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Some Indicators Regarding Early Childhood Education and Care in Türkiye and Their International Comparison

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Abstract

This study aims to compare Türkiye's early childhood education and care (ECEC) indicators, such as enrollment rates, duration of education, age of access, mandatory school start age, student-to-teacher ratios, and allocated budgets, with those of the top six European countries ranked in the United Nations Human Development Index 2024. The comparison is based on reports from UNICEF (United Nations Children's Fund), OECD (Organisation for Economic Co-operation and Development), EU (European Union), UNESCO (United Nations Educational, Scientific and Cultural Organization), UNDP (United Nations Development Programme) and the World Bank. The study group of the research consists of Switzerland, Norway, Iceland, Denmark, Sweden, which are among the top six countries determined according to the Human Development Index (HDI) specified in the United Nations Human Development Report (2024) in 2024, and Türkiye, which is ranked 45th. This study group was selected using the criterion sampling technique, one of the purposeful sampling methods. This descriptive study uses a qualitative approach. The findings indicate that Türkiye lags behind the compared countries in terms of ECEC enrollment and budget allocation. It is recommended that ECEC should be mandatory and free for at least one year.

Keywords: OECD, early childhood education and care, comparative education

Türkiye'de Erken Çocukluk Eğitimi ve Bakımına İlişkin Göstergelerin Uluslararası Karşılaştırması

Özet (Türkçe)

Bu araştırmanın amacı EÇEB' de okullaşma oranı, eğitim süreleri, yararlanma yaşları, zorunlu eğitime başlama yaşı, öğretmen başına düşen öğrenci sayıları ve ayrılan bütçe göstergeleri bağlamında Türkiye ile Birleşmiş Milletlerin 2024 yılında yayınlanan İnsani Gelişim Endeksinde ilk altı sıraya giren Avrupa ülkelerini karşılaştırmak ve Türkiye'nin uluslararası durumunu ortaya koymaktır. Bu amaçla UNICEF'in (Birleşmiş Milletler Çocuklara Yardım Fonu) çocukluk eğitimi ve bakımına ilişkin raporları, OECD'nin (Ekonomik Kalkınma ve İşbirliği Örgütü) EÇEB' e ilişkin güncel raporları ile AB (Avrupa Birliği), UNESCO (Birleşmiş Milletler Eğitim, Bilim ve Kültür Örgütü), UNDP (Birleşmiş Milletler Gelişim Programı) ve Dünya Bankası raporlarına başvurulmuştur. 2024 yılında Birleşmiş Milletlerin İnsani Gelişim Raporu'nda (2024) belirtilen İnsani Gelişme Endeksi'ne (İGE) göre belirlenen ülkelerden ilk altı sıraya giren İsviçre, Norveç, İzlanda, Danimarka, İsveç ile 45. sırada olan Türkiye araştırmanın çalışma grubunu oluşturmaktadır. Bu çalışma grubu amaçlı örneklem yöntemlerinden ölçüt örneklem tekniği ile seçilmiştir. Araştırma betimsel tarama ile gerçekleştirilmiş olan bir nitel araştırmadır. Türkiye'nin EÇEB'de okullaşma ve ayrılan bütçe kapsamında ilgili ülkelerin gerisinde olduğu sonucuna ulaşılmıştır. EÇEB' de en az son bir yılın zorunlu ve ücretsiz olması gerektiği önerilmiştir.

Anahtar Kelimeler: OECD, erken çocukluk eğitimi ve bakımı, karşılaştırmalı eğitim

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Introduction

The intensified global and geopolitical relationships, rapid advancements in information and communication technology, the comfort and convenience of international travel, international economic and trade relations, and global diseases and pandemics are just a few reasons why the 21st century is referred to as the global century. The significant changes experienced compared to previous centuries have made it necessary for countries and societies to adapt to the times. Consequently, learning to learn in the global age, the intensity of international relations, and development appropriate for the global era necessitate educational reforms. Thus, due to the impact of globalization, changes in educational policies and systems around the world have become a priority for policymakers.

The impact of globalization has facilitated the intermingling of societies through changes and transformations in social, political, cultural, and economic areas. A new model of a person, needed for global development, has emerged. The way to cultivate this new type of individual is through education (Tezcan, 1998). In the new world where knowledge is equated with power, the role of the teacher is no longer to provide ready-made information but to teach how to access constantly changing and developing knowledge (Karaman, 2010). These reasons have led to global competition treating education with commercial concerns and structuring schools as commercial organizations (Giddens, 2000, as cited in Karaman, 2010).

