

SPECIAL EDITION

IS THERE KNOWLEDGE ABOUT HOW TO HANDLE CHILDREN UNDER THREE IN ECEC?

Young children's experience of aesthetics in preschool

Ingrid Pramling Samuelsson, Sonja Sheridan* & Michael Hansen**

* Department of Education, Communication and Learning, University of Gothenburg, Sweden

**Department of Education and Special Education, University of Gothenburg, Sweden

Abstract: This article aims to investigate young children's experience of aesthetic activities in preschool. The result is based on preschool teachers' mapping during a two-week period of what toddlers (1.5 to 3.4 years) are offered or take initiatives themselves to, within the area of aesthetics. The 24 preschools where the mapping was done have been participating in a larger research project called, Children's early learning. A current study of preschool as an environment for children's learning (Sheridan, Pramling Samuelsson & Johansson, 2009). This means that we also had data on the quality of the participating preschools, based on ECERS (Harms & Clifford, 1980; Sheridan, 2007), which we linked to children's experience in aesthetics. The result shows that there is a large variation between the amount and kind of aesthetic activities in preschool that young children can participate in.

Keywords: Children; Preschool; Quality; Aesthetics

Peer-reviewed seminar contribution 8th December 2011. Oslo University College, Department of Teacher Education and International Studies together with the European Society on Family Relations.

E-mail: ingrid.pramling@ped.gu.se

Pre-published 27 October 2013

Aesthetic activities have long been integrated into the pedagogy of preschool. Traditionally, preschool aesthetics have been considered not only to be fun for children but also a part of their creative activity, communication and ways of learning by doing, enabling them to use all their senses and bodily movements. Aesthetics¹ is one dimension that also distinguishes preschool from school, partly due to the fact that young children are expected to learn subjects such as mathematics and science in a playful manner and with the help of aesthetic and crea-

tive expressions. The Reggio Emilia approach emphasizes each child's 100 languages, that is, that children have many ways to express themselves (Wallin, Mæchel, & Barsotti, 1981), where aesthetics is the key feature in their pedagogy. The Reggio Emilia movement has become very popular in Sweden, for various reasons, one of them being the focus on aesthetics (Pramling Samuelsson, 2011).

The Swedish curriculum for preschool, 1 to 5 years (National Agency of Education, 2010), states that "preschool activities should be enjoyable, safe and learning-oriented for all children" (op. cit. p 5). Creative work is linked to communication in the following manner:

1. By aesthetics we mean all kinds of creative work related to children's working with their bodies

Creating and communicating by means of different forms of expression, such as pictures, songs and music, drama, rhythm, dance and movement, as well as spoken and written language provide both the content and methods to be used by the preschool in promoting, the development and learning of the child. (National Agency of Education, 2010, p. 5).

More specifically: “The preschool should strive to ensure that each child: develop their ability to convey impressions, thoughts and experiences in many different forms of expressions, such as play, pictures, songs and music, dance and drama (p 8)”. Thus aesthetics is considered to be a subject and content in itself.

Research has, however, shown that preschool teachers often relate aesthetics in preschool to methods and not to content as such, i.e. something children should learn. Instead it is used as a means of learning other contents (Asplund Carlsson, Pramling & Pramling Samuelsson, 2008), although there are studies showing how skillful young children can become in movement, music and poetry when they are focussed on as content (Pramling Samuelsson, Asplund Carlsson, Pramling & Wallerstedt, 2008).

Despite its long tradition and being emphasised in the curriculum, our knowledge of children’s and, especially the youngest children’s aesthetic experience in preschool, is very limited. This article aims to describe young children’s opportunities for aesthetic activities in preschool. The questions investigated in the study were:

- What is aesthetics for the youngest age group in preschool?
- Does the quality of the preschool affect/have an impact on the number and type of aesthetic activities available?

RESEARCH ABOUT YOUNG CHILDREN AND AESTHETICS

Aesthetics is closely related to creativity, so let us then see what Prince and Logan (2005, p.155) say about creativity:

Understanding and learning is the process of thinking. We go through the process of thinking to create meaning. We create meaning by making a connection between the new information and what we already know, so that the new information ‘makes sense’//...// This de-

scription of the process of thinking to learn sounds surprisingly like that of ‘creative thinking’ to produce new ideas, concepts, etc. New ideas are the result of making connections between material that has not previously been connected //...// Learning and creativity are both basically, the ability to make connections to create meaning or significance.

