KU LEUVEN

FACULTY OF PSYCHOLOGY AND
EDUCATIONAL SCIENCES

Research Institute for Work and Society

Accessibility and Inclusiveness of Early Childhood Education and Care across Europe

Policies and Experiences

Özgün Ünver

Doctoral thesis offered to obtain the degree of
Doctor of Educational Sciences (PhD)

Supervisor: Prof. dr. Ides Nicaise

Co-supervisor: Dr. Tuba Bircan

juni 2019

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Summary

The overarching objective of this dissertation is to shed light on the relationship between ECEC policy instruments and the experiences of families and children with ECEC across Europe in terms of accessibility and inclusiveness. This work is based on empirical research aiming to answer practical questions about ECEC policies and policy instruments that work and do not work as regards the accessibility and inclusiveness of these services. These issues are tackled within the overall theoretical context of welfare state, social investment, and social justice and human rights.

In order to answer these practical research questions, two conceptual frameworks are adapted to ECEC. The first one is the institutional setting of ECEC that groups ECEC policies and policy instruments into the three pillars of provision, regulation and financing, which is particularly used in researching accessibility. The second is the equal opportunities, equal treatment, and equal outcomes scheme that has been helpful in researching inclusiveness. These two conceptual frameworks are the tools that provided the direction to conduct this research systematically.

In countries where ECEC is more in the realm of public sector than private, both the realised access and perceived accessibility of ECEC are found to be higher. This is evident especially in the way ECEC is provided and financed. The earlier the legal entitlement starts, the higher is the accessibility of ECEC in the country. Similarly, in countries where private self-financing ECEC is not allowed, accessibility is higher. By the same token, more public spending is closely associated with higher accessibility. As the proportion of private funding increases, the realised access drops. Hence, universal access schemes are encouraged.

However, higher public spending, lower private or parental contributions, and early start of free provision do not translate into higher access by disadvantaged children. In other words, this research confirms that there is a risk of Matthew effect in the way ECEC is financed in wealthier countries. For this reason, universal access and funding schemes should be supported by targeting and extra resources for disadvantaged children. Regarding the way ECEC is regulated, accessibility (both perceived and realised) is higher in countries with unitary systems compared to split ones. Moreover, realised access is higher in countries with high structural quality measures such as staff qualification for older children and curriculum for younger children.

Financial, cultural and attitudinal barriers, lack of available places, and lack of awareness and information are identified as major causes of unequal opportunities for low-income immigrant families in ECEC, while the challenges with regard to school segregation, language acquisition, and cultural practices contribute to unequal treatment. These are also the barriers to the inclusiveness of ECEC

systems especially for children with low-income and immigration background. The findings suggest that the inequality of opportunities is more problematic for younger children while the inequality of treatment concerns older children more. However, both younger and older children require the improvement in both areas. Moreover, both younger and older children need extra resources and strategies in order to achieve at the same level with their non-disadvantaged peers.

Samenvatting

De overkoepelende doelstelling van dit proefschrift is om licht te werpen op de relatie tussen beleidsinstrumenten op het vlak van vóórschoolse educatie (VE) en de ervaringen van gezinnen en kinderen met deze diensten in Europa, vanuit het oogpunt van toegankelijkheid en inclusiviteit. Dit werk is gebaseerd op empirisch onderzoek over de effectiviteit van het VE-beleid inzake toegankelijkheid en inclusiviteit van deze diensten. Deze kwesties worden gekaderd binnen de algemene theoretische context van de verzorgingsstaat, sociale investeringen en sociale rechtvaardigheid en mensenrechten.

Om deze concrete onderzoeksvragen te beantwoorden, worden twee conceptuele kaders toegepast op VE. Het eerste is het institutionele kader van VE dat het beleid en de beleidsinstrumenten groepeert in de drie pijlers van voorziening, regulering en financiering. Dit institutioneel kader wordt met name gebruikt voor onderzoek naar toegankelijkheid. Het tweede is de triade van gelijke kansen, gelijke behandeling en gelijke resultaten, die reeds nuttig is gebleken bij onderzoek naar inclusiviteit van het onderwijs. Deze twee conceptuele kaders zijn de instrumenten die de richting hebben gegeven aan het systematisch uitvoeren van dit onderzoek.

In landen waar VE meer tot de publieke dan tot de particuliere sector behoort, blijken zowel de gerealiseerde toegang als de gepercipieerde toegankelijkheid van VE hoger te zijn. Dit blijkt duidelijk uit de wijze waarop VE wordt verstrekt en gefinancierd. Hoe jonger de leeftijd waarop het wettelijke recht begint, hoe hoger de toegankelijkheid van VE in het land. Ook in landen waar private (commerciële) VE niet is toegestaan, is de toegankelijkheid hoger. Voorts hangen hogere overheidsuitgaven voor VE nauw samen met een betere toegankelijkheid. Naarmate het aandeel van particuliere financiering toeneemt, daalt de gerealiseerde toegankelijkheid. Daarom worden regelingen voor universele toegang aangemoedigd.

Hogere overheidsuitgaven, lagere private of ouderbijdragen en een vroege start van de gratis verstrekking leiden echter niet tot een betere toegang voor kansarme kinderen. Met andere woorden, dit onderzoek bevestigt dat er een Matteüs-effect dreigt te ontstaan door de wijze waarop VE in rijkere landen wordt gefinancierd. Om deze reden moeten universele toegangs- en financieringsregelingen gepaard gaan met gerichte extra-middelen voor kansarme kinderen. Wat betreft de regulering van VE, is de toegankelijkheid van (zowel de gepercipieerde als de gerealiseerde) VE hoger in landen met een eengemaakt systeem dan in landen met een gesplitst systeem. Bovendien is de gerealiseerde toegang hoger in landen waar structurele maatregelen gelden m.b.t. kwaliteit, zoals de vereiste minimumkwalificatie van het personeel voor kleuteronderwijs en het curriculum voor peuters.

Financiële, culturele en gedragsbarrières, een gebrek aan beschikbare plaatsen, en een gebrek aan bewustzijn en informatie worden aangewezen als belangrijke oorzaken van ongelijke kansen voor migrantengezinnen met een laag inkomen in VE, terwijl de uitdagingen met betrekking tot schoolse segregatie, taalverwerving en culturele praktijken bijdragen tot ongelijke behandeling. Dit zijn ook de belemmeringen voor de inclusiviteit van VE-systemen, met name voor kinderen met lage gezinsinkomens of een migratieachtergrond. De bevindingen suggereren dat de ongelijkheid van kansen problematischer is voor jongere kinderen, terwijl de ongelijkheid van behandeling meer betrekking heeft op oudere kinderen. Zowel jongere als oudere kinderen hebben echter behoefte aan verbetering op beide gebieden. Bovendien hebben zowel jongere als oudere kinderen extra middelen en strategieën nodig om op hetzelfde niveau te kunnen presteren als hun niet-kansarme leeftijdsgenoten.

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Table of Contents

Summary 1

Samenvatting 3

Acknowledgements 5

Introduction 11

1. Chapter I – General Introduction 13

1.1. Setting the Scene: ECEC Context in Europe 13

1.2. Theoretical Framework: From Welfare State to Social Justice 16

1.2.1. ECEC and the Welfare State 16

1.2.2. ECEC as Social Investment 20

1.2.3. ECEC as a Matter of Children's Rights and a Means for Social Justice 22

1.3. Conceptual Frameworks: Explaining Accessibility and Inclusiveness of ECEC in the light of ECEC Policies 24

1.3.1. Explaining "Accessibility" of ECEC: Institutional Setting of ECEC 26

1.3.2. Explaining "Inclusiveness" of ECEC: Equal Opportunities, Equal Treatment, and Equal Outcomes 34

1.3.3. Conceptual Clarifications 36

1.4. Data and Methodology 37

1.4.1. Quantitative Data and Methods 37

1.4.2. Qualitative Data and Methods 39

1.5. Overview of the Dissertation 40

1.6. References 41

PART I – Accessibility of ECEC 51

2. Chapter II – Early Childhood Education and Care for Younger and Older Children: Policies and Participation 53

2.1. Introduction 55

2.2. Conceptual Framework 56

2.2.1. Provision 56

2.2.2. Regulation 57

2.2.3. Financing 58

2.3. Data and Methods 59

2.3.1. Data 59

2.3.2. Dependent Variable 59

2.3.3. Individual and Household-level Control Variables 60

2.3.4. Country-level Independent Variables 62

2.3.5. Method of Analysis 66

2.4. Results and Discussion 67
2.5. Conclusions 80
2.6. References 84
2.7. Appendices 104
3. Chapter III – Perceived Accessibility of Childcare in Europe: A Cross-country Multilevel Study 107
3.1. Introduction 109
3.2. Perceptions of the Accessibility of ECEC 109
3.3. Institutional Setting of ECEC: Provision, Regulation and Financing 112
3.4. Data and Methods 114
3.4.1. Data 115
3.4.2. Method of Analysis 116
3.4.3. Dependent Variable 117
3.4.4. Independent Variables 118
3.5. Results 123
3.6. Discussion 131
3.7. Limitations and Avenues for Further Research 134
3.8. Concluding remarks 136
3.9. References 137
4. Chapter IV – Opinion-Policy Congruence in Public Provision and Financing of Childcare in Europe 143
4.1. Introduction 144
4.2. Theoretical Framework 145
4.2.1. Political Representation 145
4.2.2. Issue Salience 146
4.2.3. Opinion-Policy Congruence 146
4.2.4. Provision and Financing of Childcare 147
4.3. Data and Methodology 148
4.3.1. Data 148
4.3.2. Dependent Variables 148
4.3.3. Independent Variables 149
4.3.4. Method of Analysis 153
4.4. Results and Discussion 153
4.5. Limitations 160
4.6. Concluding Remarks 161
4.7. References 163
PART II – Inclusiveness of ECEC 167

5. Chapter V – Inclusiveness of Early Childhood Education and Care for Low-income Families with an Immigration Background across Europe 169
5.1. Introduction 170
5.2. Equal Opportunities, Equal Treatment, and Equal Outcomes 171
5.3. Inclusiveness in ECEC 172
5.4. Method 173
5.5. Findings and Discussion 176
5.5.1. (Un)Equal Opportunities 176
5.5.2. (Un)Equal Treatment 178
5.5.3. Equal Outcomes Strategies: Good Practices 182
5.6. Conclusions 183
5.7. References 186
5.8. Appendices 190
5.8.1. Focus Group Moderator Guide (Belgium as reference) 190
5.8.2. More on Sampling and Participants 192
6. Chapter VI – Interactive Acculturation of Turkish-Belgian Parents and Children in Flanders: A Case Study of Beringen 195
6.1. Introduction 196
6.2. Interactive Acculturation Theory 197
6.3. Methodology 200
6.4. Findings: Challenges Experienced by Turkish-Belgians 201
6.4.1. The Language Barrier 201
6.4.2. Social Barriers between the Turkish Families and the Flemish Majority 203
6.4.3. Employment Barrier: Turkish Mothers in the Labour Market 204
6.5. Discussion and Conclusions 205
6.6. References 207
Conclusion 211
7. Chapter VII – General Discussion and Conclusions 213
7.1. Summary of the Findings 213
7.2. General Discussion and Conclusions 215
7.2.1. Accessibility of ECEC 215
7.2.2. Final Note on Accessibility of ECEC: A Quest for Benchmarks 221
7.2.3. Inclusiveness of ECEC 224
7.3. Limitations of the Study 226
7.4. Avenues for Future Research 228
7.5. Policy Implications 229

7.5.1. Provision and Financing 229
7.5.2. Regulation 232
7.5.3. Boosting Inclusiveness 233
7.5.4. More and Better Data on ECEC Policies 235
7.6. References 236

Introduction

1. Chapter I – General Introduction

Early childhood education and care encompasses all types of care and education provided for young children before primary education – which usually starts around 6 years of age in Europe. The care aspect is emphasised more for children below the age of 3 and education is more pronounced for children of 3 years or older. While *care* can be offered by both formal (e.g. crèches, nurseries, kindergartens) and informal (e.g. childminders, grandparents) providers, *education* can only be provided in pre-schools. Historically these two strands developed separately for younger (0-3 year-old) and older (3-6 year-old) children. In this dissertation, the combination of these two aspects is referred to as early childhood education and care (ECEC) in order to (1) refer to the services provided and received before primary school as a whole, (2) emphasise the inseparable nature of the aspects of care and education for young children, and (3) bypass the country-specific terminology and definitions of care and education, given the variation across countries.

Research confirmed over and over that ECEC has a more profound and lasting effect on children's learning potential and development than any other intervention in their later life; and this is especially the case for disadvantaged children (Burger, 2010; Cunha et al., 2006; Heckman, 2006; Leseman, 2009; Leseman and Slot, 2014; Nusche, 2009). More than a decade ago, Nobel laureate economist Heckman (2006) convinced many academics and policy-makers that ECEC has the highest returns on investment in the overall educational trajectory. As a result, most industrialised countries (including Europe) have started to improve their policies in order to encourage ECEC participation, especially by disadvantaged children, so that they would have a fair start in primary school (Leseman, 2009; OECD, 2012). However, there is still a gap in the literature as regards the effectiveness of ECEC policies in improving the *accessibility* of these services. Whether ECEC services are *inclusive* for these disadvantaged children is even more under-studied. This dissertation addresses these gaps in the literature by investigating parents' experiences with regard to the accessibility and inclusiveness of the ECEC systems across Europe, in the light of the ECEC policies in place in their respective countries of residence. Note that in this research, accessibility is conceptualised as an essential function of inclusiveness.

1.1. Setting the Scene: ECEC Context in Europe

ECEC has developed differently in each country due to the social policies of the governments, cultural backgrounds of the societies, and other historical circumstances. There were two major turning points in history for ECEC to flourish in Europe (Bahle, 2009): the first is industrialisation and nation-building, where family policies were shaped by the conflict between the church and the state as well as social

class conflict. The second one is the transition to service economy and the parallel rise of female employment in the 1970s, during which women's movement played a great role. Bahle (2009) claims that, while the first had a crucial role in the development of pre-schools and care for 3-6 year olds, the second had an impact especially on the care for 0-2 year olds. However, the characteristics of the ECEC system in each country developed differently based on the general welfare regime of that country.

The European Union has been promoting widespread mainstream ECEC provision for more than two decades especially due to its role in facilitating maternal employment (Mahon, 2002). As the benefits of ECEC on child development and later school life were proven over the years, the EU discourse on ECEC shifted towards the need for high-quality, holistic, complex, integrated, intersectoral and inclusive provision (Herczog, 2012). In 2002, the European Council has set the 'Barcelona objectives' on ECEC participation. The aim of the European Union was for 33% of children below 3 and 90% of children between 3 and mandatory school age to receive ECEC by 2010 (European Commission, 2013). Although the target was not met by many countries, participation rates have increased across Europe. This was also a result of the increasing adoption of the 'social investment' approach by some countries. The European Commission has been following up the actions of the EU Member States regarding the Barcelona Objectives, and it has renewed its commitment to these goals in 2013 with a new deadline by 2020.

The European Commission has been issuing other communications as well with regard to achieving several quality standards in ECEC. Accordingly, the importance of widening access, support for research, design of efficient funding models, unification of care and education aspects, and structural quality indicators such as the development of balanced curricula and further professionalization of ECEC staff have been emphasised (European Commission, 2011). The Commission also issued a recommendation in 2013 to invest more in children on the grounds of the need for the EU to "protect the rights of the child, combat social exclusion and discrimination, promote social justice and protection" (European Commission, 2014). In this recommendation, ECEC is referred to as a crucial tool of investment in children as it enables increased participation in the labour market (especially for women) and addresses the "inequality and challenges faced by disadvantaged children through early intervention".

Besides the EU institutions, other international organisations have increased their focus on ECEC including the OECD and UNESCO. Since the beginning of the millennium, especially the work by the OECD has been contributing immensely to strengthening the position of ECEC as a key social investment. OECD already published five books in the series Starting Strong, that bring together the research done in the field and provide workable definitions and actionable recommendations for

policy-makers and researchers. The first two reports have set the scene by positioning ECEC in the education system, and listing guidelines and good practices regarding the financing and institutional setting of ECEC (OECD, 2006, 2001), the following two have focused specifically on quality (OECD, 2015, 2012), and the latest one was about the transition from ECEC to primary school (OECD, 2017a).

Despite its fairly recent political focus, childcare has been a family matter for many decades. As a result, beliefs and attitudes regarding childcare are deeply rooted in the culture of each society, resulting in different 'ideals of care' such as the full-time mother care, intergenerational care by grandparents (usually grandmothers), surrogate mother care (by childminders and babysitters), shared parental responsibilities involving also the fathers, and professional care (Kremer, 2006). The first three (especially the first two) are more traditional types of childcare.

Childcare ideals vary across social classes. In the United Kingdom, while middle class parents prefer childminders, working class parents have more confidence in professional carers (Vincent et al., 2008). However, in Poland, womanhood goes hand in hand with maternity and mothers are expected to remain as the primary carers of their children as long as possible (unless it is inevitable for economic reasons); and when the need arises, Polish mothers turn to family members or childminders rather than professional carers due to institutional ECEC being held in low regard (Heinen and Wator, 2006).

However, there is more to the attitudes about professional childcare than cultural differences. Policy feedback literature has demonstrated numerous times that governmental policies affect public opinion in general (Jordan, 2013), including the case of ECEC (Chung and Meuleman, 2017; Ellingsæter et al., 2017). Parents are more sceptical about entrusting their children to 'strangers' in the United Kingdom, where formal childcare enrolment of young children is very low; while in Denmark, where childcare is very much supported by the government, parents see professional ECEC as an indispensable opportunity for their children to fully develop (Kremer, 2006; Moss, 2006). Another interesting example is Germany: After the reunification, even though the child-rearing ideals in the Eastern and Western parts of Germany converged to a certain extent, the tendency to use formal childcare is still significantly higher in the Eastern part of the country (Döge and Keller, 2012; Goerres and Tepe, 2012).

Cultural attitudes regarding childcare are shown to play a role in parental choice for ECEC type and the intensity of ECEC use as well (Rose and Elicker, 2010; Sylva et al., 2007). However, there are many other factors that play a role in childcare preference, as documented by the scholars who have studied the socio-ecological model of childrearing: e.g. the child's temperament, the mother (and sometimes the father), family and environmental characteristics, maternal well-being, cultural beliefs and preferences with regard to childcare (Liu, 2015; Pungello and Kurtz-Costes, 1999; Rose and Elicker, 2010; Seo, 2003;

Sibley et al., 2015; Tang et al., 2012; Vandenbroeck et al., 2008). Accordingly, cultural beliefs and preferences are merely a part of a larger puzzle. Even though the role of the ECEC policies were hinted in the socio-ecological model as 'environmental characteristics', the due importance was not given to the role of these policies as major determinants of individuals' experiences with these services. This dissertation addresses this gap in the literature.

1.2. Theoretical Framework: From Welfare State to Social Justice

This section briefly explains the theoretical framework that guided me in my research. I focus mainly on the literatures of welfare state, social investment, and social justice. Even though none of these three theories have exactly preceded the others, the order that they are presented in this section is somewhat representative of the way we think about ECEC as researchers and policy-makers. In line with this order, several decades ago, ECEC (or 'childcare', as it has been usually referred to) was an aspect of family policies, and its attractiveness came from freeing up mothers' time to take up employment. As we learned about the benefits of ECEC for child development, we started to view ECEC as an opportunity to mold children into productive members of the future society, which made us approach ECEC from the angle of social investment. More recently, however, there has been increasing emphasis of ECEC being a children's right and a matter of social justice, and the need to approach ECEC and ECEC policies not only as a way to 'educate' the adults of the future, but to give children the tools to realise themselves here and now, during their early childhood. Although I have not used any of these theories explicitly in the subsequent chapters dealing with the empirical questions of accessibility and inclusiveness, these theories provided me with the wider angle from which I approached my research.

1.2.1. ECEC and the Welfare State

Welfare states regulate citizens' rights and duties as well as the financing and delivery of social services, in order to control the distribution of resources across the market and within and between families, and redistribute (through taxes, transfers and subsidised services) in order to repair the inequalities (Korpi and Palme, 1998; Vogel, 2003). Unsurprisingly, there is no consensus as regards the extent of the responsibilities of the welfare state in regulating basic social rights such as the right to employment, safe working conditions, education, poverty relief and general public health (Korpi, 2001; Vogel, 2003). Each country has its unique institutional structure that is shaped by the previous policies and the power struggles among major interest groups (Korpi, 2001).

Especially following the famous work of Esping-Andersen (1990), a large body of literature developed focusing on the types of welfare states based on the way they regulate and redistribute. Esping-Andersen (1990) bases his welfare state typology on the concepts of (1) decommodification that occurs when social policies and institutions guarantee that people can maintain their livelihood without relying on the market, and (2) welfare state as a system of stratification because it impacts the relations between different segments of the society (Esping-Andersen, 1990). Accordingly, he argues that the liberal welfare states (US, Canada, Australia) are characterised by means-tested assistance, modest universal transfers, or modest social-insurance plans. In this setting, entitlement to benefits is reserved for the ones in the lowest socio-economic strata and associated with stigma. The corporatist welfare state (Austria, France, Germany, Italy) is not as market-oriented as the liberal state, but supports the traditional ideal of family based on the male breadwinner model. Finally, based on the principles of universalism and de-commodification, the social-democratic welfare state (Scandinavian countries) promotes equality at the highest standards rather than an equality of minimal needs. One could argue that liberal welfare states tend to favour market-driven childcare services and subsidise mainly targeted services for low-income families, while corporatist countries would be expected to provide generous parental leave schemes while limiting public childcare provision, and social-democratic ones would have extensive public ECEC provision, combined with parental leave schemes for both parents.

Other scholars added yet another type of welfare regime, the 'familialist' Southern or Mediterranean, characterized by a less developed social security system granting poor benefits and lacking a guaranteed minimum benefit system – including Portugal, Spain, Greece and Italy (Fenger, 2007; Muffels and Fouarge, 2002). In a familialist regime, public intervention in ECEC is expected to be minimal, given the heavy reliance on informal family solidarity.

Post-socialist Central and Eastern European (CEE) countries were also mentioned as a separate group since they inherited a social protection system shaped after the Soviet model, where social policy was based on cash benefits directly paid to individuals (pensions, child benefits, etc.) while the paternalistic state took care of all the basic needs of the population. As a result of the family policy aimed at raising employment and fertility simultaneously, traditionally feminised tasks were institutionalised (kindergartens and nurseries for children, care homes for elderly, etc.) so that women could take up full-time employment. Moreover, maternity and parental benefits as well as child and family allowances (albeit means tested) were quite generous (Fenger, 2007; Noelke, 2008). However, over the years, several studies made it clear that there is a lot of diversity among the CEE countries when it comes to family and ECEC policies (Javornik, 2014; Javornik and Kurowska, 2017).

The welfare state is closely related to the structure and functioning of families. As Wilson (1977) has stated, the welfare state is not just a set of services, but also ideas about the society, the family, the women and domestic life. In particular, anything that has to do with 'care' – and thus, any policies related to care – is directly related to the women's role in the society, because women have historically been the primary care-givers of the family and the society (Daly and Lewis, 2000; Wilson, 1977). Despite being very popular, Esping-Andersen's typology was also criticised for ignoring crucial dimensions of the welfare state such as social services, gender and activation (Danforth, 2014) long after the start of the feminist movement.

Among the attempts to address this gap in the context of family, gender and childcare, Mahon's (2002) typology consisting of the neo-familialist, "third way", and egalitarian countries is worth mentioning: Accordingly, the *neo-familialist* countries (Finland, France) are the ones that diverged from their egalitarian ideals in the 1980s and 1990s due to economic setbacks, resulting in the encouragement of childcare provided at home rather than by professionals in order to lower ECEC costs. This system is characterized by the 'homemaker' status being made more attractive for women, with the possibility of long periods of parental leave (up to 36 months) and a childcare allowance paid to the parent who stays at home. Besides making it more difficult for women to come back to work after the extended leave, both types of measures also reinforced the employers' view of women being high risk employees who take long parental leaves – which resulted in lower wages for women as well as a lower preference for women as employees (Mahon, 2002). The *"third way"* countries (Netherlands, United Kingdom), on the other hand, are the ones that did not invest much in ECEC until the 1990s. These countries support the "one-and-a-half earner model" with women working part-time due to ECEC services being offered on a part-time basis (where parents pay a substantial share of costs). Finally, the *egalitarian* model (Denmark, Sweden) is characterised by a well-paid (almost at the level of income replacement) parental leave for approximately a year which is immediately followed by affordable and universally accessible ECEC. Notice that Mahon's typology resembles Esping-Andersen's where the "third way" replaces liberal, neo-familialist replaces corporatist, and egalitarian replaces social-democratic. Despite being a valuable contribution, Mahon's typology is not based on empirical evidence and classifies only six countries into three groups, which is a very limited conceptualisation of the way welfare states organise ECEC.

Another alternative typology specifically for the way 'care' is regulated and supported by the state was formulated by Leitner (2003). Accordingly, countries can be grouped into four varieties of familialism: (1) *optional (de)familialism* with both widespread formal childcare provision and payments for childcare within the family if the parents prefer to care for the child at home (e.g. Belgium, Denmark,

France, Sweden); (2) *explicit familialism* with insufficient formal childcare provision but offering payments for childcare within the family (e.g. Austria, Germany, Italy, Luxembourg, Netherlands); (3) *implicit familialism* with insufficient formal childcare provision as well as a lack of cash support for childcare within the family (e.g. Greece, Portugal, Spain); and (4) *defamilialism* with widespread formal childcare provision but a lack of payments for childcare within the family (e.g. Ireland, United Kingdom) (Leitner, 2003). Although useful, this approach is very limited in scope, taking into account only two features of the ECEC system: the availability of public provision and the presence of cash-for-care scheme. Moreover, while it is relevant for younger children (0-3 years old) before the pre-school age, it is much less relevant for older children (3-6 years old) in the age of pre-school as it ignores the 'education' aspect of ECEC.

Over the years, many scholars also demonstrated that welfare states are not always consistent in their policy-making. Not all areas of policies develop simultaneously in every country, but different policy actors get involved during different times for different policies (Kasza, 2002). Moreover, as argued by the 'path dependency hypothesis', political decisions made at any given time depend on the previous choices of the governments (Saint-Arnaud and Bernard, 2003; Scheiwe and Willekens, 2009), where the cumulative nature of policies may lead to further inconsistencies across different policy areas (Kasza, 2002; Wincott, 2006). By the same token, Scruggs and Allan (2006) found that most European countries were not consistent within themselves regarding their unemployment, pension, and sickness insurance policies. Hence, grouping countries under welfare state regime typologies does not necessarily make them predictable with regard to their policy-making.

Although they give some direction in assessing social policies, welfare regime typologies have not been sufficient for scholars to understand and predict the mechanisms that lead to certain policies. After noticing that some countries make policies that are not expected from them, researchers started another debate regarding whether welfare states have been converging in terms of policies (Mahon et al., 2012; Saint-Arnaud and Bernard, 2003; Stahl and Schober, 2017; Starke et al., 2008). Unsurprisingly, welfare regime typologies also did not help much in understanding which policies make ECEC accessible in a country or not. For example, even though Belgium is classified as a corporatist state, ECEC services in Flanders are almost as well-developed as in Denmark where many children attend professional childcare compared to other European countries (Bahle, 2009; Kremer, 2006). Research also shows that welfare state typologies do not capture the nuances within policy areas. For example, childcare policies may be very different from one another even in liberal welfare states such as the United Kingdom and the United States (McLean, 2014). Moreover, even though they are generally considered to be social democratic with universal social policies, Nordic countries did not

develop their ECEC policies simultaneously and with the same momentum (Ellingsæter et al., 2017; Javornik, 2014; Javornik and Kurowska, 2017; Karila, 2012). For these reasons, although the welfare state literature has been my starting point, I realized that I needed to look closer at the ECEC policies and policy instruments specifically in order to explain the accessibility and inclusiveness of early childhood education and care in European countries, regardless of the welfare regime type they were classified under.

1.2.2. ECEC as Social Investment

The social investment paradigm was adopted by welfare states in the recent decades with a view to addressing new social risks and needs in contemporary societies, and buffering against negative effects of (neo)liberalism (Morel et al., 2012; Morgan, 2012; White, 2012). Social investment aims for improved human capital development (e.g. ECEC, lifelong learning), efficient use of human capital (e.g. supporting women's, mothers' and lone parents' employment), greater social inclusion, as well as gender equality at work and at home. In other words, social investment focuses on the future opportunities of citizens rather than providing assistance to the needy in the present; it places more focus on 'preparing' rather than 'repairing' (Bundy, 2012; Conley, 2010; Morel et al., 2012). ECEC is the perfect example of social 'investment' as it is an instrument to create a more productive society in the future. Hence, the contribution of ECEC to child development and future educational career is highly regarded by the supporters of social investment.

Many countries adopted the social investment approach in their ECEC policies and implemented major reforms starting from the 1990s such as Spain (Felfe et al., 2015) and Canada (Jenson, 2004). The objective of these reforms was to make ECEC services more universal and accessible. In some cases where data were available, researchers were able to empirically test the effects of these policy changes. Several studies have revealed that investing in ECEC is quite profitable for the society.

The Spanish ECEC reform that was carried out in the 1990s, called Ley Orgánica de Ordenación General del Sistema Educativo (LOGSE), served such a purpose. This reform lowered the age of free universal access to pre-school from 4 to 3 years of age and introduced improved structural quality standards regulating educational content, group size and the educational requirements of the staff. As a result of the reform, the public pre-school coverage rate increased from less than 10% to 44% in high-intensity regions where ECEC was widely available, while it increased from 7,4% to 15,3% in low-intensity regions where ECEC facilities are more scarce (Felfe et al., 2015). As a result of the reform, children who attended ECEC scored higher in PISA for reading, even though the scores of mathematics

remained unaffected (Felfe et al., 2015). In terms of maternal employment, for every ten additional 3-year-old in pre-school, approximately two mothers took up employment (Nollenberger and Rodríguez-Planas, 2015). Thus, the universalisation of ECEC did contribute to increased female employment, albeit modestly. Finally, a cost-benefit analysis of the LOGSE reform found the benefit-to-cost ratio for the society to be 4, which means for every Euro spent per child from a low SES background for them to attend high-quality ECEC, the society gained 4 Euros back (van Huizen et al., 2016). Although this ratio is lower than those typically found in targeted ECEC interventions, the positive net effect is still quite high.

Cost-benefit analyses of universal ECEC have been carried out in other countries as well. Two decades ago, Cleveland and Krashinsky (1998) came to the conclusion that, if universal ECEC would be provided for all 2-to-5 year-olds in Canada, regardless of their mothers' employment status, the additional benefit of the service would be double the cost (assuming that parents contribute to the total cost by 20% on a sliding scale). Moreover, the positive effect of ECEC policy reforms were also observed in Quebec, when full-time, universal and low-cost (on a sliding scale) ECEC for all children over 3 was introduced starting from late 1990s (Prentice, 2007). It has been found that the introduction of universal ECEC led to substantial increase in labour market participation of mothers (Baker et al., 2006). However, the same researchers also found that only 40% of the cost of the universal ECEC was covered by the income and taxes on the extra employment caused by the universal ECEC, which means that the net cost of the initiative was also quite high.