Policies of renewal and change in education have aimed not only to develop systems that suit the positive impacts of globalization but also to combat its negative aspects. Influenced by global competition, power, and interest relations, countries have placed greater emphasis on education. Consequently, academics, policymakers, and practitioners have seen the need to develop new theories and methods, focusing on the analysis of global education systems (Beech, 2009). Countries have begun to study both their own and other countries' education systems, focusing on comparative education. Indeed, the increasing regional and global dimensions of educational problems have further emphasized the importance of comparative education, which highlights cross-cultural and international cooperation (Trethewey, 2014).

Although there is no common understanding of the definition of comparative education in the literature, it can be broadly considered as the examination of at least two educational phenomena or practices to identify their similarities and differences (Thomas, 1998, as cited in Crossley & Watson, 2003, p. 18). Kazamias (2009) states that comparative education has an added value in helping us understand our own education system through the study of foreign education systems. The global reading conducted in comparative education reveals the embedded values of regions that are foreign to us (Cowen, 2009, p. 338). When these definitions and many aspects of globalization are considered together, comparative education studies, which have become attractive internationally, help individuals better understand their education systems, satisfy their intellectual curiosity, and highlight inter-societal relationships. Additionally, by revealing similarities and differences in education systems, educational problems are understood, and new educational policies are formulated. This fosters international cooperation by creating interest and sensitivity towards different cultures and perspectives (Crossley & Watson, 2003, p. 19).

Examining the education systems of other countries and implementing innovations in their own systems is considered a practice dating back to earlier periods. It is likely that travelers who visited different countries brought back insights about educational differences to their own nations. The observations made by travelers during their journeys can be regarded as the early period of comparative education (Trethewey, 2014). Looking at the historical development of comparative education studies in Türkiye, it is seen that they began with the examination of the education systems of other countries. Indeed, during the Ottoman Empire, pedagogues were sent abroad as part of the modernization and reform movements. In the globalized world order, international competition and cooperation, the influence of neoliberalism, and other factors have made comparative education a necessity for educational reform and renewal efforts in Türkiye (Şahin, 2021, p. 12).

There are some issues in comparative education, such as adopting and implementing another culture's system exactly as it is. Crossley and Watson (2003) criticize the borrowing and application of macro systems and concepts from other systems. According to them, these attempts often end in failure. Sadler (1979) supports this view by stating that one cannot move whimsically among the world's education systems like a child picking flowers from a garden; the flowers and shrubs taken from these gardens cannot be transplanted into our own soil and revived (as cited in Beech, 2009, p. 341). Comparisons should be made considering the cultural codes and characteristics of each country.

Global and regional organizations established for development purposes after World War II have used comparative education to help countries improve their education systems. It is important to note that the founding and active work of international organizations such as Organisation for Economic Co-operation and Development (OECD), International Bank for Reconstruction and Development (World Bank), United Nations Educational Scientific and Cultural Organization (UNESCO), United Nations Development Programme (UNDP), United Nations International Children's Emergency Fund (UNICEF), International Monetary Fund (IMF), European Union (EU), and United Nations (UN) and the need for comparative education, coincided with the impact of globalization. Indeed, the transfer of educational knowledge has become part of the missions of UNESCO, the World Bank, and the OECD (Beech, 2009, p. 344).

As a mandatory requirement of globalization, policymakers initiating change and transformation in education are likely to prioritize early childhood education in their reforms. ECEC is typically designed to support children's early cognitive, physical, social, and emotional development, while also introducing young children to organized education outside of the family context. It also prepares children for entry into primary education by developing some of the skills necessary for academic readiness (UNESCO, 2012). ECEC typically occurs in two stages. The first stage, referred to as ISCED 01, covers the period from birth to 2 years of age. The second stage, referred to as ISCED 02, encompasses preschool education for children aged 3 to 5 years (UNESCO Institute for Statistics, 2011).

