

## Article

# The Quality of Early Childhood Curricula and Distributed Leadership in Lithuanian ECEC Institutions

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**Abstract:** The early childhood curriculum is an integral part of the educational process, and many countries are looking at how to ensure its quality. With the decentralization of educational content in Lithuania, each Early Childhood Education and Care (ECEC) institution develops its own curriculum. In this case, the role of the head teacher at school and the leadership style they adopt become very important. Our study aims to investigate the expression of shared leadership in Lithuanian preschool education institutions and how it relates to the curriculum quality. An online survey was conducted in spring–autumn 2023. The sample was randomly selected from a list of kindergartens (N = 549) operating in Lithuania, and 133 kindergartens were selected. Of these, 79 (59.4%) institutions responded and agreed to participate. The research sample comprised 461 early childhood educators. The analysis of the survey data showed that distributed leadership can explain 61.3% of the quality of the curriculum. This means that if there is a higher degree of distributed leadership in the early childhood education community, the quality of the ECEC curriculum will likely be higher. ECEC leaders should pay attention to the individual scales of distributed leadership, collaboration, and cooperation.

**Keywords:** quality; early childhood education; curricula; distributed leadership



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## 1. Introduction

The curriculum is a critical factor in education policy because it outlines what educational objectives, content, methods, and performance assessments are essential at a given level of education [1,2]. Early childhood curriculum development is a high priority in almost all developed countries [3]. Countries want to ensure that Early Childhood Education and Care (ECEC) institutions have high-quality curricula.

Fifteen years ago, the early childhood education content in Lithuania was decentralized [4]. In 2007, the national early childhood curriculum was abolished, and each educational institution started to develop its curriculum according to the curriculum development criteria set by the Lithuanian Minister of Education and Science. On the one hand, this process allowed the early childhood education (ECE) community to adapt the curriculum content to the needs of the children attending their institutions, the community context, and the resources [5]. On the other hand, it has shown that the quality of the ECE curriculum can vary and depends on certain factors, such as the competence of the early childhood education teachers and head teachers of these institutions, the advisory support provided by the Ministry of Education, Science, and Sport, etc. It is therefore essential to monitor and evaluate curricula and to identify the key factors that can influence the quality of early childhood curricula at the community level.

## 2. Literature Review

### 2.1. *The Quality of Early Childhood Curricula*

The quality of an early childhood curriculum is an aspect that has multiple perspectives and is open to debate [6]. Edwards [6], based on analyzing research and curricula from different countries, found that five aspects of the curriculum can be identified as influencing the quality of the early childhood education process. These are interaction, content, routines, activities, and resources. Other researchers [1] point out that implementing the curriculum is a critical dimension of the quality of early childhood education.

From the perspective of Lithuanian ECEC, fifteen years ago, when the standard curriculum was abandoned, educational institutions found themselves in a completely new situation. One of the main objectives of decentralization was to give ECEC institutions more freedom to unleash their creative potential and respond to their communities' needs. Alongside this came greater responsibility, the need to involve all community members in curriculum development and implementation, and the need for a whole new kind of leadership [7,8]. It became clear that discussions and joint agreements were needed on all issues.

In this study, we look at the quality of an early childhood curriculum by assessing the extent to which a particular setting's design and implementation is based on community-wide consensus and how well the program is responsive to the needs of the child and the community. We will now discuss these aspects in turn.

First, from our perspective, the design of the early childhood curriculum must be at the consensus of the entire school community. With their views considered, headteachers, teachers, educational support professionals, parents, and even children agree on what quality early childhood education looks like and base their institutions' early childhood education programs on these agreements. Of course, different stakeholders (e.g., educators and parents) may use different languages and assumptions to describe their goals and ideas about ECEC [9]. They may have different objectives, and reaching community consensus takes work. Research [10,11] suggests that parents may be reluctant to participate in ECEC, and that teachers may be unwilling to allow parents to influence it. However, cooperation is essential [10,12], as it shapes the respective expectations of all parties regarding children's educational goals and outcomes, the work of teachers and educational support professionals, parental support at home, and the overall educational policy of the institution. Thus, the quality of the early childhood curriculum can be assessed by measuring the extent to which it reflects the agreement of the whole community. Listening to all community members and agreeing on a common solution is essential in distributed leadership.

Second, the early childhood curriculum must be clear and meaningful to all stakeholders if we want it to be implemented. The curriculum is a crucial document for teachers that guides their daily work [13]. Correspondingly, the curriculum needs to be clear and meaningful to the child and the parents, as the child's experiences at home in the early years undoubtedly impact how the child develops and learns. Both the home environment and the early childhood education setting are microsystems that facilitate learning opportunities (proximal processes) and, ultimately, development [14–16], and the child's various experiences (interpersonal interactions with immediate adults, educational methods) at home and in the ECE setting must therefore be consistent and have the same goals. Sharing leadership and reinforcing and promoting a common and unified pedagogical vision is essential for the continued quality of ECE pedagogy and practice in all ECE services [17].

Finally, the quality of an early childhood curriculum can be linked to how it reflects the needs of children and the school community. As confirmed by numerous studies [18–23], in the early years, the developmental and educational needs of the child are best met by play activity and the exploration, discovery, and quest that it brings. These activities develop children's independence, control, and autonomy, driving learning and development. Perhaps this is why more and more countries are emphasizing child agency (i.e., active participation in their national curricula). Teachers can support and encourage children's agency by seeing and responding to children's different and varied ways of taking initia-

tives pedagogically [24]. Trevarthen and co-authors [25] identify professional and expert attention to children's agency and interest as one of the principles of preschool education that build/expand children's curricula.

