children's initiatives and content in the interactions.

The caregivers' interactional styles were analysed by applying Degotardi's (2017) model for joint attention to identify possible differences between the high- and low-profile caregivers. In an early phase, the analysis process revealed that most interactions in the groups seemed to fit either the first two categories in Degotardi's (2017) model (non-joint attention and fragmented joint attention) or the last two categories (fluid joint attention and stable joint attention). In some groups, the interactions generally alternated between non-joint and fragmented joint attention characterised by individualised interactions, often driven by pragmatic purposes. In other groups, the interactions generally alternated between fluid and stable joint attention characterised by the children showing awareness of each other's interactions and engaging in joint interactions with their caregivers. The presentation of the results emphasises whether the caregivers' interactions can be associated primarily with the first two or the last two categories in the joint attention model. The next step in the analysis was to identify details of the caregivers' initiatives, level of engagement, how they followed up the children's initiatives and their division of attention among the children. The last step was to identify the content in the interactions.

Results

The groups with high- and low-profile caregivers had no striking differences in the structural arrangements of meals. In all the groups, the meals took place in rooms that also served as play areas. The number of children and staff members seated around one table varied from nine children and three caregivers to two children and one caregiver. The child-to-staff ratio during meals was 2.8:1 for the high-profile caregivers' groups and 2.9:1 for low-profile caregivers' groups.

Differences in joint attention between high- and low-profile caregivers

The differences in joint attention between the high- and low-profile caregivers' groups were related to the first research question. At the beginning of the meals in all groups, the children were preoccupied with getting food and eating with assistance from their caregivers. It was quite silent around the tables, and the conversations mainly concerned what to eat and drink. During this phase of the meal, the interactions partly fit Degotardi's (2017) descriptions of non-joint attention as even if the children and caregivers focused on the same object, namely, food, they did not seem to have mutual awareness of the shared attention. The distribution of food seemed to be a pragmatic act, and the related interactions

were brief and disjointed, partly fitting the category of fragmented joint attention. The caregivers seemed to divide their attention among the individual children to ensure they all got food and drink. In-depth joint attention was rare.

The silence was momentary in the groups with high-profile caregivers but persistent in groups with low-profile caregivers. Interactions in the low-profile caregivers' groups were mostly food related throughout the meals, with some exceptions.

Establishing and maintaining joint attention, especially group-related, fluid and stable joint attention, can be challenging in toddler groups. However, the analysis revealed significant differences in joint attention between the children and caregivers with high and low CIP scores.

In the groups with high-profile caregivers, both the children and caregivers showed high degrees of engagement. In these groups, the meals became lively after the early, intensive serving and did not fit the description of meals as non-conversational (Hallam et al., 2016). Several episodes can be characterised as fluid or stable joint attention.

An example of stable joint attention took place when Jonas suddenly looked out the window while several other children in the group were occupied with discussing a song.

Example 1:

Jonas: *Oh oh oh.*

Assistant: *Did you hear something from outside?*

All the children turn their heads to the window. Jonas looks at the assistant and says something in a low voice.

Assistant: (whispering loudly): *An airplane? Did you see it?*

Jonas looks at the assistant and says something in a low voice.

Assistant: *No, they go so fast.*

Some children make sounds indicating agreement.

Assistant: *What do you think? Was it SAS?*

Some children make sounds indicating agreement.

Assistant: *Or was it Norwegian?*

Some children make sounds indicating agreement. The children's talk about airplanes overlaps.

Assistant: *Trine, your daddy flies. That is why Trine fancies airplanes.*

Trine: *He is flying Norwegian.*

Assistant: *Yes.*

Rasmus turns to Trine, and they talk about airplanes. After a break to serve food, the conversation continues.

Rasmus: *I have been flying SAS.*

Assistant: *You have?*

Rasmus: *And Norwegian.*

Assistant: *Yes, think about that. That is something. And Jonas has been travelling a lot on airplanes lately. He has visited his grandmother.*

The children continue to talk about airplanes, looking at each other. Their turns overlap.

This conversation was part of a flow of episodes of stable joint attention with shifting themes during the meal, which was typical of interactions in the groups with high-profile caregivers. In these groups, several children usually engaged in episodes of stable joint attention that might reflect and support their feeling of togetherness.