The political, cultural, and social changes associated with the Industrial Revolution and the increasing participation of women in the workforce have highlighted the growing societal need for ECEC. Initially, ECEC began as a service to support working women's childcare needs and later evolved, alongside its educational dimension, into a requirement of the social state principle (Alat, 2009, p. 185). In line with these developments, ECEC is considered the foundation for nurturing generations that will meet the needs of the century. According to the World Bank (2024), investment in early childhood is prioritized as it is believed to eliminate poverty, increase prosperity, stimulate economic growth, and develop human capital. Policymakers increasingly emphasize the critical role of early education and care in the cognitive and emotional development, learning, and well-being of children (OECD, 2023). Indeed, quality education and care services received between the ages of 0-6 are thought to be directly linked to future prosperity (Barnett & Yarosz, 2007). Many cognitive skills are acquired during childhood. Therefore, high-quality education received during this period is crucial for ensuring social, emotional, and cognitive development in later stages (World Bank, 2017). Children who participate in high-quality organized learning at an early age are more likely to achieve better educational outcomes as they grow. This is especially true for children from disadvantaged socio-economic backgrounds with insufficient learning environments at home (OECD, 2017).

This study aims to understand the place of early childhood education and care in Türkiye within the global context, emphasizing the importance of ECEC in education systems. Addressing the changes and transformations in education systems brought about by globalization within the scope of ECEC and examining them according to international standards is seen as a necessity. Consequently, the innovations occurring in today's education systems have endowed ECEC services with an international character and identity (UNICEF, 2019). The significance of the study is highlighted by its consideration of the OECD's latest report, Education at a Glance 2023, and recent reports from global organizations such as UNICEF, UNDP, UNESCO, and the EU, published in 2023 and 2024. The study is important for providing a global comparison of Turkey’s ECEC system and offering an opportunity for self-assessment in this field. It is hoped that the findings will provide valuable insights for policymakers, educational researchers, and practitioners in Turkey. In this context, an international comparison with the top six European countries according to the Human Development Index (HDI) in the United Nations Human Development Report (2024) is needed. This comparison will consider indicators such as the enrollment rate in ECEC services, ages of beneficiaries, compulsory education starting age, duration of education, student-teacher ratios, and allocated budget. In order to achieve the purpose of the research, answers were sought to the following research questions:

1. What are the similarities and differences between Türkiye’s enrollment rates in ECEC services and those of the selected countries based on the Human Development Index?
2. What are the similarities and differences between Türkiye and the selected countries in terms of ages of utilization, education durations, and starting age of compulsory education in ECEC services?

3. What are the similarities and differences between Türkiye and the selected countries regarding student-teacher ratios in ECEC services according to the Human Development Index?
4. What are the similarities and differences between Türkiye's budget allocation for ECEC services and the budgets allocated by the selected countries for ECEC services in terms of per-student expenditure, teacher salaries, and the share of expenditures by private institutions?

Method

This research is a qualitative study conducted using descriptive survey methodology. Qualitative research design is defined by Yıldırım and Şimşek (2018) as a strategy that guides and ensures the consistency of various stages of the research around a specific approach. In the survey model, the researcher attempts to present phenomena as they are without influencing or altering them (Karasar, 2014, p. 77). This study, as a descriptive qualitative research method, uses a comparative approach. Comparative education involves the examination of at least two educational phenomena or practices to highlight their similarities and differences (Thomas, 1998, as cited in Crossley & Watson, 2003, p. 18). In this study, the horizontal approach technique of comparative education will be employed.

Study Group

The study group consists of Switzerland, Norway, Iceland, Denmark, Sweden, which are the top six countries according to the Human Development Index (HDI) published in the United Nations Human Development Report (2024), and Türkiye, which is ranked 45th. This study group was selected using the criterion sampling technique, one of the purposive sampling methods. These countries were chosen because their HDI in the UNDP Human Development Report (2024) are closely related to education. Another reason for including these countries is their high levels of welfare and human living standards, which make them relevant for comparison with Türkiye. In criterion sampling, the primary aim is to study cases that meet a predetermined set of criteria (Yıldırım & Şimşek, 2018, p. 122).

Data Collection

To access statistical information about the countries specified by the Human Development Index of the United Nations, the 2023-2024 Human Development Report (2024) by the UNDP was reviewed. For data related to the research problem, reports on childhood education and care from UNICEF, current ECEC reports from the OECD, EU reports, UNESCO reports, and World Bank reports were utilized.

Data for this study, which aims to provide a general evaluation of Türkiye by comparing Switzerland, Norway, Iceland, Sweden, Denmark, and Türkiye in terms of certain indicators in Early Childhood Education and Care (ECEC), were collected through document analysis. Document analysis involves the examination of written documents containing information about the topics being researched. This method allows the researcher to obtain necessary data without the need for observation or interviews (Yıldırım & Şimşek, 2018, p. 189). As a systematic procedure, document analysis involves examining both printed and electronic

materials and can sometimes be the sole data source within an interpretive paradigm (Bowen, 2009). In this context, relevant reports have been accessed and data have been obtained in line with the research problem in this study.

