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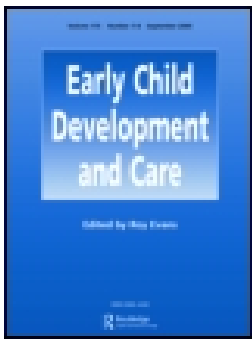
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# Economic (in)equality and sustainability: preschool children's views of the economic situation of other children in the world

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## ABSTRACT

This study explored preschool children's knowledge and views of other children's economic situation worldwide, and their self-reported sources of such knowledge. A total of 53 final-year preschool children, aged 5–6, from 12 preschools in Sweden were interviewed. Children's responses were analysed using content analysis and the Structure of the Observed Learning Outcomes Taxonomy. Most of them seemed to have knowledge about the lives and the economic situation of other children in the world. Many of the preschool children could justify their views with one or more relevant ideas or thoughts, and a few of them were also able to logically connect their arguments. Parents, media and observations of real-life situations were reported as major sources of knowledge, while preschool was mentioned by a few. Further research is needed to enhance our knowledge about how to integrate social and economic sustainability in preschool's pedagogical activities and to engage children meaningfully in such learning.

## ARTICLE HISTORY

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## KEYWORDS

Consumption; early childhood education; preschool; social sustainability; SOLO Taxonomy; sustainable development

## Introduction

Children in today's world are living in a rapidly changing society, where they observe, learn, experience and recognize complex issues such as poverty, climate change, natural disasters, and economic inequality within and among individuals and countries (Davis, 2015; Doverborg & Pramling Samuelsson, 2000; Pramling Samuelsson, 2011). A number of studies that were conducted in the previous century have shown that by the age of six, children develop a level of awareness regarding the social and economic issues related to other people, who belong to various national groups, and they also acquire some knowledge of and belief about foreign countries and people (Barrett & Short, 1992; Furby, 1979; Jahoda, 1962; Lambert & Klineberg, 1967; Piaget & Weil, 1951). However, no recent studies were identified that investigated preschool children's knowledge or views of the lives, well-being and economic conditions of children who live in other countries. It is particularly important as a challenge in present time to know 'how to live lightly, equitably, meaningfully and empathically on Earth' and what (pre)schools can do to increase children's awareness and to engage them meaningfully in such issues (Wals, 2017, p. 163).

It is claimed that children are the bearers of values and norms that shape future societies, and their attitudes are influenced by the norms and values of socializers (Eagly & Chaiken, 1993; Hofstede, Hofstede, & Minkov, 2010). Learning during the early stages of life is considered to be important as people keep the patterns of thinking, feeling and acting in their minds of what they learned when they were young, which tend to be difficult to unlearn when they grow up (Hofstede et al., 2010).

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Evidence from longitudinal studies have shown that early childhood education is effective in developing children's attitudes, and it has also positive impacts on young children's well-being and intellectual and social behavioural development (Muennig et al., 2011; Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2004). Therefore, researchers continuously stress the need for integrating education for sustainability into early childhood education (Cutter-Mackenzie & Edwards, 2013; Davis, 2005; Pramling Samuelsson, 2011). The term 'sustainability' is used throughout the text with exception of international declarations, where the term 'sustainable development' has been used. The terms are used interchangeably in this paper as they both are widely recognized within this field.

The concept of sustainable development was introduced at the end of the 1980s, defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their needs' (Brundtland, 1987, p. 43). Sustainability is a complex concept and the main complexity lies in the divergence between economic growth and the natural resources (Fien & Tilbury, 2002). To simplify the comprehension of the concept, several models were introduced, in which the three main dimensions – environmental, social and economic – are interconnected (Elliott, 2013). According to the UNESCO (2006) definition, the environmental dimension addresses, for example, climate change, rural development, natural resources, and disaster prevention and mitigation. The social dimension of sustainability includes, among others, human rights, gender equality, health and governance. Finally, the economic dimension of sustainability focuses on, among others, poverty reduction, corporate responsibility and accountability, and the market economy (UNESCO, 2006). Sustainability emphasizes the connections and interdependencies of the social, environmental and economic dimensions of human capabilities (Davis, 2015). To create a sustainable society, it is crucial to learn how to live in harmony with other people and with nature and 'the guiding rules are that people must share with each other and care for the Earth' (IUCN, UNEP, & WWF, 1991, p. 8).