It should be noted that it cannot be assumed that children's agency always develops naturally. Instead, it depends on mediation, in which teachers play an important role [26]. Educators must identify children's interests, needs, and active participation and plan the curriculum accordingly. Moreover, in terms of needs, the community dimension must be preserved. As noted in the Ontario Early Childhood Education Guidelines [27], partnering with families and communities is one of the fundamental principles for ensuring optimal learning and development for young children. This means that community needs are essential, must be visible in the curriculum, and must be linked and responded to in the educational goals for children. Therefore, the dynamism of the early childhood curriculum (changing according to the needs of the children and the community) is necessary and must be consistent with the long- and short-term plans (i.e., the child's and teacher's actual daily activities in the ECE).

In summary, all three of the above aspects (the curriculum is a community consensus on quality education; the curriculum must be clear and meaningful to all stakeholders; the curriculum must reflect the needs of children and the school community) are relevant to the quality of the early childhood curriculum, and a questionnaire to measure the quality of early childhood curricula was developed based on these aspects (the questionnaire is described in more detail in Section 3.2). These aspects are also closely linked to the essence of distributed leadership because research shows [17] that the sufficient implementation of distributed pedagogical leadership in ECEC is associated with a more significant commitment of ECE teachers to pedagogical leadership (i.e., in our case, to the design and implementation of curriculum content).

## 2.2. Distributed Leadership

School leadership refers to harnessing the knowledge and skills of all school community members to achieve the agreed-upon educational goals. Distributed leadership brings together all community members to work towards a common goal and participate in decision making on various issues. It is a dynamic organizational process when leaders and teachers influence each other's actions [28]. Research findings show that the implementation of distributed forms of leadership related positively to the ECE teacher's ability to lead reflection and learning in their teams [29]. The development of flexible leadership structures and support for collaboration between different community members in ECEC has increased leadership across the community [30].

This means that every teacher needs to regularly present their thoughts and ideas and know that they will be considered [31]. It should be noted that this form of leadership is not easy, as it does not focus primarily on tasks and roles but on complex interactions and relationships within a community [29,32]. It is not only the formal division of leadership that is significant for the teacher (what they can do), but also the environment, relationships, and conditions created for working together. As researchers [33] argue, distributed leadership is based on interaction rather than the creation of new groups or teams. Hence, a school leader's sensitive and close communication and collaboration are significant conditions for the emergence of teacher leadership [34]. This is probably why shared leadership goes hand in hand with mutual trust and reflection and is part of the learning community [30]. As Heikkinen and co-authors [29] point out, ECEC institutional leaders, "on developing relationships and who respect collaboration, succeed in creating commitment in the community" (p. 3).

Thus, distributed leadership is a shared responsibility where mutual respect, understanding, and commitment to a shared vision create its foundation [34–36]. In our study, we adopt the theoretical approach of distributed leadership because it increases the self-efficacy of the school community members by encouraging them to lead based on their competence and by creating a culture of collaboration [32,37]. Our study aims to investigate

the expression of shared leadership in Lithuanian preschool education institutions and how it relates to the curriculum quality.

### 3. Materials and Methods

#### 3.1. Participants

The sample was randomly selected. A total of 133 ECEC communities from Lithuania were invited to participate in the survey. Of these, 79 (59.4%) institutions responded and agreed to participate. The sample comprised 461 early childhood educators (94 head teachers). Their ages ranged from 21 to 66 years. More than half of the educators had more than 20 years of pedagogical work experience. The participants' characteristics are presented in Table 1.

**Table 1.** Sample characteristics.

		N	%
Job title	Kindergarten teacher	367	79.6
	Head teacher	94	20.4
Highest level of completed formal education	ISCED level 4	35	7.6
	ISCED level 6	316	68.5
	ISCED level 7	107	23.2
	ISCED level 8	3	0.7
Qualification categories	Teacher	141	30.6
	Senior teacher	162	35.1
	Teacher methodologist	158	34.3
Kindergarten location	Rural area	6	1.3
	City	70	15.2
	Big city	385	83.5
Kindergarten size	Small (up to eight groups)	99	21.5
	Large (nine groups and more)	362	78.5

#### 3.2. Research Instrument

An anonymous questionnaire comprised the Early Childhood Curriculum Quality Scale (Appendix A) and Distributed Leadership Scale (Appendix B).

The Distributed Leadership Scale consists of four subscales: the collaboration and cooperation subscale (six items, e.g., *Teachers collaborate with parents to design and implement the early childhood curriculum*); the responsibility and accountability subscale (four items, e.g., *Teachers share responsibility among themselves in the development of the ECEC curriculum*); the initiative subscale (four items, e.g., *Teachers have enough freedom to contribute their ideas to improve the quality of the early childhood curriculum*); the decision-making subscale (three items, e.g., *Each teacher can make decisions related to the early childhood curriculum*). The statements in these four subscales were adapted to the kindergarten context using Duif et al.'s [38] distributed leadership scale. The Kaiser–Meyer–Olkin value (KMO = 0.929) and Bartlett's test of sphericity ( $\chi^2 = 4919.663$ ,  $p < 0.001$ ) indicated that the research data were suitable for factor analysis. The three-factor measurement model explained 65.7% of the total variance.

The Curriculum Quality Scale is composed of 11 statements. It includes the three dimensions described in the theoretical part: the curriculum is a community consensus on quality education, the curriculum must be clear and meaningful to all stakeholders (e.g., *The curriculum is an informative and meaningful document for the child and their parents*), and it must reflect the needs of children and the school community (e.g., *The curriculum meets the needs of children and the school community*). The first author of the paper formulated the statements of the research instrument. Exploratory factor analysis (EFA) was used to validate the Curriculum Quality Scale and, before performing the EFA, assessed the suitability of the research data with Bartlett's test of sphericity and the Kaiser–Meyer–Olkin (KMO) value. An EFA was conducted using maximum likelihood estimation. One factor

was extracted, explaining 61.23% of the total variance. The results of the factor analysis are displayed in Table 2.