Scholars who studied either of the cases mentioned above noted somewhat disappointing outcomes with regard to mothers' take-up of economic activity as well as the revenue they generate. For this reason, investing in ECEC with the sole purpose of generating financial gains will not likely fully satisfy the governments who make these investments. Moreover, the Matthew effect of social policies that are supposed to target the most disadvantaged is also well documented. When the policies that aim to help alleviate the disadvantaged status of lower SES families end up helping the better-off more, this is called a Matthew effect (Cantillon, 2011), and it is also present for ECEC policies in Europe (Van Lancker and Ghysels, 2012). Therefore, in some cases, it may be a better idea to invest in targeted programmes for the most disadvantaged, in order to make sure that the most needy benefit from social investment. Nevertheless, such targeting may also lead to segregated provision where disadvantaged children are cared and educated with their disadvantaged peers. Segregated ECEC provision for disadvantaged children is less than ideal because several studies have shown that disadvantaged children benefit from ECEC the most when they are in mixed groups with their non-disadvantaged peers (de Haan et al., 2013; Melhuish et al., 2015). Hence, while the risk of Matthew effects call for targeted ECEC for the most disadvantaged, other studies demonstrating the positive

effect of ECEC provision for groups of children from mixed socio-economic backgrounds call for universal ECEC provision. Considering the role of ECEC as a matter of social justice (see section 1.2.3), it seems like aiming for progressive universalism is the ideal solution also based on the literature of social investment.

1.2.3. ECEC as a Matter of Children's Rights and a Means for Social Justice

Investing in ECEC is costly. So much so that, historically, spending on childcare has been conceived merely as an immediate cost to the economy even when both the short- and long-term benefits of ECEC were known (Prentice, 2007). In this regard, the 'social investment' approach that emerged in the recent decades provided additional incentive for governments to invest in ECEC, because of the future gains. However, the social investment approach does not rely on a unified theory or a 'single intellectual source', so it is open to different interpretations (Morel et al., 2012). For this reason, the approach has also been criticised by many scholars to date. Most critiques stated that social investment ends up creating further problems for the disadvantaged as it shifts the focus from redistribution and relieving poverty to activation of the labour force and 'investing' in the future of the labour market (Cantillon, 2011; Morel et al., 2012). As Morel et al. (2012a, p. 16) put it, in social investment, "the social or humanitarian rationale for social policy has been replaced with an economic rationale". In other words, from the perspective of social investment, ECEC is seen as an investment for the future (children's and society's 'well-becoming'), rather than a rights-based opportunity for children's well-being here and now (Herczog, 2012).

Viewing ECEC as a means to maximise economic gains tomorrow by investing today ignores its non-monetary 'consumption benefits' (Nolan, 2013). Although I am not aware of any research regarding the 'consumption benefits' of ECEC, there have been studies about the consumption benefits of education. Accordingly, besides being an investment for the future, education was demonstrated to contribute to the general well-being of the person who receives education as well as others in close contact with this person such as the family (and ultimately, the society). These non-monetary consumption benefits include the satisfaction and enjoyment of the student while in school, better health, more efficient home management, better child-rearing, etc. (McMahon, 1982). ECEC (especially in the way it is delivered to children between 3 and 6, namely the 'pre-school') is increasingly considered as an integral part of the education system.[1] This period where children's cognitive functions develop at a high speed because of high neuroplasticity is considered to be a golden

1 Ministries of education are in charge of the whole ECEC period in countries with a unitary ECEC system, and the pre-school period for 3-6 year-olds in countries with a split ECEC system (Eurydice, 2014).

period (Gammage, 2006). Beyond learning and developing cognitive skills, non-monetary benefits of ECEC include children being able to socialise, play, feel included, experience new things, and develop social skills. It is these immediate consumption benefits that make ECEC enjoyable for children and all the more reason to be concerned with its accessibility and inclusiveness.

Accessible and inclusive ECEC is also closely related to the concept of 'social justice'. Bonnycastle (2011) defines social justice as the extent to which the society is moving away from 'social oppression' towards 'social equality'. Note that, here, social oppression is defined widely as the state in which only the will of the privileged is fulfilled, while the subordinate groups are left passive, excluded or even powerless (Bonnycastle, 2011). The basic premise behind social equality is 'the equal intrinsic worth' of every person and therefore, everyone being entitled to equal civil, political, social, and economic rights, responsibilities, and treatment" (Mullaly, 2007, p. 58). We can also add the right to socialise, learn and play for every child to this list, and the most equitable way to achieve the delivery of this right to every child is to ensure that ECEC services are accessible to and inclusive for all.

Welfare states approach ECEC either as a 'social investment' or an 'individual right' (Adamson and Brennan, 2014; Bundy, 2012; Gammage, 2006; Herczog, 2012; Kjørholt, 2013). Sen's Capability Approach is a major contributor to the understanding of ECEC as a matter of children's right and social justice. This approach takes human diversity, heterogeneity, and agency into account. With the concept of 'agency' in the forefront, the Capability Approach literature also draws attention to the claim that children should be recognised as active agents in their own learning and development (Dalkilic and Vadeboncoeur, 2016). The possibility to achieve their capabilities is closely related to children's individual, social and environmental experiences (Underwood et al., 2012), and ECEC as a children's right is based on the premise that it is a "societal responsibility to grant all children adequate family care and time, as well as non-family resources for the full development of their capabilities" (Saraceno, 2011).

ECEC contributes to something greater than future economic gains and can be considered a children's right. It is something that all children should have a right to access and experience not only because of its returns on investment, but also because it contributes to their self-realisation here and now. As advocated by the American educator John Dewey and Polish educator Janusz Korczak, viewing children not merely as future 'becomings', but 'beings' here and now entails acknowledging children as holders of rights regardless of their future economic contributions to society, and hence, children are entitled to respect, voicing their thoughts, and active participation in matters that concern them (Gammage, 2006; Gawlicz and Starnawski, 2018).

1.3. Conceptual Frameworks: Explaining Accessibility and Inclusiveness of ECEC in the light of ECEC Policies

The overarching objective of this dissertation is to shed light on the relationship between ECEC *policy instruments* and the *experiences* of families with ECEC across Europe in terms of *accessibility* and *inclusiveness*. In other words, this work is based on empirical research aiming to answer practical questions about ECEC policies and policy instruments that work and do not work as regards the accessibility and inclusiveness of these services. In order to answer these practical research questions, I employed two conceptual frameworks specifically adapted to ECEC. The first one is the institutional setting of ECEC that groups ECEC policies and policy instruments into the three pillars of provision, regulation and financing, which is particularly used in researching accessibility. The second is the equal opportunities, equal treatment, and equal outcomes scheme that has been helpful in researching inclusiveness. These two conceptual frameworks are the tools that provided me with the direction to conduct my research systematically. To begin with, I will decipher the two key concepts of accessibility and inclusiveness as used in this work. Subsequently, I explain more in detail the two conceptual frameworks that I have used throughout my dissertation.

In the context of ECEC, what I mean by *accessibility* is the absence of barriers to participate in ECEC. The concrete elements of accessibility which were studied in previous research include flexible opening hours (Barbarin et al., 2006; Lehrer et al., 2015; Li-Grining and Coley, 2006; OECD, 2001), convenient location and/or proximity (Barbarin et al., 2006; Lehrer et al., 2015; OECD, 2001), and affordability (Hofferth and Wissoker, 1992; Li-Grining and Coley, 2006). One of the ways accessibility was defined is as an overarching concept encompassing four key features: availability, geographical accessibility (e.g. proximity), affordability, and quality (Davis and Connelly, 2005; Peyton et al., 2001). This conceptualisation both covers the key aspects of the accessibility of ECEC and is narrow enough to tackle with empirical research. Note that, in this definition, quality is treated as a contributor to accessibility in general. In this manner, the quality of services children receive in childcare facilities is clearly distinguishable from the affordability of cost, geographic accessibility, and the availability of services; and it is treated as a dimension of accessibility only with regard to whether it is an obstacle to the willingness to use childcare or not. In other words, the quality of ECEC is not addressed in terms of child outcomes, but as the fulfilment of minimum standards in the provision of ECEC.

I study accessibility in two ways: objective and subjective. In order to study accessibility objectively, I use the number of hours of attendance as the measure of 'realised access' (Andersen and Aday, 1978) (Chapter 2). To tackle subjective accessibility as perceived by the public, I used the Perceived

Accessibility Index I computed based on the four above-mentioned dimensions of accessibility: affordability, availability, geographical accessibility and quality (Chapter 3).

Note that barriers to accessibility may also include attitudinal barriers such as the cultural norms of motherhood or childrearing. Such cultural norms also have a significant influence on parental choice to use ECEC (Kremer, 2006; Pavolini and Van Lancker, 2018; Sylva et al., 2007). Attitudinal barriers can also be affected by governmental ECEC policies, as argued by the policy feedback theory (*cf.* Chapter 4). Such barriers to ECEC use are investigated as a part of inclusiveness of ECEC, rather than accessibility. In Part I dealing with the questions of accessibility, the existence of such potential influences is acknowledged in the case of ECEC use by immigrant families (Chapter 2) and when it comes to the opinion-policy congruence with regard to the public provision and financing of childcare (Chapter 4). In Part II where the inclusiveness of the ECEC systems is in the spotlight, the cultural norms of motherhood and child-rearing are principally investigated in the case study of Beringen (Chapter 6).

While accessibility is the absence of barriers hindering access to ECEC, *inclusiveness* is a broader term referring to the extent to which ECEC systems respond to different needs related to education and care appropriately. Inclusiveness is particularly important for socio-economically disadvantaged children and children with a migration and/or minority background, because they start out already with unequal chances in life. In other words, inclusiveness refers to the quest for equal outcomes of the ECEC system for all children (*cf.* Chapter 5). Inclusive ECEC systems combine a wide range of strategies to maximise equal opportunities, equal treatment and equal outcomes, especially for disadvantaged children. Inclusiveness is a gradual rather than absolute, and relational rather than legalistic feature. To be considered socially inclusive, ECEC systems should have various qualities such as availability, accessibility, affordability, adaptability, adequacy, acceptability, flexibility, non-discrimination, and redistributive effectiveness. As a result, inclusiveness also refers to the presence of the strategies aiming for equal opportunities, treatment, and outcomes.

Accessibility is one of the essential functions of and the first step towards an inclusive ECEC system. In other words, we cannot speak of inclusiveness if accessibility is missing, while accessibility can still be achieved without complete inclusiveness. Even though inclusiveness comprises accessibility, the two terms are highlighted separately both in the title and throughout the text because the first half (and the majority) of this dissertation is exclusively about the accessibility of ECEC while the second half deals with inclusiveness. Additionally, different methods are employed to tackle accessibility and inclusiveness: quantitative and qualitative, respectively.

1.3.1. Explaining "Accessibility" of ECEC: Institutional Setting of ECEC

Analysing ECEC policy measures grouped in three pillars – provision, regulation, and financing (also referred to as 'the institutional setting of ECEC' throughout the text) – has been instrumental in bringing structure to this hefty field of social policy. This three-pillared structure was originally proposed by McLean (2014) in an article where she compares two liberal welfare states, the United Kingdom and the United States, in terms of their ECEC policies leading to quite different ECEC systems. In this study, McLean defined the framework for each of these three pillars and made a comparative policy analysis in a qualitative manner. Inspired by the structure proposed by McLean, I undertook the challenge of quantifying some of the main points under each pillar and using them in quantitative analyses as key policy indicators representing the overall setting of ECEC in European countries.

The three-pillared institutional setting of ECEC acknowledges the role of the government in the provision, regulation and financing of the ECEC system. While the dimensions of financing (Meyers and Gornick, 2003; Myers, 2000) and provision (Meyers and Gornick, 2003) have been studied earlier, research on the regulation aspect has been more scattered (Hotz and Xiao, 2011). This conceptualisation invites researchers to look beyond the level of funding by the welfare state, to how and by whom these public funds are delivered as well (White and Friendly, 2012). Moreover, by underlining the different pillars of a given policy area, McLean draws attention to the risk of essentialising welfare states to the regime category they fall into and expecting certain types of policies from those countries that belong to the same cluster. Hence, she invites researchers to take country-specific contexts into account when studying social policies.

These three pillars are highly intertwined. Especially provision and financing go hand in hand as both of them are very much concerned with the direct presence of the state in the delivery of ECEC. Still, it is possible to distinguish them from one another for the purpose of clarity when conducting the quantitative analyses. For example, while I treated the privatisation of ECEC within the context of provision, I treated the amount of resources allocated to ECEC within the context of financing. The pillar of regulation was easier to handle, as all policies with regard to service quality and the structure in which the services are delivered were assigned to this pillar.

Comparative social policy literature has been criticised for combining dependent and independent variables and drawing conclusions about the availability or accessibility of services merely looking at the use (Javornik, 2014). The three-pillared structure of institutional setting of ECEC clearly distinguishes between independent and dependent variables. It explicitly relies on the legal frameworks within which the ECEC system is provided and regulated. As regards the pillar of financing, although I do not use the data in the context of the legal framework, I strictly observe the contextual

nature of the variables that would (in theory) affect the accessibility of ECEC. However, due to data limitations, I do not make causal claims but point to the associations between the country-level context and individual-level outcomes, be it realised access or perceived accessibility. Wherever possible, I control for the other potential determinants of the dependent variables (usually at the micro-level) in order to explain as much of the variance as possible.

1.3.1.1. Provision

Provision is concerned with the question "who provides ECEC and for whom?". Various actors play a role in the provision of ECEC. The state and the for-profit market sector are the obvious ones; others include the 'kith and kin' (e.g. neighbours, friends, extended family members) (McLean, 2014), informal carers (e.g. child-minders, surrogate mothers) and not-for-profit providers. None of the European countries have purely public or private ECEC, but mixed provision with varying combinations of public and market-based provision. Still, public and publicly subsidised private ECEC provision for 3-6 year olds is more widespread across Europe compared to the provision for 0-3 year olds (Eurydice, 2014).

Some countries opt for a predominantly market-driven approach to ECEC, where the government limits public expenditure. In this case, the state relies on the basic market principle that competition will result in cheaper, more efficient, responsive, innovative, flexible and high-quality services, and that entrepreneurship will balance the demand and the supply (Noailly and Visser, 2009; OECD, 2006; Penn, 2009). Although this system claims to provide greater choice for and control by the parents, research suggests that in reality, families end up with limited access to affordable and high-quality ECEC (Bennett, 2004; Noailly and Visser, 2009; Penn, 2009; Sosinsky et al., 2007). In market-based systems, the steering capacity of the state also weakens due to lower public funding (OECD, 2006). For example, Gambaro et al. (2015) showed that disadvantaged children are more likely to access higher quality ECEC when the facilities are publicly subsidised and run by local authorities in England. However, the coverage rate of these facilities is very low (Gambaro et al., 2015). This is not a surprising finding, given that, especially in countries with a market-based privatised ECEC system, there are less ECEC facilities in low-SES areas (Cloney et al., 2015; Noailly and Visser, 2009). As parents tend not to travel long distances due to the cost of transportation, increasing numbers of ECEC facilities cater for children with a homogenous socio-economic background (Cloney et al., 2015). As a result, disadvantaged children living in segregated neighbourhoods attend segregated facilities, if at all.

Countries that rely on market-based provision of ECEC try to address the inequalities in access by supporting targeted programmes. Targeted ECEC provision for disadvantaged children such as

migrants, ethnic minorities (e.g. Roma) and low-income families first appeared in the US in the 1960s with Head Start in order to compensate for poverty-related deficiencies (Horvai, 2010). This programme inspired similar ones in Europe such as the Rutland Street project in Ireland (1969), Early Start in Ireland (1994), the European-wide Step by Step programme (1994), the Sure Start programme in the United Kingdom (1998), and the EU-funded 'A Good Start' programme in Hungary, Macedonia, Romania and Slovakia between 2010 and 2012 (Fallon, 2005; Horvai, 2010). However, there is ample evidence that providing merely targeted services for the most disadvantaged is not efficient because it reinforces social stratification (Korpi and Palme, 1998). When welfare states target the poorest instead of pooling the risks and resources of all citizens together, middle classes are more likely to see the most disadvantaged segments of the society as free-riders, which leads to the stigmatisation of vulnerable people and loss of support for these policies by the middle classes (Jordan, 2013; Korpi and Palme, 1998).

From the perspective of vulnerable families, targeted programmes also have several disadvantages: Targeted programmes either have a very limited catchment area or are very strict with the definition of 'disadvantage' or 'vulnerability'. They are limited in resources, which leaves them with the possibility of enrolling only a limited number of children. Especially the voluntary or community initiatives are difficult to sustain in the long term because these are usually funded on a piloting basis (Fallon, 2005). As a result, many disadvantaged families are not able to benefit from these targeted programmes. Finally, research has shown that disadvantaged children benefit from ECEC (and education, in general) the most, when they attend the facilities together with their non-disadvantaged peers (de Haan et al., 2013; OECD, 2018). Korpi and Palme (1998, p. 661) call this the 'paradox of redistribution' and declare that "[t]he more we target benefits at the poor only […] the less likely we are to reduce poverty and inequality".

At the other end of the spectrum, there are countries with a predominantly public provision where governments try to attract all children (regardless of their socio-economic background) to the ECEC system. The most successful examples are the Nordic countries with their social democratic care regime based on universalism, where the government, social democratic parties, and trade unions have been the driving forces behind social policy development (Mahon et al., 2012). Research suggests that the more ECEC is socialized and the more it shifts from private to public responsibility, the stronger is its impact on diminishing inequalities (Meyers and Gornick, 2003). Moreover, research shows that the accessibility, availability, affordability, and quality of the services are much higher in countries

where defamilialisation[2] is achieved mainly through public ECEC provision, as opposed to countries that rely on market mechanisms (Yerkes and Javornik, 2018).

Universal systems offer benefits "as a right of citizenship", and include also the middle classes as beneficiaries (Jordan, 2013). As a result of the promise of equal opportunities for access, universal policies do not lead to resentment from the middle classes and increase solidarity in the society. Nonetheless, universal access to ECEC or any other social service does not guarantee the alleviation of inequalities and disadvantage either. Matthew effects in social policies (including childcare policies) are well-documented (Bonoli et al., 2017; Cantillon, 2011; Van Lancker and Ghysels, 2012). Currently one in four children below the age of 6 is at risk of poverty or social exclusion in Europe, and disadvantaged children have lower ECEC participation rates (Eurydice, 2014). Ideally, the welfare state aims to bring all children to the same level of school readiness by the time compulsory schooling starts (Magnuson and Shager, 2010), which requires additional resources to improve learning outcomes for disadvantaged children who often lag behind (Nicaise et al., 2000).

A universal and accessible system supplemented with targeted measures for the disadvantaged whenever necessary, seems to be the solution to this problem (Johansson and Höjer, 2012). This is also called 'progressive universalism' (European Commission, 2014). Some European countries allocate extra resources for minority and immigrant children such as ECEC in mother tongue. For example, Finland, Cyprus and Latvia offer special assistance to children with special needs and/or different ethnic backgrounds in areas such as learning the language (Ojala, 2010). Similarly, in Sweden, extra support is provided for children whose mother tongue is not Swedish, or tuition in the mother tongue from a native speaker if needed (although less preferred due to high cost and low efficiency) (Cohen and Pay, 2011). While targeted ECEC provision is very important for disadvantaged children, I am not including anything related to targeting in my analyses due to the lack of data on targeting suitable for quantitative analysis.

Another important issue is the age from which access to ECEC is guaranteed. Governments use different strategies to increase ECEC provision. Some regulate the age at which the child is legally entitled to ECEC, some make one or more years of ECEC compulsory, and some guarantee free-of-charge services. All of these (legal entitlement, compulsory ECEC, and free provision) usually cover only 3-6 year-olds, if at all (Eurydice, 2014). When places are guaranteed by the government, parents have a stronger incentive to take up formal childcare. There is usually a trade-off for governments between high quality ECEC and free provision. In almost all European countries, parents have to pay at least a

2 "Defamilialisation refers to the extent to which the state takes on individual or family care responsibilities, thereby reducing family dependency" (Yerkes and Javornik, 2018, p. 2).

small financial contribution to ECEC institutions, including the Nordic countries (Eurydice, 2014). However, some countries have a much more generous means-testing system than others, which facilitates access also for the disadvantaged families.

Several studies showed that the mere availability of childcare places is a more important determinant of maternal labour market participation than the private cost of the services (Del Boca, 2002; Farfan-Portet et al., 2011; Kreyenfeld and Hank, 2000). Although the weekly 20 hours of free ECEC in Norway increased the participation and improved the cognitive development of immigrant children, it had no supporting effect on parental employment or education (Drange and Telle, 2015). Moreover, even though the free provision makes ECEC more affordable, children do not automatically have access to ECEC as long as there is no entitlement. According to the evidence, availability of places takes precedence over the affordability of ECEC services.

1.3.1.2. Regulation

Regulation is concerned with "how the ECEC services are delivered", which is quite wide in focus – including service delivery, quality, human resources, fees, professional standards, wages, types of services to be delivered on a for-profit and not-for-profit basis, etc. (White and Friendly, 2012). Regulatory standards (e.g. conditions for accreditation, quality improvement) and regulatory scope (e.g. exemptions, primary focus on non-residential care or not) are aspects of ECEC regulation (McLean, 2014).

There are two major aspects to quality in ECEC: structural quality and process quality (Dumčius et al., 2014; NICHD, 2002). The teacher-, family- and child-level determinants such as pedagogical practices, relationship quality, greater parental engagement, etc. are related to the process quality (Dumčius et al., 2014). The state has less power on those. In terms of regulatory power, the state has control mostly over standardising structural quality by imposing certain standards such as group size, number of children per staff, minimum education or training requirements for staff, staff wages, indoor and outdoor space, and safety standards of the institution (Burchinal et al., 2002; Dumčius et al., 2014; Phillips et al., 2000). These are the minimum standards to ensure ECEC provision of adequate quality (OECD, 2012).

Two of the most used structural quality indicators are child-to-staff ratio and group size. Lower child-to-staff ratio and smaller group size are associated with higher quality (Ceglowski and Bacigalupa, 2002; Gambaro et al., 2015; Urban et al., 2012; van Huizen et al., 2016). However, not all countries have set standards on all quality aspects (OECD, 2012). Approximately one-third of the European

countries do not regulate the maximum number of children per staff member and/or maximum number of children per group (Eurydice, 2014).

On the other hand, ECEC professionals' minimum qualifications seem to be a better predictor of quality (Burchinal et al., 2002; Dumčius et al., 2014), and most countries impose minimum qualification levels for both younger and older children (Eurydice, 2014). Another key indicator of structural quality is the wage level of ECEC staff (OECD, 2012; Phillips et al., 2000; Phillipsen et al., 1997; Urban et al., 2012). The more generous the staff wages, the higher is the chance that the profession would attract highly qualified and motivated teachers and caregivers, which would ensure high quality ECEC.

Besides the structural quality regulations, it also matters whether the ECEC system is harmonised for younger (0-3) and older (3-6) children, in other words, whether the system is split or unitary (also known as 'integrated'). There are different traditions associated with ECEC for 0-3 year-olds and for 3-6 year-olds. While care for younger children tends to be regarded as baby-sitting while mothers work, early education is seen as preparation of children for primary school (Kaga et al., 2010). These two phases of ECEC have developed rather independently from each other, with the former being left more often to the family's initiative. As a result, in most countries, childcare is in the authority of ministries of health, social welfare or family affairs, while pre-school is in the realm of ministries of education (Kaga et al., 2010).

Childcare is highly commodified especially in liberal welfare regimes (e.g. the United Kingdom) (Moss, 2006), as it is seen as a substitute for domestic (more specifically mothers') care. Moss calls this the childcare discourse, where the professional ECEC aims to create an equivalent environment, relationships and experiences to care at home. Younger children are considered in need of minding while older ones need education. Thus, education of younger children is of somewhat lower importance, supported with lower funding, lower quality, lower teacher qualifications, etc. (Kaga et al., 2010). By contrast, pre-schools in conservative welfare regimes such as France have a strictly educational approach with a detailed curriculum where the children are expected to reach pre-defined levels of knowledge in subjects relevant to school (Moss, 2008). Split systems treat these two types of ECEC provision differently and divide their resources unequally between these two distinct types of provision (Herczog, 2012).

On the other hand, the pedagogical discourse that is prevalent in unitary systems sees ECEC as a complementary service offering different experiences and relationships to children of both below and above 3 year olds than simply care or education (Moss, 2008, 2006). The pedagogical discourse, which started being implemented first in the Nordic countries, is an integrated and holistic approach, aiming

to address the whole child with body, mind, emotions, creativity, history and social identity (Moss, 2006). Integrated ECEC systems have harmonized goals in ECEC, a continuum between care, play and learning, combined resources, less variation in access and quality, more consistent regulatory, funding and staffing regimes, harmonised staff qualifications, and more consistent schemes for parental fees and opening hours (Eurydice, 2014; OECD, 2012). Unitary systems are beneficial especially for younger children (0-3 years old) and in some cases they foster higher use and higher quality of ECEC provision (Kaga et al., 2010; Moss, 2012). Full integration of childcare and early education systems also help in integrating parental leave and ECEC entitlement schemes and making them consecutive (Moss, 2012).

Integration of childcare and pre-school increases access to ECEC services in varying degrees. In the cases of Slovenia and Sweden, integration of ECEC contributed to improved supply of universal entitlement from 12 months onwards and narrowed down inequalities in access especially in Sweden (Kaga et al., 2010). With the reforms of ECEC entitlement (expanded to non-employed parents, parents on parental leave, etc.) and funding (ceiling on parental contributions, low parental fees, free provision for 4-6 year olds, etc.), disadvantages in accessibility disappeared to a great extent in Sweden (Kaga et al., 2010). In Slovenia, after the integration of ECEC services and improved entitlement (e.g. free services for children from low-income and Roma families), enrolment in ECEC increased tremendously at all ages (from 1 to 6), especially among 1-3 year olds (Kaga et al., 2010).

The (de-)centralised nature of ECEC services across different levels of governance may also have an effect on accessibility, but the evidence is mixed. One study found that decentralisation had a negative effect on the access to ECEC in France for 0–2-year-olds (decentralised in the early 1980s), while it had a positive effect for 0–6-year-olds in Sweden (decentralised in early 1990s) (Neuman, 2009). However, while improving access, it also had a negative effect on the quality of services in Sweden, which led to Sweden re-centralising ECEC in the 2000s by introducing curriculum and earmarked financing to pre-schools. Hence, (de)centralisation is certainly a key aspect of the ECEC system to be studied, especially with regard to its effect on access. However, while we have information on the authorities responsible for the accreditation, evaluation, monitoring, planning and funding of centre-based ECEC settings (Eurydice, 2014), we lack the data regarding the bodies that have the primary authority on the provision, regulation and financing of ECEC. Hence, the issue of (de-)centralisation of the ECEC system is a topic for further inquiry in the future.

1.3.1.3. Financing

The pillar of financing is concerned with "who pays for ECEC (public or private funding) and how much?" – which is one of the central questions in the welfare state literature when it comes to social policies. The level of public ECEC financing is a result of national wealth and the relative importance the government attaches to ECEC (Bennett, 2004). One rule of thumb advocated by various scholars and organisations is that the 'adequate' level of public investment in ECEC is at least 1% of GDP (OECD, 2006; Urban et al., 2012). In most countries, ECEC is funded both publicly and privately (e.g. contributions from parents and other private providers), and the actual amount of public investment per child as well as the percentage of ECEC financing that comes from private sources reveal the general importance the government places on ECEC. These are the two important policy indicators I take into account in my analyses.

Another question is whether public funds for ECEC are allocated indirectly through family cash benefits or directly to educational institutions as operational grants (Bennett, 2004). In supply-led systems, funding is granted directly to the provider (under certain conditions) or the state provides the service itself, while in demand-led systems – where the state has less control over the quality or accessibility of the provision – the users of the service are given vouchers, cash or tax credits (McLean, 2014; Penn, 2009). The latter may also vary depending on the eligibility requirements of the users such as means-testing (McLean, 2014). Supply-side funding tends to be dominant in countries with more developed systems of ECEC such as Sweden, Denmark and France, while means-testing and demand-side funding is more typical in liberal countries with less well-developed systems such as the United Kingdom (OECD, 2006; White and Friendly, 2012).

Liberal countries offer direct financial assistance to families and increase competition in order to create a 'market' for ECEC services, that would provide a quick response to ECEC shortages with greater dynamism (OECD, 2006). However, user-subsidies "show unwillingness on the part of government to consider early education as a necessary investment in young children" (Bennett, 2004). Relying on the market principle that competition would result in improved quality of ECEC does not work for ECEC because, the state has lower control over the quality, staff wages, professional training, etc. (see the section on provision). Moreover, demand-led systems lead to increased difficulty in access for families living in rural areas, where demand is lower and thus, costs of maintaining ECEC facilities are higher (Bennett, 2004; Noailly and Visser, 2009). As a result, benefits in kind seem to be more redistributive than benefits in cash (Verbist and Matsaganis, 2014).

While the advantages and disadvantages of supply- and demand-side funding are known, this issue is difficult to tackle using quantitative methods, as most countries combine supply-led and demand-led

measures. Regardless of the availability of supply-side funding, the state may introduce demand-side funding for the families that use ECEC services. As a result, families may be paying means-tested fees/contributions, receive social assistance support for ECEC, or enjoy tax relief or tax credits. According to the Eurydice report (2014), the most commonly used criteria for reduced parental contributions in Europe are family income, number of children in the household attending ECEC, number of siblings, child's age, and whether the child is in a single parent household or orphan. Every European country offers cost reductions or exemptions based on at least one of these criteria. A different research method is needed to study the effect of supply- or demand-side funding on the accessibility of ECEC.

There are other policy indicators that contribute to understanding the ECEC funding structure such as the type of financial support available to parents and the criteria to offer fee reductions. Such indicators are available in Eurydice report (2014) and the OECD Family Database. Yet, none of these indicators qualify for usage in statistical analysis as there are either a lot of missing values (in the case of the former), or they do not demonstrate sufficient explanation (in the case of the latter, as most countries take multiple measures in determining whether a fee reduction is needed, which becomes irrelevant when the country provides the services free of charge). Better indicators are needed to dive deeper into the effect of financing of ECEC on the accessibility of ECEC.

1.3.2. Explaining "Inclusiveness" of ECEC: Equal Opportunities, Equal Treatment, and Equal Outcomes

ECEC services are inclusive to the extent that disadvantaged people find them inclusive. While ECEC may be inclusive for the average family, governments often need to go the extra mile in order to make services inclusive enough also for socio-economically disadvantaged children. This is because, starting from birth, disadvantaged children face inequalities that prevent them directly or indirectly from reaching their full potential both inside and outside of the education system. The widespread rhetoric is that education is the panacea to break the cycle of disadvantage; however, if not accessible, inclusive and of high quality, education (also ECEC in particular) may as well contribute to the continuation of disadvantage. For this reason it is crucial to identify different aspects of the education and childcare system that can either contribute further to existing inequalities or provide opportunities to address them. The framework of equal opportunities, treatment and outcomes offers strategies to address different types of inequalities in ECEC and the possibilities to address these problems separately (Nicaise, 2000). In this context, strategies for equal opportunities aim for the elimination of the *exogenous* barriers to children's equitable access, while equal treatment strategies aim to overcome

endogenous barriers within ECEC, and the strategies for equal outcomes aim to bring all children to the same level of school readiness through positive discrimination if needed.