### ***Education for sustainability at preschool in Swedish***

In Sweden, preschools offer early childhood education and care for children until the year they start school, which normally is at age six or seven (Skolverket, 2017). The Swedish National Agency for Education describes sustainable development as shared responsibility and solidarity between generations, genders, communities and countries (Skolverket, 2014). Although the term sustainable development or sustainability is not explicitly used in the preschool curriculum, the issues related to environmental, social and economic dimensions of sustainability are included in the curriculum as goals to strive for (Engdahl & Årlemalm-Hagsér, 2014). In the preschool curriculum, it is stated that children should be prepared to actively participate in society. Preschools are expected to include educational activities highlighting nature and environment, as well as to work with democratic values as a foundation for learning and social interactions (Skolverket, 2011).

Despite Sweden being a world leader in taking initiatives for promoting education for sustainability (EfS), empirical research concerning EfS, in general, is still limited within the country (Årlemalm-Hagsér & Engdahl, 2015; Breiting & Wickenberg, 2010). Literature reviews have shown that although research concerning early childhood education for sustainability is on the rise globally, only a few studies have focused on economic or social dimensions of sustainability (Davis, 2009; Hedefalk, Almqvist, & Östman, 2015). To contribute to addressing this knowledge gap in a Swedish context, this study was conducted. In fact, studies are needed to enhance our knowledge about children's understanding and behaviours in terms of other children's lives and economic situation in the world so that these issues can be addressed in policy and curriculum activities in order to engage young children in learning for sustainability at preschool.

### ***Aim and research questions***

This study investigated Swedish preschool children's knowledge and views of the lives and the economic situation of other children in the world and their perceived sources of such knowledge. The following research questions were addressed:

- What do preschool children in Sweden know about the economic situation of other children in the world?
- How do preschool children view other children's economic ability to buy new toys from a shop?
- What are preschool children's perceived sources of knowledge on this issue?

In this text, the term 'other children' refers to any child who lives anywhere in the world regardless of gender, and cultural, religious or ethnical background. The term 'knowledge' is used to describe children's self-reported knowing through their verbal responses. Regarding sources of knowledge, studies have shown that it is difficult to trace the actual sources of children's knowledge of various kinds (Palmer, Grodzinska-Jurczak, & Suggate, 2003; Palmer et al., 1999). The intention of my study was to investigate children's self-reported sources of knowledge through their own descriptions of sources from where they have learned about concerned issues, which may differ from actual sources.

### Conceptual framework of sustainability

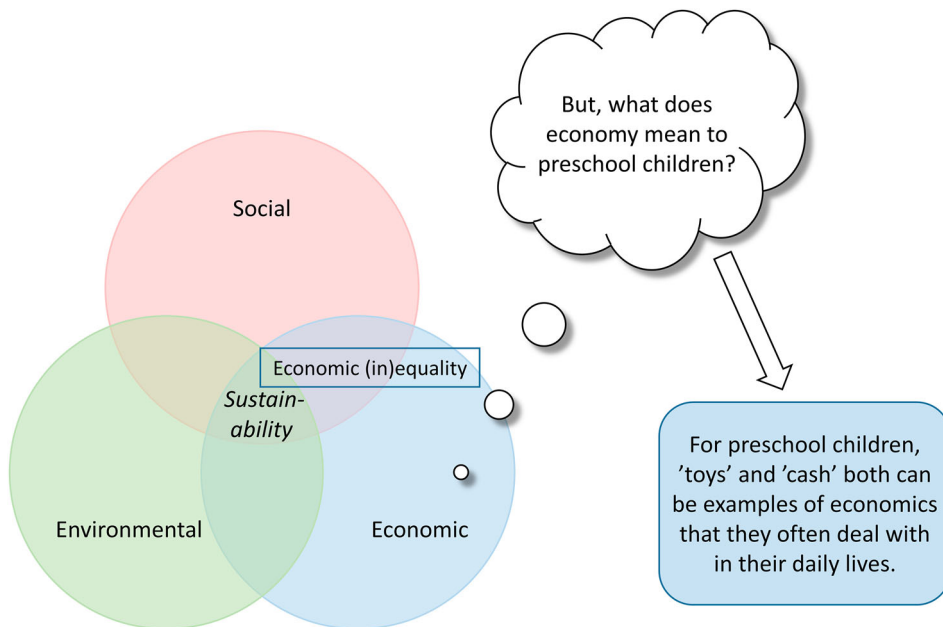
The United Nations General Assembly declared the Decade of Education for Sustainable Development (DESD) (2005–2014) to promote EfS within all areas of education and learning (UNESCO, 2005). The intention of EfS is to enable people to acquire the knowledge, attitudes, values and capacity necessary to create a sustainable future (UNESCO, 2006). DESD has ended, and a new plan of action has been outlined in the 2030 Agenda for Sustainable Development (United Nations, 2015). The 2030 Agenda for Sustainable Development (United Nations, 2015) sets 17 sustainable development goals, which address, among other things, quality education, lifelong learning for all, sustainable economic growth, sustainable consumption and reduction of inequality within and among countries.