**Table 2.** Exploratory factor analysis for 11 items of the Curriculum Quality Scale.

Statement	Mean	SD	Factor Loadings	Item–Total Correlation
The curriculum was designed by the whole community	3.872	0.896	0.639	0.630
The curriculum—community consensus on quality education	3.965	0.851	0.738	0.729
The curriculum meets the needs of children and the school community	4.130	0.800	0.811	0.783
The curriculum is continuously updated to meet the needs of children and the community	3.989	0.863	0.756	0.736
The curriculum is based on the child’s development and educational process	4.341	0.706	0.796	0.764
The curriculum is the main guideline for teachers’ educational work	4.150	0.819	0.804	0.760
The curriculum is clear and coherent	4.061	0.832	0.811	0.781
Long- and short-term education plans are aligned with the curriculum	4.124	0.783	0.804	0.768
Short-term education plans are based on the needs and interests of the children in the group	4.510	0.624	0.570	0.544
For the teacher, the curriculum is an informative and meaningful document	4.130	0.845	0.793	0.761
The curriculum is an informative and meaningful document for the child and his or her parents	3.792	0.958	0.780	0.755
KMO		0.933		
Bartlett’s Test of Sphericity		3485.019		
<i>p</i> -value		0.0001		

A five-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree was chosen for all scales and subscales used in the study. The scale scores represent the averages for all items in the scale. Higher scores indicate more robust agreement with the statement.

The internal consistency of the scales and subscales is presented in Table 3.

**Table 3.** Reliability of the questionnaires.

	Number of Items	McDonald $\omega$	Cronbach $\alpha$
Distributed Leadership Scale	17	0.919	0.918
Collaboration and cooperation subscale	6	0.912	0.912
Responsibility and accountability subscale	4	0.856	0.851
Initiative subscale	4	0.779	0.765
Decision-making subscale	3	0.831	0.823
Curriculum Quality Scale	11	0.937	0.935

The last questions of the survey instrument were related to the respondents’ demographic data.

### 3.3. Procedure

An online survey was conducted in spring–autumn 2023. Ethical approval to conduct this research was given by the Ethics Committee of the Education Academy of Vytautas Magnus University, Lithuania (protocol number: SA-EK-23-26). The sample was randomly selected; 133 kindergartens were chosen from a list of kindergartens operating in Lithuania (N = 549). The first author contacted the head teachers of the 133 kindergartens about the possibility of conducting the survey. After receiving permission to conduct the survey,

emails were sent with an overview of the purpose of the study and a link to the online questionnaire. The questionnaire provided instructions for completion, emphasized confidentiality, and gave the right to refuse to participate in the study. The email was distributed to the teachers by the kindergarten head teachers. The kindergarten teachers took part in the study voluntarily and were guaranteed anonymity.

### 3.4. Data Analysis

The analysis of the survey data was carried out using IBM SPSS 26.0 software. Descriptive statistical methods (absolute and percentage frequencies, mean and standard deviation, minimum and maximum values, median) were used to describe the socio-demographic characteristics of the respondents and the questionnaire scales and subscales. Skewness and kurtosis were calculated to check whether the variables in the survey were normally distributed. When the skewness and kurtosis values are  $\pm 1$ , the data distribution is close to normal [39]. The internal consistency of the questionnaire was assessed by calculating the Cronbach  $\alpha$  and McDonald  $\omega$  coefficients. To test the hypothesis of the equality of means, a Student's *t*-test was used, and to assess the results, the Cohen's *d* effect size was used. For Cohen's *d*, a value of 0.20 is interpreted as a small effect, 0.50 is a medium effect, and 0.80 is a significant effect. The relationships between the leadership attributes and curriculum quality were determined by calculating the Pearson correlation. Multiple linear regression revealed the association between the leadership attributes and curriculum quality. In regression analysis, the  $\beta$  loadings give the effect size of the predictor variables. The following guidance is given for interpreting the effect size: 0–0.1: weak effect; 0.1–0.3: modest effect; 0.3–0.5: moderate effect; and >0.5: strong effect [39]. The level of significance is 0.05.

## 4. Results

### 4.1. Descriptive Statistics and Correlations

The descriptive statistics of the variables are shown in Table 4. The averages of the leadership variables show that their values are not very high. School community collaboration has the lowest mean ( $M = 3.67$ ,  $SD = 0.77$ ). This indicates that teachers and head teachers have limited involvement in collaborative activities when designing and developing the early childhood curriculum. Slightly higher means were obtained for initiative ( $M = 3.83$ ,  $SD = 0.62$ ), responsibility ( $M = 3.93$ ,  $SD = 0.76$ ), and decision making ( $M = 3.93$ ,  $SD = 0.77$ ). The skewness and kurtosis values for all the variables indicate that the distributions of the variables are close to normal distribution.

**Table 4.** Descriptive statistics among main study variables.

	Min.	Max.	Median	Mean	SD	Skewness	Kurtosis
Collaboration and cooperation	1.00	5.00	3.67	3.67	0.77	−0.260	−0.132
Responsibility and accountability	1.00	5.00	4.00	3.93	0.76	−0.553	0.586
Initiative	2.00	5.00	3.75	3.83	0.62	0.127	−0.545
Decision making	1.00	5.00	4.00	3.93	0.77	−0.474	0.298
Curriculum quality	1.73	5.00	4.00	4.10	0.64	−0.432	−0.159

Table 5 shows that one of the leadership features—initiative—has a statistically significant weak and moderate relationship with the other leadership features. Decision making has a moderately significant relationship with the other leadership features. Collaboration and cooperation were found to have a strong relationship with responsibility and accountability. The analysis of the relationship of the ECE curriculum with the leadership features showed a moderate relationship only with initiative. A strong statistically significant relationship exists between the ECE curriculum and the other leadership features.