Data Analysis

To prevent confusion in comparing and describing data between countries, the International Standard Classification of Education (ISCED) created by UNESCO (2011), which assists in compiling international educational statistics, was used as a reference. ECEC data were categorized as ISCED 01 for children aged 0-3 years and ISCED 02 for children aged 3-5 years. Prior to determining the research problem, a preliminary literature review was conducted. Once the research problem was identified, relevant and current data were reviewed in line with this problem. Data obtained were compared using the OECD country averages as a reference. Indicators such as the starting age of compulsory education, education durations, student-teacher ratios, and ECEC budget data were tabulated using OECD and European Union reports as primary sources. Thus, comparisons were made among OECD countries, and similarities and differences with Türkiye were identified using the generated tables.

Findings

The study analyzed enrollment rates separately for ISCED 01 and ISCED 02 levels in ECEC. According to Table 1, among OECD countries, 18% of children under 2 years old and 43% of 2-year-olds are enrolled in ISCED 01 programs.

Table 1. Enrollment Rates in ECEC (2021)

	Under 2 Years	2 Years	3 Years	4 Years	5 Years
Switzerland	-	-	2.3	48.7	98.1
Norway	41.2	94.1	96.7	97.6	97.7
Iceland	40.2	94.4	96.6	96.5	96.9
Denmark	38.1	86.5	95.7	97.4	98.1
Sweden	25.7	91.9	95.5	95.4	96.1
OECD	18.1	43	73.7	88	95.1
Türkiye	0.1	0.7	6.4	20.1	67.7

Source: OECD, 2023.

For ISCED 02 level enrollment rates, OECD countries show 73.7% at age 3, 88% at age 4, and 96.1% at age 5. In Switzerland, the starting age for ECEC is 4 years, so there is no official ECEC program for children under 4 (Educa, 2018, as cited in Sop, 2022, p. 253). In other countries, the enrollment rate for 2-year-olds is higher than the OECD average: 41.2% in Norway, 40.2% in Iceland, 38.1% in Denmark, and 25.7% in Sweden. In contrast, Türkiye's enrollment rate for children under 2 years old is only 0.1%, significantly lower than the OECD average. The enrollment rate for 2-year-olds is also very low in Turkey at 0.7%, compared to Norway (94.1%), Iceland (94.4%), Denmark (86.5%), and Sweden (91.9%). Regarding 3-year-olds, Norway has an enrollment rate of 96.7%, Iceland 96.6%, Denmark 95.7%, and Sweden 95.5%. In comparison, Switzerland has 2.3% and Türkiye 6.4%.

In general, enrollment rates for ISCED 02 level are higher. For 4-year-olds, 97.6% in Norway, 96.5% in Iceland, 97.4% in Denmark, and 95.4% in Sweden are enrolled in ISCED 02 programs. In Switzerland, the rate is 48.7%, and in Türkiye, it is 20.1%. Both Türkiye and Switzerland have lower enrollment rates at age 4 compared to the OECD average. For 5-year-olds, enrollment rates are 98.1% in Switzerland and Denmark, followed by Norway at 97.7%, Iceland at 96.9%, and Sweden at 96.1%. Türkiye's enrollment rate for 5-year-olds is 67.7%, placing it significantly behind these countries and below the OECD average.

To better analyze enrollment rates in ECEC programs across countries, the ages at which entitlement to ECEC programs begins were examined. According to Table 2, the age to start free education is 4 years in Switzerland, and 3 years in Sweden and Türkiye. These ages also correspond to the enrollment age for ISCED 02 programs.

Table 2. Ages of Access to Early Childhood Education and Care (2021)

	Age to Start Free ECEC	Age to Start ISCED 01	Duration of ISCED 01	Age to Start ISCED 02	Duration of ISCED 02
Switzerland	4	-	-	4	2
Norway	-	0	3	3	3
Iceland	-	0	3	3	3
Denmark	-	7 mo.	3	3	3
Sweden	3	1	2	3	4
Türkiye	3	0	2	3	3

Source: OECD, 2023.