Strategies for governments to ensure equal opportunities in ECEC require the compensation for disadvantages that are related to the child's own environment and are exogenous to the ECEC system – such as the differences in material resources, parental education, parenting skills, children's health, and social support (Nicaise, 2000). Universal entitlement to ECEC, free ECEC provision or low-cost services, and financial support schemes are policy measures to make ECEC more accessible to the families who otherwise would find it difficult to use these services.

Strategies for equal treatment in ECEC, on the other hand, are related to the functioning of ECEC once children access these services and their objective is to eliminate discrimination within the ECEC system. A typical way to ensure equal treatment for governments is the regulation of the quality of ECEC services. The more ECEC is standardised in terms of quality for different geographical areas, age groups and providers, the more the government can make sure that the children who attend ECEC are treated in a non-discriminatory manner. Equal treatment strategies are very important for socio-economically disadvantaged children as these children tend to receive ECEC in a more segregated environment, where their classmates are also disadvantaged (see section 1.3.1). In the course of both ECEC (de Haan et al., 2013) and later educational trajectory (OECD, 2018), it is known that disadvantaged children have much worse educational outcomes compared to their peers if they attend segregated schools where the majority of pupils are equally disadvantaged. Segregation is merely one form of unequal treatment. Language and the related communication problems, and problems arising from not observing cultural and religious diversity are some of the other forms of unequal treatment.

Finally, equal outcomes strategies include positive discrimination measures in order to bring all children to the same level of school readiness as much as possible. This is important in ECEC because especially socio-economically disadvantaged children may have a different state of development and school readiness compared to their non-disadvantaged peers due to their family circumstances (Magnuson and Shager, 2010). For disadvantaged children, equal standards are not enough and most of the time additional measures need to be taken (e.g. better equipped centres, better personnel, either free or at affordable cost, priority access, etc.) in order to bring them to the same level of outcomes after ECEC (Nicaise, 2000; OECD, 2006; Vandenbroeck, 2011). By employing equal outcomes strategies, governments try to compensate for such disadvantages through additional resources. In other words, they pre-empt the problems that may arise in the future educational careers of disadvantaged children instead of trying to mend them after they become deeply rooted (Horvai, 2010). The most common way to build for equal outcomes is targeting disadvantaged children either

within the mainstream provision (e.g. progressive universalism) or outside of the mainstream provision by making ECEC particularly more accessible for children from various backgrounds of disadvantage (e.g. the Sure Start Local Programmes in the UK).

To emphasise once more, even though inclusiveness of ECEC is important for all children, it is crucial for disadvantaged children. In this dissertation, I study the inclusiveness of ECEC especially for families with a low-income and immigration background. Chapter 5 directly deals with the issue of inclusiveness in five locations in Europe in five different countries, while Chapter 6 supports this discussion with extra evidence regarding the integration of immigrant families in the case of the town of Beringen in Belgium, building on the Interactive Acculturation Theory borrowed from the literature of social psychology.

1.3.3. Conceptual Clarifications

ECEC encompasses the care and education provided for small children before primary education, which usually starts at 6 years of age in Europe. While *education* is closely linked with the education system implying provision in a formal setting, *care* is provided both formally (e.g. crèches, nurseries) and informally (e.g. childminders, grandparents) – the latter either by professionals or non-professionals. In my dissertation, I investigate the experiences and attitudes related to ECEC provided only by professionals in the context of a formal setting. I chose to do so for two reasons: Firstly, the relationship between ECEC policies and individuals' experiences with ECEC would be suitable to explore in the context of formal centre-based ECEC, over which the state has more regulatory power. Secondly, in comparative studies it is important to define the subject of research as precisely as possible in order to avoid comparing apples with oranges, considering the varying definitions of childcare between countries.

While I limited my focus to formal and centre-based ECEC, I also widened it to cover the whole 0-6 age range. This has posed a considerable challenge throughout my research due to the large cultural, attitudinal, and conceptual variations that resulted in inconsistencies in terms of both data and policies. In split ECEC systems, the policies applied to younger and older children are usually different (see section 1.3.1). Nevertheless, I decided to include both age groups in my analyses simultaneously and treated care and education as two sides of a single coin where both aspects greatly shape the experience of young children before they start primary education.

Whenever I could specify further and make sure that I refer to the whole ECEC experience and age range, I specifically used the term *ECEC* (e.g. Chapter 2). Other times, especially when the data source

I'm analysing has not made this distinction and used the term 'childcare' (e.g. chapters 3 and 4), I used the term *childcare*. Note that in the latter two chapters, neither the nature of services nor the age of children to whom these services are targeted are specified in the datasets I used.

Finally, in this work, I focus especially on disadvantaged families – namely families with low-income and/or immigration background. In the quantitative chapters of Part I, I focus on these two whenever possible.[3] In Part II dealing with the inclusiveness of ECEC with a qualitative methodology, the focus is always on families who are of both low-income and immigration background.

1.4. Data and Methodology

I use both quantitative and qualitative methods to explore the accessibility and inclusiveness of ECEC in Europe. It is easier to identify and quantify the key characteristics (availability, affordability, quality, etc.) and the consequence (i.e. intensity of use) of accessibility. Hence, Part I tackling the accessibility of ECEC is based on quantitative methods in order to explore individuals' experiences with regard to these characteristics. Inclusiveness, however, requires a more qualitative investigation due to being more complex and heterogeneous. Since inclusiveness is a holistic concept referring to the presence of equal opportunities, equal treatment and equal outcomes issues, it is more difficult to compare ECEC systems with each other regarding how inclusive they are. For this reason, Part II of this dissertation dealing with the inclusiveness of ECEC is based on qualitative methods.

1.4.1. Quantitative Data and Methods

Part I of this dissertation is concerned with the accessibility of ECEC and I approach the issue from three different angles. In this part, I use secondary data by three major international surveys. In the first chapter (Chapter 2), using the European Union Statistics on Income and Living Conditions (EU-SILC) data, I study the intensity of use of ECEC in terms of the hours of ECEC attendance of 0-5 year-olds. Here, the intensity of use is considered to be a consequence of accessibility. In the second chapter of Part I (Chapter 3), I study the accessibility of the childcare services in the country as perceived by the public using the European Quality of Life Survey (EQLS) data. Since the EQLS investigates the perspective of the public with regard to the availability, affordability, geographical accessibility and quality of ECEC separately, I combine these variables and call it the Perceived Childcare Accessibility Index (PCAI), and use the PCAI as the dependent variable. Finally, the third and last chapter of Part I

3 Immigration background was taken into account only in Chapter 2 since EU-SILC contains such data, while income (subjective or objective) was taken into account in all three quantitative chapters of Part I.

(Chapter 4) is concerned with the opinion-policy congruence with regard to the public provision and financing of childcare. To this end, using the International Social Survey Programme (ISSP) data, I investigate whether the citizens support public provision and financing of childcare more in countries where public childcare is more prominent in the first place.

I have employed multilevel modelling in each of these three chapters using secondary data. Multilevel analysis is used to examine the relations between variables measured at different levels (i.e. nested data) (Hox, 2010). My research requires multilevel modelling because I deal with the use and the perceptions of individuals/households who are nested within countries. If variables at different levels are analysed at a single level (e.g. multivariate regression), the researcher risks "committing the fallacy of analysing the data at one level and making inferences to another (higher or lower) level" (Hox and Kreft, 1994, p. 284). While "traditional multiple regression techniques are only designed to model response variable variance at a single unit of analysis" (Peugh, 2010, p. 89), I need to model two levels of analysis simultaneously. The first one is the individual- or household-level including various demographic and socio-economic variables as well as the information on the ECEC use or perceptions of the respondents. The second one is the country level where the system-level characteristics relating to the institutional setting of ECEC come into play. Via multilevel modelling, I investigate the variation across the level-2 units (i.e. countries) and I can analyse the differences between countries regarding the relationship between the institutional setting of ECEC and individual use or perceptions.

The conceptual framework of institutional setting of ECEC is used in each of these three chapters. Two or three variables are used per pillar (provision, regulation and financing), each representing different aspects of these pillars. The data are drawn from different sources such as Eurydice, Eurostat and the OECD. Even though these indicators do not cover all features of ECEC systems, they are still representative of some of the most important ECEC system characteristics.

Since the intensity of ECEC use, perceived accessibility of ECEC and the public attitude toward governmental ECEC provision and financing are influenced by many factors, I control for as many individual circumstances as possible. When controlling for the individual-, family- or household-related circumstances, I employ the socio-ecological model that argues that families determine the type and intensity of childcare they use based on characteristics that are related to the child, the parents, and the environment (neighbourhood, region, etc.) (Liu, 2015; Pungello and Kurtz-Costes, 1999; Rose and Elicker, 2010; Sylva et al., 2007). Since I use three different datasets for each of the three chapters, the individual- and household-level data available in each dataset are also different. Hence, the circumstances that I can control in the context of the socio-ecological model are different in each case. The particular variables that are controlled for are listed in each chapter.

1.4.2. Qualitative Data and Methods

In the context of ECEC, inclusiveness is a multi-dimensional concept that is difficult to quantify. For this reason, Part II dealing with the inclusiveness of ECEC is based on qualitative methods (focus groups, in particular), for a particularly disadvantaged group in Europe: families with a background of low-income and immigration. This part is based on primary data within the context of the CARE project.[4]

In the first chapter of Part II (Chapter 5), I provide a snapshot of common experiences of families with low-income and immigration background in five countries – Belgium, Finland, Germany, Italy, and the United Kingdom. In this chapter, I present some barriers to the inclusiveness of the ECEC system as well as some good practices in relation to the "equal opportunities, equal treatment and equal outcomes" framework (Nicaise et al., 2000) (see section 1.3.2). Note that the data was collected via focus groups in five countries in Europe by different researchers, since this study was conducted within the context of the CARE project. However, despite the data collection being carried out by five different research teams, I have been the coordinator of the research and the fieldwork in each of these countries. Moreover, I carried out the focus group study in Belgium.

The second chapter in Part II is a case study of the Belgian focus group conducted in Beringen with mothers with a low income and a Turkish immigration background (Chapter 6). This chapter contributes to the discussion of inclusiveness from a wider angle – i.e. not only from the standpoint of children but the whole family. I use the Interactive Acculturation Theory borrowed from the social psychology literature (Bourhis et al., 1997; Piontkowski et al., 2002) as the theoretical framework, and based on the focus group discussion, I tackle the extent to which the Turkish-Belgian mothers are willing to integrate into the Flemish society. This chapter also provides hints with regard to the acculturation patterns of the Flemish majority as perceived by the participants.

Both studies were conducted using the focus group methodology. The focus group method is a group interview where the researcher/moderator relies on the interaction within the group based on the pre-determined set of topics, and hence can provide evidence about the similarities and differences among the participants in a very concentrated way (Morgan, 1997). Since focus groups were conducted in different localities, a common methodology was ensured via a common 'moderator's guide' where all important topics of discussion were listed, as well as guidelines about how to moderate the discussion. I have coordinated the partners' work and supported them in dealing with the challenges that arose throughout the stages of planning, organisation, execution, analysis and reporting of the

4 The CARE project was funded by the Seventh Framework Programme of the European Union (grant agreement number 613318).

results. However, each focus group also had a different contextual setting as expected in any cross-national qualitative research (*cf.* Chapter 5).

1.5. Overview of the Dissertation

The dissertation is organised in two parts. Part I tackles the relationship between ECEC policies and the experiences and perceptions of individuals in relation to ECEC, within the overall concept of accessibility. Chapter 2 explores the relationship between the intensity of ECEC use and ECEC policies using the EU-SILC dataset from 2014, focusing especially on the ECEC use of two disadvantaged groups: low-income families and families with a migration background. Chapter 3 tackles the relationship between the same ECEC policies and the perceived accessibility of childcare across Europe, paying special attention to the perceptions of low-income families. More on the periphery of the topic of accessibility, Chapter 4 investigates whether there is congruence between the public opinion and the ECEC policies regarding the way childcare is provided and financed in the country. All three chapters use the same ECEC policy measures at the country-level as independent variables, making the findings interesting to interpret in relation to each other – i.e. actual use, perceived accessibility, and the ideal situation as to how ECEC should be provided (public or otherwise).

Taking the findings with regard to accessibility one step further, Part II investigates inclusiveness of ECEC by investigating the personal experiences of families with the ECEC system (or in society in general). Data collected through focus groups are used to provide insight into the daily lives of people navigating their way through childcare and related activities (employment, education, etc.). Defining inclusiveness as striving for the ideal to secure equal opportunities, equal treatment and equal outcomes in ECEC, Chapter 5 presents some of the common challenges of disadvantaged families with a cross-country approach. Chapter 6 builds on this analysis, and complements it by linking the specific ECEC-related experiences of the low-income Turkish-Belgian mothers in the town of Beringen in Flanders with their overall interactive acculturation patterns.

1.6. References

Adamson, E., Brennan, D., 2014. Social Investment or Private Profit? Diverging Notions of 'Investment' in Early Childhood Education and Care. IJEC 46, 47–61. https://doi.org/10.1007/s13158-013-0098-x

Andersen, R., Aday, L.A., 1978. Access to Medical Care in the U.S.: Realized and Potential. Medical Care 16, 533–546.

Bahle, T., 2009. Public Child Care in Europe: Historical Trajectories and New Directions, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 23–42.

Baker, M., Gruber, J., Milligan, K., 2006. Universal Childcare, Maternal Labor Supply, and Family Well-Being. Federal Reserve Bank of St Louis, St. Louis, United States.

Barbarin, O.A., McCandies, T., Early, D., Clifford, R.M., Bryant, D., Burchinal, M., Howes, C., Pianta, R., 2006. Quality of Prekindergarten: What Families Are Looking for in Public Sponsored Programs. Early Education and Development 17, 619–642. https://doi.org/10.1207/s15566935eed1704_6

Bennett, J., 2004. Early Education Financing: What is Useful to Know?

Bonnycastle, C.R., 2011. Social Justice along a Continuum: A Relational Illustrative Model. Social Service Review 85, 267–295. https://doi.org/10.1086/660703

Bonoli, G., Cantillon, B., Van Lancker, W., 2017. Social Investment and the Matthew Effect: Limits to a Strategy, in: Hemerijck, A. (Ed.), The Uses of Social Investment. Oxford University Press, pp. 66–76.

Bourhis, R.Y., Moïse, L.C., Perreault, S., Senécal, S., 1997. Towards an Interactive Acculturation Model: A Social Psychological Approach. International Journal of Psychology 32, 369–386. https://doi.org/10.1080/002075997400629

Bundy, J., 2012. Rendering (gender) invisible: early childhood education and care in Ontario as a biopolitical social investment apparatus. Discourse: Studies in the Cultural Politics of Education 33, 591–605. https://doi.org/10.1080/01596306.2012.692964

Burchinal, M., Howes, C., Kontos, S., 2002. Structural predictors of child care quality in child care homes. Early Childhood Research Quarterly 17, 87–105. https://doi.org/10.1016/S0885-2006(02)00132-1

Burger, K., 2010. How does early childhood care and education affect cognitive development? An international review of the effects of early interventions for children from different social backgrounds. Early Childhood Research Quarterly 25, 140–165. https://doi.org/10.1016/j.ecresq.2009.11.001

Cantillon, B., 2011. The paradox of the social investment state: growth, employment and poverty in the Lisbon era. Journal of European Social Policy 21, 432–449. https://doi.org/10.1177/0958928711418856

Ceglowski, D., Bacigalupa, C., 2002. Four Perspectives on Child Care Quality. Early Childhood Education Journal 30, 87–92. https://doi.org/10.1023/A:1021245017431

Chung, H., Meuleman, B., 2017. European parents' attitudes towards public childcare provision: the role of current provisions, interests and ideologies. European Societies 19, 49–68. https://doi.org/10.1080/14616696.2016.1235218

Cleveland, G., Krashinsky, M., 1998. Benefits and costs of good child care: The economic rationale for public investment in young children.

Cloney, D., Cleveland, G., Hattie, J., Tayler, C., 2015. Variations in the Availability and Quality of Early Childhood Education and Care by Socioeconomic Status of Neighborhoods. Early Education and Development 0, 1–18. https://doi.org/10.1080/10409289.2015.1076674

Cohen, B., Pay, N., 2011. Inspiring Change: An Early Childhood Education and Care Study Visit to Sweden and Poland. King Baudouin Foundation and Children in Scotland.

Conley, A., 2010. Childcare: welfare or investment? International Journal of Social Welfare 19, 173–181. https://doi.org/10.1111/j.1468-2397.2009.00665.x

Cunha, F., Heckman, J.J., Lochner, L., Masterov, D.V., 2006. Interpreting the Evidence on Life Cycle Skill Formation. Handbook of the Economics of Education 1, 697–812.

Dalkilic, M., Vadeboncoeur, J.A., 2016. Re-framing Inclusive Education Through the Capability Approach: An Elaboration of the Model of Relational Inclusion. 1 3.

Daly, M., Lewis, J., 2000. The concept of social care and the analysis of contemporary welfare states. The British Journal of Sociology 51, 281–298. https://doi.org/10.1111/j.1468-4446.2000.00281.x

Danforth, B., 2014. Worlds of welfare in time: A historical reassessment of the three-world typology. Journal of European Social Policy 24, 164–182. https://doi.org/10.1177/0958928713517919

Davis, E.E., Connelly, R., 2005. The Influence of Local Price and Availability on Parents' Choice of Child Care. Popul Res Policy Rev 24, 301–334. https://doi.org/10.1007/s11113-005-8515-y

de Haan, A., Elbers, E., Hoofs, H., Leseman, P., 2013. Targeted versus mixed preschools and kindergartens: effects of class composition and teacher-managed activities on disadvantaged children's emergent academic skills. School Effectiveness and School Improvement 24, 177–194. https://doi.org/10.1080/09243453.2012.749792

Del Boca, D., 2002. The effect of child care and part time opportunities on participation and fertility decisions in Italy. J Popul Econ 15, 549–573. https://doi.org/10.1007/s001480100089

Döge, P., Keller, H., 2012. Child-rearing goals and conceptions of early childcare from young adults' perspective in East and West Germany. International Journal of Adolescence and Youth 19, 37–49. https://doi.org/10.1080/02673843.2012.692657

Drange, N., Telle, K., 2015. Promoting integration of immigrants: Effects of free child care on child enrollment and parental employment. Labour Economics, European Association of Labour Economists 26th Annual Conference 34, 26–38. https://doi.org/10.1016/j.labeco.2015.03.006

Dumčius, R., Peeters, J., Hayes, N., Van Landeghem, G., Siarova, H., Peciukonytė, L., Cenerić, I., Hulpia, H., 2014. Study on the effective use of early childhood education and care (ECEC) in preventing early school leaving (ESL): Annex 1. Literature review. Publications Office of the European Union, Luxembourg.

Ellingsæter, A.L., Kitterød, R.H., Lyngstad, J., 2017. Universalising Childcare, Changing Mothers' Attitudes: Policy Feedback in Norway. Journal of Social Policy 46, 149–173. https://doi.org/10.1017/S0047279416000349

Esping-Andersen, G., 1990. The Three Worlds of Welfare Capitalism. Princeton University Press, Princeton, New Jersey.

European Commission, 2014. Investing in children: breaking the cycle of disadvantage. European Commission, Brussels.

European Commission, 2013. Barcelona objectives: the development of childcare facilities for young children in Europe with a view to sustainable and inclusive growth. Publications Office of the European Union, Luxembourg.

European Commission, 2011. Early Childhood Education and Care: Providing all our children with the best start for the world of tomorrow.

Eurydice, 2014. Key Data on Early Childhood Education and Care in Europe (Eurydice and Eurostat Report). Publications Office of the European Union, Luxembourg.

Fallon, J., 2005. Targeting Disadvantage among Young Children in the Republic of Ireland: An Overview. Child Care in Practice 11, 289–311. https://doi.org/10.1080/13575270500151821

Farfan-Portet, M.-I., Lorant, V., Petrella, F., 2011. Access to Childcare Services: The Role of Demand and Supply-Side Policies. Popul Res Policy Rev 30, 165–183. https://doi.org/10.1007/s11113-010-9184-z

Felfe, C., Nollenberger, N., Rodríguez-Planas, N., 2015. Can't buy mommy's love? Universal childcare and children's long-term cognitive development. J Popul Econ 28, 393–422. https://doi.org/10.1007/s00148-014-0532-x

Fenger, H.J.M., 2007. Welfare regimes in Central and Eastern Europe: Incorporating post-communist countries in a welfare regime typology. Contemporary Issues and Ideas in Social Sciences 3.

Gambaro, L., Stewart, K., Waldfogel, J., 2015. A question of quality: do children from disadvantaged backgrounds receive lower quality early childhood education and care? Br Educ Res J 41, 553–574. https://doi.org/10.1002/berj.3161

Gammage, P., 2006. Early childhood education and care: politics, policies and possibilities. Early Years 26, 235–248. https://doi.org/10.1080/09575140600898407

Gawlicz, K., Starnawski, M., 2018. For child and social justice: radical approaches in education and care for young children in interwar Poland. Early Years 38, 197–211. https://doi.org/10.1080/09575146.2018.1449816

Goerres, A., Tepe, M., 2012. Doing It for the Kids? The Determinants of Attitudes towards Public Childcare in Unified Germany. Journal of Social Policy 41, 349–372. https://doi.org/10.1017/S0047279411000754

Heckman, J.J., 2006. Skill Formation and the Economics of Investing in Disadvantaged Children. Science 312, 1900–1902. https://doi.org/10.1126/science.1128898

Heinen, J., Wator, M., 2006. Child Care in Poland before, during, and after the Transition: Still a Women's Business. Soc Pol 13, 189–216. https://doi.org/10.1093/sp/jxj008

Herczog, M., 2012. Rights of the Child and Early Childhood Education and Care in Europe. European Journal of Education 47, 542–555. https://doi.org/10.1111/ejed.12008

Hofferth, S.L., Wissoker, D.A., 1992. Price, Quality, and Income in Child Care Choice. The Journal of Human Resources 27, 70–111. https://doi.org/10.2307/145913

Horvai, A., 2010. Recognising the Roma and their Rights: an analysis of exclusion and integration in the education system. Research in Comparative and International Education 5, 394. https://doi.org/10.2304/rcie.2010.5.4.394

Hotz, V.J., Xiao, M., 2011. The Impact of Regulations on the Supply and Quality of Care in Child Care Markets. The American Economic Review 101, 1775–1805.

Hox, J.J., 2010. Multilevel Analysis: Techniques and Applications, 2. ed. ed, Quantitative methodology series. Routledge, Taylor & Francis, New York.

Hox, J.J., Kreft, I.G.G., 1994. Multilevel Analysis Methods. Sociological Methods & Research 22, 283–299. https://doi.org/10.1177/0049124194022003001

Javornik, J., 2014. Measuring state de-familialism: Contesting post-socialist exceptionalism. Journal of European Social Policy 24, 240–257. https://doi.org/10.1177/0958928714525815

Javornik, J., Kurowska, A., 2017. Work and Care Opportunities under Different Parental Leave Systems: Gender and Class Inequalities in Northern Europe. Social Policy & Administration 51, 617–637. https://doi.org/10.1111/spol.12316

Jenson, J., 2004. Changing the Paradigm: Family Responsibility or Investing in Children. The Canadian Journal of Sociology 29, 169–192. https://doi.org/10.1353/cjs.2004.0025

Johansson, H., Höjer, I., 2012. Education for disadvantaged groups — Structural and individual challenges. Children and Youth Services Review, Educational Interventions, Practices, and Policies to Improve Educational Outcomes Among Children and Youth in Out-of-Home Care 34, 1135–1142. https://doi.org/10.1016/j.childyouth.2012.01.042

Jordan, J., 2013. Policy feedback and support for the welfare state. Journal of European Social Policy 23, 134–148. https://doi.org/10.1177/0958928712471224

Kaga, Y., Bennett, J., Moss, P., 2010. Caring and Learning Together: Study on the integration of ECCE within education. UNESCO, Paris.

Karila, K., 2012. A Nordic Perspective on Early Childhood Education and Care Policy. European Journal of Education 47, 584–595. https://doi.org/10.1111/ejed.12007

Kasza, G.J., 2002. The Illusion of Welfare. Journal of Social Policy 31, 271–287. https://doi.org/10.1017/S0047279401006584

Kjørholt, A.T., 2013. Childhood as Social Investment, Rights and the Valuing of Education. Child Soc 27, 245–257. https://doi.org/10.1111/chso.12037

Korpi, W., 2001. Contentious Institutions: An Augmented Rational-Action Analysis of the Origins and Path Dependency of Welfare State Institutions in Western Countries. Rationality and Society 13, 235–283. https://doi.org/10.1177/104346301013002005

Korpi, W., Palme, J., 1998. The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality, and Poverty in the Western Countries. American Sociological Review 63, 661–687.

Kremer, M., 2006. The Politics of Ideals of Care: Danish and Flemish Child Care Policy Compared. Soc Pol 13, 261–285. https://doi.org/10.1093/sp/jxj009

Kreyenfeld, M., Hank, K., 2000. Does the availability of child care influence the employment of mothers? Findings from western Germany. Population Research and Policy Review 19, 317–337. https://doi.org/10.1023/A:1026556309080

Lehrer, J.S., Lemay, L., Bigras, N., 2015. Parental Perceptions of Child Care Quality in Centre-Based and Home-Based Settings: Associations with External Quality Ratings. IJEC 47, 481–497. https://doi.org/10.1007/s13158-015-0147-8

Leitner, S., 2003. Varieties of familialism: The caring function of the family in comparative perspective. European Societies 5, 353–375. https://doi.org/10.1080/1461669032000127642

Leseman, P.P.M., 2009. The Impact of High Quality Education and Care on the Development of Young Children: Review of the Literature, in: Tackling Social and Cultural Inequalities through Early Childhood Education and Care in Europe. Education, Audiovisual and Culture Executive Agency, Brussels, pp. 17–49.

Leseman, P.P.M., Slot, P.L., 2014. Breaking the cycle of poverty: challenges for European early childhood education and care. European Early Childhood Education Research Journal 22, 314–326. https://doi.org/10.1080/1350293X.2014.912894

Li-Grining, C.P., Coley, R.L., 2006. Child care experiences in low-income communities: Developmental quality and maternal views. Early Childhood Research Quarterly 21, 125–141. https://doi.org/10.1016/j.ecresq.2006.04.001

Liu, M., 2015. An Ecological Review of Literature on Factors Influencing Working Mothers' Child Care Arrangements. Journal of Child and Family Studies 24, 161–171. https://doi.org/10.1007/s10826-013-9822-2

Magnuson, K., Shager, H., 2010. Early education: Progress and promise for children from low-income families. Children and Youth Services Review, Meeting Children's Basic Needs 32, 1186–1198. https://doi.org/10.1016/j.childyouth.2010.03.006

Mahon, R., 2002. Child Care: Toward What Kind of "Social Europe"? Soc Pol 9, 343–379. https://doi.org/10.1093/sp/9.3.343

Mahon, R., Anttonen, A., Bergqvist, C., Brennan, D., Hobson, B., 2012. Convergent care regimes? Childcare arrangements in Australia, Canada, Finland and Sweden. Journal of European Social Policy 22, 419–431. https://doi.org/10.1177/0958928712449776

McLean, C., 2014. Market managers and market moderators: Early childhood education and care provision, finance and regulation in the United Kingdom and United States. Journal of European Social Policy 24, 122–134. https://doi.org/10.1177/0958928713517916

McMahon, W.W., 1982. Consumption Benefits of Education (BEBR Faculty Working Paper No. 856).

Melhuish, E., Ereky-Stevens, K., Petrogiannis, K., Ariescu, A., Penderi, E., Rentzou, K., Tawell, A., Leseman, P.P.M., Broekhuisen, M., 2015. A review of research on the effects of early childhood education and care (ECEC) on children development, CARE D4.1.

Meyers, M.K., Gornick, J.C., 2003. Public or Private Responsibility? Early Childhood Education and Care, Inequality, and the Welfare State. Journal of Comparative Family Studies 34, 379–411.

Morel, N., Palier, B., Palme, J., 2012. Beyond the welfare state as we knew it?, in: Morel, N., Palier, B., Palme, J. (Eds.), Towards a Social Investment Welfare State? Ideas, Policies and Challenges. The Policy Press, UK, pp. 1–30.

Morgan, D.L., 1997. Focus Groups as Qualitative Research, 2nd ed. ed, Qualitative research methods series. SAGE, Thousand Oaks, California.

Morgan, K.J., 2012. Promoting social investment through work-family policies: which national do it and why?, in: Morel, N., Palier, B., Palme, J. (Eds.), Towards a Social Investment Welfare State? Ideas, Policies and Challenges. The Policy Press, UK, pp. 153–179.

Moss, P., 2012. Caring and Learning Together: exploring the relationship between parental leave and early childhood education and care. European Journal of Education 47, 482–493. https://doi.org/10.1111/ejed.12003

Moss, P., 2008. What Future for the Relationship between Early Childhood Education and Care and Compulsory Schooling? Research in Comparative and International Education 3, 224. https://doi.org/10.2304/rcie.2008.3.3.224

Moss, P., 2006. Farewell to Childcare? National Institute Economic Review 195, 70–83. https://doi.org/10.1177/0027950106064040

Muffels, R.J.A., Fouarge, D.J.A.G., 2002. Do European Welfare Regimes Matter in Explaining Social Exclusion?, in: Muffels, R.J.A., Tsakloglou, P., Mayes, D.G. (Eds.), Social Exclusion in European Welfare States. Edward Elgar, Cheltenham, pp. 202–232.

Mullaly, R.P., 2007. The new structural social work, 3rd ed. Oxford University Press, Don Mills, Ont.

Myers, R.G., 2000. Financing early childhood education and care services. International Journal of Educational Research 33, 75–94. https://doi.org/10.1016/S0883-0355(99)00044-0

Neuman, M.J., 2009. The Politics of (De)centralisation: Early Care and Education in France and Sweden, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 157–179.

Nicaise, I., ed., 2000. The right to learn: educational strategies for socially excluded youth in Europe. Policy Press, Bristol.

Nicaise, I. et al., 2000. Success for all? Educational strategies for disadvantaged youth in six European countries, in: Walraven, G., Parsons, C., van Veen, D., Day, C. (Eds.), Combating Social Exclusion through Education: Laissez-Faire, Authoritarianism or Third Way? Garant, Leuven, pp. 271–286.