**Table 5.** Pearson correlations between variables.

	Responsibility and Accountability	Initiative	Decision Making	Curriculum Quality
Collaboration and cooperation	0.773 **	0.336 **	0.584 **	0.723 **
Responsibility and accountability	–	0.556 **	0.690 **	0.334 **
Initiative		–	0.491 **	0.415 **
Decision making			–	0.614 **

Note: \*\*  $p < 0.01$ .

**4.2. Expression of Leadership Features and Curriculum Quality**

To analyze the data in more detail, a Student’s *t*-test was applied to compare the differences in the evaluation of the variables according to the positions of the participants and the sizes of the nursery schools in which the participants worked. The results of the Student’s *t*-test presented in Table 6 show that the leadership features of collaboration and cooperation and responsibility and accountability were rated higher by teachers than head teachers.

**Table 6.** Student’s *t*-test findings for differences in variables in terms of responsibilities.

		Mean	SD	<i>t</i> -Test		Cohen’s <i>d</i>
				<i>t</i>	<i>p</i>	
Collaboration and cooperation	Head teachers	3.39	0.73	–4.027	0.0001	0.460
	Teachers	3.74	0.77			
Responsibility and accountability	Head teachers	3.69	0.80	–3.380	0.001	0.399
	Teachers	3.99	0.74			
Initiative	Head teachers	4.03	0.54	3.507	0.0001	–0.408
	Teachers	3.78	0.63			
Decision making	Head teachers	4.12	0.67	2.797	0.005	–0.313
	Teachers	3.88	0.79			
Curriculum quality	Head teachers	4.01	0.57	–1.679	0.095	–
	Teachers	4.12	0.65			

However, head teachers rated the other two features—initiative and decision making—higher. The differences obtained are statistically significant, but considering the Cohen’s *d* values, it can be argued that they indicate a small effect. The evaluation of the quality of the curriculum was similar for both the teachers and principals and did not differ in terms of statistical significance.

Analyzing the Student’s *t*-test results presented in Table 7, all the variables (i.e., leadership features and curriculum quality) were scored higher by participants working in smaller kindergartens (with up to eight groups) than those working in large kindergartens (with nine groups or more). The Student’s *t*-test results were statistically significant in all cases, although the Cohen’s *d* values indicate a small effect.

**4.3. Association between Leadership Attributes and Curriculum Quality**

Correlation analysis revealed that curriculum quality assessment has a moderate–strong relationship with the leadership features. Multiple linear regression was conducted to identify the association between the leadership features (independent variables) and curriculum quality (dependent variable), and to assess whether the leadership features can predict the curriculum quality. Additional dummy variables (job titles of study participants and sizes of kindergartens) were included in the regression. The results of the multiple linear regression (Table 8) showed that the dummy variables were statistically insignificant predictors, and the multiple linear regression model was optimized with them removed.

**Table 7.** Student’s *t*-test findings for variable differences in kindergarten size.

		Mean	SD	<i>t</i> -Test		Cohen’s <i>d</i>
				<i>t</i>	<i>p</i>	
Collaboration and cooperation	Small	3.94	0.78	4.085	0.0001	−0.463
	Large	3.59	0.75			
Responsibility and accountability	Small	4.15	0.73	3.384	0.001	−0.385
	Large	3.86	0.76			
Initiative	Small	3.99	0.67	2.715	0.007	−0.329
	Large	3.79	0.59			
Decision making	Small	4.16	0.74	3.547	0.0001	−0.406
	Large	3.85	0.77			
Curriculum quality	Small	4.27	0.59	3.132	0.002	−0.361
	Large	4.04	0.65			

**Table 8.** Multiple linear regression results.

Predictors	Unstandardized Coefficients		Standardized Coefficients (β)	<i>t</i>	<i>p</i>
	<i>B</i>	Std. Error			
Constant	1.029	0.134		7.671	0.0001
Job title	−0.010	0.051	−0.006	−0.197	0.844
Size of kindergarten	−0.020	0.046	−0.013	−0.441	0.659
Collaboration and cooperation	0.312	0.041	0.375	7.584	0.0001
Responsibility and accountability	0.211	0.040	0.251	5.320	0.0001
Initiative	0.110	0.035	0.106	3.108	0.002
Decision making	0.174	0.034	0.210	5.153	0.0001

The results of the repeated procedure of multiple linear regression in Table 9 show that all the leadership features are statistically significant predictors of the curriculum quality. However, the standardized coefficient (β) values indicate a modest effect. Nevertheless, the obtained statistically significant regression model had R<sup>2</sup> = 0.613 (F = 180.818, *p* < 0.0001). Thus, it can be argued that the leadership features can explain 61.3% of the quality of the curriculum.

**Table 9.** Multiple linear regression results.

Predictors	Unstandardized Coefficients		Standardized Coefficients (β)	<i>t</i>	<i>p</i>
	<i>B</i>	Std. Error			
Constant	1.052	0.133		7.921	0.0001
Collaboration and cooperation	0.309	0.040	0.373	7.767	0.0001
Responsibility and accountability	0.211	0.039	0.253	5.380	0.0001
Initiative	0.108	0.035	0.104	3.109	0.002
Decision making	0.169	0.033	0.205	5.188	0.0001

The multiple linear regression model can be written as the following equation:

$$\text{Quality} = 1.052 + 0.309\text{CC} + 0.211\text{RA} + 0.169\text{DM} + 0.108\text{In} \tag{1}$$

where CC refers to collaboration and cooperation; RA refers to responsibility and accountability; DM refers to decision making; In refers to initiative.

### 5. Discussion

Already a decade ago, researchers [8] noted the need to enhance the leadership capacity within early childhood education organizations and explore effective leadership strategies

to enable the enactment of complex policy changes. Effective leadership is emerging as related to the quality of early childhood education curricula [40–43].