In contrast, the meals in the groups with low-profile caregivers were quiet, as described by Hallam et al. (2016). The caregivers rarely involved themselves in joint attention interactions even when the children explicitly invited them.

Example 2:

Jens sits next to the teacher, who looks in the other direction. Jens has three pieces of paprika on his plate, and he touches them one by one.

Jens: *It is three years* (excited).

The teacher still looks in the other direction.

Jens: *Is it three years?* (looking at the teacher).

The teacher turns to Jens and looks at his plate.

Teacher: *Yes, it is three paprika* (turns away from Jens).

Jens seemed excited to discover that the number of his paprika pieces almost equalled his age, and he invited the teacher to share his experience. However, after a short comment in the form of a correction, the teacher turned away. This episode falls into the category of non-joint attention as there were only a brief moment of attention to the same object or theme and no signs of mutual awareness of shared attention that could indicate intersubjective sharing of meaning (Degotardi, 2017; Tomasello, 1999, p. 97). This episode illustrates the frequently lost opportunities for joint attention in the groups with low-profile caregivers. In this particular case, the teacher lost an opportunity to share the boy's excitement at discovering the correspondence between the number of years and objects, which was an expression of abstract thinking. Most interactions in the groups with low-profile caregivers matched the description of non-joint attention or fragmented joint attention as they were addressed to the individual children and partly focused on regulation of the children's behaviour instead of shared meaning beyond behaviour (see Degotardi, 2017).

Characteristics of interactions in groups with high- and low-profile caregivers

The second research question concerned the characteristics of the interactions of the high- and low-profile caregivers.

Joint attention in groups might be challenging not only for children but also for caregivers. In the groups with high-profile caregivers, though, the interactions largely seemed to involve multiple peers in episodes of fluid and stable joint attention. In the following, some hallmarks of the caregivers' interactional style are presented.

All the high-profile caregivers had high levels of engagement even though the expressivity in their voices, intonation, facial expressions and body movements varied. They all seemed to take the lead in their groups. They talked relatively much and loudly enough for all the children to hear. The caregivers initiated conversations with the children by asking questions and talking about themselves, the children and events outside and in the childcare setting.

Although the high-profile caregivers seemed to have a leading position in interactions, they also showed awareness of the children's non-verbal and verbal expressions. The caregivers went with the flow, responding to the children's initiatives. Often, when the children expressed themselves verbally or non-verbally, the caregivers explicitly showed attention to them through body and visual orientation. Occasionally, when a child expressed something surprising, exciting or otherwise remarkable, the caregiver looked at that child and the other children in the group with surprised, excited or scared faces. The children's utterances were sometimes difficult to apprehend due to their young age and verbal skills. Some uttered sounds or only one word, and some talked in low voices. The caregivers often repeated, rephrased and extended the children's utterances and asked clarifying

questions. In example 1, when Jonas looked out the window and said, ‘Oh oh oh’, the assistant asked him, ‘Did you hear something from outside?’. Although she was already involved in a conversation, she noticed Jonas’ sound utterance and the direction where he looked, and she followed his initiative. Sensitive and responsive to the children’s contributions, the high-profile caregivers seemed to use their leading position to make the children in the group visible. The caregivers seemed to balance leading the group and going with the flow. Still, it should be noted that there were few instances of peer-related interactions without the caregivers’ involvement in the high-profile caregivers’ groups.

The caregivers’ interactions were characterised by smooth shifts between attending to individual children and the group. These attention shifts seemed to maintain joint attention in the group. Even when addressing individual children, the caregivers included the rest of the group by looking around and keeping their voices at an audible level, so all the children could follow and thus participate in the conversations.

The low-profile caregivers were rarely involved in joint attention episodes with the children. For the most part, they neither initiated interactions nor responded to the children’s initiatives. In this sense, the caregivers’ sensitive responsiveness was low, indicating that shared meaning rarely appeared. When it did, the interactions were brief, disjointed and mostly aimed at regulating the children.

The low-profile caregivers were not harsh or unfriendly. Their voices were soft and calm, and some smiled quite often. However, their level of engagement seemed low. When the children approached them, the caregivers gave brief replies and did not encourage further interaction, as shown in example 2.