NICHD, E.C.C.R.N., 2002. Child-Care Structure → Process → Outcome: Direct and Indirect Effects of Child-Care Quality on Young Children's Development. Psychological Science 13, 199–206. https://doi.org/10.1111/1467-9280.00438

Noailly, J., Visser, S., 2009. The Impact of Market Forces on Child Care Provision: Insights from the 2005 Child Care Act in the Netherlands. Journal of Social Policy 38, 477–498. https://doi.org/10.1017/S0047279409003109

Noelke, C., 2008. Social protection, inequality and labour market risks in Central and Eastern Europe, in: Kogan, I., Gebel, M., Noelke, C. (Eds.), Europe Enlarged: A Handbook of Education, Labour and Welfare Regimes in Central and Eastern Europe. The Policy Press, Bristol, pp. 63–95.

Nolan, B., 2013. What use is 'social investment'? Journal of European Social Policy 23, 459–468. https://doi.org/10.1177/0958928713499177

Nollenberger, N., Rodríguez-Planas, N., 2015. Full-time universal childcare in a context of low maternal employment: Quasi-experimental evidence from Spain. Labour Economics 36, 124–136. https://doi.org/10.1016/j.labeco.2015.02.008

Nusche, D., 2009. What Works in Migrant Education? (OECD Education Working Papers). Organisation for Economic Co-operation and Development, Paris.

OECD, 2018. Equity in Education: Breaking Down Barriers to Social Mobility, PISA. OECD, Paris. https://doi.org/10.1787/9789264073234-en

OECD, 2017. Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education. Organisation for Economic Co-operation and Development, Paris.

OECD, 2015. Starting Strong IV: Monitoring Quality in Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2012. Starting Strong III: A Quality Toolbox for Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2006. Starting Strong II: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2001. Starting Strong: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

Ojala, M., 2010. Developing Multicultural Early Childhood Education in a Finnish. International Journal of Child Care and Education Policy 4, 13–22.

Pavolini, E., Van Lancker, W., 2018. The Matthew effect in childcare use: a matter of policies or preferences? Journal of European Public Policy 25, 878–893. https://doi.org/10.1080/13501763.2017.1401108

Penn, H., 2009. International Perspectives On Quality in Mixed Economies of Childcare. National Institute Economic Review 207, 83–89. https://doi.org/10.1177/0027950109103687

Peugh, J.L., 2010. A practical guide to multilevel modeling. Journal of School Psychology 48, 85–112. https://doi.org/10.1016/j.jsp.2009.09.002

Peyton, V., Jacobs, A., O'Brien, M., Roy, C., 2001. Reasons for choosing child care: associations with family factors, quality, and satisfaction. Early Childhood Research Quarterly 16, 191–208. https://doi.org/10.1016/S0885-2006(01)00098-9

Phillips, D., Mekos, D., Scarr, S., McCartney, K., Abbott–Shim, M., 2000. Within and beyond the classroom door: assessing quality in child care centers. Early Childhood Research Quarterly 15, 475–496. https://doi.org/10.1016/S0885-2006(01)00077-1

Phillipsen, L.C., Burchinal, M.R., Howes, C., Cryer, D., 1997. The prediction of process quality from structural features of child care. Early Childhood Research Quarterly 12, 281–303. https://doi.org/10.1016/S0885-2006(97)90004-1

Piontkowski, U., Rohmann, A., Florack, A., 2002. Concordance of Acculturation Attitudes and Perceived Threat. Group Processes Intergroup Relations 5, 221–232. https://doi.org/10.1177/1368430202005003003

Prentice, S., 2007. Childcare, the "Business Case" and Economic Development: Canadian Evidence, Opportunities and Challenges. International Journal of Economic Development 9, 269–300.

Pungello, E.P., Kurtz-Costes, B., 1999. Why and How Working Women Choose Child Care: A Review with a Focus on Infancy. Developmental Review 19, 31–96. https://doi.org/10.1006/drev.1998.0468

Rose, K.K., Elicker, J., 2010. Maternal child care preferences for infants, toddlers, and preschoolers: the disconnect between policy and preference in the USA. Community, Work & Family 13, 205–229. https://doi.org/10.1080/13668800903314366

Saint-Arnaud, S., Bernard, P., 2003. Convergence or Resilience? A Hierarchical Cluster Analysis of the Welfare Regimes in Advanced Countries. Current Sociology 51, 499–527. https://doi.org/10.1177/00113921030515004

Saraceno, C., 2011. Childcare needs and childcare policies: A multidimensional issue. Current Sociology 59, 78–96. https://doi.org/10.1177/0011392110385971

Scheiwe, K., Willekens, H., 2009. Introduction: Path-dependencies and Change in Child-care and Preschool Institutions in Europe - Historical and Institutional Perspectives, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 1–22.

Scruggs, L., Allan, J., 2006. Welfare-state decommodification in 18 OECD countries: a replication and revision. Journal of European Social Policy 16, 55–72. https://doi.org/10.1177/0958928706059833

Seo, S., 2003. Early child care choices: a theoretical model and research implications. Early Child Development and Care 173, 637–650. https://doi.org/10.1080/0300443032000088230

Sibley, E., Dearing, E., Toppelberg, C.O., Mykletun, A., Zachrisson, H.D., 2015. Do increased availability and reduced cost of early childhood care and education narrow social inequality gaps in utilization? Evidence from Norway. International Journal of Child Care and Education Policy 9. https://doi.org/10.1007/s40723-014-0004-5

Sosinsky, L.S., Lord, H., Zigler, E., 2007. For-profit/nonprofit differences in center-based child care quality: Results from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development. Journal of Applied Developmental Psychology, New findings from

Secondary Data Analysis Results from the NICHD Study of Early Child Care and Youth Development Friedman Special Issue 28, 390–410. https://doi.org/10.1016/j.appdev.2007.06.003

Stahl, J.F., Schober, P.S., 2017. Convergence or divergence? Educational discrepancies in work-care arrangements of mothers with young children in Germany. Work, Employment and Society 0950017017692503. https://doi.org/10.1177/0950017017692503

Starke, P., Obinger, H., Castles, F.G., 2008. Convergence towards where: in what ways, if any, are welfare states becoming more similar? Journal of European Public Policy 15, 975–1000. https://doi.org/10.1080/13501760802310397

Sylva, K., Stein, A., Leach, P., Barnes, J., Malmberg, L.-E., 2007. Family and child factors related to the use of non-maternal infant care: An English study. Early Childhood Research Quarterly 22, 118–136. https://doi.org/10.1016/j.ecresq.2006.11.003

Tang, S., Coley, R.L., Votruba-Drzal, E., 2012. Low-income families' selection of child care for their young children. Children and Youth Services Review 34, 2002–2011. https://doi.org/10.1016/j.childyouth.2012.06.012

Underwood, K., Valeo, A., Wood, R., 2012. Understanding Inclusive Early Childhood Education: A Capability Approach. Contemporary Issues in Early Childhood 13, 290–299. https://doi.org/10.2304/ciec.2012.13.4.290

Urban, M., Vandenbroeck, M., Van Laere, K., Lazzari, A., Peeters, J., 2012. Towards Competent Systems in Early Childhood Education and Care. Implications for Policy and Practice. European Journal of Education 47, 508–526. https://doi.org/10.1111/ejed.12010

van Huizen, T., Dumhs, L., Plantenga, J., 2016. D5.4: Report on costs-benefits estimations of ECEC.

Van Lancker, W., Ghysels, J., 2012. Who benefits? The social distribution of subsidized childcare in Sweden and Flanders. Acta Sociologica 55, 125–142. https://doi.org/10.1177/0001699311433428

Vandenbroeck, M., 2011. Diversity in Early Childhood Services. Encyclopedia on Early Childhood Development [online].

Vandenbroeck, M., De Visscher, S., Van Nuffel, K., Ferla, J., 2008. Mothers' search for infant child care: The dynamic relationship between availability and desirability in a continental European welfare state. Early Childhood Research Quarterly 23, 245–258. https://doi.org/10.1016/j.ecresq.2007.09.002

Verbist, G., Matsaganis, M., 2014. The Redistributive Capacity of Services in the European Union, in: Vandenbroecke, F., Cantillon, B. (Eds.), Reconciling Work and Poverty Reduction: How Successful Are European Welfare States? Oxford University Press, New York, pp. 185–211.

Vincent, C., Braun, A., Ball, S.J., 2008. Childcare, choice and social class: Caring for young children in the UK. Critical Social Policy 28, 5–26. https://doi.org/10.1177/0261018307085505

Vogel, J., 2003. Welfare State. Social Indicators Research 64, 373–391.

White, L.A., 2012. Must We All Be Paradigmatic? Social Investment Policies and Liberal Welfare States. Canadian Journal of Political Science/Revue canadienne de science politique 45, 657–683. https://doi.org/10.1017/S0008423912000753

White, L.A., Friendly, M., 2012. Public Funding, Private Delivery: States, Markets, and Early Childhood Education and Care in Liberal Welfare States – A Comparison of Australia, the UK, Quebec, and New Zealand. Journal of Comparative Policy Analysis: Research and Practice 14, 292–310. https://doi.org/10.1080/13876988.2012.699789

Wilson, E., 1977. Women and the Welfare State.

Wincott, D., 2006. Paradoxes of New Labour Social Policy: Toward Universal Child Care in Europe's "Most Liberal" Welfare Regime? Soc Pol 13, 286–312. https://doi.org/10.1093/sp/jxj011

Yerkes, M.A., Javornik, J., 2018. Creating capabilities: Childcare policies in comparative perspective. Journal of European Social Policy 0958928718808421. https://doi.org/10.1177/0958928718808421

PART I – Accessibility of ECEC

2. Chapter II – Early Childhood Education and Care for Younger and Older Children: Policies and Participation

This chapter will be resubmitted to the Journal of Social Policy for the second round of review.

ABSTRACT

This study explores the relationship between the intensity of ECEC participation and ECEC policies separately for two age groups (0-2 year-olds and 3-5 year-olds) using multilevel Tobit modelling. At the micro-level, we employ the socio-ecological model to control for the individual- and family-related circumstances, using the EU-SILC data from 2014; and at the macro-level, we test for policy measures regarding the provision, regulation, and financing of ECEC. We pay particular attention to the role of these policies on two major sources of disadvantage: low-income status and migration background. Our analyses reveal that ECEC use is higher in countries where the legal entitlement to ECEC and free ECEC provision start early, pre-school is exclusively public or publicly subsidised, the ECEC system is unitary, the structural quality standards are high, and public spending per child is high while the share of private funding and the parental fees are low. However, while universal access and structural quality policies are particularly favourable for disadvantaged children, high public spending and low parental or private financing for ECEC do not correlate with higher use by disadvantaged children, confirming the risk of a Matthew effect with the way ECEC is financed.

KEYWORDS

ECEC, pre-school, childcare, disadvantaged groups, Matthew effect, multilevel Tobit modelling

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2.1. Introduction

While the European Union has been promoting early childhood education and care (ECEC) provision for more than two decades especially due to its role in facilitating maternal employment (Mahon, 2002), the importance of ECEC as 'social investment' as a means to prepare children for a successful educational career, and hence, their future productive role in the society has also been recognised recently (Bundy, 2012; Morel et al., 2012). As ECEC participation rates became a measure of development of the welfare state in the developed world, the European Council set the so-called Barcelona objectives on ECEC participation in 2002, implying that 33% of the children below age 3 and 90% of those between 3 and mandatory school age should receive ECEC by 2010 (European Commission, 2013). However, this target is still not met by many Member States, as ECEC services are still not accessible enough for many segments of the society, despite sufficient proof that high-quality ECEC helps vulnerable children break the intergenerational vicious circle of disadvantage (Leseman and Slot, 2014).

The effectiveness of policies in achieving accessible ECEC for disadvantaged groups is still under discussion. Social policies aiming for universal access to services sometimes end up having a Matthew effect, a phenomenon where the better-off enjoy social benefits more than the ones who need them more (Bonoli et al., 2017, p. 67). In other words, 'the rich get richer, the poor stay poor' and the intergenerational chain of disadvantage persists. The Matthew effect in childcare is documented in some European countries, as well as other areas including education, labour market policies, social investment and redistribution (Bonoli et al., 2017; Cantillon, 2011). Van Lancker and Ghysels (2012) found that, in Flanders (Belgium), the governmental expenditure on formal childcare benefits higher-income families more than the poor; while families with the lowest income would benefit from ECEC twice as much as the higher-income ones in Sweden. Bonoli et al. (2017) also report that, even among the European countries that are known for high ECEC participation rates, there is a significant gap in formal childcare use of the 0-2 year-olds from different socio-economic backgrounds.

In this research, the intensity of ECEC use is considered as one of the consequences of the accessibility of ECEC in general. In this sense, using the terminology coined by Andersen, we investigate the relationship between the (potential) accessibility of ECEC (instrumentalised as ECEC policy measures) and 'realised access' in the form of weekly participation (Andersen and Aday, 1978). While realised access can be a result of other drivers at the levels of the household (e.g. need for childcare and individual beliefs) and policy (e.g. family, labour market, and education policies), as demonstrated by the present study, it also depends on the overall accessibility of ECEC in the country itself.

2.2. Conceptual Framework

Our conceptual framework is based on the theoretical work by McLean (2014) focusing on the three pillars of institutional setting (provision, regulation, and financing) of ECEC in the United Kingdom and the United States. McLean argues that, although both countries are liberal welfare states that rely on market-based provision, they differ in the way they regulate and finance ECEC. While McLean lists several dimensions for each pillar, not all of these dimensions are quantifiable. We contribute to this framework by operationalising some of these concepts and using them in quantitative analysis.

2.2.1. Provision

Various actors play a role in the provision of ECEC. All countries in Europe have mixed ECEC provision made up of varying degrees of public or market-based provision; so none of the European countries have purely public or private ECEC (Eurydice, 2014). Still, public and publicly subsidised ECEC provision is more widespread for 3-6 year-olds compared to 0-2 year-olds across Europe (Eurydice, 2014).

In countries with a predominantly market-driven approach to ECEC, the state relies on the basic market principle that more competition will result in cheaper, more efficient, responsive, innovative, flexible and high-quality services, and that entrepreneurship and the price mechanism would balance the demand and supply (Noailly and Visser, 2009; OECD, 2006; Penn, 2009). Although this system claims to provide greater choice for and control by parents, some authors note that, in reality, families end up with limited access to ECEC that is both affordable and high quality (Bennett, 2004; Noailly and Visser, 2009; Penn, 2009; Sosinsky et al., 2007).

At the other end of the spectrum, there are countries with a predominantly public provision, such as the Nordic countries whose social democratic care regime is based on universal rights (Mahon et al., 2012). Research suggests that the more ECEC is socialized and the more it shifts from private to public responsibility, the stronger is its impact on diminishing inequalities (Meyers and Gornick, 2003; Van Lancker and Ghysels, 2016).

Governments adopt different provision strategies to increase access to ECEC. Some regulate the age at which the child is legally entitled to ECEC, some make one or more years of ECEC compulsory, and some guarantee free-of-charge services even though all of these (legal entitlement, compulsory ECEC, and free provision) usually cover only 3-6 year-olds, if at all (Eurydice, 2014). When places are guaranteed by the government, families have a stronger incentive to take up formal childcare (Van Lancker and Ghysels, 2016).

2.2.2. Regulation

ECEC systems are regulated and legislated by the state in different ways in relation to human resources, fees, professional standards, wages, and the types of services to be delivered on a for-profit or not-for-profit basis (White and Friendly, 2012). However, unlike the policy measures regarding provision and financing, we expect regulation-related policies to have an indirect relationship with the intensity of ECEC use. Governments regulate the quality of ECEC also by imposing certain standards such as group size, number of children per staff, minimum education or training requirements for staff, staff wages, and safety standards of the institution, which are referred to as structural quality measures (Burchinal et al., 2002; Dumčius et al., 2014; Phillips et al., 2000).[5] These are the minimum standards to enable "adequate or good enough quality ECEC provisions" (OECD, 2012, p. 32) and they reflect the importance given to ECEC in that country.

Two of the most used structural quality indicators are child-to-staff ratio and group size. A lower child-to-carer ratio and smaller group size are associated with higher quality (Ceglowski and Bacigalupa, 2002; Dumčius et al., 2014). However, approximately one-third of the European countries do not regulate the maximum number of children per staff member and/or maximum number of children per group (Eurydice, 2014, p. 45). On the other hand, minimum requirements for ECEC professionals' qualification seem to be a better predictor of higher quality (Burchinal et al., 2002; Dumčius et al., 2014), and most countries impose minimum qualification requirements for educators and carers (Eurydice, 2014, pp. 100–101).

Another key indicator of structural quality is the salary level of the ECEC staff (Phillips et al., 2000; Phillipsen et al., 1997). The higher the staff wages, the higher the chance that the profession would attract highly qualified and motivated teachers and caregivers. Whereas this improves the quality and attractiveness of the services, higher structural quality also means an overall higher cost of ECEC and maybe even higher parental fees to compensate for that, which could also limit the intensity of use (Gorry and Thomas, 2017).

Finally, the curriculum is increasingly recognised as a crucial element of high-quality ECEC (Sylva et al., 2015). Sylva et al. (2015) distinguish between the national steering documents with educational guidelines provided by the government (i.e. official curriculum) and the implemented curriculum

[5] There are two main dimensions to quality in ECEC: structural quality and process quality (Dumčius et al., 2014; NICHD, 2002). In terms of regulatory power, the state has most control over standardising structural quality, as more of the teacher-, family- and child-level determinants come into play during the process quality, such as pedagogical practices, relationship quality, greater parental engagement, etc. (Dumčius et al., 2014).

realised by the ECEC staff in their daily practice, which may or may not be legislated. To lead to high-quality ECEC, curriculum needs to be clear, coherent, consistent, holistic, child-centred, and inclusive (Sylva et al., 2015; Wood and Hedges, 2016). Moreover, the ECEC and primary school curricula should have continuity (OECD, 2017a). However, while all European countries provide a national steering document of educational guidelines for 3-6 year-olds in centre-based ECEC, such a national curriculum is absent in almost half of the European countries (Eurydice, 2014).

Besides the structural quality regulations, it also matters whether the ECEC system is harmonised for younger and older children, in other words, whether the system is split by age group or unitary/integrated. Traditionally, care for younger children is considered as 'baby-sitting' while mothers work, whereas early education is considered as preparation of children for primary school (Kaga et al., 2010). These two phases of ECEC have usually developed independently from each other across Europe, with the former being more often left to the families' initiative. Split systems still treat these two dimensions of ECEC separately and keep their resources divided instead of harmonizing them towards a single goal (Herczog, 2012). In contrast, integrated ECEC systems aim for harmonised goals in ECEC, a continuum between care, play and learning, combined resources, less variation in access and quality, more consistent regulatory, funding and staffing regimes, harmonised staff qualifications, and more consistent schemes for parental fees and opening hours (Eurydice, 2014; OECD, 2012, p. 28). Unification of the ECEC system for both age groups benefit especially younger children (Kaga et al., 2010).

2.2.3. Financing

European countries differ remarkably in their levels of investment in ECEC, due to factors such as their national wealth and the relative importance they attach to ECEC (Bennett, 2004). To sustain ECEC services, in addition to the governmental funding, contributions from parents and other private providers are often foreseen. The financing of the ECEC system can be organised in many ways. One of the determinants is whether the system is universal or targeted (Myers, 2000). While some countries offer universal ECEC provision, others aim for targeting the most disadvantaged in order to limit public investment.

The cost of the services for the parents is one of the first obstacles that make or break ECEC attendance (Abrassart and Bonoli, 2015; Bainbridge et al., 2005). Hence, many countries have financial support schemes (means-testing, tax credits, a weekly number of hours provided free of charge, etc.) in place for families that find ECEC unaffordable (Eurydice, 2014). The level of public funding of ECEC is

measured both as the total expenditure on childcare and pre-school in the country and expenditure per child (Myers, 2000).

2.3. Data and Methods

2.3.1. Data

At the individual-level, we use the 2014 EU-SILC cross-sectional data (EUSILC UDB, 2014). The dataset contains the number of hours of weekly ECEC attendance by the units of our analysis, 0-5 year-olds. We conducted two sets of analyses: for 0-2 year-olds (N=11847) and 3-5 year-olds (N=17954).[6] While only 23% of 0-2 year-olds in Europe attend ECEC in the sample, this rate increases to 73% for 3-5 year-olds.[7]

Children's data were matched with their parents' data to control for the family background. To correct for sampling bias, we applied the personal cross-sectional weights when producing both the descriptive statistics and the multilevel analyses, using the *pweight* (design weight) function in Stata. While some level-1 independent variables have no missing values at all, the ones that contain missing values do not follow a noticeable pattern when cross-tabulated against key household characteristics such as income and country of residence. For this reason, the cases that have missing values in any of the level-1 control variables were deleted list-wise. The countries with missing values at level-2 were also deleted list-wise from the analysis in that particular model.[8] Finally, the 23 outliers who attended ECEC more than 75 hours per week were removed in order to reduce the noise in the results.

2.3.2. Dependent Variable

Our dependent variable is the combined hours of weekly attendance to various types of formal ECEC: education at pre-school,[9] education at compulsory school,[10] and childcare at formal day-care centres (organised and controlled by a public or private structure). The hours of attendance to these three were combined for two reasons: Firstly, to avoid the confusion that comes with different starting ages of pre-school or compulsory school, because there is no internationally standardised way of organising ECEC. Secondly, to account for the centre-based and/or paid ECEC use at any given time between 0 and 5 years, regardless of the different terminology used in each country (e.g. ECEC is referred to as

6 This is the maximum sample size from 32 countries in the null models. As the level-1 and level-2 variables are included in the analyses, the sample size drops due to missing data.
7 The data is not weighted. See Table 2-9 in Appendices for the attendance rates of the two age groups in each country.
8 Romania is absent in all the analyses done for 0-2 year-olds because none of the 0-2 year-olds in the Romanian sample attend ECEC.
9 The educational classification used for pre-school or equivalent is ISCED 0.
10 Compulsory school is primary schooling (not pre-school even when compulsory).

day-care until the child starts primary school at age 7 in Finland while in Belgium pre-school starts as early as 2,5 years).[11]

2.3.3. Individual and Household-level Control Variables

Several individual- and household-level predictors are controlled for, in order to account for children's individual circumstances. These are chosen in line with the socio-ecological model that takes into account the child's environment from the inner (household- and family-level) to the extended circle (system-level) (Pungello and Kurtz-Costes, 1999; Sibley et al., 2015; Tang et al., 2012; Vandenbroeck et al., 2008).

In accordance with the socio-ecological model, we control for the age of the child (Bainbridge et al., 2005; Sibley et al., 2015; Tang et al., 2012), number of children in the household (Geoffroy et al., 2012; Sibley et al., 2015; Tang et al., 2012), adult-to-child ratio in the household (Geoffroy et al., 2012; Sylva et al., 2007; Zachrisson et al., 2013), degree of urbanisation of the area where the family resides (Grace et al., 2014), equivalised disposable income in PPP[12] (Bainbridge et al., 2005; Kim and Fram, 2009; Magnuson and Shager, 2010; Sibley et al., 2015; Sylva et al., 2007; Tang et al., 2012), and education level of the mother (Geoffroy et al., 2012; Kim and Fram, 2009; Tang et al., 2012). Work status of the parents (in particular, the mother) is another potential predictor (Geoffroy et al., 2012; Kim and Fram, 2009; Sibley et al., 2015; Tang et al., 2012), and since the EU-SILC already contains information on the number of hours worked per week, we opt for this variable to make use of more information regarding the employment situation of the mother.

The minority status of the parents (e.g. race, ethnicity, immigration background, language spoken at home) is another key predictor of the intensity of ECEC use (Sibley et al., 2015; Sylva et al., 2007; Tang et al., 2012; Zachrisson et al., 2013). Immigrants are particularly vulnerable in Europe, not only due to the language barriers, cultural differences, discrimination and issues regarding integration (Herczog, 2012; Johansson and Höjer, 2012), but also because they may lack the information about their rights as well as the know-how on accessing various services (Chapter 5). The present study takes into account the immigration background of the child's parents in particular. We used a binary variable to control for this: 'neither or one of the parents has immigrated into the country' versus 'both of the parents have immigrated' (irrespective of the country of origin).[13] We made families with both parents

11 Our cut-off point is 5 years because 6 year-olds start primary school in many countries.

12 The EU-SILC contains the income-related data of the household with no missing values and also provides the equivalised disposable income in Euros. We converted these values into purchasing power parity in Euros using the PPP rates for 2013 (the reference year of incomes reported in EU-SILC 2014) (CIRCABC, 2016). The values were divided by 1000 to make interpretation easier.

13 A three-category variable (neither, one, or both of the parents being immigrants) did not yield significant results for the middle category.

being immigrants our focus because we believe that the particular disadvantage resulting from the lack of information on how to access ECEC would be a problem especially for these families. Henceforth, the term 'immigrant families' denotes families where both parents have an immigrant status.

As an alternative to formal ECEC, both the number of weekly hours of care by "grand-parents, other family members (outside parents), other relatives, friends or neighbours" (unpaid and informal) and the number of weekly hours of care by childminders (paid and informal) are also controlled for separately. We expect these variables to have a negative effect on the use of centre-based ECEC because care provided by informal carers may be used as a substitute for formal ECEC.

Table 2-1: Descriptive statistics of individual-level variables for 0-2 year-olds (weighted)

	Mean or %	St. Dev.	Min.	Max.
Dependent Variable				
Weekly hours of ECEC attendance	6,25	13,03	0	73
Level-1 Control Variables				
Continuous Variables				
Adult-to-child ratio	1,75	0,85	0,33	9
Weekly number of working hours of the mother	16,65	18,01	0	99
Age of the child	1,29	0,72	0	2
Weekly hours of care by a childminder	1,56	6,86	0	90
Weekly hours of care by kith and kin	4,62	11,12	0	99
Equivalised disposable income (PPP in thousands)	17,32	11,34	-56,94	224,74
Categorical Variables				
Immigrant status of parents				
Neither or one immigrant	89,2%			
Both immigrant	10,8%			
Degree of urbanisation				
Thinly populated	24,8%			
Intermediate	29,7%			
Densely populated	45,5%			
Education level of the mother				
Secondary or lower	51,4%			
Post-secondary	48,6%			
Number of 0-5 year-olds in the household				
One child	63,1%			
Two or more children	36,9%			

Table 2-2: Descriptive statistics of individual-level variables for 3-5 year-olds (weighted)

	Mean or %	St. Dev.	Min.	Max.
Dependent Variable				
Weekly hours of ECEC attendance	21,39	15,33	0	72
Level-1 Control Variables				
Continuous Variables				
Adult-to-child ratio	1,75	0,82	0,33	10
Weekly number of working hours of the mother	19,27	17,97	0	99
Age of the child	4,03	0,81	3	5
Weekly hours of care by a childminder	1,05	5,65	0	99
Weekly hours of care by kith and kin	4,32	9,91	0	99
Equivalised disposable income (PPP Euro in thousands)	16,77	11,70	-29,06	504,79
Categorical Variables				
Immigrant status of parents				
Neither or one immigrant	91%			
Both immigrant	11%			
Degree of urbanisation				
Thinly populated	28%			
Intermediate	30%			
Densely populated	42%			
Education level of the mother				
Secondary or lower	53,4%			
Post-secondary	46,6%			
Number of 0-5 year-olds in the household				
One child	65%			
Two or more children	35%			

2.3.4. Country-level Independent Variables

As we test the relevance of the same ECEC policy measures for the ECEC use of both younger and older children, we used different independent variables for these two age groups (except for the provision-related variables) for two reasons: (1) the unavailability of standardised policies and data for both age groups (e.g. minimum qualifications for educational staff), and (2) the lack of data variance for one age group as opposed to the other (e.g. the existence of curriculum).[14]

Moreover, we controlled for the length of 'well-paid' or adequately compensated (at least 66% of the previous earnings) parental leave available for mothers in the analyses for younger children in order

14 The values that each country was assigned for each independent variable are reported in Table 2-9 in Appendices.

to obtain more accurate results. Even though the length of parental leave is relevant more to family (rather than ECEC) policies, we expect it to have a significant impact on parents' needs and decisions to use ECEC services. We particularly chose the length of leave available to mothers because not only historically but also in the 21st century, welfare states assume 'care' to be a primary role for women, while men and women are increasingly expected to earn their social security equally (Javornik and Kurowska, 2017). In countries where well-paid parental leave is short, working mothers have a big incentive to use childcare. For this reason, all analyses for younger children were ran with an extra control variable at level-2, which is the combined length of well-paid maternal and parental leave available to mothers (in months), based on the data provided by the (Leave Network, 2013). In the case of missing data for some countries, the values for the countries were complemented by the data provided by Eurydice (2014).[15] No country-level control variables were used in the analyses for older children so as to not lose an extra degree of freedom and because the relevance of parental leave is not as high for older children.

2.3.4.1. Provision

Whether private self-financing ECEC provision is allowed (Eurydice, 2014, p. 76): in examining the potential link between the intensity of use and the commodification of ECEC, we use a dummy variable reflecting whether private self-financing ECEC provision is legally allowed by the government.[16] We use two different variables for the two age groups, since most ECEC systems are split in Europe – with the 2012-2013 school year as the reference period.

Start of legal entitlement (Eurydice, 2014, p. 40): we investigate the link between ECEC use and the availability of places in ECEC guaranteed by the government (regardless of the amount of parental fees).

Start of free provision (Eurydice, 2014, p. 84): we aim to reveal the relationship between ECEC use and the availability of ECEC hours free of charge (with or without guaranteed legal entitlement to a place).

15 It is very difficult to find accurate and reliable information regarding the length of parental leave since different sources such as the Eurydice, OECD and the Leave Network report different data, usually due to the flexible nature of the leave policies across countries. We chose to use the data provided by the Leave Network because it is the most comprehensive source of information on the issue (Javornik and Kurowska, 2017) and reports the leave policies in each country in great detail, which gives researchers the freedom to access the type of data they need. Considering the different leave options some countries provide at different levels of compensation, we chose the option of 'well-paid' leave, i.e. payment of at least 66% of earnings. The length of leave reported at Eurydice (2014) is different for some countries, but we used this information in the absence of information in the Leave Network (2013), in order to avoid an even smaller level-2 sample size due to the missing values. In 2013, Slovakia did not offer well-paid leave with the 66% rate; hence, as reported by the Leave Network, the value 0 was adopted in the analyses.

16 Note that this variable is only concerned with the legal possibility of commercial provision. We do not test for whether commercial ECEC exists or not in practice.

We use both of these as continuous variables in the analyses for 3-5 year-olds, in the form of the age of children (in years) the moment they are given the right of legal entitlement or free provision. However, there are only a handful of countries ensuring legal entitlement or free provision to children younger than 3 years of age, which led to insignificant coefficients in the case of continuous variables. Since we are particularly interested in knowing whether early entitlement or free provision makes any difference for younger children, we converted these into dummy variables (i.e. the presence or absence of legal entitlement or free provision) for the analyses for 0-2 year-olds.