In this study, the theme *economic (in)equality* is used to address issues that are challenges for promoting sustainability, such as existing poverty, consumption or economic capability to afford something. In the Swedish National Curriculum for Preschool (Lpfö98, Rev. 2010), it is stated that the preschool 'should strive to ensure that each child develops the ability to take account of and emphasize with the situation of others' (Skolverket, 2011, p. 10). The theme *economic (in)equality* relates to both social and economic dimensions of sustainability and it is about equity, just, fairness and solidarity.

To operationalize the *economic (in)equality* theme for preschool children, it was necessary to find out what economy means to preschool children (see Figure 1). Economy for young children is not only cash but also other things that children deal with in their daily lives about which they often have decision-making rights (Näsman & von Gerber, 2002; Webley, 2005).

It is assumed that children have some experiences of buying toys or candies from a shop together with their parents, siblings, friends or other adults. They might have experienced economic inequality while buying or selling things in a daily transactional situation or heard about it at home or in preschool. Children sometimes consider the possession of desired toys or clothes as an important aspect of being an individual, and it can work as a motivation in the selection of friends (Selman, 1980). In my study, the theme *economic (in)equality* has been used to investigate preschool children's knowledge, views and knowledge sources of other children's economic situation in the world.

Guided by Bruner's (1961) *iconic* (image-based) mode of representation, the theme was adapted for preschool children. According to Bruner (1960), a child of any age is capable of understanding complex information if the instruction is organized appropriately. Bruner (1961) argues that children construct their knowledge by organizing and categorizing information through a coding system. Based on Bruner's (1961) *iconic* modes of representation, an illustration was developed to start a conversation in a child-friendly environment. Bruner (1966) emphasizes that children (aged 1–6 years) construct their knowledge by organizing and categorizing information through a coding system, which is called *Iconic* representation (image-based).



**Figure 1.** Conceptualization of sustainability and operationalization of the theme *economic (in)equality* to be used for young children.

In the creation of a sustainable society, social learning is regarded as a powerful tool and is described as being ‘a transitional and transformative process that can help create the systemic changes needed to meet the challenge of sustainability’ (Wals & van der Leij, 2007, p. 32). In children’s lives, social learning is important as they learn from one another through observation, imitation and modelling (Bandura, 1977). According to Bandura (1986), learning is a cognitive process that takes place in a social context. Children are surrounded by many influential models in society: for example, parents, friends, teachers and TV characters; their learning takes place in a social context (Bandura, 1986). Evidence from empirical studies supports this claim (Musser & Diamond, 1999; Palmer, Suggate, & Matthews, 1996).

## Method

A qualitative approach was utilized to explore the phenomenon of preschool children’s knowledge and views of the lives of other children in terms of their economic ability to buy new toys from a shop. As the study focused on exploring children’s self-reported knowledge and views, interviews were considered to be an appropriate method. Researchers have argued that children are considered to be the best sources of information about themselves, and their perspective is of special interest within education for sustainability (Dahlberg & Moss, 2005; Docherty & Sandelowski, 1999; Hägglund & Johansson, 2014). The United Nations Convention on the Rights of the Child (UNICEF, 1989) states that children have rights to express their views on all matters of concern to them. This study was therefore designed from a *child perspective* that was created by adults to reconstruct children’s views as realistically as possible and the *child perspective* also provides the opportunity to investigate *children’s perspective* about issues that concern their lives (Sommer, Pramling Samuelsson, & Hundeide, 2010). In *children’s perspectives*, the child is viewed as the subject and the focus lies on children’s own expressions, experiences and feelings. In my study, *child’s perspectives* were utilized to frame research questions for children, to operationalize the concept of sustainability, to choose data-collection methods, to develop interview instruments and to discuss results.

## Study context

This study was conducted in Sweden that was one of the first countries in the world to ratify the UN Convention on the Rights of the Child. In 2006, a total of 114,202 children, who were between 5 and 6 years old, were registered in preschools. There are a total of 290 municipalities with more than 9800 preschools. In Sweden, preschools can be owned by municipalities or by other organizations, for examples, parental cooperatives or companies or non-profit organizations (Skolverket, 2017). Regardless of ownership, the costs of the education services are paid by the municipality and municipalities get contributions from the state based on demographic data (Skolverket, 2017).