The low level of engagement with and interest in children seemed to be an obstacle to the provision of basic care. For example, when a caregiver became aware that a child had dribbled food on her sweater and tried to rub it away herself, the caregiver commented, ‘Oh, you soiled yourself, messed a little’. The caregiver then turned away, leaving the child on her own with the problem. In these groups, the caregivers’ responses to the children’s initiatives often were limited to repeating words and making short comments before they signalled that the conversation was over. When a child showed his knife to the teacher, she teacher said, ‘That is your knife’, before turning away. There were few attempts to elaborate the children’s initiatives or include their peers in interactions. In sum, the low-scoring caregivers rarely initiated interactions nor followed up children’s initiatives. Consequently, there were few interactions in which to participate. However, unlike interactions in the high-profile caregivers’ groups, some incidents of peer interactions occurred without the caregivers’ involvement in the low-profile caregivers’ groups.

Interactions themes in groups with high- and low-profile caregivers

The high- and low-profile caregivers’ groups had significant differences in the content in the interactions. Whereas the content in the high-profile caregivers’ groups covered a wide range of themes, the primary focus in the groups with low-profile caregivers was rules and regulation of the children. Rules and regulations appeared infrequently in the high-profile classrooms and seemed to disappear quickly, in contrast to their appearances in the low-profile groups. The content in the interactions was related to research question three.

In the classrooms with high-profile caregivers, the content had rich variation including self-presentation and togetherness. To mention some examples, the groups talked about food, airplanes, birthdays, tractors, animals and bubbles in the water. The inspirations for the themes seemed to include the caregivers’ and children’s individual experiences outside the childcare settings, their shared experiences and plans, and things that suddenly appeared: a passing tractor or plane or an insect flying in the room. The pictures on the walls and materials in the room seemed to inspire joint attention and were not, as Nyberg and Grindland (2008) suggested, sources of disturbance.

The conversations seemed to give the children opportunities to make themselves visible in the group. They talked about themselves and their experiences. Such self-talk might be considered to be an early form of self-presentation, as described by Goffman (1992). The children conversed about age, gender, families, what they had in their lunchboxes, what they liked and did not like to eat, what they did and had at home and their experiences with tractors and airplanes. One girl proudly proclaimed, 'We have carrots at home'. Involvement in conversations with self-talk served a double function: the children made themselves visible and became aware of others. They compared themselves with their peers and caregivers, emphasising their common grounds, belonging to the group, similar experiences (all the children in one group had sat on a tractor) and sameness, expressed as having and liking the same food. According to de Haan and Singer (2001), manifestations of common ground are children's first language of togetherness.

The interactions in the high-profile caregivers' groups seemed to have an inherent structure. Shifting themes followed each other in an ongoing flow. Sometimes the caregivers initiated the shifts, and sometimes the children did. The children's initiatives seemed to be associative. Their contributions were often linked to a theme or a word in the previous speakers' contributions. The themes were chained together, a typical form of young children's conversations (Wood, McMahon, & Cranstoun, 1980).

Example 3:

Eight children and three staff members were gathered around a table. The staff members mentioned that the children were silent and drinking a lot because they were thirsty after playing outdoors. One child said, "Train," and the teacher confirmed that they had pretended they were on a train outside. Another child commented that she had participated too. Then a child said, "Wood," and the teacher confirmed that he had been playing in the woods. When a child said, "Lion," the teacher expanded this utterance, telling about the big boys who had pretended to be lions in the woods. Many of the toddlers had observed this game and said they found the lions to be scary. This conversation continued for a while until one boy noticed a tractor passing outside and said that he had driven a tractor. The other children claimed that they had too.

During the conversation, the children appeared engaged and enthusiastic. The teacher linked their contributions by filling in and expanding their utterances based on knowledge of their playground activities. In the middle of the conversation about tractors, a girl suddenly asked the teacher, 'Are you a girl?'. The question did not seem to be connected to the theme but might have been a delayed link to the conversation about the big boys playing in the wood (Wood et al., 1980).