Since having the option of free ECEC is not necessarily combined with the legal entitlement to a place in an ECEC facility (or vice versa), free provision and legal entitlement are modelled separately. A limitation of this study is that we do not take into account the number of ECEC hours children are entitled to with regard to these two variables, but only whether the services are legally available and/or free. In the cases where there is no legal entitlement to ECEC or free provision, we consider the start of compulsory education (pre-primary or primary) as the corresponding value because compulsory education encompasses both legal entitlement and free access to school. In the case of federal countries (e.g. Belgium, Germany, UK), the value that is valid for the majority of the regions in the country is adopted. In the case of the Netherlands for which no value was reported in Eurydice (2014), we complemented the data based on the information provided in the (OECD, 2015). The reference year for both variables is the school year 2012-2013.

2.3.4.2. Regulation

ECEC system being split or unitary (Eurydice, 2014, p. 34): in examining the potential link between ECEC use and whether ECEC is harmonised for all children below the age of primary school, we use a three-category variable: split, partly integrated, fully integrated/unitary. In the case of partial integration, although managed by the same authority, staff qualifications, curricula or funding arrangements are usually different between age groups. Since unitary systems are argued to be beneficial especially for younger children, this variable is included only in the analyses for 0-2 year-olds. The data is from the school year 2012-2013.

Existence of a curriculum for younger children (Eurydice, 2014, p. 34): in order to see whether children participate more in ECEC in countries where educational guidelines exist, we use a dummy variable in the analyses for the younger children from the school year 2012-2013. This variable is excluded from the analyses for older children because all European countries have educational guidelines in place for

older children. Note that Belgium and the United Kingdom are assigned missing values since half of the regions in both countries provide curricula for younger children and half do not.

Minimum pre-school staff qualification (Eurydice, 2014, p. 101): to understand the relationship between staff qualification and ECEC use, we use the number of years pre-school teachers should be educated before they start teaching (based on the data from 2012-2013 school year). Note that all European countries impose qualification standards for 'educational staff' working with older children. However, such standards may be missing or unclear for the 'care staff' (Eurydice, 2014, p. 100). Due to the large difference across countries with regard to the definitions of and requirements for educational and care staff working with younger children, we could not use a similar variable in the analyses for younger children. Hence, this variable is only used in the analyses for 3-5 year-olds.

Salary of pre-school teachers (Education at a Glance, 2015): we also look into the relationship between the intensity of ECEC use and the salary (PPP in USD) of teachers in 2013 after 10 years of service in public pre-schools. Since the data is only available for 'pre-schools', this variable is only included in the analyses for 3-5 year-olds.

2.3.4.3. Financing

Public spending per 0-5 year-old in ECEC settings (OECD Family Database, 2011) is used as an indicator of the generosity of public support for ECEC. To understand the relationship between the public spending per child in ECEC and the intensity of ECEC use, we use the data from 2011 in PPP in EUR in the analyses for both age groups.

Out-of-pocket childcare costs for single parents as a percentage of average salary (OECD Family Database, 2012): to tackle the relationship between the burden of childcare fees on the average single-parent household and ECEC use, we include a variable regarding the share of full-time childcare costs (for two children aged 2 and 3 in a typical care facility) expressed in percent of the average wage. This share of wage required for out-of-pocket childcare costs is inclusive of childcare benefits, tax reduction and other benefits offered to single-parent families by the government and used only in the analyses for younger children.

Share of funding for ISCED 0 from private sources (Education at a Glance, 2013): we examine whether the amount of private funding at the country-level is related to the intensity of ECEC use at the individual-level. We test for the share of private funding for pre-school, considering that ECEC is less privatised for pre-school children compared to younger ones and the effect of private funding for services for older children is even more crucial. Most of the private funding for ECEC comes from

households (Eurydice, 2014) and the data are from 2010. This variable is only used in the analyses for 3-5 year-olds as such data is not available, to our knowledge, for younger children.

Table 2-3: Descriptive statistics of country-level independent variables

	Mean or %	St. Dev.	Min.	Max.	n
Continuous variables					
Total well-paid leave available to mothers (maternity + parental in months)	10,95	8,94	0	37,70	31
Start of legal entitlement (age of child)	3,70	1,83	0,60	7	31
Start of free provision (age of child)	3,94	1,77	0	7	31
Minimum staff qualification for 3-6 year-olds (years of post-sec. edu.)	3,07	1,25	0	5	30
Salary of pre-school teachers (10 years exp.) (1000 USD in PPS)	34,30	17,19	10,94	91,20	20
Public spending per 0-5 year-old in care and education (1000 EUR in PPS)	24,74	16,48	5,39	73,57	24
Net (out-of-pocket) cost of childcare for lone parents (% of average wage)	8,68	9,36	0	41,55	27
Proportion of funding for ISCED 0 from private sources	11,57	9,14	0	27,80	27
Categorical variables					
Self-financing private ECEC provision for 0-3 year-olds					30
Not allowed	33,33%				10
Allowed	66,67%				20
Self-financing private ECEC provision for 3-6 year-olds					30
Not allowed	50,00%				15
Allowed	50,00%				15
Start of legal entitlement before age 3					31
Starts before 3	25,81%				8
Starts at 3 or later	74,19%				23
Start of free provision before age 3					31
Starts before 3	16,13%				5
Starts at 3 or later	83,87%				26
ECEC system split, mixed or integrated					31
Integrated/unitary	29,03%				9
Mixed	19,35%				6
Split	51,61%				16
Curriculum for 0-3 year-olds					28
Exists	60,71%				17
Does not exist	39,29%				11

2.3.5. Method of Analysis

Our aim is to explain whether an individual-level outcome may be linked to contextual characteristics, which requires multilevel modelling so that individual- and country-level variances are observed simultaneously. Multilevel modelling is superior to the ordinary least square estimates in the case of nested data, as the OLS systematically underestimates coefficients and affect (Brandt et al., 2009; Cameron and Trivedi, 2010; Hox, 2010). However, we did not only use the standard multilevel modelling, but used *multilevel Tobit modelling* in order not to lose information and model all hours of

use simultaneously, because almost three quarters of our sample of 0-2 year-olds and one fourth of our sample of 3-5 year-olds have reported 0 hours of ECEC attendance (Rabe-Hesketh and Skrondal, 2012). Tobit models allow certain values of the dependent variable to be censored but still take into account the censored part of the data. Hence, the children who attend 0 hours of ECEC have been censored as our focus is the 'intensity' of ECEC use, taking into account that some do not use ECEC at all. Tobit regression provides more consistent parameter estimates because of the censoring (Tobin, 1958; Warner, 2013). As a result, we were able to develop models where variables were tested for their link with children attending or not attending ECEC, and if attending, the number of hours they spend in ECEC every week. To apply multilevel Tobit modelling, we used the *metobit* function in Stata version 15 (StataCorp, 2017), and set the starting values for the estimation to 0 and the integration method to *ghermite* (nonadaptive Gauss-Hermite quadrature) to avoid model non-convergence.

2.4. Results and Discussion

In the analyses for 0-2 year-olds, the coefficients for the degree of urbanisation, adult-to-child ratio and the number of children under 6 in the household are insignificant, despite sufficient variation in the data. The role of maternal education, the number of weekly working hours of the mother, number of hours of care by childminders and kith and kin, income, and the child's age is amplified when it comes to the ECEC participation of younger children in comparison with the effect sizes found for older children (Model 1, Table 2-4). The effect of immigrant status of parents is only marginally significant in the first model and its significance changes throughout the analyses. Despite the weighting, this may be due to the insufficient sampling of immigrants in the dataset, especially for 0-2 year-olds. Finally, the total length of well-paid maternal and parental leave is significantly associated with the number of hours of ECEC use of younger children (Model 1a, Table 2-4), and this variable remains significant throughout the subsequent analyses. The association is negative, meaning that the longer the well-paid leave, the lower are the number of hours of ECEC use for younger children. This is an expected result, because the availability of well-paid leave postpones the start of ECEC use. Hence, it is more important to find out whether other policy instruments have any positive or negative correlations with ECEC use despite even when the length of leave is taken into account. Model 1a is the baseline model against which the subsequent models are compared.

The ECEC usage of 3-5 year-olds is positively correlated with the age of the child, income, maternal (post-secondary) education, number of hours the mother works, and increasing urbanisation; and negatively correlated with the number of children under 6 in the household, the adult-to-child ratio in the household, and the number of hours of care received from childminders as well as kith and kin (Model 1, Table 2-6). The use is also lower among older children both of whose parents are immigrants.

Table 2-4: Results of multilevel Tobit analyses for 0-2 year-olds

		Model 1	Model 1a (baseline)	Model 2	Model 2a	Model 3	Model 3a	Model 3b
Fixed Part (individual-level)		Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Intercept		-61,93*** (4,82)	-52,74*** (5,92)	-28,32*** (6,30)	-41,54*** (5,90)	-56,12*** (5,70)	-43,00*** (6,31)	-54,20*** (5,44)
Parents immigrated or not	*Ref: Neither or one*							
	Both immigrant	-5,99° (3,54)	-5,87* (2,98)	-5,09 (3,19)	11,86* (5,27)	-5,68° (3,06)	-7,42** (2,68)	-5,89° (3,10)
Degree of urbanisation	*Ref: Densely populated*							
	Intermediate	-0,26 (1,69)	-0,29 (1,64)	-0,25 (1,67)	-0,50 (1,63)	-0,90 (1,77)	-0,06 (1,60)	-0,77 (1,73)
	Thinly populated	-2,87 (2,25)	-3,30 (1,97)	-3,25 (1,98)	-3,06 (1,98)	-3,12 (2,04)	-3,48° (1,97)	-2,98 (1,97)
Education level of the mother	*Ref: Secondary or lower*							
	Post-secondary	7,00*** (1,63)	7,42*** (1,37)	6,75*** (1,55)	7,32*** (1,40)	6,88*** (1,50)	7,01*** (1,47)	7,32*** (1,38)
Adult-to-child ratio in the household		-1,98 (1,59)	-2,88 (1,80)	-3,01 (1,85)	-2,35 (1,75)	-2,33 (1,75)	-3,09° (1,84)	-2,34 (1,74)
Weekly working hours of mother		0,88*** (0,13)	0,84*** (0,13)	0,85*** (0,14)	0,86*** (0,14)	0,88*** (0,15)	0,83*** (0,14)	0,86*** (0,14)
Age of the child		22,87*** (2,00)	22,29*** (2,00)	22,18*** (2,00)	22,30*** (2,00)	22,22*** (2,00)	22,25*** (2,00)	22,37*** (2,03)
Number of 0-5 year-olds in the household	*Ref: One child*							
	Two or more	-2,12 (2,04)	-2,94 (2,36)	-2,82 (2,36)	-2,25 (2,25)	-2,27 (2,26)	-3,11 (2,38)	-2,36 (2,27)
Hours of care by childminder		-1,45*** (0,26)	-1,42*** (0,27)	-1,41*** (0,27)	-1,41*** (0,27)	-1,41*** (0,27)	-1,42*** (0,28)	-1,42*** (0,27)
Hours of care by kith and kin		-0,90*** (0,17)	-0,89*** (0,19)	-0,88*** (0,19)	-0,90*** (0,19)	-0,88*** (0,19)	-0,88*** (0,19)	-0,90*** (0,19)
Equivalised disposable income (PPP Euro in thousands)		0,16* (0,07)	0,20** (0,06)	0,22** (0,07)	0,19** (0,07)	0,18* (0,07)	0,22** (0,07)	0,22** (0,07)
Fixed Part (country-level)								
Total well-paid leave available to mothers			-0,92*** (0,12)	-1,54*** (0,13)	-1,36*** (0,08)	-1,74*** (0,14)	-0,80*** (0,13)	-1,34*** (0,10)
Private self-financing ECEC provision allowed for 0-3 year-olds	*Ref: Not allowed*							
	Allowed			-20,29*** (1,97)	-11,50*** (1,70)			

Private self-financing ECEC provision for 0-3 year-olds X Immigrant status of parents	*Ref: Not allowed & Neither or one immigrant*							
	Allowed & both immigrant				-19,55** (5,76)			
Legal entitlement to ECEC for under 3 year-olds	*Ref: Starts over 3 years*							
	Starts under 3 years					30,97*** (1,80)	18,15*** (2,10)	40,04*** (2,94)
Legal entitlement to ECEC for under 3 year-olds X Immigrant status of parents	*Ref: Starts over 3 & Neither or one immigrant*							
	Starts under 3 & both immigrant						15,78* (6,52)	
Legal entitlement to ECEC for under 3 year-olds X Income	*Ref: Starts over 3 years*							
	Starts under 3 years							-0,52*** (0,15)
Random Part								
Level 1 Individuals (residual variance)		776,66 (84,85)	759,43 (88,45)	756,44 (87,19)	755,18 (86,85)	761,39 (87,68)	753,53 (88,20)	757,27 (87,33)
Level 2 Countries (intercept variance)		86,36 (7,97)	62,39 (9,12)	30,59 (4,61)	52,48 (6,10)	23,99 (3,25)	73,04 (17,75)	51,98 (5,95)
Model Fit Statistics								
Log pseudolikelihood		-13368331	-13280884	-13280516	-13266012	-13280843	-13281672	-13267370
Change in log pseudolikelihood		8516148,72***	174892,85***	735,49***	29008,68***	81,74***	-1657,46	26946,71***
Number of estimated parameters		14	15	16	17	16	17	17
Change in the number of estimated parameters		11	1	1	1	1	1	1
Sample Size								
Level-1 n	Total	9138	8794	8794	8794	8794	8794	8794
	Censored (0's)	7178	6858	6858	6858	6858	6858	6858
	Uncensored	1960	1936	1936	1936	1936	1936	1936
Level-2 n		28	27	27	27	27	27	27

*** $p < .001$; ** $p < .01$; * $p < .05$; ° $p < .10$

Table 2-5: Results of multilevel Tobit analyses for 0-2 year-olds (continued)

		Model 4	Model 4a	Model 5	Model 5a	Model 6	Model 6a	Model 7	Model 8
Fixed Part (individual-level)		Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Intercept		-73,19*** (6,65)	-41,92*** (6,29)	-64,18*** (7,25)	-42,87*** (6,29)	-34,47*** (5,72)	-50,96*** (4,28)	-46,49*** (6,11)	-55,38*** (5,06)
Parents immigrated or not	*Ref: Neither or one*								
	Both immigrant	-6,40* (3,08)	-4,33 (3,16)	-5,72° (3,10)	17,13*** (2,53)	-1,23 (2,85)	-2,38 (2,39)	-5,10 (3,23)	-5,68° (3,25)
Degree of urbanisation	*Ref: Densely populated*								
	Intermediate	-1,45 (1,77)	-0,39 (1,79)	-0,40 (1,67)	-0,64 (1,78)	-0,95 (2,51)	-1,18 (2,53)	-0,35 (1,64)	-0,32 (1,90)
	Thinly populated	-2,36 (1,94)	-3,36° (1,97)	-3,09 (1,97)	-3,24 (2,04)	-5,40* (2,21)	-5,24** (1,99)	-3,01 (2,03)	-2,09 (1,58)
Education level of the mother	*Ref: Secondary or lower*								
	Post-secondary	7,46*** (1,46)	6,21*** (1,68)	7,36*** (1,39)	7,03*** (1,49)	5,42** (2,05)	6,35*** (1,66)	6,67*** (1,47)	7,62*** (1,25)
Adult-to-child ratio in the household		-2,55 (1,88)	-3,60° (1,93)	-2,70 (1,77)	-2,57 (1,67)	-3,85° (2,01)	-2,97 (1,92)	-3,48° (2,07)	-4,84* (1,93)
Weekly working hours of mother		0,89*** (0,14)	0,89*** (0,14)	0,85*** (0,14)	0,88*** (0,14)	1,00*** (0,09)	0,98*** (0,09)	0,87*** (0,14)	0,82*** (0,15)
Age of the child		22,45*** (1,98)	22,24*** (2,06)	22,22*** (1,98)	22,25*** (1,98)	24,29*** (3,02)	24,16*** (3,15)	21,99*** (1,99)	21,42*** (1,83)
Number of 0-5 year-olds in the household	*Ref: One child*								
	Two or more	-2,19 (2,36)	-3,37 (2,42)	-2,65 (2,30)	-2,50 (2,19)	-3,55 (2,47)	-2,78 (2,44)	-3,40 (2,65)	-5,13* (2,59)
Hours of care by childminder		-1,40*** (0,26)	-1,42*** (0,27)	-1,41*** (0,27)	-1,41*** (0,27)	-1,76*** (0,15)	-1,76*** (0,14)	-1,42*** (0,27)	-1,42*** (0,29)
Hours of care by kith and kin		-0,93*** (0,19)	-0,87*** (0,19)	-0,88*** (0,19)	-0,88*** (0,19)	-1,16*** (0,17)	-1,11*** (0,16)	-0,89*** (0,20)	-0,90*** (0,23)
Equivalised disposable income (PPP Euro in thousands)		0,17* (0,07)	0,25** (0,08)	0,18** (0,07)	0,18* (0,08)	0,21* (0,08)	0,40*** (0,09)	0,18* (0,08)	0,21** (0,08)
Fixed Part (country-level)									
Total well-paid leave available to mothers		-0,60*** (0,10)	-1,39*** (0,22)	-0,63*** (0,07)	-1,19*** (0,12)	-1,91*** (0,17)	-1,73*** (0,11)	-1,06*** (0,12)	-0,34** (0,11)
Free ECEC provision for under 3 year-olds	*Ref: Starts over 3 years*								
	Starts under 3 years	5,41** (2,01)	-13,59*** (3,59)						
Free ECEC provision for under 3 year-olds X Income	*Ref: Starts over 3 years*								
	Starts under 3 years		-0,37* (0,14)						
ECEC system being split or integrated	*Ref: Unitary*								
	Mixed			17,99*** (2,90)	-1,54 (2,09)				

	Split			-7,26*** (1,82)	-20,68*** (2,15)				
ECEC system being split or integrated X Immigrant status of parents	*Ref: Unitary & neither or one immigrant*								
	Partial x both immigrant				-26,55*** (3,96)				
	Split x both immigrant				-21,50*** (4,33)				
Curriculum for 0-3 year-olds	*Ref: Doesn't exist*								
	Exists					15,64*** (1,99)	21,79*** (2,31)		
Curriculum for 0-3 year-olds X Income	*Ref: Doesn't exist*								
	Exists						-0,45** (0,13)		
Public spending per 0-5 year-old in care and education								0,13* (0,06)	
Net (out of pocket) cost of childcare for lone parents (% of average wage in the country)									-0,53*** (0,07)
Random Part									
Level 1 Individuals (residual variance)		776,94 (88,18)	760,98 (90,30)	759,60 (87,84)	757,23 (87,44)	850,65 (102,52)	837,81 (102,36)	739,74 (83,82)	718,48 (77,73)
Level 2 Countries (intercept variance)		77,99 (15,37)	33,38 (7,91)	44,75 (5,27)	25,10 (3,96)	81,35 (13,29)	70,42 (6,91)	54,37 (7,36)	20,23 (4,83)
Model Fit Statistics									
Log pseudolikelihood		-13302904	-13306487	-13272796	-13269641	-10353141	-10317632	-13094053	-12130650
Change in log pseudolikelihood		-44039,9	-7166,01	16176,11***	6310,82***	5855487,27***	71016,20***	373661,74***	2300467,58***
Number of estimated parameters		16	17	17	19	16	17	16	16
Change in the number of estimated parameters		1	1	2	2	1	1	1	1
Sample Size									
Level-1 n	Total	8794	8794	8794	8794	7851	7851	7904	7643
	Censored (0's)	6858	6858	6858	6858	6208	6208	6044	5870
	Uncensored	1936	1936	1936	1936	1643	1643	1860	1773
Level-2 n		27	27	27	27	25	25	21	23

*** $p < .001$; ** $p < .01$; * $p < .05$; ° $p < .10$

Table 2-6: Results of multilevel Tobit analyses for 3-5 year-olds

		Model 1	Model 2	Model 3	Model 4	Model 4a	Model 5
Fixed Part (individual-level)		Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Intercept		-12,42** (3,60)	-11,66** (3,57)	-10,07** (3,47)	-6,39° (3,59)	-8,42* (4,11)	-18,88*** (3,38)
Parents immigrated or not	*Ref: Neither or one*						
	Both immigrant	-2,84* (1,18)	-2,62* (1,22)	-2,35* (1,18)	-2,59* (1,14)	-2,84* (1,31)	-2,47* (1,22)
Degree of urbanisation	*Ref: Densely populated*						
	Intermediate	-2,52*** (0,60)	-2,32*** (0,58)	-2,33*** (0,61)	-2,40*** (0,62)	-2,42*** (0,58)	-2,48*** (0,63)
	Thinly populated	-2,79* (1,08)	-2,61* (1,04)	-2,86** (1,03)	-2,72** (1,03)	-2,51* (1,09)	-2,64* (1,06)
Education level of the mother	*Ref: Secondary or lower*						
	Post-secondary	2,29** (0,73)	2,13** (0,72)	1,95** (0,70)	2,05** (0,72)	2,09** (0,72)	2,06** (0,71)
Adult-to-child ratio in the household		-2,58** (0,86)	-2,78** (0,88)	-2,95** (0,91)	-2,70** (0,91)	-2,76** (0,84)	-2,80** (0,91)
Weekly working hours of mother		0,31*** (0,04)	0,31*** (0,04)	0,30*** (0,04)	0,31*** (0,04)	0,31*** (0,04)	0,32*** (0,04)
Age of the child		6,88*** (0,83)	6,87*** (0,83)	6,86*** (0,82)	6,87*** (0,83)	6,88*** (0,84)	6,85*** (0,83)
Number of 0-5 year-olds in the household	*Ref: One child*						
	Two or more	-3,11** (1,17)	-3,27** (1,19)	-3,43** (1,18)	-3,17** (1,22)	-3,28** (1,18)	-3,22** (1,22)
Hours of care by childminder		-0,79*** (0,13)	-0,78*** (0,14)	-0,78*** (0,13)	-0,79*** (0,14)	-0,79*** (0,14)	-0,79*** (0,13)
Hours of care by kith and kin		-0,51*** (0,07)	-0,52*** (0,07)	-0,51*** (0,07)	-0,51*** (0,07)	-0,53*** (0,07)	-0,52*** (0,07)
Equivalised disposable income (PPP Euro in thousands)		0,10*** (0,02)	0,10*** (0,02)	0,11*** (0,02)	0,10*** (0,02)	0,22** (0,08)	0,09*** (0,02)
Fixed Part (country-level)							
Private self-financing ECEC provision allowed for 3-6 year-olds	*Ref: Not allowed*						
	Allowed		-0,21 (0,38)				
Start of legal entitlement (age of child)				-0,78*** (0,15)			

Start of free provision (age of child)					-1,10*** (0,13)	-0,94*** (0,25)	
Start of free provision X Income						-0,03* (0,01)	
Minimum staff qualification for 3-6 year-olds (years of education)							2,96*** (0,15)
Random Part							
Level 1 Individuals (residual variance)		237,34 (32,19)	232,78 (31,38)	232,21 (32,25)	233,19 (31,39)	234,16 (31,52)	233,31 (31,27)
Level 2 Countries (intercept variance)		11,56 (0,78)	11,01 (0,83)	14,46 (1,16)	6,51 (0,39)	23,77 (2,82)	4,23 (0,46)
Model Fit Statistics							
Log pseudolikelihood		-45044765	-44606944	-44615707	-44616187	-44631904	-44630264
Change in log pseudolikelihood		2,46e+07***	875641,28***	858115,02***	857155,94***	-31434,51	829002,12***
Number of estimated parameters		14	15	15	15	16	15
Change in the number of estimated parameters		11	1	1	1	1	1
Sample Size							
	Total	13562	13135	13135	13135	13135	13135
Level-1 n	Censored (0's)	3865	3581	3581	3581	3581	3581
	Uncensored	9697	9554	9554	9554	9554	9554
Level-2 n		28	27	27	27	27	27

*** $p < .001$; ** $p < .01$; * $p < .05$; ° $p < .10$

Table 2-7: Results of multilevel Tobit analyses for 3-5 year-olds (continued)

		Model 6	Model 7	Model 7a	Model 8	Model 8a
Fixed Part (individual-level)		Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Intercept		-10,86* (4,94)	-9,45* (4,06)	-12,57** (4,13)	-15,14*** (4,13)	-10,51** (3,47)
Parents immigrated or not	*Ref: Neither or one*					
	Both immigrant	-2,22° (1,24)	-2,45* (1,16)	2,89 (2,21)	-2,77* (1,23)	-2,22° (1,34)
Degree of urbanisation	*Ref: Densely populated*					
	Intermediate	-1,70*** (0,47)	-2,34*** (0,65)	-2,44*** (0,59)	-2,17** (0,76)	-2,46** (0,72)
	Thinly populated	-2,51° (1,37)	-2,50* (1,11)	-2,47* (1,12)	-2,86** (1,10)	-3,21** (1,18)
Education level of the mother	*Ref: Secondary or lower*					
	Post-secondary	1,80° (0,92)	1,71* (0,68)	1,87** (0,68)	1,85* (0,75)	1,42° (0,76)
Adult-to-child ratio in the household		-2,82* (1,25)	-2,78* (1,29)	-2,77* (1,24)	-2,84** (0,97)	-3,75*** (0,91)
Weekly working hours of mother		0,28*** (0,04)	0,30*** (0,04)	0,30*** (0,04)	0,30*** (0,04)	0,31*** (0,04)
Age of the child		6,98*** (0,98)	6,68*** (0,85)	6,67*** (0,86)	6,98*** (0,90)	6,90*** (0,88)
Number of 0-5 year-olds in the household	*Ref: One child*					
	Two or more	-3,61* (1,59)	-3,22* (1,58)	-3,21* (1,53)	-3,47** (1,29)	-4,04** (1,21)
Hours of care by childminder		-0,73*** (0,15)	-0,76*** (0,14)	-0,77*** (0,14)	-0,82*** (0,15)	-0,84*** (0,15)
Hours of care by kith and kin		-0,47*** (0,08)	-0,49*** (0,08)	-0,51*** (0,08)	-0,48*** (0,08)	-0,51*** (0,08)
Equivalised disposable income (PPP Euro in thousands)		0,12*** (0,03)	0,10*** (0,03)	0,10*** (0,02)	0,09*** (0,02)	0,28** (0,08)
Fixed Part (country-level)						
Salary of staff working in pre-schools (10 years experience)		0,03 (0,03)				
Public spending per 0-5 year-old in care and education			0,20*** (0,02)	0,27*** (0,01)		
	Ref: Neither or one immigrant					

Public spending per 0-5 year-old in care and education X Immigrant status of parents	Both immigrant			-0,21** (0,08)		
Proportion of funding for ISCED 0 from private sources					-0,07° (0,04)	-0,82*** (0,15)
Proportion of funding for ISCED 0 from private sources X Income						-0,01* (0,004)
Random Part						
Level 1 Individuals (residual variance)		219,41 (38,74)	220,21 (30,72)	220,17 (30,89)	232,99 (33,53)	234,71 (34,03)
Level 2 Countries (intercept variance)		6,45 (0,50)	6,11 (0,33)	10,78 (0,65)	13,11 (2,69)	17,65 (2,69)
Model Fit Statistics						
Log pseudolikelihood		-33847097	-42175701	-42170341	-41528391	-41600829
Change in log pseudolikelihood		2,24e+07***	5738128,55***	10719,43***	7032748,13***	-144876,81
Number of estimated parameters		15	15	16	15	16
Change in the number of estimated parameters		1	1	1	1	1
Sample Size						
Level-1 n	Total	9787	11681	11681	11395	11395
	Censored (0's)	2554	3014	3014	3037	3037
	Uncensored	7233	8667	8667	8358	8358
Level-2 n		17	21	21	23	23

*** $p < .001$; ** $p < .01$; * $p < .05$; ° $p < .10$

In countries that allow private self-financing provision for younger children, 0-2 year-olds' weekly ECEC attendance is significantly lower (Model 2, Table 2-4). This negative association is more pronounced for immigrant children (Model 2a, Table 2-4), meaning that, in countries where ECEC is completely public or publicly-subsidised for younger children, immigrant children attend ECEC more. However, whether governments allow private self-financing ECEC for older children or not does not have a significant correlation with 3-5 year-olds' ECEC usage (Model 2, Table 2-6). Our findings support previous research which had concluded that public ECEC is more accessible (Meyers and Gornick, 2003; Van Lancker and Ghysels, 2016), albeit only in the case of 0-2 year-olds. The lack of correlation in the case of older children could be due to the absence of private self-financing pre-schools in the country in practice, despite being allowed by the law. Further research is needed to clarify the nature of this relationship.

In countries where the legal entitlement to ECEC starts before the age of 3, younger children participate in ECEC more (Model 3, Table 2-4). This positive association is even stronger for immigrant and income-poor children (Models 3a-3b, Table 2-4).[17] Early start of legal entitlement to ECEC (in years) is also positively linked with the ECEC participation of older children, regardless of immigration background or income (Model 3, Table 2-6).[18] Like legal entitlement, presence of free ECEC for under 3 year-olds is also correlated with the increased ECEC participation of younger children (Model 4, Table 2-5). However, with the inclusion of the interaction of this variable with income, the positive correlation between free provision and participation becomes negative for the average child, with the exception that, in countries where free provision starts before 3 years of age, the income-poor use ECEC more (Model 4a, Table 2-5). The sign change may be due to the lack of variance in the data regarding the start of free ECEC, because only five countries offer free ECEC to under 3's (as opposed to eight countries providing legal entitlement). Therefore, it should be taken with a grain of salt. Also for older children, the late start of free ECEC provision (in years) is linked with lower ECEC use (Model 4, Table 2-6), but this association is stronger for high-income children (Model 4a, Table 2-6), meaning that low-income children's ECEC participation is significantly lower in countries that offer free ECEC earlier, which points to a Matthew effect. It is plausible that means-tested parental fees is a better policy instrument than free provision, as the 'discount' for wealthy families is larger than for low-income families under free provision, compared to a means-tested fee scheme.

The early start of both legal entitlement and free provision is correlated with higher ECEC use of the average child. However, the relevance of the free ECEC provision should be studied further due to the

17 This variable was also tested in its continuous form for younger children (as done for older children). Although its effect was also significant, its interactions with immigration and income background were not, due to the concentration of the starting time of the entitlement mostly between 3-6 years of age. Hence, the results for its binary form are reported.

18 The starting age of free ECEC is insignificant for younger children also when modelled in the form of continuous variable.

Matthew effect found for older children with a low-income background and the initial positive correlation observed for younger children having turned into a negative one with the inclusion of the interaction effect with income. Nonetheless, considering the much higher effect size of the presence of legal entitlement compared to free provision, our findings for younger children are in line with the previous studies that concluded that the guaranteed availability (i.e. legal entitlement) makes more of a difference than guaranteed affordability (i.e. free provision) (Del Boca, 2002; Farfan-Portet et al., 2011; Kreyenfeld and Hank, 2000). However, the opposite is the case for older children. This contrast as well as the Matthew effect associated with free provision for older children needs to be studied further.