Sweden adopted the Agenda 21 action plan in 1992, in which education was emphasized as an important part and in 2004, after the DESD was declared the focus moved from environmental education to education for sustainability reflecting a change in emphasis and direction (Breiting & Wickenberg, 2010). For example, to promote EfS in all aspects of education and learning, the Swedish National Agency for Education can certify preschools with a 'Diploma of Excellence in Sustainability' if they apply for the recognition and meet a number of sustainability-related criteria. The Swedish National Agency has certified 248 preschools for their work with the EfS, called 'Preschool for Sustainable Development' (Skolverket, 2014). Every third year, a preschool has to submit an application for renewal with an evaluation report in order to continue to be certified. Preschools can also be certified with 'Green Flag' certification by the Keep Sweden Tidy Foundation, which is part of the Eco-Schools programme of the Foundation for Environmental Education. Within this programme, a preschool may be awarded a 'Green Flag' certification if it works systematically with EfS towards the goals and guidelines of the Swedish National Curriculum for the Preschool. About 1600 preschools in Sweden are certified with 'Green Flag' (Keep Sweden Tidy, 2016). In this paper, preschools that are certified with 'Green Flag' or 'Preschool for Sustainable Development' are called 'eco-certified' preschools.

## Participants

A total of 53 final-year preschool children (29 girls and 24 boys) participated in this study from 12 preschools. The preschools were situated in six municipalities in two counties in Sweden. All participating children were between five and six years old. The reason for selecting final-year preschool children was to explore the level of their knowledge and the complexity of their understanding of social and economic issues related to sustainability upon their completion of preschool. To be included in the study, each preschool needed to have at least three final-year children.

A non-probability purposive sampling was used to select preschools from municipalities in various sizes as close as possible to the university where the study was being conducted. The intention was to reduce the environmental impact of travelling long distances, and the cost and the time of the study. In qualitative studies there are no specific rules when it comes to determining an appropriate sample size. According to Patton (1990), it is determined by the aim of the study as well as available time and resources. Nevertheless, to attain saturation, i.e. to obtain most or all of the perceptions, Morse (1994) and Creswell (1998) have argued for sample sizes ranging from 5 to 50 depending on the research approach. To get a sufficiently large sample size in my study, information letters were sent to 146 guardians who had children in the final year of preschool. Out of 146 guardians, 53 consented to their children's participation in this study. Children from eco-certified preschools were over-represented in the study as 46.9% of the guardians of children at eco-certified preschools consented to their children's participation, whereas only 23.1% of the guardians of children at non-eco-certified preschools consented.

## Interview guide

Considering the age group of the participants, a coloured illustration was developed and used as an artefact to facilitate the interview process. The interview guide included questions about children's

background (sex, age, type of preschool), their knowledge and views of other children's economic situation in the world in terms of buying new toys from a shop, and their perceived sources of knowledge (see [Figure 2](#)).

The interview guide was pre-tested with eight preschool children, aged five to six years, which were not included in the main study. The pre-test results showed that the children recognized the illustrations, but a few of them did not recognize the word 'afford'. They were also better acquainted with the word 'day-care centre' ('dagis') than with 'preschool' ('förskola'). The findings related to the wording of the questions, the appropriateness of the illustration, the interview techniques and the duration were considered in the final version of the interview guide. The word 'afford' was replaced as 'have money' for those children who were not acquainted with the former word. The use of a coloured illustration, a cuddly puppet, some toys and a sitting mat with pictures of puppies was found to be helpful in creating a friendly atmosphere during the pre-testing. The face validity of the instrument was assessed by the author and three other researchers.

### Data collection

Each child was interviewed individually and, if permitted by the child and his or her guardians, the interview was audio-taped so that note-taking could be avoided during the conversation. Forty-nine dyads granted permission for audio-recording, whereas four dyads did not. The children were interviewed using closed- and open-ended questions.

The conversation started with play-based activities showing each child the coloured illustration of a shop and a child playing with toys. The interviewer also used a cuddly puppet, some toys and a special sitting mat with a picture of two puppies to initiate a friendly and informal conversation with the child. The cuddly puppet (a teddy bear that was named Kim) was used for asking children questions as though the puppet was their friend (for more information about the interview instrument, see Borg, 2017; Borg, Winberg, & Vinterek, 2017a, 2017b). Each interview took approximately 5–10 minutes. Four children were interviewed in the presence of their teachers as per their own wishes. All interviews were conducted in Swedish, and most parts were transcribed and then translated into English. The interviews were carried out between February and June 2015.