In early childhood education, the concept of distributed leadership has become a framework for understanding the work of leaders [44]. Distributed leadership is when formal leaders and frontline staff share power and decision making in different areas of educational work. It is a joint effort by the whole school community to influence change and improve the quality of the education. The results of our study confirm the importance of distributed leadership. This leadership can explain 61.3% of the quality of the curricula. This means that if there is a greater degree of distributed leadership in the early childhood school community, then the quality of the ECE curricula will likely be higher. Given that developing an early childhood curriculum must be a joint consensus of the whole school community, distributed leadership is essential. This has been recognized by researchers [44–46] in other countries, who have argued that this leadership style can be a catalyst for organizational change.

However, it should be noted that the collaboration and cooperation scale has the lowest expression of the four scales of distributed leadership. According to Kahila, Heikka, and Sajaniemi [47], ECEC teachers' leadership in their work has been described as a contextual phenomenon based on collaboration and sharing. Hence, ECEC leaders should pay attention to the phenomenon of cooperation in Lithuania. The distributive leadership approach focuses on relations and interactions [48]; therefore, mutual respect and high-quality communication between administrators, teaching staff, and families could be the basis for achieving common goals.

Our results show that collaboration and cooperation strongly correlate with responsibility and accountability and the quality of the early childhood education curriculum. Thus, a more collaborative approach will likely lead to the development of other distributed leadership features and, as Vijayadevar, Thornton, and Cherrington [49] argue, expand the collective capacity of the organization.

It is interesting to note that the findings of our study show that the leadership features of cooperation and collaboration and responsibility and accountability were rated higher by teachers. However, head teachers rated the other two features—initiative and decision making—higher. Here, we draw on Jones [50], who suggests that although greater collaboration seems to be linked to distributed leadership, this type of leadership is not synonymous with democratic decision making. This means that head teachers must reflect on how they enable initiative and participation in decision making for a higher level of distributed leadership. While individual head teacher decision making can have advantages, such as quick decision making and clear accountability, collaborative decision making has a few advantages. One of the most important outcomes of the successful implementation of this decision making can be an increase in the commitment and dedication of the school community to the school. As Williamson and Blackburn [51] point out, collaborative problem solving would also lead to more positive change: teachers would be more satisfied and empowered. It could be assumed that the involvement of teachers in solving situations or difficulties that arise in school and overcoming them effectively would give teachers more confidence in their abilities and enable them to show more initiative.

Finally, we can see that all the variables (i.e., leadership features and curriculum quality) were rated higher by participants working in smaller ECEC institutions than by those working in large ones. This result is understandable—achieving dialogue and consensus in smaller communities is easier. So, here again, we can see the importance of the efforts of school leaders to make distributed leadership work in larger institutions. Recognizing that head teachers function as developers and coordinators of distributed leadership [52], school leaders need to view distributed leadership as an ongoing process of community growth [34].

Looking at our research in the context of research in other countries, the research that has been started needs to be continued by assessing various aspects of distributed leadership. For example, Hong Kong researcher Angela Choi Fung Tam [53] found that

ECEC leaders' beliefs are crucial for leadership style and development. Scholars in other countries also highlight the importance of collaboration, shared power, and sensitive relationships [54,55]. The work of Australian and Chilean scholars [56] shows that shared leadership is not just leadership involving ECEC managers and teachers but also permeates and transforms the teacher's own pedagogical interactions with children, parents, and colleagues, whereas, in our study, we only considered the level of teachers and school leaders. Finally, we dare to acknowledge that the most widely distributed pedagogical leadership has been studied by Finnish researchers [17,29,30,32,36], whose work we have drawn on in discussing the results of our study. However, it is not very meaningful from our point of view to provide a comparison of the results. As we pointed out at the beginning of this paper, Lithuania (as well as other post-Soviet countries) is characterized by a certain context. Responsibility for preschool education institutions is only 15 years old, so comparisons with countries with deep democratic cultures are incorrect because of the different contexts.

However, our findings may also be relevant to ECEC communities or researchers in other countries. The very phenomenon of leadership already implies a position of power. How to share that power, empower staff, and simultaneously not create anarchy is a task and focus for every school leader, which must receive the attention of researchers. According to this study, distributed leadership is growing in Lithuanian communities, where people agree, cooperate, and share responsibility for decisions. Importantly, this is conditional on sensitive and close peer-to-peer communication, which is increasingly likely to be found across ECEC groups.

## 6. Conclusions

The results confirm the relationship between distributed leadership and the curriculum quality. This leadership can explain 61.3% of the curriculum quality. This means that if there is more distributed leadership in the ECEC community, then the quality of the early childhood curriculum will likely be higher. Looking at the individual scales of distributed leadership, cooperation and collaboration are the most critical factors for ECEC leaders in Lithuania. The results also show that collaboration and cooperation strongly correlate with responsibility and accountability and the quality of the early childhood education curriculum. All the variables (i.e., leadership features and curriculum quality) were rated higher by participants working in smaller ECEC institutions than by those working in large ones.

The empirical study confirmed the links between the curriculum quality and distributed leadership. It should be noted that, in this study, quality was seen as a community consensus. On the one hand, this can be acknowledged as the novelty and value of this work, and, on the other hand, it can be seen as a limitation of the research work, as quality in early childhood education is a very multidimensional concept. The findings, therefore, encourage further research to explore how the expression of distributed leadership in early childhood education institutions can be related to various other aspects of educational quality.

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**Informed Consent Statement:** Completion of the survey constituted the participant's freely given consent to participate in the study. Separate written consents were not collected.

**Data Availability Statement:** The datasets generated and analyzed during the current study are not publicly available due to privacy and ethical concerns but are available from the corresponding author upon reasonable request.