Regarding regulation, we analysed different variables for younger and older children given the context-specificity of the policies for the two age groups. 0-2 year-olds appear to participate in ECEC significantly more in countries with mixed systems, and significantly less in split systems, as opposed to unitary (Model 5, Table 2-5). However, when the interaction with immigration background is introduced, the results show that both split and mixed systems are associated with lower ECEC use by immigrants (where split systems are also linked with lower participation for the general population) (Model 5a, Table 2-5). Moreover, the marginal effect of the immigrant status of parents becomes positive only in Model 5a, which is yet another confirmation that in unitary systems (reference category) immigrant children attend ECEC more. This finding confirms previous research that argues unitary systems being more accessible for younger children (Kaga et al., 2010; OECD, 2012).

The second regulation-related variable used for 0-2 year-olds is the presence of the curriculum for younger children attending centre-based ECEC. The presence of a curriculum for younger children is significantly associated with their higher participation (Model 6, Table 2-5), and the correlation is even higher for income-poor children (Model 6a, Table 2-5). The present study is the first one to test the relationship between the presence of a curriculum and ECEC use.

For older children, the number of years of post-secondary education required to become a pre-school teacher is positively associated with higher ECEC use (Model 5, Table 2-6), regardless of immigration or income background. As regards our second structural quality indicator for older children, higher pre-school teacher salaries (in PPS) are not correlated with more intensive use of ECEC (Model 6, Table 2-7). However, note that the information on teacher salaries was available for only 17 countries, which made the country-level sample size too small to come to a meaningful conclusion. Hence, further research is needed to rule out a possible relationship between teacher salaries and ECEC use. Moreover, the present study is the first one that tests the relationship of the length of teacher training and the amount of teacher salaries with ECEC use.

Finally, ECEC attendance of both younger and older children increases proportionally to the public spending per child in ECEC (Model 7, Table 2-5 and Table 2-7). While this is the case regardless of immigration or income background for younger children, older children with immigrant parents attend ECEC less in countries where public spending is high compared to their native peers, given the negative interaction effect – but the negative interaction effect is still smaller than the main effect of public spending (Model 7a, Table 2-7). Hence, high public investment benefits the natives more, at least in the case of older children. Moreover, this positive relationship between public spending and hours of attendance is not significantly stronger for low-income families, which means that high public expenditure does not necessarily benefit lower-income families more than higher-income families.

The average out-of-pocket full-time childcare cost (for two children aged 2 and 3 for single-parent households as the percentage of the average salary) is negatively correlated with ECEC use of younger children (Model 8, Table 2-5). Note that two individual-level control variables (i.e. the number of 0-5 year-olds and adult-to-child ratio in the household), that have been insignificant in the previous analyses, become significant in this model: the adult-to-child ratio and the number of children in the household. Younger children tend to use ECEC less as the out-of-pocket costs escalate if there are more children at home and more adults per child.[19] This association is present regardless of income or immigration background, meaning that the extra benefits and reductions single-parent households receive do not necessarily benefit lower-income or immigrant families more.

The share of private pre-school funding is correlated with lower ECEC participation for older children (Model 8, Table 2-7), meaning that, as the share of private funding increases, participation decreases. This is not a surprising finding, especially since parental fees make up a large chunk of the private pre-school funding. However, the interaction of this variable with income indicates a negative correlation between the two (Model 8a, Table 2-7). In other words, income-poor older children's ECEC use is not as negatively correlated with high reliance on private pre-school financing as children from higher-income families. The ambiguity of the link between private funding and ECEC use may be due to the similar levels of private pre-school funding in countries with completely opposite track-records of accessibility for ECEC. For instance, while Belgium and Romania rely on private pre-school funding on a similar level (3,6% and 2,6% respectively), ECEC in Belgium is perceived to be more accessible than Romania (Chapter 3), which is also reflected in the ECEC participation rates (Eurydice, 2014). Moreover, countries with high ECEC participation rates of older children and a track-record of accessible ECEC

19 The out-of-pocket costs for dual-earner couple families were also tested. Since the results were also significant and similar, only the result of the analysis regarding the cost for single-parent families is reported, as this variable takes into account the extra reductions and benefits single-parents receive from the government due to their particular disadvantage.

(e.g. Germany, Spain, Iceland, and Norway) had also received a high percentage of funding from private sources, according to 2010 data.

Free provision seems to produce a Matthew effect for older children across Europe, as the early start of free provision is correlated with lower realised access of income-poor children; even though the provision of free ECEC seem to benefit younger children who are socio-economically disadvantaged. Moreover, whereas low-income children enjoy more hours of ECEC in countries with early legal entitlement, curriculum for younger children, and less private funding for pre-school, no similar association is observed as the amount of public spending increases or the average out-of-pocket childcare cost decreases. In other words, the financing-related ECEC policy instruments that are expected to increase disadvantaged children's chances for participation seem to have no correlation with higher accessibility of the system particularly for disadvantaged children. Hence, although the present study did not find a Matthew effect for low-income children, it did not find any additional benefits of higher public investment for these children either.

The analyses yield one more Matthew effect-like result for older children, and that is the negative interaction between immigration background and public spending per 0-5 year-old in ECEC (Model 7a, Table 2-7). Even though higher public spending is linked with higher ECEC use for the general population, immigrant children attend ECEC less than their native peers in countries that invest more. However, it is tricky to interpret this finding as a Matthew effect. First of all, immigrant children's participation is still higher in the countries that invest a lot in comparison to the countries that invest less; however these children seem to benefit less from the system. Secondly, we do not know the exact socio-economic composition of the immigrant group in question. It could be that, in some of these countries, immigrant groups have distinct characteristics.[20] Finally, in the case of immigrants, lower intensity of use could be related to the cultural norms of motherhood as well. The significant effect of dominant motherhood norms on childcare take-up has been demonstrated by Pavolini and Van Lancker (2018), even though they did not control specifically for the immigration background of the respondents. By the same token, Seibel and Hedegaard (2017), who have studied migrants' attitudes towards formal childcare in three European countries, found that migrants in Denmark and the Netherlands are less in favour of formal childcare than natives; and most of the attitude gaps can be explained by the dominant attitudes to formal childcare in the country of origin. Further research is needed to determine whether the lesser use of ECEC by immigrants is a result of a possible Matthew effect or their cultural preferences.

20 One of these could be the income status. However, as a methodological limitation of this study, we could not test the interaction of the country-level variables simultaneously with immigration and income background, due to even lowered degrees of freedom and insufficient number of level-2 sample size.

2.5. Conclusions

The present study contributes to the literature on ECEC use by operationalising the conceptual framework of McLean (2014) and using concrete variables reflecting various ECEC policies to explain the variance in the intensity of ECEC use, in particular for two disadvantaged groups (low-income and immigrant) and for two distinct age groups (0-2 and 3-5 year-olds). The value of this research mostly stems from the fact that not countries but specific ECEC policies are considered as the benchmark in their contribution to higher ECEC participation. Different policies that are adopted by different countries stand out as potential 'good practices' as the ECEC policy measures are included in the analyses one by one. Therefore, this study does not single out one or two key policy measures to make ECEC accessible, and looks beyond the singular policies.

The intensity of use is considered as one of the consequences of accessibility in this research. Hence, the higher intensity of use is also considered to be partly attributable to higher accessibility in general. However, there are surely other drivers of increased ECEC participation at the levels of the household (e.g. need for childcare and individual beliefs) and policy (e.g. family, labour market, and education policies). Moreover, a higher number of hours of weekly ECEC attendance cannot be considered purely as a positive indicator in itself, considering that the quality of services make or break the real benefit of ECEC (Leseman and Slot, 2014), an aspect that could not be controlled for in the analyses.

Higher ECEC use by 0-2 year-olds is observed in countries that allow only public or publicly subsidised ECEC for younger children, grant legal entitlement to ECEC before the age of 3, provide free ECEC provision before the age of 3, adopt a unitary ECEC system, provide a curriculum for younger children, invest more public money per child in ECEC, and ensure that the out-of-pocket cost of ECEC remains low. The former five are particularly positively related to the higher participation of disadvantaged children either with an immigration or income-poverty background.

Higher ECEC use by 3-5 year-olds is observed in countries that grant legal entitlement to ECEC earlier, provide free ECEC provision earlier, require the pre-school teachers to follow more years of schooling, invest more public money per child in ECEC, and rely less on private sources to fund pre-schools. However, income-poor older children's ECEC use is not as negatively correlated with high reliance on private pre-school financing as children from higher-income families, while early start of free provision is associated with lower use by income-poor children. Immigrants' participation is much lower compared to their native peers in countries that invest a lot in ECEC, meaning that high public investment in ECEC tend to benefit the locals more than immigrants.

The limitations of the present study are mainly due to the shortage and imperfections of data both at the micro and macro levels. At the micro-level, while the duration of ECEC attendance and the quality of services are shown to be important for disadvantaged children (Burger, 2010), these could not be taken into account due to data limitations. Still, the most problematic data issues are related to the macro-level variables. For example, the ECEC system being split, mixed or unitary is an imperfect variable leading to ambiguous results, also because it is not clear to what extent the services for both age categories are integrated in the mixed systems. Moreover, the variables do not necessarily reflect the everyday reality in each country. For instance, private self-financed pre-schools being legally allowed does not mean that self-financed pre-schools are widespread in practice, which could be a reason for the insignificant association of this variable for older children. Nevertheless, in the absence of better data, these findings give direction to both future research and the prioritisation of policies to increase ECEC attendance in Europe.

There are also some methodological limitations. The small level-2 sample size and the correlations (Table 2-8) between some country-level variables prevented us from testing multiple macro-level variables in a single model and including more than one interaction term of the country-level variable with income and/or immigration status. Moreover, we abstain from making causal claims but speak of correlations, as we could not conduct longitudinal analyses due to the unavailability of some country-level data over time. Finally, investigating outcomes at the individual-level in relation to the policies adopted at the country-level is always *a long shot* and there is always risk of missing an important link in the equation, not having access to the data of potentially mediating factors, or the practical limitation of not being able to include more variables in a single model due to limited sample size.

The findings suggest that increased presence of the government in the provision of ECEC is closely related to higher participation, also by disadvantaged groups, especially when the intervention takes the form of public or publicly subsidised provision and early legal entitlement. As universal access policies seem to be extra beneficial for disadvantaged children in accessing and using ECEC, we recommend more state involvement in ECEC and early legal entitlement to ECEC. However, the findings are mixed with regard to the early start of free provision. It is likely that this is a result of some countries with high ECEC participation rates (and sometimes with very early legal entitlement to ECEC) not providing ECEC free of charge at any stage before the start of primary education (e.g. Denmark, Germany, Norway, Slovenia) (Eurydice, 2014). As a result, although we recommend making ECEC as affordable as possible, making it completely free of charge may not be necessary. Affordability can also be achieved via means-tested fee schemes.

One interesting finding is the participation of lower-income children not dropping as much as the participation for higher-income children does in countries that rely more on private sources in funding pre-schools (ISCED 0), even though the average use is lower in such countries. This finding is an indication that we need to look deeper into the way ECEC is financed in each country in order to come to a conclusion as to what kind of funding scheme is the most effective and efficient. For instance, the percentage of private funding is very low in some post-socialist Central and Eastern European countries such as Bulgaria, Croatia, Czech Republic, Romania, but ECEC participation in these countries (especially among younger children) is also much lower than the European average (Eurydice, 2014).

The positive associations between ECEC use and regulation-related policies look promising, but it is best to interpret these as an indirect consequence of the value that governments attach to ECEC. However, this does not necessarily mean that parents are willing to use ECEC more because the services are of high quality. Rather than quality, parents tend to make decisions to use ECEC based on need, accessibility, and affordability (Johnson et al., 2012). Still, high structural quality is indicative of the relative importance governments attach to ECEC, and thus, it is expected that in countries with higher structural quality, ECEC is indirectly more accessible and favourable. Moreover, younger children attend ECEC more in countries where the ECEC system is unitary. While the positive influence of unitary systems on the accessibility of ECEC for younger children is known (Kaga et al., 2010), the countries that adopted a unitary ECEC system are first and foremost the Nordic countries, where the services are already highly accessible because of a wide array of policies applied simultaneously over several decades, and not limited to ECEC but including parental leave, women's activation, and education.

Most provision- and regulation-related variables yielded significant interaction effects with immigration or low-income backgrounds, and mostly in favour of disadvantaged children (except the start of free provision for older children). Against this backdrop, the negative interaction of public spending on ECEC for older children with immigration background and the lack of significant interactions of public spending on ECEC and out-of-pocket childcare costs for younger children from single-parent households with income add to the probability of a Matthew effect. These findings (or lack thereof) point to the inequality of opportunities for disadvantaged groups, even when governments invest a lot in ECEC or ensure low parental fees for single-parent households. Such an inequality of opportunity in accessing ECEC is an indication of a possible Matthew effect when it comes to the financing of ECEC especially in richer countries. The funding practices of ECEC systems need further attention from scholars and policy-makers because, while these policies improve access in general, disadvantaged children keep following from a distance.

This study confirms that ECEC policies matter for the accessibility of ECEC and higher intensity of ECEC use. It demonstrates that universal access policies and increased presence of the public sector contributes to higher participation of both disadvantaged and non-disadvantaged children in ECEC. However, higher public investment, providing ECEC for free, and even the measures to lower the burden on parental contributions do not seem to be sufficient to improve the accessibility of ECEC for disadvantaged children. Hence, while universal access policies seem to work in general, the truly disadvantaged children need a more targeted approach to eventually increase their chances to break the cycle of disadvantage (Leseman and Slot, 2014). Therefore, we recommend taking universalism one step further and applying 'progressive universalism', which is a balance between universal and targeted policies (European Commission, 2014). Unless extra measures are taken to tackle their disadvantages, vulnerable children may still lag behind if treated on equal footing with their non-disadvantaged peers.

2.6. References

Abrassart, A., Bonoli, G., 2015. Availability, Cost or Culture? Obstacles to Childcare Services for Low-Income Families. Journal of Social Policy 44, 787–806. https://doi.org/10.1017/S0047279415000288

Adamson, E., Brennan, D., 2014. Social Investment or Private Profit? Diverging Notions of 'Investment' in Early Childhood Education and Care. IJEC 46, 47–61. https://doi.org/10.1007/s13158-013-0098-x

Agirdag, O., 2010. Exploring bilingualism in a monolingual school system: insights from Turkish and native students from Belgian schools. British Journal of Sociology of Education 31, 307–321. https://doi.org/10.1080/01425691003700540

Agirdag, O., Jordens, K., Van Houtte, M., 2014. Speaking Turkish in Belgian Primary Schools: Teacher Beliefs versus Effective Consequences. Bilig 70, 7–28.

Agirdag, O., Van Houtte, M., Van Avermaet, P., 2012. Why Does the Ethnic and Socio-economic Composition of Schools Influence Math Achievement? The Role of Sense of Futility and Futility Culture. Eur Sociol Rev 28, 366–378. https://doi.org/10.1093/esr/jcq070

Alba, R., Sloan, J., Sperling, J., 2011. The Integration Imperative: The Children of Low-Status Immigrants in the Schools of Wealthy Societies. Annual Review of Sociology 37, 395–415. https://doi.org/10.1146/annurev-soc-081309-150219

Altinkamis, N.F., Agirdag, O., 2014. Determinants of Language Use and Attitudes among Turkish Speakers in Flanders: A Focus on Generational Difference. Bilig 70, 59–80.

Alwin, D.F., Braun, M., Scott, J., 1992. The Separation of Work and the Family: Attitudes towards Women's Labour-Force Participation in Germany, Great Britain, and the United States. European Sociological Review 8, 13–37.

Andersen, R., Aday, L.A., 1978. Access to Medical Care in the U.S.: Realized and Potential. Medical Care 16, 533–546.

Anderson, K.J., Minke, K.M., 2007. Parent Involvement in Education: Toward an Understanding of Parents' Decision Making. The Journal of Educational Research; Bloomington 100, 311–323,328.

Anderson, S., Mikesell, M., 2017. Child care type, access, and quality in rural areas of the United States: a review. Early Child Development and Care 0, 1–15. https://doi.org/10.1080/03004430.2017.1412959

Aran, M.A., Boudet, A.M.M., Aktakke, N., 2016. Can Regulations Make It More Difficult to Serve the Poor? The Case of Childcare Services in Istanbul, Turkey. Journal of Human Development and Capabilities 17, 558–582. https://doi.org/10.1080/19452829.2016.1225703

Arends-Tóth, J., Van de Vijver, F.J.R., 2004. Domains and dimensions in acculturation: Implicit theories of Turkish–Dutch. International Journal of Intercultural Relations 28, 19–35. https://doi.org/10.1016/j.ijintrel.2003.09.001

Asparouhov, T., 2006. General Multi-Level Modeling with Sampling Weights. Communications in Statistics - Theory and Methods 35, 439–460. https://doi.org/10.1080/03610920500476598

Bahle, T., 2009. Public Child Care in Europe: Historical Trajectories and New Directions, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 23–42.

Bainbridge, J., Meyers, M.K., Tanaka, S., Waldfogel, J., 2005. Who Gets an Early Education? Family Income and the Enrollment of Three- to Five-Year-Olds from 1968 to 2000. Social Science Quarterly 86, 724–745. https://doi.org/10.1111/j.0038-4941.2005.00326.x

Baker, M., Gruber, J., Milligan, K., 2006. Universal Childcare, Maternal Labor Supply, and Family Well-Being. Federal Reserve Bank of St Louis, St. Louis, United States.

Barbarin, O.A., McCandies, T., Early, D., Clifford, R.M., Bryant, D., Burchinal, M., Howes, C., Pianta, R., 2006. Quality of Prekindergarten: What Families Are Looking for in Public Sponsored Programs. Early Education and Development 17, 619–642. https://doi.org/10.1207/s15566935eed1704_6

Barnes, J., Leach, P., Sylva, K., Stein, A., Malmberg, L.-E., Families, C., 1, C.C. team, 2006. Infant care in England: mothers' aspirations, experiences, satisfaction and caregiver relationships. Early Child Development and Care 176, 553–573. https://doi.org/10.1080/03004430500317408

Bastos, P., Cristia, J., 2012. Supply and quality choices in private child care markets: Evidence from São Paulo. Journal of Development Economics 98, 242–255. https://doi.org/10.1016/j.jdeveco.2011.08.001

Baysu, G., de Valk, H., 2012. Navigating the school system in Sweden, Belgium, Austria and Germany: School segregation and second generation school trajectories. Ethnicities 12, 776–799. https://doi.org/10.1177/1468796812450857

Baysu, G., Phalet, K., 2014. Avrupali Ikinci Nesil Türk Göçmenlerin Okul Basarisi. Turk Psikoloji Yazilari 17, 36–52.

Baysu, G., Phalet, K., Brown, R., 2014. Relative group size and minority school success: The role of intergroup friendship and discrimination experiences. Br. J. Soc. Psychol. 53, 328–349. https://doi.org/10.1111/bjso.12035

Beaudin, C.L., Pelletier, L.R., 1996. Consumer-based research: using focus groups as a method for evaluating quality of care. J Nurs Care Qual 10, 28–33.

Bennett, J., 2004. Early Education Financing: What is Useful to Know?

Beyea, S.C., Nicoll, L.H., 2000. Learn more using focus groups. AORN Journal 71, 897–900. https://doi.org/10.1016/S0001-2092(06)62276-X

Bîea, N., 2012. (In)Congruence: A Study of Opinion-Policy Distance in 33 Democracies. CEU Political Science Journal 290–324.

Bircan, T., 2012. Community Structure and Ethnocentrism. A Multilevel Approach: A case Study of Flanders (Belgium). KU Leuven, Leuven.

Blohm, M., Koch, A., 2009. Item Nonresponse in the European Social Survey. ASK. Research & Methods 45–65.

Bonal, X., 2012. Education policy and school segregation of migrant students in Catalonia: the politics of non-decision-making. Journal of Education Policy 27, 401–421. https://doi.org/10.1080/02680939.2011.645168

Bonnycastle, C.R., 2011. Social Justice along a Continuum: A Relational Illustrative Model. Social Service Review 85, 267–295. https://doi.org/10.1086/660703

Bonoli, G., Cantillon, B., Van Lancker, W., 2017. Social Investment and the Matthew Effect: Limits to a Strategy, in: Hemerijck, A. (Ed.), The Uses of Social Investment. Oxford University Press, pp. 66–76.

Bourhis, R.Y., Moïse, L.C., Perreault, S., Senécal, S., 1997. Towards an Interactive Acculturation Model: A Social Psychological Approach. International Journal of Psychology 32, 369–386. https://doi.org/10.1080/002075997400629

Bourhis, R.Y., Montreuil, A., Vanbeselaere, N., 2004. Perceived Threat and Host Community Acculturation Orientations toward Immigrants: Comparing Flemings in Belgium and Francophones in Quebec. Canadian Ethnic Studies 36, 113–142.

Bowers, A.P., Strelitz, J., Allen, J., Donkin, A., 2012. An Equal Start: Improving Outcomes in Children's Centres. UCL Institute of Health Equity, Brussels.

Brandt, M., Haberkern, K., Szydlik, M., 2009. Intergenerational Help and Care in Europe. Eur Sociol Rev 25, 585–601. https://doi.org/10.1093/esr/jcn076

Brantley, A., Cho, M., Langer, R., 2009. Stadtteilmütter: Approaching Integration Through Education in Berlin-Neukölln. Humanity in Action.

Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qualitative Research in Psychology 3, 77–101. https://doi.org/10.1191/1478088706qp063oa

Brooks, C., Manza, J., 2006. Social Policy Responsiveness in Developed Democracies. Am Sociol Rev 71, 474–494. https://doi.org/10.1177/000312240607100306

Bryan, M.L., Jenkins, S.P., 2016. Multilevel Modelling of Country Effects: A Cautionary Tale. Eur Sociol Rev 32, 3–22. https://doi.org/10.1093/esr/jcv059

Bundy, J., 2012. Rendering (gender) invisible: early childhood education and care in Ontario as a biopolitical social investment apparatus. Discourse: Studies in the Cultural Politics of Education 33, 591–605. https://doi.org/10.1080/01596306.2012.692964

Burchinal, M., Howes, C., Kontos, S., 2002. Structural predictors of child care quality in child care homes. Early Childhood Research Quarterly 17, 87–105. https://doi.org/10.1016/S0885-2006(02)00132-1

Burger, K., 2010. How does early childhood care and education affect cognitive development? An international review of the effects of early interventions for children from different social backgrounds. Early Childhood Research Quarterly 25, 140–165. https://doi.org/10.1016/j.ecresq.2009.11.001

Burstein, P., 2003. The impact of public opinion on public policy: A review and an agenda. Political Research Quarterly; Salt Lake City 56, 29–40.

Cai, T., 2013. Investigation of Ways to Handle Sampling Weights for Multilevel Model Analyses. Sociological Methodology 43, 178–219. https://doi.org/10.1177/0081175012460221

Cameron, A.C., Trivedi, P.K., 2010. Microeconometrics using Stata. Stata Press, College Station, Tex.

Cantillon, B., 2011. The paradox of the social investment state: growth, employment and poverty in the Lisbon era. Journal of European Social Policy 21, 432–449. https://doi.org/10.1177/0958928711418856

Carey, M.A., Asbury, J.-E., 2012. Focus Group Research, Qualitative essentials. Left Coast Press, Walnut Creek, CA.

Carle, A.C., 2009. Fitting multilevel models in complex survey data with design weights: Recommendations. BMC Med Res Methodol 9, 49. https://doi.org/10.1186/1471-2288-9-49

Cebolla-Boado, H., Radl, J., Salazar, L., 2017. Preschool education as the great equalizer? A cross-country study into the sources of inequality in reading competence. Acta Sociologica 60, 41–60. https://doi.org/10.1177/0001699316654529

Ceglowski, D., Bacigalupa, C., 2002. Four Perspectives on Child Care Quality. Early Childhood Education Journal 30, 87–92. https://doi.org/10.1023/A:1021245017431

Chang, Y.-C., Tsai, C.-L., Chiu, W.-Y., 2015. The influence of life satisfaction and well- being on attitude toward the internet, motivation for internet usage and internet usage behavior. Journal of Interdisciplinary Mathematics 18, 927–946. https://doi.org/10.1080/09720502.2015.1108111

Chantala, K., Suchindran, C.M., Blanchette, D., 2005. Adjusting for Unequal Selection Probability in Multilevel Models: A Comparison of Software Packages. IDEAS Working Paper Series from RePEc; St. Louis.

Chung, H., Meuleman, B., 2017. European parents' attitudes towards public childcare provision: the role of current provisions, interests and ideologies. European Societies 19, 49–68. https://doi.org/10.1080/14616696.2016.1235218

Ciccia, R., Javornik, J., 2018. Methodological Challenges for Comparative Welfare State Research: Capturing Intra-Country Variation in Cross-National Analyses. Journal of Comparative Policy Analysis: Research and Practice 0, 1–8. https://doi.org/10.1080/13876988.2018.1551598

CIRCABC, 2016. PPP rates X-sectional from 11/03/2016 for EU-SILC.

Cleveland, G., Krashinsky, M., 1998. Benefits and costs of good child care: The economic rationale for public investment in young children.

Cleveland, J., Susman-Stillman, A., Halle, T., 2013. Parental Perceptions of Quality in Early Care and Education.

Cloney, D., Cleveland, G., Hattie, J., Tayler, C., 2015. Variations in the Availability and Quality of Early Childhood Education and Care by Socioeconomic Status of Neighborhoods. Early Education and Development 0, 1–18. https://doi.org/10.1080/10409289.2015.1076674

Cohen, B., Pay, N., 2011. Inspiring Change: An Early Childhood Education and Care Study Visit to Sweden and Poland. King Baudouin Foundation and Children in Scotland.

Conley, A., 2010. Childcare: welfare or investment? International Journal of Social Welfare 19, 173–181. https://doi.org/10.1111/j.1468-2397.2009.00665.x

Cunha, F., Heckman, J.J., Lochner, L., Masterov, D.V., 2006. Interpreting the Evidence on Life Cycle Skill Formation. Handbook of the Economics of Education 1, 697–812.

Dalkilic, M., Vadeboncoeur, J.A., 2016. Re-framing Inclusive Education Through the Capability Approach: An Elaboration of the Model of Relational Inclusion. 1 3.

Daly, M., Lewis, J., 2000. The concept of social care and the analysis of contemporary welfare states. The British Journal of Sociology 51, 281–298. https://doi.org/10.1111/j.1468-4446.2000.00281.x

Danforth, B., 2014. Worlds of welfare in time: A historical reassessment of the three-world typology. Journal of European Social Policy 24, 164–182. https://doi.org/10.1177/0958928713517919

Davis, E.E., Connelly, R., 2005. The Influence of Local Price and Availability on Parents' Choice of Child Care. Popul Res Policy Rev 24, 301–334. https://doi.org/10.1007/s11113-005-8515-y

de Haan, A., Elbers, E., Hoofs, H., Leseman, P., 2013. Targeted versus mixed preschools and kindergartens: effects of class composition and teacher-managed activities on disadvantaged children's emergent academic skills. School Effectiveness and School Improvement 24, 177–194. https://doi.org/10.1080/09243453.2012.749792

Del Boca, D., 2002. The effect of child care and part time opportunities on participation and fertility decisions in Italy. J Popul Econ 15, 549–573. https://doi.org/10.1007/s001480100089

Dobrotić, I., Juroš, T.V., 2016. Who Should Finance Childcare? Multilevel Analysis of 24 Countries. Revija za socijalnu politiku 23, 323–358. https://doi.org/10.3935/rsp.v23i3.1392

Döge, P., Keller, H., 2012. Child-rearing goals and conceptions of early childcare from young adults' perspective in East and West Germany. International Journal of Adolescence and Youth 19, 37–49. https://doi.org/10.1080/02673843.2012.692657

Drange, N., Telle, K., 2015. Promoting integration of immigrants: Effects of free child care on child enrollment and parental employment. Labour Economics, European Association of Labour Economists 26th Annual Conference 34, 26–38. https://doi.org/10.1016/j.labeco.2015.03.006

Dumčius, R., Peeters, J., Hayes, N., Van Landeghem, G., Siarova, H., Peciukonytė, L., Cenerić, I., Hulpia, H., 2014. Study on the effective use of early childhood education and care (ECEC) in preventing early school leaving (ESL): Annex 1. Literature review. Publications Office of the European Union, Luxembourg.

Education at a Glance, 2015. Table D3.1a – Teachers' statutory salaries, based on typical qualifications, at different points in teachers' careers (2013). OECD.

Education at a Glance, 2013. Table B3.2a – Relative proportions of public and private expenditure on educational institutions, by level of education (2000, 2010). OECD.

Ellingsæter, A.L., Gulbrandsen, L., 2007. Closing the Childcare Gap: The Interaction of Childcare Provision and Mothers' Agency in Norway. Journal of Social Policy; Cambridge 36, 649–669.

Ellingsæter, A.L., Kitterød, R.H., Lyngstad, J., 2017. Universalising Childcare, Changing Mothers' Attitudes: Policy Feedback in Norway. Journal of Social Policy 46, 149–173. https://doi.org/10.1017/S0047279416000349

Esping-Andersen, G., 1990. The Three Worlds of Welfare Capitalism. Princeton University Press, Princeton, New Jersey.

Eurofound, 2013a. 3rd European Quality of Life Survey: Weighting Report - EU27 and non-EU countries. GfK EU3C.

Eurofound, 2013b. Third European Quality of Life Survey – Quality of society and public services. Publications Office of the European Union, Luxembourg.

European Commission, 2014. Investing in children: breaking the cycle of disadvantage. European Commission, Brussels.

European Commission, 2013. Barcelona objectives: the development of childcare facilities for young children in Europe with a view to sustainable and inclusive growth. Publications Office of the European Union, Luxembourg.

European Commission, 2011. Early Childhood Education and Care: Providing all our children with the best start for the world of tomorrow.

Eurostat, 2015. Non-national population by group of citizenship, 1 January 2015.

Eurydice, 2014. Key Data on Early Childhood Education and Care in Europe (Eurydice and Eurostat Report). Publications Office of the European Union, Luxembourg.

EUSILC UDB, 2014. EU-SILC Cross-sectional Data – version 2 of August 2016.

Fallon, J., 2005. Targeting Disadvantage among Young Children in the Republic of Ireland: An Overview. Child Care in Practice 11, 289–311. https://doi.org/10.1080/13575270500151821

Farfan-Portet, M.-I., Lorant, V., Petrella, F., 2011. Access to Childcare Services: The Role of Demand and Supply-Side Policies. Popul Res Policy Rev 30, 165–183. https://doi.org/10.1007/s11113-010-9184-z

Felfe, C., Nollenberger, N., Rodríguez-Planas, N., 2015. Can't buy mommy's love? Universal childcare and children's long-term cognitive development. J Popul Econ 28, 393–422. https://doi.org/10.1007/s00148-014-0532-x

Fenger, H.J.M., 2007. Welfare regimes in Central and Eastern Europe: Incorporating post-communist countries in a welfare regime typology. Contemporary Issues and Ideas in Social Sciences 3.