From this perspective, there are many creative activities in preschool which are non-aesthetic. On the other hand, we also know that children’s aesthetic activities do not need to be very creative. When it comes to music in early years, we know that children listen to a lot of music, but generally just as a background for other activities, not for the sake of listening to the music in itself. In his survey, Lamont (2008) telephoned about 400 parents to find out if their children were listening to music when he called. Most children were, but only in one family did they do it for the sake of the music alone. In a recent doctoral thesis, Still (2011) showed that singing was the most common music activity planned by teachers. She claims that the songs are often far too difficult for young children, and that teacher should focus more extensively on the basic elements of music, that is, music as such. Holmberg (2013) shows that music events in preschool are either reproductive or investigative. She says: “singing in preschool often has the character of reproducing, playing instruments has a character of investigating and the movement can be of reproductive as well as investigative character, depending on the context”.

Änggård (2005) made a study of older preschool children’s drawing activities. The results showed how making drawings was looked upon from the teacher’s perspective as an individual task, but in reality, among children, it was a very collective and interactive task. This means that extensive interaction and communication takes place when children have free creative work. But we can also see from other studies (Bendroth Karlsson, 2011) that, if the teacher has no clear aim for her activities, visual art can end up in conceptual confusion and “non-visual art” for children. This can also be seen in the study by Pramling et al, (2008) where children were supposed to paint to music. The key questions in creative work are the communication between children and between children and the teachers. For the play dimension to be part of aesthetics, an open and permissive attitude and communi-

cation are essential (Johansson & Pramling Samuelsson, 2006).

To be outside in the yard of the preschool, more or less every day, is a strong tradition in Swedish preschool, but little research has been done to establish what the children are really doing there. What we do know from research is that being outdoors tends to be beneficial to the health, and that children's playground activities depend to a certain extent on what is growing out there (Söderström, Mårtensson, Grahn & Blennow, 2004; Boldemann, Blennow, Dal, Mårtensson, Raustorp, Yuen & Wester, 2006).

In this study, preschool quality is used as a contextual framework for conditions created for children to participate in aesthetics activities in preschool. The reason for this is research showing that children learn better in a preschool of high quality (Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2010). The study *Children's early learning* also showed that in preschools of high quality, children's learning tended to be more developed within the area of language and communication (Mellgren & Gustafsson, 2009) and in early mathematics (Doverborg & Pramling Samuelsson, 2009). In the present study, we assumed that children would also have more opportunities to participate in aesthetic activities in high quality preschools than in ones of low quality.

The primary aim of the study was to map the distribution of different types of aesthetic activities in 24 preschools. While we are unable to say anything about the quality of the aesthetic activities that the children were involved in, we can claim that this aspect of preschool activities is extremely important, since it very often allows the child to take his/her own initiative and to feel free to do something in his or her own way.

METHOD, DATA PRODUCTION AND PARTICIPANTS

The study is quantitative and based on preschool teachers' mapping of young children's participation in aesthetic activities during a two-week period in May. The data refer to 24 preschools and 157 children in total. At the time when the activities were observed and recorded, the children were between 1.5 to 3.4 years old. The number of participating children in the 24 preschools varied from 2 to 13 children. The children were either in toddler groups, in which the children are between 1 and 3 years of age, or

in sibling groups with children between 1 and 5 years of age.

The teachers and children belonged to 24 of the 38 preschools that were involved in the larger project *Children's early learning. A current study of preschool as an environment for children's learning* (Sheridan, Pramling Samuelsson & Johansson, 2009). In that study the quality of the preschools was evaluated with the Early Childhood Environment Rating Scale (ECERS) (Harms & Clifford, 1980; Sheridan, 2007). Of the 38 preschools, 10 were evaluated as being of high quality, 19 as being of good quality, and 9 as being of low quality. The results from these quality evaluations are used in the present study where 6 of the 24 preschools are evaluated as being of high quality, 14 of good quality and 4 of low quality.

The ECERS was chosen primarily because of its ability to detect curricular quality, and its ability to function as a measure of conditions created for children's learning within different areas. A further advantage is that the ECERS builds on a child perspective that is central to the Swedish curriculum as regards to the values, content, activities, and development of competencies. More important is the fact that the evaluations of the conditions for learning, the pedagogical processes, and the experiences of the children, focus on the preschool as such, rather than on individual teachers or children.

The ECERS consists of 37 items that define different levels of quality in typical situations of Early Childhood Education and Care (ECEC). These items are grouped together into seven subscales: Personal care routines of children; Furnishings and display for children; Language reasoning experiences; Fine and gross motor activities; Creative activities; Social development; and Adult needs. Detailed descriptions are provided for each item, with item scores ranging from 1 (inadequate) through to 7 (excellent). The lower levels of quality are characterized by pedagogical unawareness and a focus on rules, and material resources, while the 'excellent' level is characterized by teachers' interaction with children and the best possible use of all resources, including themselves, to promote children's learning, participation, and influence.