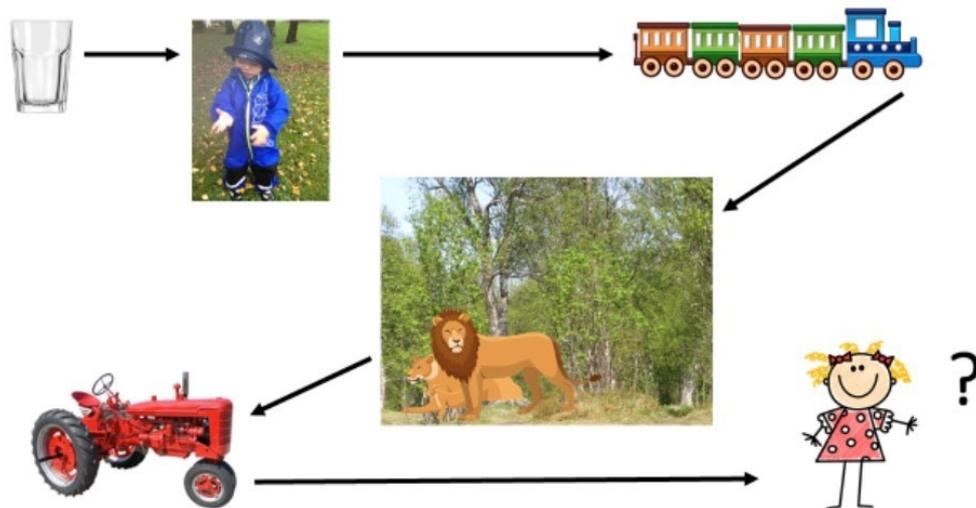


Figure 1: Chain of a conversation¹

In the low-profile caregivers' classrooms, the interactions mostly focused on rules and regulation of the children, which Hallam et al. (2016) found that dominated interactions during meals in toddler rooms. In the current study, some regulations were brief, telling the children that they should sit down, eat the food or crust of bread provided and not play with the utensils. However, there were some quite long-lasting episodes concerning eating the provided food.

Example 4:

Jenny has a big slice of bread with salami. Despite her efforts, she is not able to bite over the salami when eating the piece of bread. The whole salami slice follows into her mouth, leaving her with a big piece of bread without salami.

Jenny: *Salami, salami.* (Pointing at the salami on the serving plate while looking at the teacher).

The teacher turns to Jenny.

Teacher: *You have eaten your salami. Eat your bread. Afterwards you will have a new slice of bread with salami.* (Turns away from Jenny).

Jenny: *Want food, want food.*

This exchange is repeated several times until the end of the video recording.

Whether the teacher should have fulfilled Jenny's appeal for more salami is not the focus here. However, the teacher did not establish joint attention with Jenny. The focus was on regulating the child's behaviour rather than sharing the child's meaning. The teacher's low levels of engagement and empathy can be seen as a strategy to discipline the child through neglect.

In classrooms with high-profile caregivers, some children also did not want to eat the provided food. For example, a girl claimed she did not like the onion in the served casserole. After a short discussion regarding that she sometimes ate food with onion, the teacher offered her a slice of bread. Another girl said she too wanted bread, and both girls got a slice of bread. The high-profile caregivers'

regulations were few and brief. This contrasted the frequency and duration of regulations in low-profile caregivers' classrooms.

Discussion

Although meals are semi-structured contexts found to offer opportunities for children to participate in interactions (Rhyner et al., 2013), the results of this study indicated considerable differences in realising this potential. Mealtime in the low-profile caregivers' groups fit the description of meals as quiet, with few conversations and rare incidents of intersubjectivity between the caregivers and children. The sparse interactions in these groups generally consisted of regulating. These results accorded with several studies on interactions during meals (Hallam et al., 2016; Johansson & Berthelsen, 2014; Klette et al., 2016; Os, 2013; Os & Bjørnstad, in progress). In the high-profile caregivers' groups, the interactions seemed to make use of the potential embedded in meals and included rich, polyadic conversations with various themes (cf. Barton & Tomasello, 1991). Such conversations and interactions can facilitate toddlers' well-being, group togetherness, language and cognitive development, feeling of security and learning about different themes and how to interact with adults and peers (Grøver Aukrust & Snow, 1998; Blum-Kulka et al., 2004; Ehrlich & Blum-Kulka, 2010; Hooper & Hallam, 2017; Ridley et al., 2000; Snow & Beals, 2006; Ødegaard, 2006).