In Norway, Iceland, and Denmark, there is no official rule regarding the age to start free ECEC. In these countries, the entitlement to free ECEC begins with enrollment in ISCED 02 programs. These data should not be confused with the mandatory school starting age. The information provided here is related to the entitlement to optional free education. In Switzerland, since official ECEC enrollment starts at age 4, there is no data available for ISCED 01. However, in Norway, Iceland, and Denmark, the ISCED 01 program lasts 3 years, while in Sweden and Türkiye, it lasts 2 years. The pre-primary education considered as ISCED 02 starts at age 4 in Switzerland and at age 3 in other countries. The duration of ISCED 02 programs is 3 years in Norway, Iceland, Denmark, and Türkiye, while it is 2 years in Switzerland and 4 years in Sweden.

The information regarding the mandatory school starting age and primary school starting age provides insights into which countries have mandatory ECEC programs. It also offers information about enrollment rates in ECEC programs across countries.

Table 3. Mandatory School and Primary School Starting Ages (2021)

	Switzerland	Norway	Iceland	Denmark	Sweden	Türkiye
Mandatory Education Age	4-5	6	6	6	6	6
Primary School Starting Age	6	6	6	6	7	6

Source: OECD, 2023.

Table 3 indicates that the starting age for primary school is 7 years in Sweden and 6 years in other countries. For mandatory education, Switzerland starts at ages 4-5, while in all other countries, it starts at age 6. This suggests that in Switzerland, mandatory education includes the last year before primary school. In Sweden, the mandatory education starts at age 6, meaning that the final year of ECEC programs is mandatory. In Norway, Iceland, Denmark, and Türkiye, ECEC programs are not mandatory.

Table 4 shows the number of students per teacher in ECEC services in selected countries and the OECD average. According to these findings, Iceland has the lowest teacher-to-student ratio in ECEC programs (ISCED 02) with 5 students per teacher. It is followed by Denmark with 10 students, and Norway with 11 students per teacher. In Türkiye, the ratio is 13 students per teacher. These ratios are lower than the OECD average. Sweden has a ratio of 14, and Switzerland has a ratio of 18.

Table 4. Teacher-to-Student Ratios in ECEC

	Early Childhood Educational Development (ISCED 01)	**Pre-primary (ISCED 02)**
Switzerland	-	18
Norway	6	11
Iceland	3	5
Denmark	5	10
Sweden	13	14
OECD	9	14
Türkiye	-	13

Source: OECD, 2023.

For ISCED 01 programs (ages 0-3), data is not available for Switzerland and Türkiye. In ISCED 01 programs, the teacher-to-student ratio is 3 in Iceland, 5 in Denmark, and 6 in Norway, which are below the OECD average. In Sweden, the ratio is 13.

To compare expenditures on the education and care of children aged 3-5 years, both annual per-student spending and the percentage of Gross Domestic Product (GDP) spent were examined. Table 5 shows that Iceland has the highest expenditure at $18,770 per child. Iceland allocates 1.2% of its GDP to the education and care of 3-5 year-olds, which is the highest percentage. Norway follows with $17,412, Denmark with $16,508, and Sweden with $14,934. Türkiye spends $4,968 per child annually.

Table 5. Expenditures on Education and Care for Children Aged 3-5 Years (Per Student, 2020)

	Percentage of GDP	Annual Expenditure per Child (USD)
Norway	1.0	17.412
Iceland	1.2	18770
Denmark	0.6	16 508
Sweden	0.9	14.934
OECD	0.6	10.025
Türkiye	0.3	4.968

Source: OECD, 2023

Compared to the OECD average, Türkiye's expenditure is significantly lower. As a percentage of GDP, Norway is at 1.0%, Sweden at 0.9%, Denmark at 0.6%, and Türkiye at 0.3%. The OECD average for this percentage is 0.6%, making Türkiye the lowest among these countries.

The data in Table 6 provide information on the ratio of countries' spending on private ECEC institutions to their total ECEC spending. In OECD countries, the share of spending on private institutions in total spending on ECEC programs is 14% in ISCED 02 programs, 26% in ISCED 01 programs and 15% in ISCED 0 (0-5 age) programs. When the share of spending on ISCED 01 programs in private institutions in ECEC spending is examined, it is seen that it is below the OECD average in Sweden, Denmark, Iceland and Norway. When the share of spending on private institutions in total ECEC spending in ISCED 02 programs is examined, it is seen that Denmark and Türkiye have the highest shares. In Norway, Iceland and Sweden, this share is below the OECD average. In terms of the share of spending on ISCED 0 programs in private institutions in ECEC expenditures, Norway, Iceland and Sweden are below the OECD average, while Denmark is above the OECD average. Since data on the spending of private institutions on ISCED 01 programs in Turkey could not be obtained, the share of private educational institutions in the expenditures of general early childhood and care programs (ISCED 0) could not be obtained either. Because, ISCED 0 programmes cover ISCED 01 and ISCED 02 programmes.