The following items were selected for this study of the relationships between children's participation in aesthetic activities and the preschool quality. They are, Item 10 (Child related display), Item 21 (Art), Item 22 (Music/Move-

ment), Item 25 (Dramatic play) as well as all of the items within the subscale Language reasoning experiences (i.e., Item 11. Understanding language, Item 12. Using language, Item 13. Concepts/Reasoning, and Item 14. Informal use of language).

The schedule for recording the children's activities was constructed by us researchers. It consisted of a list of activities with an aesthetic content assumed to be common in most Swedish preschools. The teachers were instructed to enter a simple tally mark in the schedule each time an activity was observed during the observation period. The teachers were allowed to add activities relevant to their own preschool, such as cooking and hand dolls, but such activities are not considered in this study as they only represent individual preschools. Our intention was that the teachers should note whether the initiative to do different aesthetic activities came from them or the child, or as a joint task, but this did not function. Either we had not been clear when we gave the instructions, or it was an impossible task for the teachers. Things happen very fast in preschools with young children and it may be impossible for teachers to observe and register when activities begin or end, and who initiates them. This means that the results only embrace what kind of aesthetic activities children were involved in and how often they were involved in these activities. We cannot say anything about the quality of the activities or how long they lasted.

The maximum number of observation days was 10 per child if both the children and the teachers were in the preschool during all of the observation period. The total number of observed days was 1284, with a mean of 8.18 days per child. During the period studied, some of the children were ill or had a day off. Furthermore, some of the teachers were unable to enter the tally marks in the schedule every day as they were participating in competence development programmes etc. However, we have no reason to believe that this kind of omission varies systematically with the preschool's quality according to ECERS.

THE STATISTICAL ANALYSES

The analyses are based on the number of tally marks per child aggregated to preschool level. The number of tally marks for a specific activity

in a specific preschool has also been related to the total number of tally marks for this preschool. This gives an idea of the relative balance between different kinds of activities in each preschool. This is also a way to reduce the influence of uncertainties related to the observations and records which needs to be considered in the interpretation of the analyses. For example, the data provide no information on the number of children observed in an activity, i.e. whether they were individuals or groups, and no information on how long time an activity lasted. It is also difficult to know how the teachers have coded multi-task activities, that is, situations when a child has been drawing and painting at the same time as he or she is listening to music.

As the data material is rather limited and because of the uncertainties related to the recording of activities, a non-parametric correlation coefficient (Spearman's rho) was used. However, the most used coefficient, Pearson's *r*, gives similar results, which might strengthen the analyses.

RESULTS

In this study the number of participating preschools is relatively low and since the observation schedule allowed many different types of activities, for some preschools there are no or only a few tally marks for some aesthetic activities. In order to discern generalizable aesthetic activity patterns in the preschools, we have pooled the observed activities together into broad activity categories. In this way we also make the analyses less sensitive to random variations related to the choice of observation period (i.e., recording of untypical activities). Accordingly, we have defined four categories, each one collecting a fairly large number of observations. The four categories are: *Play outdoors*, *Creativity indoors*, *Verbal stimulation* and *Music activities* (see Table 1). Together they give a comprehensive view of young children's participation in aesthetic activities in preschool. We assume that these broad categories are relevant not only to the preschools in the study but to preschools in general.

In total there are 4000 tally marks for the 24 participating preschools distributed across the four categories above. In the data as a whole the categories are quite equal in size. Every category has between 20 to 34% of the total number of marks. Most marks, 34% in total, refer to activ-

Table 1. The division of recorded activities into four categories.

<i>Activity category</i>	<i>Observed activities</i>
Play outdoors	Sand or water
Creative work indoors	Sand indoors, beads, creativity with natural materials, clay of various kinds, cutting and pasting, painting and drawing
Verbal stimulation	Drama, narratives, role-play
Music activities	Listening or singing to music and playing with instruments

ities related to music. Second comes activities in the category Creative work indoors, 26%, third comes play outdoors with 22%, and last comes Verbal stimulation, 18%. An in-door focus

shows that music accounts for 44% of all recordings and creative work 33%, while verbal stimulation accounts for only 23% of all recorded indoor activities. See Table 2 below.

Table 2. Total number and percentage of recorded activities within the four categories.

	<i>Total number</i>	<i>Percent of all registrations</i>	<i>Percent of in-door registrations</i>
<i>Play outdoors</i>	898	22%	---
<i>Creative work indoors</i>	1091	26%	33%
<i>Verbal stimulation</i>	747	18%	23%
<i>Music activities</i>	1431	34%	44%
<i>All</i>	4167	100%	100%

THE RELATIVE DISTRIBUTION OF CATEGORIES RELATED TO INDIVIDUAL PRESCHOOLS

It is not meaningful to compare preschools based on their absolute number of tally marks as the numbers of children per preschool varies. It is, however, possible to compare relative distribution patterns in the participating preschools.