- Can all children in the world afford to buy toys from a shop?
- Why do you think that all children (can or cannot) afford to buy toys from a shop?
- From where have you got to know this (child's response)?



**Figure 2.** Excerpt from the interview guide for children.



## Ethical considerations

As my research involved young children, an ethical vetting was sought from the Umeå Regional Ethical Review Board, Sweden. The Board stated that they did not find any ethical problems with this study. Guardians of all participating children were informed in writing about the study. Informed consent to voluntarily participate in an interview was obtained from the children themselves and their guardians. Confidentiality was taken into consideration while conducting and performing the study. Children's participation in the study could be discontinued at any time without any reason being given. The study followed the principles of ethical research and practice of the Swedish Research Council (Vetenskapsrådet, 2011). At the beginning of the study, informed consent to participate in the study was obtained from preschool directors concerning the participation of their preschools. Data were preserved securely and unauthorized individuals do not have access to the information.

## Data analysis

A content analysis was performed to get a deeper understanding of the studied phenomena. The children's interview data were read and reread as a means of familiarization, and notes were kept of interesting patterns, inconsistencies and contradictions within and between individuals and groups (Hammersley & Atkinson, 1983). The data were coded and categorized starting with small samples of text and then with the whole text.

An analytical tool was developed based on Biggs and Collis' (1982) Structure of the Observed Learning Outcomes (SOLO) Taxonomy to organize and classify children's justifications for economic (in)equality between individuals and countries. In my study, the SOLO Taxonomy was used to systematically analyse children's responses in terms of their quality and complexity, but not 'of how many bits of this and of that got right' (Biggs, 2016).

The SOLO Taxonomy has five levels which include the prestructural level (a student misses the point), the unistructural level (a student has an idea or carries out a task, which can be relevant but inconsistent with each other), the multistructural level (a student has several ideas, but the relationship between them is missing), the relational level (a student links or connects the ideas) and the extended abstract level (a student has extended ideas and can generalize or create a new understanding) (Table 1). The levels have been adapted for young children with 'no relevant idea (prestructural)', 'one relevant idea (unistructural)', 'many relevant ideas, but no link (multistructural)', 'linked ideas (relational)' and 'extended ideas (extended abstract)' (Hook, Wall, & Manger, 2015).






Levels two (unistructural) and three (multistructural) of the Taxonomy indicate more quantitative phases of learning outcomes that are related to surface learning, whereas level four (relational) and level five (extended abstract) are qualitative phases of children's learning outcomes by the sophistication of their logical and relevant justifications. Levels four and five indicate the deep learning outcomes of the theme (Biggs & Tang, 2011; Hattie & Yates, 2013). The levels were scored ranging from Prestructural = 0 to Extended abstract = 4. Examples of how the SOLO Taxonomy is used in the content analysis in this study are shown in Table 1.

According to P. Hook (personal communication, February 2016), an indicator of a relational learning outcome for a young child is when they explain 'why' by using 'because' or 'so that'. Hook uses a 'double because' as an indicator of extended abstract understanding. The example in Table 1 '... People should help the poor. I want to give some money to them' indicates that the respondent's ideas are extended into a new context.

## Results and discussion

The results of the content analysis are presented and discussed under the three categories: *Children's knowledge and views of economic (in)equalities in the world*, *Preschool children's level of justifications*

**Table 1.** Operationalization of the SOLO Taxonomy.

SOLO level	Prestructural	Unistructural	Multistructural	Relational	Extended abstract
					
	No relevant idea	One relevant idea	Many relevant idea	Linked ideas	Extended ideas
Examples from children's responses in this study	I don't know	They do not have enough money to buy toys from a shop.	Children in other countries don't have money. Many people in the world don't have any money. They cannot buy toys from a shop.	Not all children can afford to buy toys from a shop, because some people are poor and they come to Sweden. I see how many people sit outside our shops in Sweden. They beg for money. They don't have so much money.	Some people cannot buy toys from a shop. They are poor; they have very little money. Poor people cannot even afford to buy food for their children. We have a cottage at our place, where some poor people come and sit and they live there. We take them into our cottage. We give them food. People should help the poor. I want to give some money to them.

and *Sources of knowledge of economic situation in the world*, which emerged from the content analysis of children's responses.

### **Children's knowledge and views of economic (in)equalities in the world**

The results indicate that almost all (94.3%) of the preschool children had some knowledge about poverty in the world. They knew about economic inequalities among and between individuals and countries in society. One child stated that 'some people don't have money, but some people have a lot of money. Some people can be very rich. The King is rich' (Child # 5). This indicates that children are, to a great extent, aware of existing inequalities, which is one of the challenges of sustainability for our world (United Nations, 2015).