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**Appendix A. Distributed Leadership Scale (Ranging from 1 = Strongly Disagree to 5 = Strongly Agree)**

Collaboration and cooperation subscale	<p>Q1. Teachers work collaboratively to achieve the best possible results in the curriculum.                  Q2. Teachers, on a regular basis, express their opinions when developing the curriculum.                  Q3. Teachers share their knowledge and experience with one another in developing the curriculum.                  Q4. Teachers help each other to solve problems in developing, updating and improving the curriculum.</p>
Responsibility and accountability subscale	<p>Q5. Teachers are provided sufficient time to collaborate with colleagues on issues related to the development of the curriculum.                  Q6. Teachers collaborate with parents to design and implement the curriculum                  Q7. Teachers feel accountable to their superior (head teacher at school) for the design and implementation of the curriculum.                  Q8. Teachers feel accountable to the school community (children, parents, colleagues) for the design and implementation of the curriculum.</p>
Initiative subscale	<p>Q9. Teachers share responsibility among themselves in the development of the curriculum.                  Q10. All staff are encouraged to express their views in the development, updating or improvement of the curriculum, regardless of their formal status.                  Q11. Initiatives and ideas for developing and improving the curriculum mainly come from the school leaders at the top.                  Q12. Teachers have enough freedom to contribute their ideas to improve the quality of the curriculum.</p>
Decision making subscale	<p>Q13. Those in leadership positions must take initiative and responsibility in the development of the curriculum.                  Q14. All tasks in the development of the curriculum are assigned to staff based on their level of expertise.                  Q15. Each teacher can make decisions related to the curriculum.</p>
	<p>Q16. Each teacher can make their own decisions regarding their professional development.                  Q17. In our organization, it's common for everyone to be involved in decision-making.</p>

Note: The questionnaire items were adapted and modified from [38].

**Appendix B. Curriculum Quality Scale (Ranging from 1 = Strongly Disagree to 5 = Strongly Agree)**

The curriculum is a community consensus on quality education	<p>Q1. The curriculum was designed by the whole community.                  Q2. The curriculum—community consensus on quality education.</p>
The curriculum must be clear and meaningful to all stakeholders.	<p>Q3. Long- and short-term education plans are aligned with the curriculum.                  Q4. The curriculum is clear and coherent.                  Q5. The curriculum is an informative and meaningful document for the child and his or her parents.</p>
The curriculum must reflect the needs of children and the school community	<p>Q6. The curriculum is the main guideline for teachers' educational work.                  Q7. For the teacher, the curriculum is an informative and meaningful document.                  Q8. The curriculum meets the needs of children and the school community.                  Q9. The curriculum is continuously updated to meet the needs of children and the community.                  Q10. Short-term education plans are based on the needs and interests of the children in the group.                  Q11. The curriculum is based on the child's development and educational process.</p>