The results show a variation between the preschools in all of the four categories. Table 3 shows the proportion of each preschool's total numbers of tally marks that falls into each of the four categories. Half of the preschools have 16-27% of all marks in the category Play outdoors (see the last three lines in table 3). There are preschools with few marks for outdoors, while other preschools have more than half of their marks

for outdoors. In all, play outdoors embraces activities with sand and water. In total, there are approximately 900 recorded out-door activities with sand and/or water play. All preschools have some tally marks for outdoor play, although the number for individual preschools varies between 6 and 118.

The category Verbal stimulation accounts for between 7 and 23% of all tally marks in half of the preschools. Despite this, some preschools have only a few or no marks for children's rhymes, narratives and role-play. Creativity indoors accounts for 11% and Music activities for 21% of all tally marks for a preschool.

These results can be interpreted to mean that the preschools have different aesthetic profiles.

Table 3. Proportions of the total number of tally marks in four activity categories.
Number of preschools: N=24

	<i>Verbal stimulation</i>	<i>Creativity indoors</i>	<i>Music activities</i>	<i>Play outdoors</i>
<i>Mean</i>	.16	.26	.35	.24
<i>Median</i>	.16	.24	.33	.24
<i>SD</i>	.10	.11	.09	.12
<i>Minimum</i>	.00	.11	.21	.04
<i>Maximum</i>	.35	.49	.56	.63
<i>25th Percentile</i>	.07	.18	.27	.16
<i>75th Percentile</i>	.23	.35	.43	.27

Activities related to music dominate in most preschools. The variation between preschools is small, and there is no preschool with only a few marks in this category. The largest spread is in the categories creativity indoors and to some extent play outdoors.

In total, almost 80 per cent of all tally marks refer to indoor activities, with a considerable variation between preschools. Table 4 highlights that the largest differences between preschools

are to be found in activities related to creative activities indoors, with a variation between a minimum value of 15% and a maximum of 59%. There is also considerable variation in the proportion of the activities allotted to music, with a minimum of 28% and a maximum of 64%. In half of the preschools, less than 20% of the tally marks refer to verbal stimulation while it varies between 20% and 40% in the other preschools.

Table 4. Proportions of the total number of tally marks in the three categories for indoor activity.
Number of preschools: N=24.

	Activity category		
	<i>Verbal stimulation</i>	<i>Creativity indoors</i>	<i>Music activities</i>
<i>Mean</i>	.20	.34	.46
<i>Median</i>	.20	.31	.44
<i>SD</i>	.12	.14	.11
<i>Minimum</i>	.00	.15	.28
<i>Maximum</i>	.39	.59	.64
<i>25th Percentile</i>	.13	.23	.36
<i>75th Percentile</i>	.31	.46	.56

Number of tally marks per child and preschool
 So far the preschools have been compared with each other according to the balance between the four categories in each preschool. The advan-

tage of this analysis is that the comparisons are less influenced by the variation in the total number of tally marks between preschools. At the same time, it is a way to control for the vari-

ation in the number of children observed at different preschools. The disadvantage of this approach is that it is impossible to get a picture of the absolute number of the different activities in the preschools. To obtain such a measure, the

variable *Number of tally marks per child and preschool* was created for each one of the four activity categories. In other words, the number of tally marks in each preschool, was divided by the number of observed children.

Table 5. Number of tally marks per child and preschool in four activity categories.
Number of preschools, N=24.

	<i>Activity category</i>				<i>Total</i>
	<i>Verbal stimulation</i>	<i>Creativity indoors</i>	<i>Music activities</i>	<i>Play outdoors</i>	
<i>Mean</i>	4.9	8.5	10.0	6.4	29.9
<i>Median</i>	4.6	5.3	10.3	6.2	29.0
<i>SD</i>	3.8	7.2	4.2	3.0	13.7
<i>Minimum</i>	0.0	1.6	2.2	1.2	8.2
<i>Maximum</i>	14.3	29.0	19.6	12.0	59.5
<i>25th Percentile</i>	1.8	3.8	6.9	5.1	20.9
<i>75th Percentile</i>	7.1	13.1	12.2	8.9	40.6

In table 5 the column to the far right (Total) highlights that the average number of tally marks per child and preschool is 30, with a variation between 8 and 60. This means that some preschools have a large number of tally marks per child, while others have just a few. In line with the analyses presented above, most tally marks per child concern the activities related to music and creative activities indoors. One can also note that the mean value and the median differ for the category creative activities indoors. This mirrors the asymmetrical distribution in this variable. It is positively skewed, with relatively many preschools with only a few marks per child in contrast to a small number of preschools with comparatively many marks per child.