Based on Degotardi's (2017) model for joint attention, the high-profile caregivers seemed to involve themselves and the toddlers in stable, group-related joint attention episodes. It can be questioned whether group-related approaches mean sacrificing individual children and their needs (see Schaffer, 1998, p. 131). However, in this case, the high-profile caregivers seemed to balance focusing on individual children and including their peers (cf. Singer, 2017). Awareness of individual children seemed to be embedded in the inclusion. The low-profile caregivers rarely initiated interactions with the children, and their responses to the children's initiatives were what Diderichsen (1991) characterised as energy-saving responses. Even when taking an individual approach to the children, the low-profile caregivers' aloof approach seemed to favour the wellbeing and learning of neither the individual children nor the group as there rarely was joint attention, as defined by Degotardi (2017). The results of the current study suggest that group-related approaches that still attend to individual children can facilitate both aspects of interactions. However, the analysis did not examine whether group-related approaches serve *all* children. There probably are differences based on the characteristics of the caregivers, children and settings (cf. Eide & Winger, 2018).

It is possible that the high-profile caregivers' leading position made them dominant in a way that did not allow space for peer interactions. During the meals, interactions between the children without the caregivers participating were rare. Most such interactions occurred in the low-profile caregivers' groups. Creating space for peer interactions during meals seemed to be challenging for the high-profile caregivers.

The results illustrate the asymmetric relationships between children and caregivers and the defining power of caregivers (see Bae, 2009; Emilson & Folkesson, 2006; Johansson, 2004). In both high- and low-profile caregivers' classrooms, the toddlers seemed to adapt to their caregivers' interactional approaches. In the high-profile caregivers' groups, the children were engaged. They made initiatives to which the caregivers responded. In the low-profile caregivers' groups, the children were less engaged. They rarely tried to initiate interactions and did not persist when the caregivers did not respond or did so superficially. As Emilson and Folkesson (2006) found, participation presupposes that there is something in which to participate. In toddler care, caregivers have the responsibility to create these opportunities.

Conclusion

The first research question in this study was whether there were differences in the caregivers' tailoring of joint attention during meals in the toddler groups. The study yielded contrasting pictures of interactions in different toddler groups. Applying Degotardi's (2017) model, the high-profile caregivers' interactions consisted of fluid and stable joint attention characterised by a more collective approach, while the interactions in the low-profile caregivers' classrooms were more individual and mostly consisted of non-joint and fragmented joint attention.

The second research question concerned the characteristics of different approaches to interactions. The high-profile caregivers seemed to take a leading position and showed high levels of engagement when initiating interactions, responding to the children's initiatives and making sure children in the group were included. The low-profile caregivers showed low levels of engagement. They rarely initiated interactions and did not respond to the children's initiatives or did so briefly.

The last question concerned the content emphasised in the interactions. The content in the high-profile caregivers' groups was varied, including self-presentation, common grounds and various themes, but the content in the low-profile caregivers' groups was pragmatic and regulating to a great degree.

In sum, in toddler groups, meals offer opportunities to create joint attention with meaningful, joyful interactions among groups of children. Even if joint attention sometimes is brief and fragmented, it does not necessarily mean that the quality of the childcare is low. According to Degotardi (2017), variations in joint attention should instead be '...seen as one part of the naturally occurring continuum of interactional experiences for educators and young children.' (p. 417).

Limitations

Focusing on individual caregivers does not describe the interactional quality experienced by toddlers in childcare as caregivers always work in teams. During the video recordings in this study, the staff members knew that one of them was the focus, which might have made the rest of the staff more restrained than usual. One should also avoid drawing conclusions about causes based on the study results presented here. Attributing the results to the observed caregivers' characteristics might leave underlying causes hidden.

The study findings are not statistically representative of interactions by all staff members in Norwegian ECEC. The sample was small and represented extremes: caregivers with high and low CIP scores. It was presumed that the patterns found in interactions in groups with staff members with very high or low CIP scores might be relevant to staff members with especially high and low skills in the interactional aspects measured by the CIP scales. This assumption was supported by the high degree of similarities in the interactions within the high- and low-profile caregivers' groups and the marked differences between the high- and low-profile caregivers' groups.

In addition, video recordings do not reflect all of reality but give snapshots of what occurs. In this study, the video recordings covered only 8–10 minutes for each group. They also had a limited focus, did not catch the whole room and filmed some people from behind. In addition, the camera probably affected the behaviour of both the caregivers and the toddlers.