Table 6. Share of Total ECEC Expenditures for Private ECEC Institutions (%) (2020)

	ISCED 01 Expenditure	ISCED 02 Expenditure	ISCED 0 Expenditure
Norway	13	13	13
Iceland	8	12	10
Denmark	24	24	24
Sweden	6	6	6
OECD	26	14	15
Türkiye	-	16	-

Source: OECD, 2023

Teacher salaries are an important indicator for comparing education budgets across countries. Table 7 shows that Switzerland has the highest starting salary at $56,429, followed by Denmark

at $46,552, Türkiye at $46,333, Iceland at $42,593, Sweden at $42,374, and Norway at $39,337. The starting salaries in these countries are above the OECD average. Switzerland and Denmark have higher salaries compared to Türkiye, while Sweden, Iceland, and Norway have lower salaries than Turkey.

Table 7. Annual Legal Salaries of ECEC Teachers at Different Career Stages (2022) (USD)

	Starting Salary	Salary After 10 Years	Salary After 15 Years	Top Salary
Switzerland	56.429	70.367	-	86.368
Norway	39.337	47.854	47.854	48.588
Iceland	42.593	43.306	45.371	46.451
Denmark	46.552	52.261	52.261	52.261
Sweden	42.374	44.430	45.132	49.547
OECD	34.563	43.063	45.981	57.118
Türkiye	46.333	47.691	47.063	50.489

Source: OECD, 2023; OECD, 2022.

In terms of the highest salaries, Türkiye, Sweden, Iceland, Denmark, and Norway have salaries below the OECD average, while Switzerland exceeds the OECD average.

Conclusion and Discussion

When examining enrollment rates for children under 2 years old, Norway, Iceland, Denmark, and Sweden are above the OECD average, while Türkiye is below it. In Switzerland, since the age of starting ECEC is set at 4, there is no formal ECEC program for children under 4 (Educa, 2018, cited in Sop, 2022, p. 253). Although many countries have programs for children under 3, not all countries report the number of children enrolled in these programs (OECD, 2023, p. 169). It should be noted that the data in this study only covers formal education and care, excluding services provided by parents, caregivers, relatives, or nannies.

For 2-year-olds, there has been a rapid increase in enrollment rates in Norway, Sweden, Iceland, and Denmark compared to younger children. This may be related to the expiration of parental leave for working parents. Generally, working mothers are granted child care rights from the birth of their babies worldwide. In these countries, the enrollment rate for 2-year-olds is above the OECD average, while Türkiye's rate is very low and below the OECD average. One possible reason for this might be the higher number of working women in these countries compared to Turkey. The increased participation of women in the workforce worldwide has made ECEC a necessity (Gür & Çelik, 2009, p. 15). As employment gaps in countries close, registering in ECEC programs is considered important for working women to return to work (OECD, 2023). The rapid increase in registration rates for children aged 0-3 in Norway, Iceland, Sweden, and Denmark and their above-average OECD rates could be due to policymakers' awareness of the importance of ECEC in children's educational, cognitive, and emotional development (OECD, 2023, p. 167). Indeed, Heckman and Karapakula (2021) have noted the significant contribution of early childhood education and care to children's cognitive, social, and emotional development. Duncan and Magnuson (2013) have stated that ECEC programs from 20 years

ago have had lasting effects on children's lives in adulthood, increased their success, and reduced crime rates. In Türkiye, the lack of sufficient public institutions providing education and care for children aged 0-2, reliance on family and neighbor support for child care, and insufficient attention from policymakers to ECEC could be reasons for the very low enrollment rates compared to the OECD average. Indeed, the 20th National Education Council (Talim ve Terbiye Kurulu Başkanlığı [TTKB], 2021) emphasized the need to increase access to early childhood education for ages 0-3, direct charitable support to preschool education, and provide municipal support for preschool education, although details of these efforts were not specified.