In response to the question as whether all children in the world could afford to buy new toys from a shop or not, a majority (88.7%) of the preschool children reported that it was not possible for all children in the world to afford to buy new toys from a shop, and the main reason they stated for this situation was existing poverty among individuals and countries. One child said that 'some countries are poor and children in those countries must work. Their mum and dad don't have much money' (Child # 40). A number of studies conducted in the previous century have also found that by the age of six, children develop some awareness about social and economic issues related to people who live in foreign countries (Barrett & Short, 1992; Furby, 1979; Jahoda, 1962; Lambert & Klineberg, 1967; Piaget & Weil, 1951). However, a few (5.7%) of the children stated that they did not know whether all children could afford to buy new toys from a shop or not. An equal proportion (5.7%) of the children assumed that all children in the world could buy toys from a toy shop, but they were not sure about this.

The results also show that some (7.6%) children seemed to have an ability to link various social issues, such as education level, type of jobs and lifestyles, low salaries and unemployment, with economic situation of other children in the world. One child argued that 'all children in the world cannot afford to buy toys from a shop, because their parents cannot earn that much money. They have not studied in a good school. They are poor' (Child # 32). This child (Child # 32) seemed to understand that

buying things requires more money that is to be earned. Another child opined that '... some people don't have a job, so they cannot afford to buy toys from a shop' (Child # 50).

When the children described other children's economic situations and their ability to buy new toys, their responses were mixed with emotions, a sense of responsibility, some sort of values, and personal liking and disliking. For example, one child told:

Some people cannot buy toys from a shop. They are poor; they have very little money. Poor people cannot even afford to buy food for their children. We have a cottage at our place, where some poor people come and sit and they live there. We take them into our cottage. We give them food. People should help the poor. I want to give some money to them. (Child # 28)

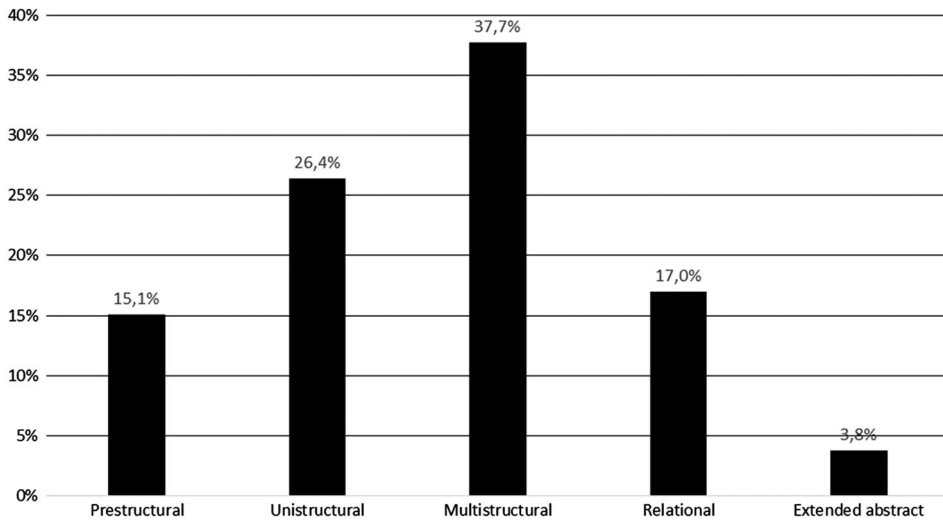
Not only were the children aware of poverty and economic inequality, but they also had ideas about what to do to address those problems. The findings are in line with those of previous studies, where researchers found that children often described their views in relation to people's real-life situations, and their knowledge, emotions and values were often integrated into their expressions of economic, social and environmental issues of sustainability (Alerby, 2000; Manni, Ottander, Sporre, & Parchmann, 2013).

Generally, children from other countries were viewed as poor and as living under difficult circumstances, and their parents did not have a good education or enough money to buy toys. For example, one child said that 'children in Africa do not have much money. They are poor' (Child # 25). It is a picture that is often shown on TV or heard on the news. The thought that Africa is an example of a place of poverty and only poor people live in Africa is only partially true. Preschools may need to organize activities in such a way that helps children gain a fair understanding of the world. The children of today's world are entitled to learn about the lives of others. These issues are also emphasized, among others, by Hägglund and Pramling Samuelsson (2009), and Johansson (2009), who argue for the importance of increasing children's global awareness so that they become responsible citizens of this world. Otherwise, there is a risk that children may develop a stereotypical understanding of people who are different. Since we know that the patterns of what children learn at a young age remain in their minds (Hofstede et al., 2010), it is particularly important for preschool to engage children actively in sustainability issues that are suitable for them and that help them to increase their global knowledge and awareness.