References

- Ahnert, L., Pinquart, M., & Lamb, M. E. (2006). Security of children's relationships with nonparental care providers: A meta-analysis. *Child Development, 74*(3), 664-679. doi:10.1111/j.1467-8624.2006.00896.x
- Bae, B. (2004). *Dialoger mellom førskolelærer og barn: En beskrivende og fortolkende studie*. Det utdanningsvitenskapelige fakultet, Institutt for spesialpedagogikk. Unipub, Oslo.
- Bae, B. (2009). Rom for medvirkning? Om kvaliteter i samspeilet mellom førskolelærer og barn. *Barn, 27*(1), 9-28.
- Bae, B. (2012). Children and Teachers as Partners in Communication: Focus on Spacious and Narrow Interactional Patterns. *International Journal of Early Childhood, 44*(1), 53-69. doi:10.1007/s13158-012-0052-3
- Barton, M. E., & Tomasello, M. (1991). Joint Attention and Conversation in Mother-Infant-Sibling Triads. *Child Development, 62*(3), 517-529. doi:10.1111/j.1467-8624.1991.tb01548.x
- Bjørnstad, E., Broekhuizen, M., Os, E., & Baustad, A.-G. (accepted for publication). Teachers' and Assistants' Interaction Skills in Norwegian ECEC for Toddlers Measured with the Caregiver Interaction Profile Scales (CIP). *Scandinavian Journal of Educational Research*.
- Bjørnstad, E., Pramling Samuelsson, I., Bae, B., Gulbrandsen, L., Johansson, J.-E., Løberg, H., & Os, E. (2012). *Hva betyr livet i barnehagen for barn under 3 år? En forskningsoversikt. [What does life in day care mean for children under the age of three years? A research review]*. (Vol. 2012 nr. 9). Oslo: Høgskolen i Oslo og Akershus.
- Blum-Kulka, S., Huck-Taglicht, D., & Avni, H. (2004). The social and discursive spectrum of peer talk. *Discourse Studies, 6*(3), 307-328. doi:10.1177/1461445604044291
- Cain, D. W., Rudd, L. C., & Saxon, T. F. (2007). Effects of professional development training on joint attention engagement in low-quality childcare centers. *Early Child Development and Care, 177*(2), 159-185. doi:10.1080/03004430500375927
- Dalli, C., White, E. J., Rockel, J., Duhn, I., Buchanan, E., Davidson, S., Ganly, S., Kus, L., & Wang, B. (2011). *Quality early childhood education for under-two-year-olds: What should it look like? A literature review*. Retrieved from https://www.educationcounts.govt.nz/publications/ECE/Quality_ECE_for_under-two-year-olds/executive-summary
- de Haan, D., & Singer, E. (2001). Young Children's Language of Togetherness. *International Journal of Early Years Education, 9*(2), 117-124. doi:10.1080/713670682
- De Schipper, J. C., Tavecchio, L. W. C., & Van Ijzendoorn, M. H. (2008). Children's Attachment Relationships with Day Care Caregivers: Associations with Positive Caregiving and the Child's Temperament. *Social Development, 17*(3), 454-470. doi:10.1111/j.1467-9507.2007.00448.x
- Degotardi, S. (2017). Joint attention in infant-toddler early childhood programs: Its dynamics and potential for collaborative learning. *Contemporary Issues in Early Childhood, 18*(4), 409-421. doi:10.1177/1463949117742786
- Diderichsen, A. (1991). *Omsorg for de 2-6 årige. Børns omsorgsbehov - set gennem børns egne udtryk*. København: Danmarks Pædagogiske Institut.
- Early, D. M., Iruka, I. U., Ritchie, S., Barbarin, O. A., Winn, D.-M. C., Crawford, G. M., Frome, P. M., Clifford, R. M., Burchinal, M., Howes, C., Bryant, D. M., & Pianta, R. C. (2010). How do pre-kindergarteners spend their time? Gender, ethnicity, and income as predictors of experiences in pre-kindergarten classrooms. *Early Childhood Research Quarterly, 25*(2), 177-193. <https://doi.org/10.1016/j.ecresq.2009.10.003>