Enrollment rates increase at age 3 compared to age 2 in all the countries studied. The enrollment rate for 3-year-olds is above the OECD average in Norway, Sweden, Iceland, and Denmark. In Denmark, Sweden, and Norway, ECEC services for 3-year-olds are provided free of charge, and there is a guarantee of placement for registrants (European Commission / EACEA / Eurydice, 2023). This may be a reason for the rapid increase in enrollment rates and the high figures above the OECD average in these countries. In Switzerland and Türkiye, the participation of 3-year-olds in ECEC programs is much lower than in other countries and below the OECD average. In Switzerland, the low enrollment rate for 3-year-olds and the lack of data for ages 0-2 might be due to the absence of a formal ECEC program for ages 0-3 and the non-compliance of 0-3 programs with ISCED 2011 criteria. For a program to be included in the ISCED 2011 classification, it must have a nationally recognized institutional structure that provides at least 2 hours of education daily, and staff must have graduated from accredited training programs (OECD/Eurostat/UNESCO Institute for Statistics, 2015, p. 20). The potential reasons for the low enrollment rate of 3-year-olds in Turkey differ from those in Switzerland. One possible explanation could be the relatively lower number of working mothers in Turkey compared to other countries. Additionally, working mothers in Turkey often leave their young children with relatives, and the absence of free daycare centers could be other potential contributing factors. In fact, in Turkey, 34.5% of working mothers leave their young children with their grandmothers, while 28% of working mothers care for their children themselves while working (ERG, 2017).

At age 4, enrollment rates in the countries under comparison are above 95%, while Switzerland’s rate is 48.7% and Türkiye’s is 20.1%, both below the OECD average. Türkiye is the only country with a 5-year-old enrollment rate below the OECD average, and this rate is very low at 67.7% compared to OECD countries. Türkiye’s position second to last after Saudi Arabia in the OECD ranking for 5-year-old enrollment rates is striking (OECD, 2023). Several factors contribute to Türkiye’s low enrollment rates in ECEC programs compared to the OECD average. One reason could be the collection of fees for school supplies and contributions in preschool education, which lowers the enrollment rate. Other potential reasons include the lack of compulsory ECEC programs beyond a certain age, no guaranteed placements in preschool registrations, and the absence of nutrition support for students, all of which could decrease enrollment rates. Additionally, the prioritization of 5-year-olds in enrollment due to inadequate physical facilities and classrooms in schools is another reason. However, our low enrollment rates for 5-year-olds compared to the OECD average also indicate that early childhood education in Türkiye has not kept pace with modern standards. The Ministry of National

Education's Regulation on Preschool Education and Primary Education Institutions (2014) states that priority should be given to children aged 57-68 months in enrollment, and children aged 45-56 months can be enrolled if physical facilities are sufficient. Despite this, the 20th National Education Council (TTKB, 2021) recommended increasing the enrollment rate for 5-year-olds by providing social, economic, and physical resources, yet no recommendation was made for making preschool education compulsory. In Switzerland, the enrollment rate at age 4 is 48.7%, while at age 5, it rises to 98.1%. The compulsory education starting at age 5 with the ISCED 02 program and the age of starting primary school at 7 have contributed to the rapid increase in the 5-year-old enrollment rate. Additionally, affordable and accessible ECEC services help retain parents in the workforce, contributing to the country's economic well-being and growth. This has increased governments' interest in ECEC services (OECD, 2018; OECD, 2016). The broad legal and regulatory definitions of ECEC rights in European countries and the EU policymakers' primary concern have ensured high enrollment rates from age 2 (European Commission / EACEA / Eurydice, 2023).

When examining data related to the ages at which children can benefit from ECEC, it is notable that in some countries, the age for free education corresponds to the ISCED 02 program. In such cases, it can be concluded that there are no public institutions offering free services for children aged 0-2. In Switzerland, Sweden, and Turkey, the right to free education begins with ISCED 02 programs. However, in Turkey, a contribution fee is collected to cover the basic needs, self-care requirements, and support for the educational program during the time children spend at school (Ministry of National Education [MEB], 2014). It is noteworthy that there are no free institutions for children under 3 years of age in Turkey, and there is no guaranteed placement or sufficient physical conditions for children over the age of 3. According to the Turkish Ministry of National Education Preschool Education and Primary Education Institutions Regulation (2014), priority is given to registering children aged 57-68 months, and if physical conditions permit, children aged 36-56 months are also registered. The inadequacy and fee-based nature of ISCED 01 programs, along with the lack of guaranteed placement in ISCED 02 programs in Turkey, are believed to contribute to the low enrollment rates in ECEC and negatively impact female employment in the workforce. In this context, the 20th National Education Council (TTKB, 2021) emphasized the need for efforts to ensure access to ECEC services for children aged 0-3. In Denmark, Iceland, and Norway, enrollment in ECEC programs is fee-based, while Sweden and Norway provide placement guarantees (European Commission / EACEA / Eurydice, 2023). In Switzerland, it is understood that ISCED 01 programs are not publicly registered. In other countries, the right to access ECEC services begins from birth. However, in Sweden, this right starts at the age of 1, and in Denmark, it starts from 7 months. A potential reason for this could be the policy of allowing babies to spend their initial care months with their mothers. When comparing the ages for starting primary school and compulsory education, it is found that in Sweden and Switzerland, preschool education is compulsory for a one-year period. In many countries around the world, ECEC services are fee-based, and the preschool period is not mandatory. In line with this, UNICEF (2017) calls on governments and all stakeholders to increase the budget allocated for ECEC services, facilitate access, and provide two years of pre-primary education services.