THE RELATION BETWEEN AESTHETICS AND THE PRESCHOOL QUALITY

So far we have found a large amount of variation in the way the preschools allocate their time to the four types of activity in focus here. Now we turn to the question whether this variation is related to the variation in preschool quality as

assessed by ECERS. We have looked for mean differences in the activity measures between preschools of different quality, as well as for correlations between activity and quality at preschool level. For the measures based on the relative distribution of aesthetic activities within preschools, we found no correlations with any of the quality indicators and no mean differences. Thus, preschools do seem to have different profiles in terms of their aesthetic activities, but these profiles have no simple relation to the quality of the preschools.

Looking at the activity measures based on tally marks per child we did however find some correlations with the quality indicators. As shown in Table 6, especially item 10, exhibition of art, was found to be correlated with Play outdoors, Music and Creativity indoors. Preschools with many tally marks per child in these activity categories tend to have a lower value for this item. The table also indicates that there could be correlations with more items even if these are not statistically significant in this limited sample.

Not shown in Table 6 is the fact that Item 10 is moderately correlated with Item 21 ($\rho=.55$) and Item 23 ($\rho=.56$). Thus we would expect

Table 6. Correlations (Spearman's rho) between aesthetic activity and preschool quality. The activity measures represent tally marks per child and preschool. Number of preschools, N=24.

Activity category	Observed number of children	ECERS quality indicators						
		Total	Creative	Language	Item 10	Item 21	Item 22	Item 23
Play outdoor	-0.24	-0.23	0.00	-0.25	-0.60	-0.14	0.16	-0.25
Creative indoor	-0.08	-0.40	-0.30	-0.20	-0.40	-0.37	-0.33	-0.12
Verbal stimulation	0.12	-0.03	0.02	0.08	-0.30	-0.27	0.08	-0.17
Music activities	-0.01	-0.29	-0.10	-0.15	-0.59	-0.28	-0.02	-0.07
Total	-0.12	<u>-0.39</u>	-0.23	-0.23	-0.61	<u>-0.39</u>	-0.13	-0.16

these to show some correlation with the four activity measures but they do not. The ECERS subscales Creative activities and Language are also moderately correlated with one another (Spearman's rho is .62), but they do not seem to be correlated with the four categories. Overall this analysis does not show any interpretable pattern of correlations between the ECERS items and subscales and the four categories.

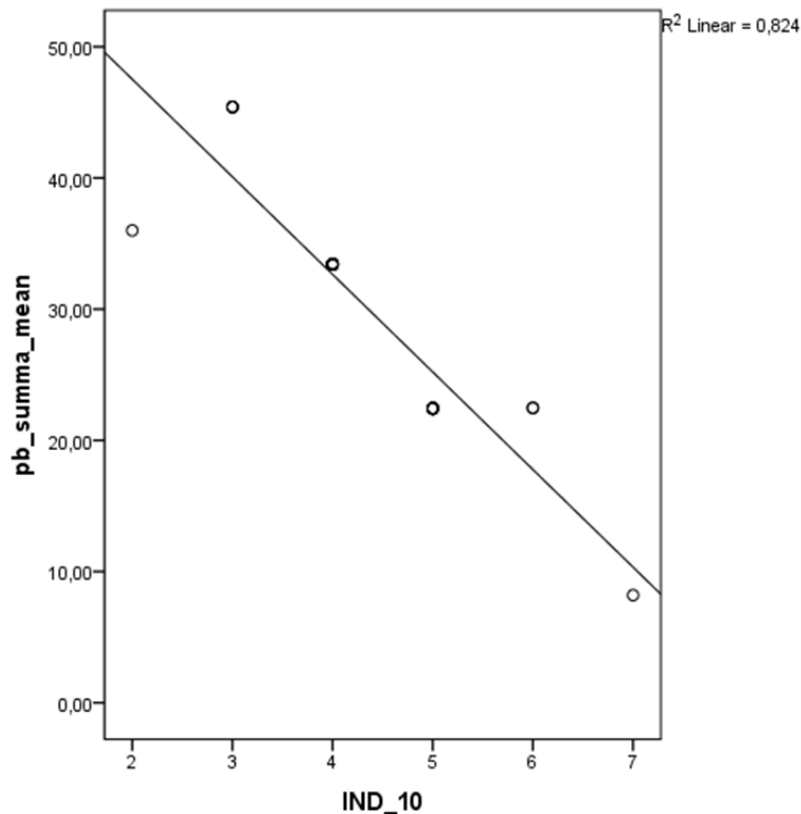
In another attempt to discern patterns of correlations, the preschools were grouped in different ways. One example of grouping can be seen in the diagram below. On the Y-axis is the mean value for tally marks per child and preschool for preschools having the same value for item 10. The advantage of this approach is that it reduces the influence of random measurement errors, which tend to reduce the observed correlation. As may be seen in the diagram, the difference between preschools with high and low values on item 10 becomes clearer. We did not, however, find the same kind of pattern as for Item 10 for the other items in ECERS. As before, the overall pattern is a negative correlation, which means that preschools with many tally marks per child tend to have lower values for the quality indicators.