## References

1. Shuey, E.A.; Kim, N.; Cortazar, A.; Poblete, X.; Rivera, L.; Lagos, M.J.; Faverio, F.; Engel, A. *Curriculum Alignment and Progression between Early Childhood Education and Care and Primary School: A Brief Review and Case Studies*; OECD Education Working Papers, No. 193; OECD Publishing: Paris, France, 2019. [CrossRef]
2. Sylva, K.; Ereky-Stevens, K.; Pastori, G.; Slot, P.L.; Lerkkanen, M.-K. Integrative Report on a Culture Sensitive Quality and Curriculum Framework (Report) 2016. Available online: <https://dspace.library.uu.nl/handle/1874/342308> (accessed on 28 September 2023).
3. Bennett, J. Curriculum issues in national policy-making. *Eur. Early Child. Educ. Res. J.* **2005**, *13*, 5–23. [CrossRef]
4. Monkevičienė, O.; Stankevičienė, K.; Jonilienė, M. Processes of Changes in Pre-school Curriculum: Centralisation–Radical Decentralisation–Combination of Centralisation and De-centralisation Processes. In *Contemporary Education Contexts*; Jašinauskas, L., Ed.; Lithuanian University of Educational Sciences Publishing House: Vilnius, Lithuania, 2013; pp. 40–61.
5. Monkevičienė, O. Tendencies of change in pre-school and pre-primary education content. *Pedagogy* **2008**, *91*, 66–72.
6. Edwards, S. *Process Quality, Curriculum and Pedagogy in Early Childhood Education and Care*; OECD Education Working Papers, No. 247; OECD Publishing: Paris, France, 2021. [CrossRef]
7. Dambrauskienė, D.; Liukinevičienė, L. The development of distributed leadership in Lithuanian pre-school education institutions. *Soc. Res.* **2018**, *41*, 48–60. [CrossRef]
8. Urbanovič, J. Aspects of decentralization in management reforms of the education system in Lithuania. *Viešoji Polit. Ir Adm./Public Policy Adm.* **2009**, *30*, 102–113.
9. Prusinski, E.; Mahler, P.P.; Collins, M.; Couch, H. Strengthening Early Childhood Education and Care in a “Childcare Desert”. *Early Child. Educ. J.* **2023**, *51*, 1317–1333. [CrossRef]
10. Råde, A. The Involved, Engaged or Partnership Parents in Early Childhood Education and Care. *Univ. J. Educ. Res.* **2020**, *8*, 2833–2841. [CrossRef]
11. Hujala, E.; Turja, L.; Gaspar, M.F.; Veisson, M.; Waniganayake, M. Perspectives of early childhood teachers on parent–teacher partnerships in five European countries. *Eur. Early Child. Ed. Res. J.* **2009**, *17*, 57–76. [CrossRef]
12. Almendingen, A.; Clayton, O.; Matthews, J. Partnering with Parents in Early Childhood Services: Raising and Responding to Concerns. *Early Child. Educ. J.* **2022**, *50*, 527–538. [CrossRef]
13. Laevers, F. The curriculum as means to raise the quality of early childhood education. *Implications for policy. Eur. Early Child. Ed. Res. J.* **2005**, *13*, 17–29. [CrossRef]
14. Bronfenbrenner, U.; Ceci, S.J. Nature-nuture reconceptualized in developmental perspective: A bioecological model. *Psychol. Rev.* **1994**, *101*, 568–586. [CrossRef] [PubMed]
15. Sadownik, A.R. Bronfenbrenner: Ecology of Human Development in Ecology of Collaboration. In *(Re)Theorising More-than-Parental Involvement in Early Childhood Education and Care*; Sadownik, A.R., Višnjic Jevtić, A., Eds.; Springer: Cham, Switzerland, 2023; pp. 83–95.
16. Aleksić, G.; Bebić-Crestany, D.; Kirsch, C. Factors influencing communication between parents and early childhood educators in multilingual Luxembourg. *Int. J. Educ. Res.* **2024**, *124*, 102309. [CrossRef]
17. Heikka, J.; Pitkänieniemi, H.; Kettukangas, T.; Hyttinen, T. Distributed pedagogical leadership and teacher leadership in early childhood education contexts. *Int. J. Leadersh. Educ.* **2021**, *24*, 333–348. [CrossRef]
18. Wood, E.; Hedges, H. Curriculum in early childhood education: Critical questions about content, coherence, and control. *Curric. J.* **2016**, *27*, 387–405. [CrossRef]
19. Cole-Hamilton, I. *Getting It Right for Play: The Power of Play: An Evidence Base*; Play Scotland: Edinburgh, UK, 2012; Available online: <https://www.playscotland.org/resources/getting-it-right-for-play/> (accessed on 12 January 2024).
20. Liu, C.; Solis, S.L.; Jensen, H.; Hopkins, E.J.; Neale, D.; Zosh, J.M.; Hirsh-Pasek, K.; Whitebread, D. *Neuroscience and Learning Through Play: A Review of The Evidence (Research Summary)*; The LEGO Foundation: Billund, Denmark, 2017; Available online: [https://cms.learningthroughplay.com/media/zbcd21td/neuroscience-review\\_web.pdf](https://cms.learningthroughplay.com/media/zbcd21td/neuroscience-review_web.pdf) (accessed on 12 January 2024).
21. Whitebread, D.; Neale, D.; Jensen, H.; Liu, C.; Solis, S.L.; Hopkins, E.; Hirsh-Pasek, K.; Zosh, J.M. *The Role of Play in Children’s Development: A Review of the Evidence*; The LEGO Foundation: Billund, Denmark, 2017; Available online: [https://cms.learningthroughplay.com/media/esriqz2x/role-of-play-in-childrens-development-review\\_web.pdf](https://cms.learningthroughplay.com/media/esriqz2x/role-of-play-in-childrens-development-review_web.pdf) (accessed on 12 January 2024).
22. Sewell, C.; Smale, J.; Smith, K. Play Maps: Supporting Children’s Provisional Rights to Play in Their Local Community. In *The Routledge International Handbook of Young Children’s Rights*; Murray, J., Swadener, B.B., Smith, K., Eds.; Routledge: London, UK, 2019; pp. 365–386.
23. Fler, M. *Play in The Early Years*, 3rd ed.; Cambridge University Press: Cambridge, UK; Anthem Press: Cambridge, UK, 2021.
24. Sairanen, H.; Kumpulainen, K.; Kajamaa, A. An investigation into children’s agency: Children’s initiatives and practitioners’ responses in Finnish early childhood education. *Early Child. Dev. Care* **2022**, *192*, 112–123. [CrossRef]
25. Trevarthen, C.; Dunlop, A.-W.; Delafield-Butt, J. The Spirit of the Child Inspires Learning in the Community: How Can We Balance This Promise with the Politics and Practice of Education? In *The Child’s Curriculum: Working with the Natural Values of Young Children*; Trevarthen, C., Delafield-Butt, J., Dunlop, A.-W., Eds.; Oxford University Press: Oxford, UK, 2018; pp. 311–318.