### ***Preschool children's level of justifications***

The children's logical explanations of their thoughts and views were analysed in terms of their quality and the level of complexity using the SOLO Taxonomy. A majority (84.9%) of the children could justify their views and thoughts about the economic situation of other children in the world in relation to their ability to buy new toys from a shop, but the level of justification varied (see Figure 3). The responses of more than one-third (37.7%) of the children demonstrated that they could come up with several justifications for their choices, but the relationship between those ideas was missing. Nearly one-fifth (20.8%) of the children not only had learned to logically present their thoughts and views, but they also were able to make links or connections between those thoughts or ideas.

The content analysis showed that the complexity of the justifications among the children at eco-certified preschools tended to be higher compared with those at non-eco-certified preschools. The children at eco-certified schools seemed to have a deeper understanding of other children's economic situations in the world than those at non-eco-certified preschools. These findings are consistent with those of previous studies reporting that children who participated in whole-school programmes, such as eco-schools or schools that promote a healthy lifestyle, had a deeper understanding of these issues; furthermore, they learned about various global and local issues related to sustainability with support of their teachers (Davis, 2005; Davison, Davison, Reed, Halden, & Dillon, 2003; Lewis, Mansfield, & Baudains, 2010; Mackey, 2012). Nevertheless, two previous studies that compared eco-certified and non-eco-certified preschools in terms of children's knowledge and practices of



**Figure 3.** The quality and the level of complexity of preschool children's responses concerning other children's economic situation in the world.

environmental and sustainability issues using statistical analysis did not find any statistically significant differences (Borg, et al., 2017a, 2017b). Therefore, it is important to conduct a large-scale study of sufficient statistical power to investigate whether eco-certification plays any role in developing children's knowledge, attitudes and behaviours of particular relevance to a sustainable society.

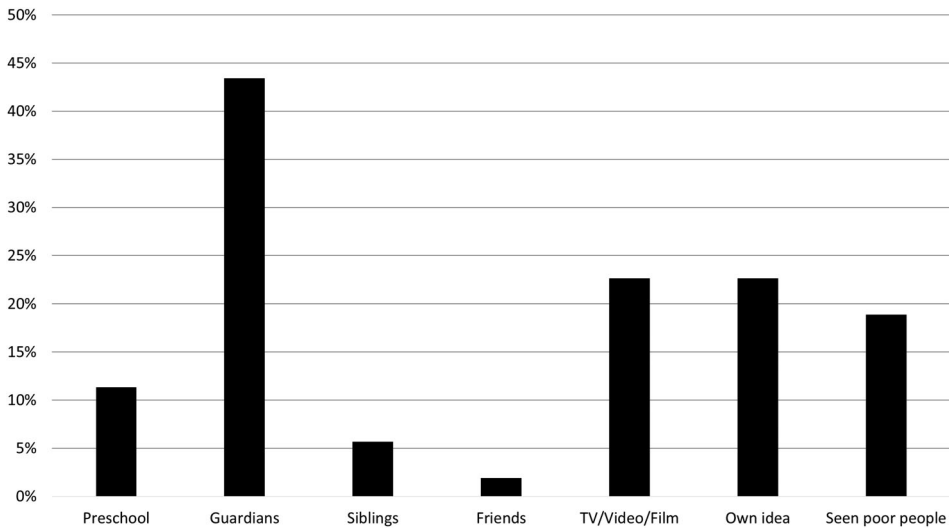
### **Sources of knowledge of economic situation in the world**

The findings of my study indicate that preschool children learned a great deal about the lives of other children and their economic situation through various sources, such as through their parents (or guardians), through their personal contacts with people, through siblings and friends, through TV/books and through preschools (see Figure 4). This supports the argument that young children's learning is influenced by different role models within society (Bandura, 1977; Corsaro, Molinari, & Rosier, 2002). It should be noted that one-third (34.0%) of the children reported more than one source of knowledge on this theme.

Nearly half (45.3%) of the children reported their parents to be the main source of their knowledge on this issue, whereas approximately one-tenth (11.3%) considered preschool to be their source of knowledge. Thus, there may be a need to address social and economic issues in preschools' pedagogical activities to a greater extent. However, research is needed to enhance our knowledge about how to integrate such activities in early childhood education, since knowledge about the current level of sustainability economics in preschool is weak, which has also been pointed out by Siraj-Blatchford, Smith, and Pramling Samuelsson (2010).