Forry, N.D., Simkin, S., Wheeler, E.J., Bock, A., 2013. 'You know how it makes you feel': Low-income parents' childcare priorities and definitions of ideal high-quality childcare. Journal of Children and Poverty 19, 107–126. https://doi.org/10.1080/10796126.2013.843508

Foubert, J., Levecque, K., Van Rossem, R., Romagnoli, A., 2014. Do welfare regimes influence the association between disability and self-perceived health? A multilevel analysis of 57 countries. Social Science & Medicine 117, 10–17. https://doi.org/10.1016/j.socscimed.2014.07.023

Fram, M.S., Kim, J., 2008. Race/ethnicity and the start of child care: A multi-level analysis of factors influencing first child care experiences. Early Childhood Research Quarterly 23, 575–590. https://doi.org/10.1016/j.ecresq.2008.04.002

Fuller, B., Holloway, S.D., Rambaud, M., Eggers-Pierola, C., 1996. How do mothers choose child care? Alternative cultural models in poor neighborhoods. Sociology of Education; Albany 69, 83.

Gambaro, L., Stewart, K., Waldfogel, J., 2015. A question of quality: do children from disadvantaged backgrounds receive lower quality early childhood education and care? Br Educ Res J 41, 553–574. https://doi.org/10.1002/berj.3161

Gamble, W.C., Ewing, A.R., Wilhlem, M.S., 2009. Parental Perceptions of Characteristics of Non-Parental Child Care: Belief Dimensions, Family and Child Correlates. J Child Fam Stud 18, 70–82. https://doi.org/10.1007/s10826-008-9208-z

Gammage, P., 2006. Early childhood education and care: politics, policies and possibilities. Early Years 26, 235–248. https://doi.org/10.1080/09575140600898407

Gatt, S., Ojala, M., Soler, M., 2011. Promoting social inclusion counting with everyone: Learning Communities and INCLUD-ED. International Studies in Sociology of Education 21, 33–47. https://doi.org/10.1080/09620214.2011.543851

Gawlicz, K., Starnawski, M., 2018. For child and social justice: radical approaches in education and care for young children in interwar Poland. Early Years 38, 197–211. https://doi.org/10.1080/09575146.2018.1449816

Geoffroy, M.-C., Séguin, J.R., Lacourse, É., Boivin, M., Tremblay, R.E., Côté, S.M., 2012. Parental Characteristics Associated With Childcare Use During the First 4 Years of Life: Results From a Representative Cohort of Québec Families. Can J Public Health 103, 76–80.

Ghysels, J., Van Lancker, W., 2011. The unequal benefits of activation: an analysis of the social distribution of family policy among families with young children. Journal of European Social Policy 21, 472–485. https://doi.org/10.1177/0958928711418853

Gilens, M., 2009. Preference Gaps and Inequality in Representation. PS: Political Science & Politics 42, 335–341. https://doi.org/10.1017/S1049096509090441

Goerres, A., Tepe, M., 2012. Doing It for the Kids? The Determinants of Attitudes towards Public Childcare in Unified Germany. Journal of Social Policy 41, 349–372. https://doi.org/10.1017/S0047279411000754

Göktuna Yaylaci, F., 2014. Simultaneous Lives: Daily Life Practices of Turks in Belgium as Migrant. ZfWT 6.

Goldsmith, P.R., 2009. Schools or Neighborhoods or Both? Race and Ethnic Segregation and Educational Attainment. Soc Forces 87, 1913–1941. https://doi.org/10.1353/sof.0.0193

Goldstein, H., 2003. Multilevel statistical models, 3rd ed. ed, Kendall's library of statistics. E. Arnold ; Oxford University Press [Distributor], London : New York.

Gorry, D., Thomas, D.W., 2017. Regulation and the cost of childcare. Applied Economics 49, 4138–4147. https://doi.org/10.1080/00036846.2016.1276275

Grace, R., Bowes, J., Elcombe, E., 2014. Child Participation and Family Engagement with Early Childhood Education and Care Services in Disadvantaged Australian Communities. IJEC 46, 271–298. https://doi.org/10.1007/s13158-014-0112-y

Greenlee, J.S., 2014. The Political Consequences of Motherhood, The CAWP series in gender and American politics. University of Michigan Press, Ann Arbor.

Guest, G., Namey, E.E., Mitchell, M.L., 2013. Collecting Qualitative Data: A Field Manual for Applied Research. SAGE, London. https://doi.org/10.4135/9781506374680

Habibov, N., 2012. Early childhood care and education attendance in Central Asia. Children and Youth Services Review 34, 798–806. https://doi.org/10.1016/j.childyouth.2012.01.006

Hayes, A.F., 2006. A Primer on Multilevel Modeling. Human Communication Research 32, 385–410. https://doi.org/10.1111/j.1468-2958.2006.00281.x

Heckman, J.J., 2006. Skill Formation and the Economics of Investing in Disadvantaged Children. Science 312, 1900–1902. https://doi.org/10.1126/science.1128898

Heinen, J., Wator, M., 2006. Child Care in Poland before, during, and after the Transition: Still a Women's Business. Soc Pol 13, 189–216. https://doi.org/10.1093/sp/jxj008

Henly, J.R., Lyons, S., 2000. The Negotiation of Child Care and Employment Demands Among Low-Income Parents. Journal of Social Issues 56, 683–706. https://doi.org/10.1111/0022-4537.00191

Herczog, M., 2012. Rights of the Child and Early Childhood Education and Care in Europe. European Journal of Education 47, 542–555. https://doi.org/10.1111/ejed.12008

Hindriks, P., Verkuyten, M., Coenders, M., 2015. The evaluation of immigrants' political acculturation strategies. International Journal of Intercultural Relations 47, 131–142. https://doi.org/10.1016/j.ijintrel.2015.04.002

Hofferth, S.L., Wissoker, D.A., 1992. Price, Quality, and Income in Child Care Choice. The Journal of Human Resources 27, 70–111. https://doi.org/10.2307/145913

Horvai, A., 2010. Recognising the Roma and their Rights: an analysis of exclusion and integration in the education system. Research in Comparative and International Education 5, 394. https://doi.org/10.2304/rcie.2010.5.4.394

Hotz, V.J., Xiao, M., 2011. The Impact of Regulations on the Supply and Quality of Care in Child Care Markets. The American Economic Review 101, 1775–1805.

Hox, J.J., 2010. Multilevel Analysis: Techniques and Applications, 2. ed. ed, Quantitative methodology series. Routledge, Taylor & Francis, New York.

Hox, J.J., Kreft, I.G.G., 1994. Multilevel Analysis Methods. Sociological Methods & Research 22, 283–299. https://doi.org/10.1177/0049124194022003001

IBM Corp., 2017. IBM SPSS Statistics for Windows. Armonk, NY: IBM Corp.

IBM Corp., 2015. IBM SPSS Statistics for Windows. Armonk, NY: IBM Corp.

Immervoll, H., Barber, D., 2005. Can Parents Afford to Work? (OECD Social, Employment and Migration Working Papers). Organisation for Economic Co-operation and Development, Paris.

Ishimine, K., Tayler, C., Bennett, J., 2010. Quality and Early Childhood Education and Care: A Policy Initiative for the 21st Century. International Journal of Child Care and Education Policy 4, 67. https://doi.org/10.1007/2288-6729-4-2-67

ISSP, 2016. International Social Survey Programme 2012 - Family and Changing Gender Roles IV, Variable Report (No. 2016/12), GESIS-Variable Reports. GESIS, Köln.

Javornik, J., 2014. Measuring state de-familialism: Contesting post-socialist exceptionalism. Journal of European Social Policy 24, 240–257. https://doi.org/10.1177/0958928714525815

Javornik, J., Kurowska, A., 2017. Work and Care Opportunities under Different Parental Leave Systems: Gender and Class Inequalities in Northern Europe. Social Policy & Administration 51, 617–637. https://doi.org/10.1111/spol.12316

Jenson, J., 2004. Changing the Paradigm: Family Responsibility or Investing in Children. The Canadian Journal of Sociology 29, 169–192. https://doi.org/10.1353/cjs.2004.0025

Johansson, H., Höjer, I., 2012. Education for disadvantaged groups — Structural and individual challenges. Children and Youth Services Review, Educational Interventions, Practices, and Policies to Improve Educational Outcomes Among Children and Youth in Out-of-Home Care 34, 1135–1142. https://doi.org/10.1016/j.childyouth.2012.01.042

Johnson, A.D., Ryan, R.M., Brooks-Gunn, J., 2012. Child-Care Subsidies: Do They Impact the Quality of Care Children Experience? Child Development 83, 1444–1461. https://doi.org/10.1111/j.1467-8624.2012.1780.x

Jones, R.S., Jones, E.T., 1971. Issue Saliency, Opinion-Holding, and Party Preference. The Western Political Quarterly 24, 501–509. https://doi.org/10.2307/446918

Jordan, J., 2013. Policy feedback and support for the welfare state. Journal of European Social Policy 23, 134–148. https://doi.org/10.1177/0958928712471224

Ju, I., Jun, J.W., Dodoo, N.A., Morris, J., 2017. The influence of life satisfaction on nostalgic advertising and attitude toward a brand. Journal of Marketing Communications 23, 413–427. https://doi.org/10.1080/13527266.2015.1051093

Kaga, Y., Bennett, J., Moss, P., 2010. Caring and Learning Together: Study on the integration of ECCE within education. UNESCO, Paris.

Kaplan, D., Elliott, P.R., 1997. A Model-Based Approach to Validating Education Indicators Using Multilevel Structural Equation Modeling. Journal of Educational and Behavioral Statistics 22, 323–347. https://doi.org/10.2307/1165288

Karila, K., 2012. A Nordic Perspective on Early Childhood Education and Care Policy. European Journal of Education 47, 584–595. https://doi.org/10.1111/ejed.12007

Karsten, S., Felix, C., Ledoux, G., Meijnen, W., Roeleveld, J., Schooten, E.V., 2006. Choosing Segregation or Integration? The Extent and Effects of Ethnic Segregation in Dutch Cities. Education and Urban Society 38, 228–247. https://doi.org/10.1177/0013124505282606

Kasza, G.J., 2002. The Illusion of Welfare. Journal of Social Policy 31, 271–287. https://doi.org/10.1017/S0047279401006584

Kim, J., Fram, M.S., 2009. Profiles of choice: Parents' patterns of priority in child care decision-making. Early Childhood Research Quarterly 24, 77–91. https://doi.org/10.1016/j.ecresq.2008.10.001

Kitzinger, J., 1995. Qualitative Research: Introducing focus groups. BMJ 311, 299–302. https://doi.org/10.1136/bmj.311.7000.299

Kjørholt, A.T., 2013. Childhood as Social Investment, Rights and the Valuing of Education. Child Soc 27, 245–257. https://doi.org/10.1111/chso.12037

Korpi, W., 2001. Contentious Institutions: An Augmented Rational-Action Analysis of the Origins and Path Dependency of Welfare State Institutions in Western Countries. Rationality and Society 13, 235–283. https://doi.org/10.1177/104346301013002005

Korpi, W., Palme, J., 1998. The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality, and Poverty in the Western Countries. American Sociological Review 63, 661–687.

Kotok, S., DeMatthews, D., 2018. Challenging School Segregation in the Twenty-first Century: How Districts can Leverage Dual Language Education to Increase School and Classroom Diversity. The Clearing House: A Journal of Educational Strategies, Issues and Ideas 91, 1–6. https://doi.org/10.1080/00098655.2017.1336405

Kremer, M., 2007. How Welfare States Care: Culture, Gender, and Parenting in Europe, Changing welfare states. Amsterdam University Press, Amsterdam.

Kremer, M., 2006. The Politics of Ideals of Care: Danish and Flemish Child Care Policy Compared. Soc Pol 13, 261–285. https://doi.org/10.1093/sp/jxj009

Kreyenfeld, M., Hank, K., 2000. Does the availability of child care influence the employment of mothers? Findings from western Germany. Population Research and Policy Review 19, 317–337. https://doi.org/10.1023/A:1026556309080

Krueger, R.A., Casey, M.A., 2009. Focus Groups: A practical guide for applied research, Fourth. ed. SAGE, Los Angeles.

Leave Network, 2013. International Review of Leave Policies and Related Research 2013. International Network on Leave Policies and Research.

Lehrer, J.S., Lemay, L., Bigras, N., 2015. Parental Perceptions of Child Care Quality in Centre-Based and Home-Based Settings: Associations with External Quality Ratings. IJEC 47, 481–497. https://doi.org/10.1007/s13158-015-0147-8

Leitner, S., 2003. Varieties of familialism: The caring function of the family in comparative perspective. European Societies 5, 353–375. https://doi.org/10.1080/1461669032000127642

Leseman, P.P.M., 2014. Quality of the early years provisions: a European perspective.

Leseman, P.P.M., 2009. The Impact of High Quality Education and Care on the Development of Young Children: Review of the Literature, in: Tackling Social and Cultural Inequalities through Early

Childhood Education and Care in Europe. Education, Audiovisual and Culture Executive Agency, Brussels, pp. 17–49.

Leseman, P.P.M., Slot, P.L., 2014. Breaking the cycle of poverty: challenges for European early childhood education and care. European Early Childhood Education Research Journal 22, 314–326. https://doi.org/10.1080/1350293X.2014.912894

Lesschaeve, C., 2017. Finding inequality in an unlikely place: Differences in policy congruence between social groups in Belgium. Acta Polit 52, 361–383. https://doi.org/10.1057/s41269-016-0033-x

Li-Grining, C.P., Coley, R.L., 2006. Child care experiences in low-income communities: Developmental quality and maternal views. Early Childhood Research Quarterly 21, 125–141. https://doi.org/10.1016/j.ecresq.2006.04.001

Liu, M., 2015. An Ecological Review of Literature on Factors Influencing Working Mothers' Child Care Arrangements. Journal of Child and Family Studies 24, 161–171. https://doi.org/10.1007/s10826-013-9822-2

Luhmann, M., Lucas, R.E., Eid, M., Diener, E., 2013. The Prospective Effect of Life Satisfaction on Life Events. Social Psychological and Personality Science 4, 39–45. https://doi.org/10.1177/1948550612440105

Magnuson, K., Shager, H., 2010. Early education: Progress and promise for children from low-income families. Children and Youth Services Review, Meeting Children's Basic Needs 32, 1186–1198. https://doi.org/10.1016/j.childyouth.2010.03.006

Maguire, M., Delahunt, B., 2017. Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. AISHE-J 9.

Mahon, R., 2002. Child Care: Toward What Kind of "Social Europe"? Soc Pol 9, 343–379. https://doi.org/10.1093/sp/9.3.343

Mahon, R., Anttonen, A., Bergqvist, C., Brennan, D., Hobson, B., 2012. Convergent care regimes? Childcare arrangements in Australia, Canada, Finland and Sweden. Journal of European Social Policy 22, 419–431. https://doi.org/10.1177/0958928712449776

Manning, M., Garvis, S., Fleming, C., Wong, G.T.W., 2017. The Relationship between Teacher Qualification and the Quality of the Early Childhood Care and Learning Environment: A Systematic Review. Campbell Collaboration.

Mantovani, S., Tobin, J., 2016. Introduction, in: Tobin, J. (Ed.), Preschool and Im/Migrants in Five Countries: England, France, Germany, Italy and United States of America. Peter Lang, Brussels.

McLean, C., 2014. Market managers and market moderators: Early childhood education and care provision, finance and regulation in the United Kingdom and United States. Journal of European Social Policy 24, 122–134. https://doi.org/10.1177/0958928713517916

McLellan, E., MacQueen, K.M., Neidig, J.L., 2003. Beyond the Qualitative Interview: Data Preparation and Transcription. Field Methods 15, 63–84. https://doi.org/10.1177/1525822X02239573

McMahon, W.W., 1982. Consumption Benefits of Education (BEBR Faculty Working Paper No. 856).

Melhuish, E., Ereky-Stevens, K., Petrogiannis, K., Ariescu, A., Penderi, E., Rentzou, K., Tawell, A., Leseman, P.P.M., Broekhuisen, M., 2015. A review of research on the effects of early childhood education and care (ECEC) on children development, CARE D4.1.

Meyers, M.K., Gornick, J.C., 2003. Public or Private Responsibility? Early Childhood Education and Care, Inequality, and the Welfare State. Journal of Comparative Family Studies 34, 379–411.

Molinuevo, D., 2015. Childcare for all: making early childhood education and care more accessible and inclusive [WWW Document]. European Commission DG Employment, Social Affairs and Inclusion. URL http://ec.europa.eu/social/main.jsp?catId=89&furtherNews=yes&langId=en&newsId=2420 (accessed 2.11.16).

Montreuil, A., Bourhis, R.Y., 2001. Majority Acculturation Orientations Toward "Valued" and "Devalued" Immigrants. Journal of Cross-Cultural Psychology 32, 698–719. https://doi.org/10.1177/0022022101032006004

Morel, N., Palier, B., Palme, J., 2012. Beyond the welfare state as we knew it?, in: Morel, N., Palier, B., Palme, J. (Eds.), Towards a Social Investment Welfare State? Ideas, Policies and Challenges. The Policy Press, UK, pp. 1–30.

Morgan, D.L., 1998. The Focus Group Guidebook, Nachdr. ed, Focus Group Kit. SAGE, Thousand Oaks, California.

Morgan, D.L., 1997. Focus Groups as Qualitative Research, 2nd ed. ed, Qualitative research methods series. SAGE, Thousand Oaks, California.

Morgan, K.J., 2012. Promoting social investment through work-family policies: which national do it and why?, in: Morel, N., Palier, B., Palme, J. (Eds.), Towards a Social Investment Welfare State? Ideas, Policies and Challenges. The Policy Press, UK, pp. 153–179.

Moss, P., 2012. Caring and Learning Together: exploring the relationship between parental leave and early childhood education and care. European Journal of Education 47, 482–493. https://doi.org/10.1111/ejed.12003

Moss, P., 2008. What Future for the Relationship between Early Childhood Education and Care and Compulsory Schooling? Research in Comparative and International Education 3, 224. https://doi.org/10.2304/rcie.2008.3.3.224

Moss, P., 2006. Farewell to Childcare? National Institute Economic Review 195, 70–83. https://doi.org/10.1177/0027950106064040

Motiejūnaitė-Schulmeister, A., 2017. Structural indicators on early childhood education and care in Europe – 2016. (Eurydice Report). Publications Office of the European Union, Luxembourg.

Muffels, R.J.A., Fouarge, D.J.A.G., 2002. Do European Welfare Regimes Matter in Explaining Social Exclusion?, in: Muffels, R.J.A., Tsakloglou, P., Mayes, D.G. (Eds.), Social Exclusion in European Welfare States. Edward Elgar, Cheltenham, pp. 202–232.

Muižnieks, N., 2017. Position Paper on Fighting School Segregation in Europe through Inclusive Education.

Mullaly, R.P., 2007. The new structural social work, 3rd ed. Oxford University Press, Don Mills, Ont.

Muthén, B.O., 1994. Multilevel Covariance Structure Analysis. Sociological Methods & Research 22, 376–398. https://doi.org/10.1177/0049124194022003006

Myers, R.G., 2000. Financing early childhood education and care services. International Journal of Educational Research 33, 75–94. https://doi.org/10.1016/S0883-0355(99)00044-0

Nekby, L., Rödin, M., 2007. Acculturation identity and labor market outcomes (IZA Discussion paper No. 2826). Institut zur Zukunft der Arbeit, Bonn.

Neuman, M.J., 2009. The Politics of (De)centralisation: Early Care and Education in France and Sweden, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 157–179.

Nicaise, I., 2019. Selectiemachine of sociale lift? Segregatie in het onderwijs tegengaan, in: Vlaamse Onderwijsraad VLOR (Ed.), Spots Op Onderwijs. Wetenschappers Voor Het Voetlicht. Lannoo Campus.

Nicaise, I., 2002. The role of school community action in the context of the Flemish Educational Priority Policy. Presented at the Integration of nursery and primary school children from a migratory background, Frankfurt.

Nicaise, I., ed., 2000. The right to learn: educational strategies for socially excluded youth in Europe. Policy Press, Bristol.

Nicaise, I. et al., 2000. Success for all? Educational strategies for disadvantaged youth in six European countries, in: Walraven, G., Parsons, C., van Veen, D., Day, C. (Eds.), Combating Social Exclusion through Education: Laissez-Faire, Authoritarianism or Third Way? Garant, Leuven, pp. 271–286.

NICHD, E.C.C.R.N., 2002. Child-Care Structure → Process → Outcome: Direct and Indirect Effects of Child-Care Quality on Young Children's Development. Psychological Science 13, 199–206. https://doi.org/10.1111/1467-9280.00438

Noailly, J., Visser, S., 2009. The Impact of Market Forces on Child Care Provision: Insights from the 2005 Child Care Act in the Netherlands. Journal of Social Policy 38, 477–498. https://doi.org/10.1017/S0047279409003109

Noelke, C., 2008. Social protection, inequality and labour market risks in Central and Eastern Europe, in: Kogan, I., Gebel, M., Noelke, C. (Eds.), Europe Enlarged: A Handbook of Education, Labour and Welfare Regimes in Central and Eastern Europe. The Policy Press, Bristol, pp. 63–95.

Nolan, B., 2013. What use is 'social investment'? Journal of European Social Policy 23, 459–468. https://doi.org/10.1177/0958928713499177

Nollenberger, N., Rodríguez-Planas, N., 2015. Full-time universal childcare in a context of low maternal employment: Quasi-experimental evidence from Spain. Labour Economics 36, 124–136. https://doi.org/10.1016/j.labeco.2015.02.008

Nordin, M., 2013. Immigrant School Segregation in Sweden. Popul Res Policy Rev 32, 415–435. https://doi.org/10.1007/s11113-013-9271-z

Nusche, D., 2009. What Works in Migrant Education? (OECD Education Working Papers). Organisation for Economic Co-operation and Development, Paris.

OECD, 2018. Equity in Education: Breaking Down Barriers to Social Mobility, PISA. OECD, Paris. https://doi.org/10.1787/9789264073234-en

OECD, 2017a. Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education. Organisation for Economic Co-operation and Development, Paris.

OECD, 2017b. The Funding of School Education, OECD Reviews of School Resources. OECD Publishing. https://doi.org/10.1787/9789264276147-en

OECD, 2015. Starting Strong IV: Monitoring Quality in Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2012. Starting Strong III: A Quality Toolbox for Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2006. Starting Strong II: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2001. Starting Strong: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD Family Database, 2012. PF3.4 Childcare support. Organisation for Economic Co-operation and Development.

OECD Family Database, 2011. PF1.6 Public spending by age of children. Organisation for Economic Co-operation and Development.

Ojala, M., 2010. Developing Multicultural Early Childhood Education in a Finnish. International Journal of Child Care and Education Policy 4, 13–22.

Onaga, E.E., Martoccio, T.L., 2015. Dynamic and Uncertain Pathways between Early Childhood Inclusion Policy and Practice. International Journal of Child Care and Education Policy 2, 67. https://doi.org/10.1007/2288-6729-2-1-67

Page, B.I., Shapiro, R.Y., 1983. Effects of Public Opinion on Policy. The American Political Science Review 77, 175–190. https://doi.org/10.2307/1956018

Patton, M.Q., 2002. Qualitative research and evaluation methods, 3rd ed. ed. Sage, Thousand Oaks.

Pavolini, E., Van Lancker, W., 2018. The Matthew effect in childcare use: a matter of policies or preferences? Journal of European Public Policy 25, 878–893. https://doi.org/10.1080/13501763.2017.1401108

Penn, H., 2015. Policy Rationales for Early Childhood Services. International Journal of Child Care and Education Policy 5, 1. https://doi.org/10.1007/2288-6729-5-1-1

Penn, H., 2014. International Indicators as a Measure of National Policies. IJEC 46, 33–46. https://doi.org/10.1007/s13158-013-0099-9

Penn, H., 2011. Policy Rationales for Early Childhood Services. ICEP 5, 1–16. https://doi.org/10.1007/2288-6729-5-1-1

Penn, H., 2009. International Perspectives On Quality in Mixed Economies of Childcare. National Institute Economic Review 207, 83–89. https://doi.org/10.1177/0027950109103687

Peugh, J.L., 2010. A practical guide to multilevel modeling. Journal of School Psychology 48, 85–112. https://doi.org/10.1016/j.jsp.2009.09.002

Peyton, V., Jacobs, A., O'Brien, M., Roy, C., 2001. Reasons for choosing child care: associations with family factors, quality, and satisfaction. Early Childhood Research Quarterly 16, 191–208. https://doi.org/10.1016/S0885-2006(01)00098-9

Pfau-Effinger, B., 2005. Welfare State Policies and the Development of Care Arrangements. European Societies 7, 321–347. https://doi.org/10.1080/14616690500083592

Pfeffermann, D., 1993. The Role of Sampling Weights When Modeling Survey Data. International Statistical Review / Revue Internationale de Statistique 61, 317–337. https://doi.org/10.2307/1403631

Pfeffermann, D., Moura, D.S., Antonio, F., Silva, D.N., Luis, P., 2006. Multi-level modelling under informative sampling. Biometrika 93, 943–959. https://doi.org/10.1093/biomet/93.4.943

Pfeffermann, D., Skinner, C.J., Holmes, D.J., Goldstein, H., Rasbash, J., 1998. Weighting for unequal selection probabilities in multilevel models. Journal of the Royal Statistical Society: Series B (Statistical Methodology) 60, 23–40. https://doi.org/10.1111/1467-9868.00106

Phalet, K., Baysu, G., Van Acker, K., 2015. Ethnicity and Migration in Europe, in: Wright, J.D. (Ed.), International Encyclopedia of the Social & Behavioral Sciences (Second Edition). Elsevier, Oxford, pp. 142–147.

Phillips, D., Mekos, D., Scarr, S., McCartney, K., Abbott–Shim, M., 2000. Within and beyond the classroom door: assessing quality in child care centers. Early Childhood Research Quarterly 15, 475–496. https://doi.org/10.1016/S0885-2006(01)00077-1

Phillipsen, L.C., Burchinal, M.R., Howes, C., Cryer, D., 1997. The prediction of process quality from structural features of child care. Early Childhood Research Quarterly 12, 281–303. https://doi.org/10.1016/S0885-2006(97)90004-1

Pierson, P., 1993. When Effect Becomes Cause: Policy Feedback and Political Change. World Politics 45, 595–628. https://doi.org/10.2307/2950710

Piontkowski, U., Rohmann, A., Florack, A., 2002. Concordance of Acculturation Attitudes and Perceived Threat. Group Processes Intergroup Relations 5, 221–232. https://doi.org/10.1177/1368430202005003003

Poesen-Vandeputte, M., Nicaise, I., 2015. Rich schools, poor schools. Hidden resource inequalities between primary schools. Educational Research 57, 91–109. https://doi.org/10.1080/00131881.2014.983722

Poon-McBrayer, K.F., Wong, P., 2013. Inclusive education services for children and youth with disabilities: Values, roles and challenges of school leaders. Children and Youth Services Review 35, 1520–1525. https://doi.org/10.1016/j.childyouth.2013.06.009

Prentice, S., 2007. Childcare, the "Business Case" and Economic Development: Canadian Evidence, Opportunities and Challenges. International Journal of Economic Development 9, 269–300.

Pulinx, R., Avermaet, P.V., 2014. Linguistic diversity and education. Dynamic interactions between language education policies and teachers' beliefs. A qualitative study in secondary schools in Flanders (Belgium). Revue française de linguistique appliquée Vol. XIX, 9–27.

Pungello, E.P., Kurtz-Costes, B., 1999. Why and How Working Women Choose Child Care: A Review with a Focus on Infancy. Developmental Review 19, 31–96. https://doi.org/10.1006/drev.1998.0468

Rabe-Hesketh, S., Skrondal, A., 2012. Multilevel and longitudinal modeling using Stata, 3rd ed. ed. Stata Press Publication, College Station, Tex.

Rabinowitz, G., Prothro, J.W., Jacoby, W., 1982. Salience as a Factor in the Impact of Issues on Candidate Evaluation. The Journal of Politics 44, 41–63. https://doi.org/10.2307/2130283

Radey, M., Brewster, K.L., 2007. The influence of race/ethnicity on disadvantaged mothers' child care arrangements. Early Childhood Research Quarterly 22, 379–393. https://doi.org/10.1016/j.ecresq.2007.05.004

Rojas, A.J., Navas, M., Sayans-Jiménez, P., Cuadrado, I., 2014. Acculturation Preference Profiles of Spaniards and Romanian Immigrants: The Role of Prejudice and Public and Private Acculturation Areas. The Journal of Social Psychology 154, 339–351. https://doi.org/10.1080/00224545.2014.903223

Rose, K.K., Elicker, J., 2010. Maternal child care preferences for infants, toddlers, and preschoolers: the disconnect between policy and preference in the USA. Community, Work & Family 13, 205–229. https://doi.org/10.1080/13668800903314366

Rosenthal, K.R., Gesten, E.L., Shiffman, S., 1986. Gender and Sex Role Differences in the Perception of Social Support. Sex Roles; New York, N.Y. 14, 481–499.

Saint-Arnaud, S., Bernard, P., 2003. Convergence or Resilience? A Hierarchical Cluster Analysis of the Welfare Regimes in Advanced Countries. Current Sociology 51, 499–527. https://doi.org/10.1177/00113921030515004

Saraceno, C., 2011. Childcare needs and childcare policies: A multidimensional issue. Current Sociology 59, 78–96. https://doi.org/10.1177/0011392110385971

Scheiwe, K., Willekens, H., 2009. Introduction: Path-dependencies and Change in Child-care and Preschool Institutions in Europe - Historical and Institutional Perspectives, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 1–22.

Schleicher, A., 2014. Equity, Excellence and Inclusiveness in Education. Organisation for Economic Co-operation and Development, Paris.

Schlueter, E., Meuleman, B., Davidov, E., 2013. Immigrant Integration policies and perceived Group Threat: A Multilevel Study of 27 Western and Eastern European Countries. Social Science Research 42, 670–682. https://doi.org/10.1016/j.ssresearch.2012.12.001

Schober, P.S., Spiess, C.K., 2013. Early Childhood Education Activities and Care Arrangements of Disadvantaged Children in Germany. Child Ind Res 6, 709–735. https://doi.org/10.1007/s12187-013-9191-9

Scruggs, L., Allan, J., 2006. Welfare-state decommodification in 18 OECD countries: a replication and revision. Journal of European Social Policy 16, 55–72. https://doi.org/10.1177/0958928706059833

Seibel, V., Hedegaard, T.F., 2017. Migrants' and natives' attitudes to formal childcare in the Netherlands, Denmark and Germany. Children and Youth Services Review 78, 112–121. https://doi.org/10.1016/j.childyouth.2017.05.017

Seo, S., 2003. Early child care choices: a theoretical model and research implications. Early Child Development and Care 173, 637–650. https://doi.org/10.1080/0300443032000088230

Sibley, E., Dearing, E., Toppelberg, C.O., Mykletun, A., Zachrisson, H.D., 2015. Do increased availability and reduced cost of early childhood care and education narrow social inequality gaps in utilization? Evidence from Norway. International Journal of Child Care and Education Policy 9. https://doi.org/10.1007/s40723-014-0004-5

Slot, P.L., Lerkkanen, M.-K., Leseman, P.P.M., 2015. D2.2: The relations between structural quality and process quality in European early childhood education and care provisions: Secondary analyses of large scale studies in five countries.