26. Borg, F.; Pramling Samuelsson, I. Preschool children's agency in education for sustainability: The case of Sweden. *Eur. Early Child. Educ. Res. J.* **2022**, *30*, 147–163. [CrossRef]
27. Ontario Ministry of Education. *How Does Learning Happen? Ontario's Pedagogy for the Early Years*; Queen's Printer for Ontario: Toronto, ON, Canada, 2014; Available online: <https://files.ontario.ca/edu-how-does-learning-happen-en-2021-03-23.pdf> (accessed on 28 September 2023).
28. Harris, A. Distributed leadership: Implications for the role of the principal. *J. Manag. Dev.* **2011**, *31*, 7–17. [CrossRef]
29. Heikkinen, K.M.; Ahtiainen, R.; Fonsén, E. Perspectives on Leadership in Early Childhood Education and Care Centers Through Community of Practice. *SAGE Open* **2022**, *12*, 1–9. [CrossRef]
30. Thornton, K. Leadership in Professional Learning Communities: A Review of Literature. In *Quality in Early Childhood Education and Care through Leadership and Organizational Learning. International Perspectives on Early Childhood Education and Development*; Hansen, L.S., Ringsmose, C., Eds.; Springer: Cham, Switzerland, 2023; pp. 173–193.
31. Okiri, P.O.; Hercz, M. The tenets of distributed pedagogical leadership in educational contexts—A systematic literature review on perception and practice. *Educ. Manag. Adm. Leadersh.* **2023**, 1–18, online first. [CrossRef]
32. Kangas, J.; Venninen, T.; Ojala, M. Distributed leadership as administrative practice in Finnish early childhood education and care. *Educ. Manag. Adm. Leadersh.* **2016**, *44*, 617–631. [CrossRef]
33. Leithwood, K.; Harris, A.; Hopkins, D. Seven strong claims about successful school leadership revisited. *Sch. Leadersh. Manag.* **2019**, *40*, 5–22. [CrossRef]
34. Heikka, J. Distributed Pedagogical Leadership in Early Childhood Education. Ph.D. Thesis, Tampere University Press, Tampere, Finland, 2014. Available online: <https://trepo.tuni.fi/bitstream/handle/10024/95016/978-951-44-9381-2.pdf> (accessed on 28 November 2023).
35. Hujala, E. Contextually defined leadership. In *Researching Leadership in Early Childhood Education*; Hujala, E., Waniganayake, M., Rodd, J., Eds.; Tampere University Press: Tampere, Finland, 2013; pp. 47–60.
36. Heikka, J.; Waniganayake, M.; Hujala, E. Contextualizing distributed leadership within early childhood education: Current understandings, research evidence and future challenges. *Educ. Manag. Adm. Leadersh.* **2013**, *41*, 30–44. [CrossRef]
37. Schleicher, A. *Preparing Teachers and Developing School Leaders for the 21st Century: Lessons from around the World*; International Summit on the Teaching Profession; OECD Publishing: Paris, France, 2012. [CrossRef]
38. Duif, T.; Harrison, C.; van Dartel, N.; Sinyolo, D. Distributed Leadership in Practice: A Descriptive Analysis of Distributed Leadership in European Schools 2013. Available online: [http://www.schoolleadership.eu/sites/default/files/esha-etuice\\_report\\_on\\_dl.pdf](http://www.schoolleadership.eu/sites/default/files/esha-etuice_report_on_dl.pdf) (accessed on 28 September 2023).
39. Cohen, L.; Manion, L.; Morrison, K. *Research Methods in Education*, 8th ed.; Routledge: New York, NY, USA, 2018.
40. Cheung, A.C.K.; Keung, C.P.C.; Kwan, P.Y.K.; Cheung, L.Y.S. Teachers' Perceptions of the Effect of Selected Leadership Practices on Pre-Primary Children's Learning in Hong Kong. *Early Child. Dev. Care* **2019**, *189*, 2265–2283. [CrossRef]
41. Fonsén, E.; Lahtinen, L.; Sillman, M.; Reunamo, J. Pedagogical Leadership and Children's Well-Being in Finnish Early Education. *Educ. Manag. Adm. Leadersh.* **2022**, *50*, 979–994. [CrossRef]
42. Fonsén, E.; Szecsi, T.; Kupila, P.; Liinamaa, T.; Halpern, C.; Repo, M. Teachers' pedagogical leadership in early childhood education. *Educ. Res.* **2023**, *65*, 1–23. [CrossRef]
43. Gibson, M.; McFadden, A.; Williams, K.; Zollo, L.; Winter, A.; Lunn, J. Imbalances Between Workforce Policy and Employment for Early Childhood Graduate Teachers: Complexities and Considerations. *Aust. J. Early Child.* **2020**, *45*, 82–94. [CrossRef]
44. Varpanen, J. Early childhood education leadership in Finland through the lens of structure and agency. *Educ. Manag. Adm. Leadersh.* **2021**, *49*, 518–533. [CrossRef]
45. Azorín, C.; Harris, A.; Jones, M. Taking a distributed perspective on leading professional learning networks. *School Leadersh. Manag.* **2020**, *40*, 111–127. [CrossRef]
46. Harris, A.; Jones, M. Leading professional learning with impact. *School Leadersh. Manag.* **2019**, *39*, 1–4. [CrossRef]
47. Kahila, S.K.; Heikka, J.; Sajaniemi, N. Teacher leadership in the context of early childhood education: Concepts, characteristics and enactment. *SAECJ* **2020**, *9*, 28–43. Available online: <https://ejournal.upsi.edu.my/index.php/SAECJ/article/view/3301>. (accessed on 28 November 2023).
48. Lund, H.H. 'We are equal, but I am the leader': Leadership enactment in early childhood education in Norway. *Intern. J. Leadersh. Educ.* **2021**, 1–26. [CrossRef]
49. Vijayadevar, S.; Thornton, K.; Cherrington, S. Professional learning communities: Enhancing collaborative leadership in Singapore early childhood settings. *Contemp. Issues Early Child.* **2019**, *20*, 79–92. [CrossRef]
50. Jones, S. Distributed leadership: A critical analysis. *Leadership* **2014**, *10*, 129–141. [CrossRef]
51. Williamson, R.; Blackburn, B. Collaborating through shared decision-making. *Educ. Dig.* **2019**, *84*, 21–25.
52. Harris, A. Distributed leadership: According to the evidence. *J. Educ. Adm.* **2008**, *46*, 172–188. [CrossRef]
53. Tam, A.C.F. Conceptualizing Distributed Leadership: Diverse Voices of Positional Leaders in Early Childhood Education. *Leadersh. Pol. Sch.* **2019**, *18*, 701–718. [CrossRef]
54. Douglass, A. *Leading for Change in Early Care and Education: Cultivating Leadership from Within*; Teachers College Press: New York, NY, USA, 2017.

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55. Nicholson, J.; Kuhl, K.; Maniates, H.; Lin, B.; Bonetti, S. A review of the literature on leadership in early childhood: Examining epistemological foundations and considerations of social justice. *Early Child. Dev. Care* **2018**, *190*, 91–122. [[CrossRef](#)]
  56. Singh, M.; Han, J.; Woodrow, C. Shifting Pedagogies through Distributed Leadership: Mentoring Chilean Early Childhood Educators in Literacy Teaching. *Aust. J. Early Child.* **2012**, *37*, 68–76. [[CrossRef](#)]

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