In another attempt to discern patterns of correlations, the preschools were grouped in different ways. One example of grouping can be seen in the diagram below. On the Y-axis is the mean value for tally marks per child and preschool for

preschools having the same value for item 10. The advantage of this approach is that it reduces the influence of random measurement errors, which tend to reduce the observed correlation. As may be seen in the diagram, the difference between preschools with high and low values on item 10 becomes clearer. We did not, however, find the same kind of pattern as for Item 10 for the other items in ECERS. As before, the overall pattern is a negative correlation, which means that preschools with many tally marks per child tend to have lower values for the quality indicators.

In order to compare them, the preschools were also grouped according to their mean values into groups of low, good and high quality. The 24 preschools were distributed according to their quality as follows: 4 preschools were rated as being of low quality, with an ECERS mean value under 4.00, 14 preschools were of good quality, that is, with an ECERS mean value between 4.00 and 5.00, and finally 6 preschools were represented in the group of high quality, having a mean value above 5.00. Again, no mean differences were found with respect to the four broad activity categories taken individually. The overall tendency is that the activity category Music had the most tally marks and Verbal stimulation the least. This pattern was seen in all three quality groups. In other words, the differences in activities per child between preschools

Graph 1: Regression of mean number of tally marks per child and preschool on ECERS item 10.
 R^2 Linear = 0.824



cannot be related differences in the overall quality of the preschools.

TWO DIMENSIONS OF AESTHETIC ACTIVITIES

In this final section, we present an analysis of the aesthetic activities where they are seen as reflecting two broad dimensions of a preschool's activities, *The dimension of the child* and *The dimension of the teacher and preschool*. The

first dimension takes its starting point in the child and it is assumed to be reflected in aesthetic activities that children are largely able to carry out without much support from the teachers. The second dimension is defined in relation to the teachers and the preschool as an institutionalised practice. This dimension is assumed to be important in activities that place demands on the teachers to plan, organise and to be involved in the activity together with the children.

Table 7. Tally marks in the dimension of the child and the dimension of the teacher and preschool.

<i>Dimension</i>	<i>Activities</i>	<i>Registrations (sum)</i>	<i>Percent</i>
<i>Teacher and preschool</i>	Paint with tempera colours, finger-paint etc. clay, sand and water inside, singing and playing with instruments, drama and narratives, rhymes, science and baking.	1733	42%
<i>Child</i>	Draw with pencils and crayons, cutting, sand and water outside, modelling, listen to music, role-play etc.	2370	58%

Table 7 shows that activities that children can do by themselves are somewhat more frequent than the teacher-supported activities. Even if the overall amount of tally marks is higher in the child dimension, some preschools have more marks in the dimension of teacher-supported activities.

Again the results showed no correlations between tally marks related to the child or teacher dimensions and the preschool quality. However, some small tendencies were shown that could be interpreted as a quality aspect. Preschools of lower quality tend to have more tally marks in the child dimension, while preschools of high quality have fewer tally marks in this dimension.

CONCLUSION AND DISCUSSION

This article investigated young children's experience of aesthetic activities in preschool. So what picture have we gained from answering the three questions we asked in the beginning?

What is aesthetics for the youngest age group in preschool?

In preschool young children play with sand and water outdoors. Indoors they sing and listen to music, and they draw and paint. If we begin with outdoor activities, it seems that most children play with sand first of all and then water. How creative these activities are is hard to know, but it is reasonable to assume that they are not so challenging, although young children like to pour sand into a bucket and pour it out again, over and over. And, of course, if there is a small puddle of water children will always find it, so there is something kinaesthetic about sand and water that attracts children. Altogether, around 25% of the tally marks refer to outdoor activities. The variation is very large, however, and must affect how the children experience their preschool. For some preschools, more than 50% of the tally marks refer to out-door activities, while in half of the preschools between 16% and 27% of the tally marks refer to out-door activities.

Music is the most common category, constituting 34% of the total number of tally marks, which amounts to 43% of the indoor activities. The category of music includes singing, listening to music and playing with instruments. Singing is most common, and we think it is because in most preschools they sing a song before lunch or when they have assembly. Research has shown

that this activity is more a matter of reproduction than creativity (Still, 2011; Holmberg, 2013). The second most frequent activity within this category is listening to music, an activity where children are usually left to themselves, putting on a CD to listen to. Instruments are used to a very little extent.