- Ehrlich, S. Z., & Blum-Kulka, S. (2010). Peer talk as a 'double opportunity space': The case of argumentative discourse. *Discourse & Society*, 21(2), 211-233. doi:10.1177/0957926509353847
- Eide, B., & Winger, N. (2018). "...være grei og snill og forøvrig kan man gjøre hva man vil"? Medvirkningens kår i dagens barnehage. In K. D. Wolf & B. S. Svenning (Eds.), *Perspektiver på barns medvirkning i barnehagen* (pp. 27-42). Oslo: Universitetsforlaget.
- Elicker, J., Ruprecht, K. M., & Anderson, T. (2014). Observing Infants' and Toddlers' Relationships and Interactions in Group Care. In L. J. Harrison & J. Sumsion (Eds.), *Lived Spaces of Infant-Toddler Education and Care* (pp. 131-145). Dordrecht: Springer. https://doi.org/10.1007/978-94-017-8838-0_10
- Emilson, A., & Folkesson, A.-M. (2006). Children's participation and teacher control. *Early Child Development & Care*, 176(3/4), 219-238. doi:10.1080/03004430500039846
- Goffman, E. (1992). *Vårt rollespill til daglig: En studie i hverdagslivets dramatik* (Ny utg. ed.). Oslo: Pax.
- Grøver Aukrust, V., & Snow, C. E. (1998). Narratives and explanations during mealtime conversations in Norway and the U.S. *Language in Society*, 27(2), 221-246. doi:10.1017/S0047404500019862
- Hallam, R. A., Fouts, H. N., Bargreen, K. N., & Perkins, K. (2016). Teacher-Child Interactions During Mealtimes: Observations of Toddlers in High Subsidy Child Care Settings. *Early Childhood Education Journal*, 44(1), 51-59. doi:10.1007/s10643
- Helmerhorst, K. O. W., Riksen-Walraven, J. M., De Kruif, R. E. L., Vermeer, H. J., Fukkink, R. G., & Tavecchio, L. W. C. (2014). Measuring Interactive Skills of Caregivers in Child Care Centers: The Caregiver Interaction Profile Scales. *Early Education & Development*, 25(5), 770-790. doi:10.1080/10409289.2014.840482
- Helmerhorst, K. O. W., Riksen-Walraven, J. M. A., Deynoot-Schaub, M. J. G., & Fukkink, R. G. (2015). Child Care Quality in the Netherlands Over the Years: A Closer Look. *Early Education & Development*, 26(1), 89-105. doi:10.1080/10409289.2014.948784
- Hooper, A., & Hallam, R. (2017). Exploring the Relationship Between Global Quality and Group Engagement in Toddler Child Care Classrooms. *Journal of Research in Childhood Education*, 31(2), 215-226. doi:10.1080/02568543.2016.1273287
- Johansson, E. (2004). Learning encounters in preschool: Interaction between atmosphere, view of children and of learning. *International Journal of Early Childhood*, 36(2), 9-26. <https://doi.org/10.1007/BF03168197>
- Johansson, E., & Berthelsen, D. (2014). The Birthday Cake: Social Relations and Professional Practices Around Mealtimes with Toddlers in Child Care. In L. Harrison & J. Sumsion (Eds.), *Lived Spaces of Infant-Toddler Education and Care* (pp. 75-88). Dordrecht: Springer. https://doi.org/10.1007/978-94-017-8838-0_6
- Klette, T., Drugli, M. B., & Aandahl, A. M. (2016). Together and alone a study of interactions between toddlers and childcare providers during mealtime in Norwegian childcare centres. *Early Child Development and Care*, 1-12. doi:10.1080/03004430.2016.1220943
- La Paro, K. M., Williamson, A. C., & Hatfield, B. (2014). Assessing Quality in Toddler Classrooms Using the CLASS-Toddler and the ITERS-R. *Early Education and Development*, 25(6), 875-893. doi:10.1080/10409289.2014.883586
- Nyberg, M., & Grindland, B. (2008). The influence of the room context in the meal experience: Examples from a hospital and a nursery. *Journal of Foodservice*, 19(1), 35-43. doi:10.1111/j.1745-4506.2007.00078.x
- OECD. (2015). *Early childhood education and care policy. Review NORWAY*: OECD.