In terms of the number of students per teacher, Türkiye has 13 students per teacher, compared to the OECD average of 14. However, given Türkiye's very low enrollment rates in ECEC, this is not a positive outcome. In this case, if Turkey achieves a schooling target close to the OECD average, it is likely that the number of teachers will be very insufficient.

Regarding financial data for ECEC programs, Norway, Sweden, Denmark, and Iceland spend between 15,000 and 19,000 USD per child aged 3-5, which is above the OECD average. In Switzerland, due to ECEC programs starting at age 4, data for comparison are unavailable. The highest values for pre-primary education financing are observed in Iceland, Norway, and Sweden. In Türkiye, the budget spent per child aged 3-5 is 4,968 USD, which is lower than both the OECD average and that of the other countries. Türkiye 's budget for education and care of 3-5-year-olds is 0.3% of GDP, which is below the OECD average and that of the relevant countries. On the other hand, when the share of private expenditures in total expenditures on ISCED 02 programs in private ECEC institutions is compared, it is seen that the highest share is in Turkey after Denmark. This rate is below the OECD average in Sweden, Norway and Iceland. This situation shows that the share of public expenditures in total expenditures on ECEC programs in Türkiye is behind OECD countries. Indeed, if accessibility and quality of ECEC services cannot be provided in public institutions, parents will tend to send their children to private institutions. (Shin, Jung, & Park, 2009, as cited in OECD, 2023, p. 171). Data on teacher salaries can be seen as another indicator of the importance given to ECEC programs. In 2022, the starting salaries of ECEC teachers are above the OECD average in all countries. However, looking at the highest possible salaries, it is observed that other countries, except Switzerland, pay below the OECD average. This indicates that salary increases based on seniority are inadequate in Türkiye compared to other countries. Teacher salaries can vary based on education level, experience, and career in different countries (OECD, 2023, p. 379). However, such variations are less common in Türkiye. Switzerland has the largest difference between starting and maximum salaries. This discrepancy may be due to countries determining teacher salaries based on references such as experience, career, and education level.

Limitations, Future Research and Recommendations

Since international comparisons were made in this research, it was assumed that the richest sources available were the OECD, UNICEF, World Bank, UNDP and EU reports. These reports were published in 2023 and 2024, and it should be noted that the information in these reports may change in the future.

This study compares Türkiye with five European countries ranked in the top six in the Human Development Index published by the United Nations in 2024. Expanding the study to include countries from other continents could provide a more global perspective. Including countries at the top and bottom of the Human Development Index could offer a broader view of ECEC services worldwide and Türkiye 's position in this context. Increasing enrollment rates in ECEC could be a way to enhance employment opportunities for women and men in Türkiye. Indeed, Türkiye 's enrollment rates in ISCED 01 and ISCED 02 levels are far below those of OECD countries. To ensure children's cognitive and sensory development and improve their future

well-being, access to ECEC should be facilitated. In a world with increasing competition due to globalization, raising enrollment rates in ECEC should be a significant agenda for policymakers and decision-makers in Türkiye. With the support of public institutions, more educational institutions should be established for ISCED 01 (ages 0-3) and ISCED 02 (ages 3-5) in Türkiye, and these institutions should provide free services. At least one year of mandatory pre-primary education should be enforced for children aged 3-5. Fees for nutrition and self-care under the name of contributions should be eliminated in ISCED 02 programs, and these services should be provided for free. Families should receive monthly financial support for child care services for children aged 0-3. The budget allocated per child for education and care of 3-5-year-olds should be increased to exceed the OECD average. Salaries for ECEC teachers should be raised based on seniority and education level to be above the OECD average.

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