Creativity indoors is a mixed category, where some activities are very infrequent, like cutting and pasting, while drawing and painting as well as activities with clay (play-dough or clay) are more common. This category also captures about 25% of the total number of tally marks, but the variation is between 15% and 59% of the tally marks for indoor activities, which must make a huge difference to children in the various groups.

Verbal stimulation indoors (drama, narratives and role-play) is the smallest category with only 18% of the total tally marks. The variation in the verbal stimulation recorded is also large, with 50% of the preschools having between 12 and 31% of their tally marks for indoor activities here. This is a category where the teachers have to be active, except in role-play. So why are there so few tally marks within these category? Especially as all new theories of children's learning and the theoretical perspective in the curriculum focus on communication as a main aspect (Skolverket, 2010; Pramling & Pramling Samuelsson, 2011). Is it a question of the teachers' attitudes towards aesthetics? Do they support children's individual ways of expressing themselves and feel that they should not disturb them in, for example, their play?

From our experiences and the data we have analysed here, we think we can claim that sand and water is a main activity outdoors for the youngest children. What we find challenging is that so few of the tally marks refer to role-play in the group of the youngest children. Is it a question of teachers' not recognising the youngest children's minor role-play? Do they think of role-play as something well developed and thematic? In her study, Lindahl (1996) showed how children used role-play already before they are two, so we suppose there is a lot going on that is not recognised by the teachers.

Creative work indoors is also very limited. An explanation for this can be that painting or working with clay in this early age group requires the presence of a teacher, and once again teachers may not have time. Or it is a question of attitude. Many preschools do not appear to

be in line with Prince and Logan (2005), who see creativity and learning as two sides of the same coin. Neither do they see play and learning as integrated (Pramling Samuelsson & Asplund Carlsson, 2008).

Does the quality of the preschool affect/have an impact on the number and type of aesthetic activities available?

It is not easy to prove any correlation between the preschool quality and the children's experience of aesthetics in early years as recorded by teachers in this study. However, it is interesting to note that the correlations which were found are negative, which could be interpreted to mean that the higher the quality of a preschool the fewer tally marks per child. That can have many explanations. The negative correlations could be related to systematic differences in the way the coding instructions have been interpreted or used in preschools of different quality, so that teachers at preschools of higher quality have tended to record only longer activities, or have been too busy to record the activities to the same extent as teachers at preschools of lower quality. It may also be that children in high quality preschools work longer on each activity. That this is a realistic explanation may be related to the fact that more activities are teacher-led, or the teacher is involved in more activities, in the preschools of high quality. When children sing or are involved in drama, rhymes and science, the teachers are with them, supporting and guiding the children, while activities such as drawing pictures, listening to music or role-play are not dependent on teachers' participation.

Independent of the quality, in most Swedish preschools activities such as drawing pictures, listening to music etc. are available for the children throughout the day. Research shows that differences in the preschool quality can be related to how the teachers interact and communicate with the children and how they challenge and guide them in activities. In preschools of both low and good quality it is more often up to the children to occupy themselves with activities such as role-play and drawing (Sheridan, Pramling Samuelsson & Johansson, 2009). In this study most of the participating preschools have a low or a good quality (18 out of 24) and the results show that the children are involved in a large number of various aesthetic activities, but not how these activities are done. Unfortunately the design of the study, the recording of the

teachers, does not give knowledge of how the aesthetic activities were conducted, for how long and if and in what way the teachers interacted and communicated with the children. Future research needs to take those aspects into consideration for.

The results of this study confirm that, independent of the preschool quality, aesthetics still plays a major role as a child activity in preschool. However, most of the time the children are left to themselves while doing creative work. This could be interpreted to mean that creativity is seen as an individual competence, a view many have challenged in recent years (see e.g. Sawyer, 1997.)