- Os, E. (2013). Opportunities knock: Mediation of peer-relations during meal-time in toddler groups. *Nordisk barnehageforskning*, 6(30), 1-9. doi:10.7577/nbf.460
- Os, E. (in progress). *Voksnes mediering av jevnaldningsrelasjoner i småbarnsgrupper*.
- Os, E., & Bjørnstad, E. (2016). Undersøkelse av støtte til samspill mellom småbarn. Et kritisk blikk på ITERS-R-skalaen. [Investigating support for toddlers' peer interactions. A critical view on ITERS-R]. In T. Gulpinar, L. Hernes, & N. Winger (Eds.), *Blikk fra barnehagen* (pp. 69-96). Bergen: Fagbokforlaget.
- Os, E., & Bjørnstad, E. (in progress). Interactions in toddler care under pressure.
- Os, E., & Eide, B. (2013). Småbarn og fellesskap i samlingsstunder og under måltider. [Young children and togetherness in circle time and during meals]. In A. Greve, S. Mørreaunet, & N. Winger (Eds.), *Ytringer om likeverd, demokrati og relasjonsbygging i barnehagen* (pp. 209-226). Bergen: Fagbokforlaget.
- Raspa, M. J., McWilliam, R. A., & Maher Ridley, S. (2001). Child Care Quality and Children's Engagement. *Early Education & Development*, 12(2), 209-224. doi:10.1207/s15566935eed1202_3
- Redder, B., & White, E. J. (2017). Implicating teachers in infant–peer relationships: Teacher answerability through alteric acts. *Contemporary Issues in Early Childhood*, 18(4), 422-433. doi:10.1177/1463949117742782
- Rhyner, P. M., Guenther, K. L., Pizur-Barnekow, K., Cashin, S. E., & Chavie, A. L. (2013). Child caregivers' contingent responsiveness behaviors during interactions with toddlers within three day care contexts. *Communication Disorders Quarterly*, 34(4), 232-241. <https://doi.org/10.1177/1525740112465174>
- Ridley, S. M., McWilliam, R. A., & Oates, C. S. (2000). Observed Engagement as an Indicator of Child Care Program Quality. *Early Education and Development*, 11(2), 133-146. doi:10.1207/s15566935eed1102_1
- Schaffer, H. R. (1998). *Making Decisions about Children: Psychological Questions and Answers*. Oxford, UK: Blackwell Publishing.
- Schaffer, H. R., & Liddell, C. (1984). Adult–child interaction under dyadic and polyadic conditions. *British Journal of Developmental Psychology*, 2(1), 33-42. doi:10.1111/j.2044-835X.1984.tb00532.x
- Selby, J. M., & Bradley, B. S. (2003). Infants in Groups: A Paradigm for the Study of Early Social Experience. *Human Development*, 46(4), 197-221. doi:10.1159/000070370
- Singer, E. (2017). Emotional Security and Play Engagement of Young Children in Dutch Child Centres: A Story of Explorative Research, Experiments and Educators Testing Hypotheses. In L. Li, G. Quiñones, & A. Ridgway (Eds.), *Studying Babies and Toddlers: Relationships in Cultural Contexts* (pp. 207-223). Singapore: Springer. https://doi.org/10.1007/978-981-10-3197-7_14
- Snow, C. E., & Beals, D. E. (2006). Mealtime Talk That Supports Literacy Development. *New Directions for Child and Adolescent Development*, 2006(111), 51-66. doi:10.1002/cd.155
- Tomasello, M. (1999). *The cultural origins of human cognition*. Cambridge, MA: Harvard University Press.
- Winger, N., & Os, E. (2010). Hverdagsliv og fellesskap på småbarnsavdelinger. *Barnehagefolk*(1), 66-76.
- Wood, D., McMahan, L., & Cranstoun, Y. (1980). *Working with Under Fives*. London, UK: Grant McIntyre.
- Ødegaard, E. E. (2006). What's worth talking about? Meaning-making in toddler-initiated co-narratives in preschool. *Early Years*, 26(1), 79-92. doi:10.1080/09575140500507892

¹ The illustration contains images from *Pixabay* by *boristrost*, *gyathanarts*, *Josethestoryteller*, *gustavorezende* and *Pexels* (All free for commercial use. No attribution required) and Ellen Os.