About one-fifth (18.9%) of the children informed that they learned about the economic situation of other people through observation in real-life situations rather than learning about the lives of other children in preschool. For example, a child explained that '... I have seen outside the shop and someone asked my dad if he could give a little money to her. But my dad didn't have much money left, so he couldn't give her very much' (Child # 17). Another child stated that 'My brother and his friends collect money to support the poor people, so I know that they don't have much money' (Child # 16).

Although most of the children mentioned others as being their sources of knowledge, nearly one-quarter (22.6%) of the children referred to themselves as being one source of knowledge. This is similar to the findings of Prince's (2010) study in which the children also reported themselves as



**Figure 4.** Sources of knowledge about the economic (in)equalities in the world as reported by children.

being the main source of knowledge. This supports the view that young children probably develop a sort of sense of themselves as being a source of knowledge. It could also be that they might not yet have developed an awareness of the roles of others in their learning.

Some (18.9%) of the children talked about the current situation in Sweden, mentioning that they had observed beggars in the street or outside shops who did not have work or money and that they were increasing in numbers. For example, one child stated that

[T]here are people, who often come to Sweden and sit beside shops; they are poor. They come here and there are more and more of them. Some of them do not have any money in the beginning. (Child # 43)

About one-fifth (20.8%) of the participating children considered media (TV, film and books) to be their source of knowledge. One child said that 'I have heard from TV that there are countries that are extremely poor. In those countries, people cannot buy toys from a shop' (Child # 22). These findings are consistent with the findings of earlier studies that have shown how children seemed to derive their knowledge of different national groups from different sources, such as parents, TV, movies, travels and direct contact with foreigners (Barrett & Short, 1992; Lambert & Klineberg, 1967). Although Bandura (1977) argued in the 1970s that the increase in TV, films and other visual media that provide symbolic modelling may reduce the importance of parents, teachers and other traditional role models in social learning, 40 years later children in my study still reported parents – along with other social role models – as being their principal source of knowledge. Thus, appropriate strategies for integrating role models in EfS are needed, as they can be instrumental for children's learning for sustainability.

## Method discussion

The participating children of this study represented different types of preschools, which gave useful information about the studied phenomenon of children's knowledge and views of other children's economic situation in the world. Although the numbers of eco-certified and non-eco-certified preschools were equal, fewer children from non-eco-certified preschools participated. The reason for this is that fewer guardians of children at non-eco-certified preschools consented to their children's participation compared to those of children at eco-certified preschools. This could be assumed to relate to the guardians' motivation and commitment to sustainable development issues, but the actual reason is unknown. However, it could also be that the information about the study was not

received by the guardians in time. During the data-collection process, it was found that information letters given to one of the non-eco-certified preschools were not delivered to any guardians in time, which resulted in less participation on the part of the children from that preschool. Nevertheless, it is likely that saturation was attained, since the sample size that was suggested for qualitative study has been exceeded in my study.

Collecting information from young children through interviews was found appropriate as the study explored children's self-reported knowledge, views and sources of knowledge. The qualitative approach offered flexibility in asking questions in different ways, using synonyms or child language, allowing children to think aloud, or giving them the opportunities to ask questions. The use of an illustration, toys and a sitting mat with pictures of two puppies was found useful in creating a friendly environment during the interviews. Without such artefacts it would have been difficult to interview young children.

## Conclusion and implications for research

This study enhances the knowledge in the field of early childhood education for sustainability by contributing insights into preschool children's knowledge and views of economic and social issues from a Swedish perspective. By the time the children had completed preschool, most of them had acquired some knowledge about economic situation of other children in the world. Although a few children had a stereotypical picture of particular countries or nations, many of them could connect other children's economic capabilities to the education of their parents, well-paid jobs and living in high-income countries. In general, the children perceived their guardians (parents), different media and their own experiences as major sources of knowledge, along with preschools, siblings and friends.

The quality and complexity of children's responses of economic issues seemed to vary between individuals. The children at eco-certified preschools seemed to have a deeper understanding of other children's economic situation in the world compared with those of non-eco-certified preschools. A nationally representative survey of sufficient statistical power would be required to explore whether eco-certification of preschools has a role to play in developing children's understanding and practices of sustainability-related issues. This knowledge is important, especially at a time when the world is facing numerous challenges related to economic and social sustainability, as this may contribute to improved educational practices, and eventually, attitudes and practices that are more in keeping with a sustainable world.

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