REFERENCES

- Asplund Carlsson, M., Pramling, N., & Pramling Samuelsson, I. (2008). Från görande till lärande och förståelse. En studie av lärares lärande inom estetik [From doing to learning and understanding]. *Nordisk barnehageforskning*, 1(1), 41–51. <http://www.nordiskbarnehageforskning.no/>
- Bendroth Karlsson, M. (2011). Pictures of Spring: Aesthetic Learning and Pedagogical Dilemmas in Visual Arts. In N. Pramling & I. Pramling Samuelsson (Eds.), *Educational Encounters: Nordic Studies in Early Childhood Didactics*. Dordrecht: Springer.
- Boldemann, C., Blennow M., Dal H., Mårtensson F., Raustorp A., Yuen K., & Wester U. (2006). Impact of preschool environment upon children's physical activity and sun exposure. *Preventive Medicine*, 42(4), 301–308.
- Doverborg, E., & Pramling Samuelsson, I. (2009). Grundläggande matematik [Elementary mathematics]. In S. Sheridan, I. Pramling Samuelsson, & E. Johansson (Eds.), *Barns tidiga lärande. En tvärsnittsstudie om förskolan som miljö för barns lärande* [Children's early learning. A cross-sectional study of the preschool as an environment for learning] (pp. 125–150). Göteborg: Acta Universitatis Gothoburgensis.
- Harms, T., & Clifford, R. (1980). *The Early Childhood Environment Rating Scale*. New York: Teachers College, Columbia university.
- Holmberg, Y. (2013). Centering av musikstunder [Centering of music times]. In I. Pramling Samuelsson & I. Tallberg Broman (Eds.), *Barndom, lärande och ämnesdidaktik* (Chap. 12) [Childhood, learning, and subject matter education]. Lund: Studentlitteratur.

- Johansson, E. & Pramling Samuelsson, I. (2006). *Lek och läroplan*. Göteborg: Acta Universitatis Gothoburgensis.
- Lamont, A. (2008). Young children's musical worlds: Musical engagement in 3.5-year-olds. *Journal of Early Childhood Research*, 6(3), 247–261.
- Mellgren, E., & Gustafsson, K. (2009). Perspektiv på språk och kommunikation [Perspectives on language and communication]. In S. Sheridan, I. Pramling Samuelsson, & E. Johansson (Eds.), *Barns tidiga lärande. En tvärsnittsstudie om förskolan som miljö för barns lärande [Children's early learning: A cross-sectional study of the preschool an environment for learning]* (pp. 154–157). Göteborg: Acta Universitatis Gothoburgensis.
- Pramling, N., & Pramling Samuelsson, I. (Eds.). (2011). *Educational encounters: Nordic studies in early childhood didactics*. Dordrecht: Springer.
- Pramling Samuelsson, I. (2011). Reggio Emilia i kritiskt ljus [Reggio Emilia in a critical light]. *Barnehagefolk*, 3, 37–43.
- Pramling Samuelsson, I. & Asplund Carlsson, M. (2008). The playing learning child: Towards a pedagogy of early childhood. *Scandinavian Journal of Educational Research*, 52(6), 623–641.
- Pramling Samuelsson, I., Asplund Carlsson, M., Olsson, B., Pramling, N. & Wallerstedt, C. (2008). *Konsten att lära barn estetik [The art of teaching aesthetics to children]*. Stockholm: Norstedts Akademiska Förlag.
- Prince, G. M. & Logan, V. (2005). 'Thinking learning and creativity'. In V. Nolan & G. Darby. (Eds.), *Reinventing Education: A 'thought experiment' by 21 authors* (pp. 155–165). Stoke Mandeville: Synectics Education Initiative (SEI).
- Sawyer, R. K. (1997). *Pretend play as improvisation. Conversation in the preschool classroom*. Mahwah, NJ: Erlbaum.
- Sheridan, S. (2007). *En svensk version av the Early Childhood Environment Rating Scale (ECERS [A Swedish version of the Early Childhood Environment Rating Scale (ECERS)]*. Reviderad version av Harms & Clifford, 1980; Kärrby, G., 1989. Göteborg: Göteborgs universitet, Institutionen för pedagogik och didaktik.
- Sheridan, S., Pramling Samuelsson, I., & E. Johansson. (Eds.). (2009). *Barns tidiga lärande. En tvärsnittsstudie av förskolan som miljö för barns lärande [Children's early learning. A cross-sectional study of the preschool as an environment for children's learning]*. Göteborg, Sweden: Acta Universitatis Gothoburgensis.
- Skolverket (2010). *Reviderad läroplan för förskolan [Revised curriculum for the preschool]*. Stockholm: Skolverket.
- Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I. & Taggart, B. (2010). *Early childhood matters: Evidence from the Effective Pre-school and Primary Education project*. London: Routledge.
- Söderström, M., Mårtensson, F., Grahn, P., & Blenow, M. (2004). The outdoor environment of day care centers: Its importance to play and development. *Ugeskrift Laeger*, 166(36), 3089–92.
- Wallin, K., Mæchel, I., & Barsotti, A. (1981). *Ett barn har hundra språk [A child has a hundred languages]*. Stockholm: Utbildningsradion.
- Änggård, E. (2005). *Bildskapande: en del av förskolebarns kamratkulturer [Creating pictures: A part of the peer cultures of preschool children]*. Linköping: Institutionen för Tema. Filosofiska Fakulteten.