Smithson, J., Brannen, J., 2002. Qualitative methodology in cross-national research, in: Brannen, J., Lewis, S., Nilsen, A., Smithson, J. (Eds.), Young Europeans, Work and Family: Futures in Transition, Routledge/European Sociological Association Studies in European Societies. Routledge, London; New York.

Sosinsky, L.S., Lord, H., Zigler, E., 2007. For-profit/nonprofit differences in center-based child care quality: Results from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development. Journal of Applied Developmental Psychology, New findings from Secondary Data Analysis Results from the NICHD Study of Early Child Care and Youth Development Friedman Special Issue 28, 390–410. https://doi.org/10.1016/j.appdev.2007.06.003

Stahl, J.F., Schober, P.S., 2017. Convergence or divergence? Educational discrepancies in work-care arrangements of mothers with young children in Germany. Work, Employment and Society 0950017017692503. https://doi.org/10.1177/0950017017692503

Starke, P., Obinger, H., Castles, F.G., 2008. Convergence towards where: in what ways, if any, are welfare states becoming more similar? Journal of European Public Policy 15, 975–1000. https://doi.org/10.1080/13501760802310397

StataCorp, 2017. Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC.

Stone, P.J., 1997. Thematic text analysis: New agendas for analyzing text content, in: Roberts, C.W. (Ed.), Text Analysis for the Social Sciences: Methods for Drawing Statistical Inferences from Texts and Transcripts, Routledge Communication Series. Routledge, Mahwah NJ.

Stoney, L., Greenberg, M.H., 1996. The Financing of Child Care: Current and Emerging Trends. The Future of Children 6, 83–102. https://doi.org/10.2307/1602420

Strnadová, I., Hájková, V., 2012. Striving for Inclusive Education in the Czech Republic. Intervention in School and Clinic 47, 307–311. https://doi.org/10.1177/1053451211430114

Suri, H., 2011. Purposeful Sampling in Qualitative Research Synthesis. Qualitative Research Journal 11, 63–75. https://doi.org/10.3316/QRJ1102063

Sylva, K., Ereky-Stevens, K., Ariescu, A., 2015. Overview of European ECEC curricula and curriculum template, CARE D2.1.

Sylva, K., Stein, A., Leach, P., Barnes, J., Malmberg, L.-E., 2007. Family and child factors related to the use of non-maternal infant care: An English study. Early Childhood Research Quarterly 22, 118–136. https://doi.org/10.1016/j.ecresq.2006.11.003

Szulkin, R., Jonsson, J.O., 2007. Ethnic Segregation and Educational Outcomes in Swedish Comprehensive Schools (No. Working Paper 2007:2), SULCIS Working Paper Series. The Stockholm University Linnaeus Center for Integration Studies (SULCIS), Stockholm.

Tang, S., Coley, R.L., Votruba-Drzal, E., 2012. Low-income families' selection of child care for their young children. Children and Youth Services Review 34, 2002–2011. https://doi.org/10.1016/j.childyouth.2012.06.012

Thomassen, J., 2012. The Blind Corner of Political Representation. Representation 48, 13–27. https://doi.org/10.1080/00344893.2012.653229

Tip, L.K., González, R., Brown, R., De Tezanos-Pinto, P., Saavedra, P., Sagredo, V., Zagefka, H., Celeste, L., 2015. Effects of ingroup norms on domain-specific acculturation preferences: Experimental evidence from two cultural contexts. International Journal of Intercultural Relations 47, 113–130. https://doi.org/10.1016/j.ijintrel.2015.03.027

Tobin, J., 1958. Estimation of Relationships for Limited Dependent Variables: 1. Introduction. Econometrica (pre-1986); Evanston 26, 24.

Underwood, K., Valeo, A., Wood, R., 2012. Understanding Inclusive Early Childhood Education: A Capability Approach. Contemporary Issues in Early Childhood 13, 290–299. https://doi.org/10.2304/ciec.2012.13.4.290

Urban, M., Vandenbroeck, M., Van Laere, K., Lazzari, A., Peeters, J., 2012. Towards Competent Systems in Early Childhood Education and Care. Implications for Policy and Practice. European Journal of Education 47, 508–526. https://doi.org/10.1111/ejed.12010

Van Acker, K., Vanbeselaere, N., 2011. Bringing together acculturation theory and intergroup contact theory: Predictors of Flemings' expectations of Turks' acculturation behavior. International Journal of Intercultural Relations 35, 334–345. https://doi.org/10.1016/j.ijintrel.2010.06.004

Van Houtte, M., Stevens, P.A.J., 2010. School ethnic composition and aspirations of immigrant students in Belgium. British Educational Research Journal 36, 209–237. https://doi.org/10.1080/01411920902802180

van Huizen, T., Dumhs, L., Plantenga, J., 2016. D5.4: Report on costs-benefits estimations of ECEC.

van Huizen, T., Plantenga, J., 2018. Do children benefit from universal early childhood education and care? A meta-analysis of evidence from natural experiments. Economics of Education Review 66, 206–222. https://doi.org/10.1016/j.econedurev.2018.08.001

Van Lancker, W., Ghysels, J., 2016. Explaining patterns of inequality in childcare service use across 31 developed economies: A welfare state perspective. Intl Journal of Comparative Sociology 57, 310–337. https://doi.org/10.1177/0020715216674252

Van Lancker, W., Ghysels, J., 2012. Who benefits? The social distribution of subsidized childcare in Sweden and Flanders. Acta Sociologica 55, 125–142. https://doi.org/10.1177/0001699311433428

Van Lancker, W., Van Mechelen, N., 2015. Universalism under siege? Exploring the association between targeting, child benefits and child poverty across 26 countries. Social Science Research 50, 60–75. https://doi.org/10.1016/j.ssresearch.2014.11.012

van Oorschot, W., Reeskens, T., Meuleman, B., 2012. Popular perceptions of welfare state consequences: A multilevel, cross-national analysis of 25 European countries. Journal of European Social Policy 22, 181–197. https://doi.org/10.1177/0958928711433653

Van Oudenhoven, J.P., Prins, K.S., Buunk, B.P., 1998. Attitudes of minority and majority members towards adaptation of immigrants. Eur. J. Soc. Psychol. 28, 995–1013. https://doi.org/10.1002/(SICI)1099-0992(1998110)28:6<995::AID-EJSP908>3.0.CO;2-8

Vande Gaer, E., Gijselinckx, C., Hedebouw, G., 2013. Het gebruik van opvang voor kinderen jonger dan 3 jaar in het Vlaamse Gewest (No. 12), Steunpunt Welzijn, Volksgezondheid en Gezin. Leuven, Belgium.

Vandenbroeck, M., 2011. Diversity in Early Childhood Services. Encyclopedia on Early Childhood Development [online].

Vandenbroeck, M., De Visscher, S., Van Nuffel, K., Ferla, J., 2008. Mothers' search for infant child care: The dynamic relationship between availability and desirability in a continental European welfare state. Early Childhood Research Quarterly 23, 245–258. https://doi.org/10.1016/j.ecresq.2007.09.002

Vandenbroeck, M., Lazzari, A., 2014. Accessibility of early childhood education and care: a state of affairs. European Early Childhood Education Research Journal 22, 327–335. https://doi.org/10.1080/1350293X.2014.912895

Verbist, G., Matsaganis, M., 2014. The Redistributive Capacity of Services in the European Union, in: Vandenbroecke, F., Cantillon, B. (Eds.), Reconciling Work and Poverty Reduction: How Successful Are European Welfare States? Oxford University Press, New York, pp. 185–211.

Verkuyten, M., Martinovic, B., 2012. Immigrants' National Identification: Meanings, Determinants, and Consequences. Social Issues and Policy Review 6, 82–112. https://doi.org/10.1111/j.1751-2409.2011.01036.x

Vincent, C., Braun, A., Ball, S.J., 2008. Childcare, choice and social class: Caring for young children in the UK. Critical Social Policy 28, 5–26. https://doi.org/10.1177/0261018307085505

Vlaanderen Onderwijs, 2015a. Ingeschreven leerlingen met geboortejaar 2006 en op 01/02/2015 in het lager onderwijs.

Vlaanderen Onderwijs, 2015b. "Onvoldoende afwezige" leerlingen met geboortejaar 2006 en op 01/02/2015 in het lager onderwijs.

Vogel, J., 2003. Welfare State. Social Indicators Research 64, 373–391.

Waldring, I., 2017. Practices of change in the education sector: professionals dealing with ethnic school segregation. Ethnic and Racial Studies 40, 247–263. https://doi.org/10.1080/01419870.2017.1245434

Warner, R.M., 2013. Applied statistics: from bivariate through multivariate techniques, 2nd ed. ed. SAGE Publications, Thousand Oaks, Calif.

Wets, J., 2006. The Turkish Community in Austria and Belgium: The Challenge of Integration. Turkish Studies 7, 85–100. https://doi.org/10.1080/14683840500520600

White, L.A., 2012. Must We All Be Paradigmatic? Social Investment Policies and Liberal Welfare States. Canadian Journal of Political Science/Revue canadienne de science politique 45, 657–683. https://doi.org/10.1017/S0008423912000753

White, L.A., Friendly, M., 2012. Public Funding, Private Delivery: States, Markets, and Early Childhood Education and Care in Liberal Welfare States – A Comparison of Australia, the UK, Quebec, and New Zealand. Journal of Comparative Policy Analysis: Research and Practice 14, 292–310. https://doi.org/10.1080/13876988.2012.699789

Willekens, H., 2009. How and Why Belgium Became a Pioneer of Preschool Development, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 43–56.

Wilson, E., 1977. Women and the Welfare State.

Wincott, D., 2006. Paradoxes of New Labour Social Policy: Toward Universal Child Care in Europe's "Most Liberal" Welfare Regime? Soc Pol 13, 286–312. https://doi.org/10.1093/sp/jxj011

Winters, J.A., Page, B.I., 2009. Oligarchy in the United States? Perspectives on Politics 7, 731–751. https://doi.org/10.1017/S1537592709991770

Wlezien, C., 2005. On the salience of political issues: The problem with 'most important problem.' Electoral Studies 24, 555–579. https://doi.org/10.1016/j.electstud.2005.01.009

Wlezien, C., Soroka, S.N., 2012. Political Institutions and the Opinion–Policy Link. West European Politics 35, 1407–1432. https://doi.org/10.1080/01402382.2012.713752

Wood, E., Hedges, H., 2016. Curriculum in early childhood education: critical questions about content, coherence, and control. The Curriculum Journal 27, 387–405. https://doi.org/10.1080/09585176.2015.1129981

Yerkes, M.A., Javornik, J., 2018. Creating capabilities: Childcare policies in comparative perspective. Journal of European Social Policy 0958928718808421. https://doi.org/10.1177/0958928718808421

Zachrisson, H.D., Janson, H., Nærde, A., 2013. Predicting early center care utilization in a context of universal access. Early Childhood Research Quarterly 28, 74–82. https://doi.org/10.1016/j.ecresq.2012.06.004

2.7. Appendices

Table 2-8: Correlations between country-level variables

	Total well-paid leave available to mothers (maternity + parental in months)	Self-financing private ECEC provision allowed for 0-3 year-olds or not	Self-financing private ECEC provision allowed for 3-6 year-olds or not	Start of legal entitlement (age of child)	Start of free provision (age of child)	ECEC system split, mixed or integrated	Curriculum exists for 0-3 year-olds or not	Minimum staff qualification for 3-6 year-olds (years of post-sec. edu.)	Salary of pre-school teachers (10 years exp.) (1000 USD in PPS)	Public spending per 0-5 year-old in care and education (1000 EUR in PPS)	Net (out-of-pocket) cost of childcare for lone parents (% of average wage)	Proportion of funding for ISCED 0 from private sources
Total well-paid leave available to mothers (maternity + parental in months)	1											
Self-financing private ECEC provision allowed for 0-3 year-olds or not	-0,46*	1										
Self-financing private ECEC provision allowed for 3-6 year-olds or not	-0,36°	0,71***	1									
Start of legal entitlement (age of child)	-0,08	0,32°	0,18	1								
Start of free provision (age of child)	0,02	-0,26	-0,21	-0,35°	1							
ECEC system split, mixed or integrated	-0,38*	0,81***	0,46*	0,23	-0,33°	1						
Curriculum exists for 0-3 year-olds or not	0,35°	-0,45*	-0,22	-0,32°	0,03	-0,58***	1					
Minimum staff qualification for 3-6 year-olds (years of post-sec. edu.)	-0,25	-0,02	0,43°	-0,07	-0,03	-0,12	-0,04	1				
Salary of pre-school teachers (10 years exp.) (1000 USD in PPS)	-0,23	-0,06	0,22	-0,34	-0,18	-0,04	-0,08	0,40°	1			
Public spending per 0-5 year-old in care and education (1000 EUR in PPS)	-0,03	-0,23	0,03	-0,24	-0,07	-0,23	0,10	0,41°	0,78***	1		
Net (out-of-pocket) cost of childcare for lone parents (% of average wage)	-0,10	0,23	-0,23	0,18	-0,09	0,23	0,04	-0,71***	-0,44°	-0,19	1	
Proportion of funding for ISCED 0 from private sources	0,01	-0,09	-0,01	0,08	0,28	-0,03	-0,10	0,05	-0,39	-0,28	-0,12	1

Table 2-9: Values per country in independent variables

	n	Attendance 0-2 year-olds (any nr of hrs, unw'd)	Attendance 3-6 year-olds (any nr of hrs, unw'd)	Total well-paid leave available to mothers (mat.+par. in months)	Self-financing private ECEC provision allowed for 0-3 year-olds or not	Self-financing private ECEC provision allowed for 3-6 year-olds or not	Start of legal entitlement (age of child)	Start of free provision (age of child)	ECEC system split, mixed or integrated	Curriculum exists for 0-3 year-olds or not	Minimum staff qualification for 3-6 year-olds (years of post-sec. edu.)	Salary of pre-school teachers (10 years exp.) (1000 USD in PPS)	Public spending per 0-5 year-old in care and education (1000 EUR in PPS)	Net (out-of-pocket) cost of childcare for lone parents (% of ave. wage)	Proportion of funding for ISCED 0 from private sources
Austria	649	10,47%	72,04%	15,8	0	0	5	5	2	0	2	38,38	20,95	3,38	27,8
Belgium	942	38,86%	91,92%	3,7	1	0	2,5	2,5	3	.	3	42,65	23,74	3,57	3,6
Bulgaria	378	6,06%	54,07%	13	1	1	5	5	2	0	4	.	.	8,02	7,3
Croatia	459	9,34%	35,74%	6	1	1	6	6	1	1	3	.	.	.	0,9
Cyprus	652	13,03%	75,70%	4	1	1	4,66	4,66	3	0	4	.	.	.	23,5
Czechia	814	2,07%	58,78%	24	1	0	5	5	3	0	0	16,74	9,22	18,02	8
Denmark	562	61,36%	96,78%	14,4	0	0	0,6	6	2	1	3,5	45,72	30,57	0	13,3
Estonia	845	9,50%	81,52%	18,6	0	0	1,5	7	1	1	3	.	5,39	7,3	1,5
Finland	1623	21,24%	66,07%	11,1	0	0	0,75	6	1	1	3	29,86	32,95	9,38	9,9
France	1495	37,93%	87,86%	3,8	1	1	3	3	3	0	5	31,23	35,91	2,44	6,3
Germany	945	20,66%	83,68%	12	1	1	3	6	2	1	3	.	22,5	1,94	23,5
Greece	874	8,62%	58,83%	6	1	1	5	4	3	1	4	22,46	10,16	2,14	.
Hungary	917	4,95%	75,57%	24,2	1	1	3	3	3	1	2	11,5	12,11	5,07	.
Iceland	544	19,23%	96,73%	9	0	0	6	6	1	1	5	24,91	44,56	4,48	24,3
Ireland	1108	17,16%	72,03%	6	1	0	3,17	3,17	3	1	1	.	25,74	41,55	0,1
Italy	1956	16,91%	82,74%	3,7	1	1	6	3	3	0	5	30,26	22,77	.	8,2
Latvia	633	9,06%	79,83%	13	0	0	5	1	1	1	2	.	.	10,61	1,8

Lithuania	327	4,81%	64,13%	24,9	0	0	7	0	1	1	3	.	.	8,85	13,2
Luxembourg[21]	640	48,00%	84,38%	1,9	1	1	3	3	3	0	4	91,2	73,57	2,97	1,2
Malta	545	58,18%	58,46%	4,5	1	1	2,75	2,75	3	1	2	.	.	25,43	19
Netherlands	1382	46,52%	90,01%	2,8	.	.	4	4	3	.	.	45,23	34,32	6,26	5,8
Norway	1029	38,52%	89,54%	37,7	0	0	1	6	1	1	3	40,88	49,11	8,32	15,4
Poland	1929	3,56%	40,05%	12,5	1	0	5	3	3	0	3	20,4	8,43	6,86	21
Portugal	643	35,51%	78,64%	6	1	1	3	3	3	0	4	33,74	9,73	1,08	.
Romania	296	0,00%	46,22%	26	1	1	6	0,2	3	1	3	.	.	.	2,6
Slovakia	711	2,57%	57,86%	0	1	0	6	5	3	0	0	10,94	7,53	28,01	17,7
Slovenia	1257	23,31%	83,33%	11,7	0	0	0,92	6	1	1	3	29,9	13,5	6,57	20,9
Spain	1498	26,54%	86,87%	5,1	1	1	3	3	2	1	4	39,47	16,98	7,89	26,8
Sweden	836	42,61%	83,68%	13,4	0	0	1	3	1	1	3,5	35,82	38,41	2,25	0
Switzerland	766	28,36%	66,27%	3,2	1	1	4	4	3	0	3	.	9,1	6,37	.
United Kingdom	1708	24,03%	70,91%	1,4	1	1	3	3	2	.	4	44,79	36,65	5,7	8,7

21 Note that Luxembourg has very high public spending per child in ECEC and pre-school teachers with 10 years of experience. In order to check whether this outlier affects the results, all analyses were repeated without Luxembourg in the data. The results were not changed, hence we kept Luxembourg in the analyses.

3. Chapter III – Perceived Accessibility of Childcare in Europe: A Cross-country Multilevel Study

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ABSTRACT

Perceptions of users regarding the accessibility of childcare services have been under-researched. The present study addresses this gap by looking into the effect of systemic level characteristics of the ECEC system on the perceived accessibility of childcare at the individual level. Perceived accessibility is composed of perceived affordability, availability, quality and geographical accessibility of these services. The socio-ecological model at the micro-level and the model of institutional setting of ECEC (provision, regulation, and financing) at the macro-level are combined in multilevel analyses. Our finding is that childcare is perceived to be more accessible in countries that (1) do not allow private private self-financing ECEC services for 3-6 year-old children, (2) adopt a unitary ECEC system where services for 0-3 year-olds and 3-6 year-olds are harmonised, and (3) provide generous public support per 0-5 year-old child in ECEC. The latter has an even stronger effect on families with an income below average.

KEYWORDS

ECEC, childcare, pre-school, vulnerable groups, disadvantaged groups

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3.1. Introduction

Ensuring the access of every child to an inclusive and good quality early childhood education and care (ECEC) for every child is an important priority for governments as ECEC has a more profound and lasting effect on children's learning potential than any other intervention in their later lives at any other age, especially for disadvantaged children (Bowers et al., 2012; Cunha et al., 2006; Heckman, 2006; Leseman, 2009). An extensive body of literature recognises the social and economic benefits of ECEC for improved child well-being and learning outcomes, prevention of educational disadvantage, enhanced female employment, reduced (child) poverty, increased intergenerational social mobility, and favourable outcomes later in life (Cunha et al., 2006; Leseman, 2009; OECD, 2012).

Although the initial focus on ECEC was to free up mothers' time so that they can take part in the labour market (Mahon, 2002), in line with scientific evidence on the positive outcomes of ECEC for the children themselves, the European discourse started to focus more on high-quality, holistic, complex, integrated, inter-sectoral and inclusive provision (Herczog, 2012). However, whether these services are effectively accessible is often overlooked by researchers and policy-makers (Vandenbroeck and Lazzari, 2014), even more so for disadvantaged children from low-income families (Fram and Kim, 2008; Ghysels and Van Lancker, 2011; OECD, 2012, 2006; Sylva et al., 2007). The present study addresses this gap in the literature for it investigates whether childcare services are perceived to be *accessible* in Europe, and how perceived accessibility is affected by the design of the ECEC system. It is important to study perceived accessibility of childcare, in order to see whether the investments made on the ECEC system translates into easier access perceived by parents who (would like to) use these services. Researching perceived accessibility provides both academics and policy-makers with insight on whether various ECEC policies have a positive impact on people's lives.

3.2. Perceptions of the Accessibility of ECEC

Before elucidating the theoretical understanding of policy effects on the accessibility of ECEC, it is crucial to appraise the wide array of research that has been investigating the perception of ECEC at the individual level. Although research on parental perception is essential, it is rarely investigated in both earlier and later stages of education (Anderson and Minke, 2007; Cleveland et al., 2013). In particular, perceptions of disadvantaged families on early childhood education have not attracted much interest with the exception of a few studies (Fram and Kim, 2008; Fuller et al., 1996; Henly and Lyons, 2000; Vandenbroeck and Lazzari, 2014), whose results are variant in terms of the dimensions of ECEC that they focus on such as preference motivations for home-based versus centre-based child care (Kim and Fram, 2009; Li-Grining and Coley, 2006), childcare arrangements (Henly and Lyons, 2000), family

processes (Fuller et al., 1996) and access to information about ECEC and enrolment procedures (Vandenbroeck and Lazzari, 2014).

In the past two decades, research on parental preferences regarding the type and intensity of ECEC has gained interest (Gamble et al., 2009; Pungello and Kurtz-Costes, 1999; Rose and Elicker, 2010; Seo, 2003; Vandenbroeck et al., 2008). Since then, parents' perception of ECEC quality is being studied in particular (Ceglowski and Bacigalupa, 2002; Lehrer et al., 2015), also from the perspective of low-income families (Barbarin et al., 2006; Forry et al., 2013; Li-Grining and Coley, 2006). Accessibility of the services also found its way in these studies.

Among these studies, Barbarin et al. (2006) identified the areas of interest for parents from different socio-economic and ethno-cultural backgrounds in relation to public ECEC quality such as close home-school collaboration, dual language development, and the emotional climate in the classroom. Accessibility-related traits such as flexible opening hours and convenient location were also listed as components of quality by the parents. The authors also noted that accessibility-related indicators were usually left out of scholarly conceptions of quality.

Li-Grining and Coley (2006), in their research regarding developmental quality and maternal views, studied whether childcare met children's needs for "healthy, engaging, and supportive environments" and mothers' preferences and needs for "affordable, accessible, and flexible care". In this context, accessibility refers to whether childcare meets the mother's standards, whether there are transportation problems, and whether the mother feels that she has access to reliable childcare and a provider with similar values. Flexibility is related to whether the provider is flexible regarding hours of care and the mothers' work schedule. Accessibility-related traits such as flexible hours and convenient location were classified as "practical considerations" in relation to childcare quality by Lehrer et al. (2015).

Regarding parental perceptions of quality, some authors listed accessibility as a feature of quality along with cost and convenience (Hofferth and Wissoker, 1992). However, treating cost, convenience and accessibility as functions of quality in ECEC broadens the definition of quality immensely. From the perspective of childcare and education, quality is "an overarching multidimensional concept referring to the extent to which ECEC provides an environment that enhances child development and child wellbeing" (Leseman, 2014). However, in order to start having an impact on child development and wellbeing, ECEC should be accessible in the first place. Hence, quality is more related to rather specific educational elements such as curriculum and pedagogy.

In 2001, the OECD defined accessibility as an umbrella term that encompasses geographical distribution (rural/urban) and proximity, affordability, flexibility, and adequacy for different age groups

as well as children with different needs (OECD, 2001). The definition of the term remained unchanged ever since with small tweaks, and eventually, some scholars listed availability, physical access, cost and quality as key parental considerations in choosing the type and/or centre of child care (Davis and Connelly, 2005; Peyton et al., 2001). The present study also adopts these four dimensions as the characteristics of accessibility for two reasons. First of all, the definition with four dimensions covers all key aspects of the accessibility of the services. Note that flexibility and adequacy mentioned in the definition by OECD (2001) can be assessed as a part of availability and quality, respectively. Secondly, in this definition, quality is treated as a contributor to the general accessibility, not the other way around. In this manner, we can clearly distinguish between the quality of services children receive in childcare facilities from the affordability of cost, physical accessibility (geographic distribution, opening times, etc.), and the availability of services. Furthermore, in the context of this study, quality is treated as a dimension of accessibility only with regard to being an obstacle to childcare use or not. The quality of ECEC as regards child outcomes is not addressed.

Even though there has been research on the perceived accessibility of childcare in the past, none of the studies directly focused on the effect of policies on individuals' perception, certainly not in a comparative manner at the European level. Using multilevel modelling, the present study fills this gap by testing the effects of country- or system-level regulations on the accessibility of childcare perceived by the public across Europe. Such a methodology is beneficial for identifying ECEC policy measures that have a stronger link with accessible ECEC services, as policy-makers need to set priorities when putting new policies in place. Consequently, the countries that plan reforms in their ECEC systems can start from the most important elements that would bring higher returns on investment.

The three-pillared institutional setting of ECEC proposed by several authors to capture the complexity of the ECEC system at the level of institutions is also adopted as the conceptual framework of this article. This model acknowledges the role of the government in the provision, regulation and financing of the ECEC system (McLean, 2014; Meyers and Gornick, 2003; White and Friendly, 2012). Given the tradition of focusing on the public investment in any public service sector, including ECEC, it is important to widen the focus also to how and by whom the services are provided (White and Friendly, 2012). In another study, we have adopted this model, established quantifiable determinants for each mode of intervention, and measured the relationship between these determinants and the intensity of use of ECEC services across Europe (Chapter 2). We use the same framework in the present study to test the effects of the same indicators on the perceived accessibility of childcare services.

3.3. Institutional Setting of ECEC: Provision, Regulation and Financing

Regarding *provision*, some countries with a more liberal welfare model opt for a predominantly market-driven approach to ECEC, while some others (e.g. Nordic countries) focus more on universal access. In general, public and publicly subsidised private ECEC provision for 3-6 year-olds is more widespread compared to 0-3 year-olds (Eurydice, 2014). By encouraging private provision, the government limits public expenditure and relies on the basic market principle that entrepreneurship would balance the demand and supply. Accordingly, more competition is expected to result in cheaper, more efficient, responsive, innovative, flexible and high-quality services (Noailly and Visser, 2009; OECD, 2006; Penn, 2009). Nonetheless, some studies argue that market-based provision leads to considerable heterogeneity in terms of availability, affordability and quality of ECEC, as profit-making providers reinforce inequalities for disadvantaged families (Bastos and Cristia, 2012; Bennett, 2004; Meyers and Gornick, 2003; Noailly and Visser, 2009; OECD, 2006; Penn, 2009; Sosinsky et al., 2007). In the light of these claims, our first hypothesis is that childcare services would be perceived to be less accessible if private profit-making provision is allowed in the country.

In order to make childcare services more accessible and equitable, governments introduce either a legal entitlement to ECEC (a guaranteed place for all children in a facility), free provision (ECEC is free of charge even though there may not be guaranteed places), or some years of compulsory ECEC (Chapter 2). Our hypothesis is that guaranteed places and/or free provision improve the perceived accessibility of services. Thus we test for these separately in our analyses. Furthermore, previous research prioritises availability over affordability. Accordingly, guaranteed availability of places is found to have a larger positive impact on maternal labour market participation and take-up of childcare than the affordability of services (Del Boca, 2002; Farfan-Portet et al., 2011; Kreyenfeld and Hank, 2000). Thus, the age from which entitlement is guaranteed may have a larger effect on perceived accessibility compared to the age when entitlement to free provision starts.

The pillar of *regulation* refers to the standards imposed by the government regarding the functioning of the ECEC services such as quality standards, fees, professional requirements, and wages (White and Friendly, 2012). Among these, the quality standards are of utmost importance. Two major types of quality (i.e. structural and process quality) in ECEC have been studied extensively over the years (Dumčius et al., 2014; NICHD, 2002). Process quality depends more on the teacher-, family- and child-level determinants such as pedagogical practices, relationship quality, and greater parental engagement (Dumčius et al., 2014). Hence, the state has more control over structural quality in terms of regulatory power as it refers to group size in ECEC facilities, minimum staff qualifications, child-to-carer ratio, and staff wages (Burchinal et al., 2002; Dumčius et al., 2014; Phillips et al., 2000). The

former three have been very popular among researchers and are referred to as the “iron triangle” in the literature (Phillipsen et al., 1997). Among these, minimum staff qualifications predict structural quality the best (Burchinal et al., 2002; Dumčius et al., 2014; Manning et al., 2017). Further, despite being left out of the iron triangle of structural quality measures, staff wages have also been shown to be a good predictor of structural quality (Phillips et al., 2000; Phillipsen et al., 1997). Even though the link between perceived accessibility of childcare and quality is less obvious, there may be an indirect link. For instance, one could expect higher quality to reduce accessibility, because it may make ECEC more expensive. Alternatively, more qualified staff are not just better, but also more socially sensitive educators – i.e. aware of the importance of ECEC in breaking the cycle of disadvantage. Consequently, the two other hypotheses of this study are that both higher staff qualification requirements and higher staff salaries would lead to higher quality, which in turn, would contribute to higher perceived accessibility of ECEC services.

There are other regulation-related features of ECEC systems besides structural quality. One of them is the ECEC system being ‘split’ or ‘integrated’ (also referred to as ‘unitary’). In split systems, the services for 0-3 year-old (day-care) and 3-6 year-old (pre-school) children are delivered and managed in a different way, by different authorities. On the other hand, unitary systems harmonise the services and resources for both age groups and are managed by a single authority. The main advantage, of unitary systems is their stronger focus on child development (rather than, for instance, childminding), which may also involve a stronger emphasis on equitable access and quality – especially for 0-3 year-olds (Eurydice, 2014; Kaga et al., 2010; OECD, 2012). On that account, we hypothesise that the perceived accessibility of services may be higher in countries where the ECEC system is unitary.

Another indicator of the way ECEC is regulated in European countries is the (de)centralisation of ECEC services across different levels of governance. Some governments opt for more decentralisation arguing that it promotes democracy and freedom of choice at the local level and that it reduces bureaucracy and overall cost (Neuman, 2009). However, the effect of decentralisation on the accessibility of services is not certain yet. According to a research conducted in France and Sweden, access to ECEC decreased in the former for 0-2 year-olds (decentralised in the early 1980s), while it increased for 0-6 year-olds in the latter (decentralised in early 1990s) (Neuman, 2009). Still, due to the decrease in quality, Sweden started to re-centralise its ECEC system in the 2000s by introducing curriculum and earmarked financing to pre-schools. Hence, (de)centralisation is certainly a key aspect of the ECEC system to be studied, especially with regard to its effect on access. The Eurydice report (2014) contains three indicators which could be used as proxies for (de)centralisation with regard to various aspects: (a) bodies responsible for the accreditation and evaluation of centre-based ECEC settings, (b) bodies responsible for capacity monitoring and forward planning of centre-based ECEC,

and (c) authorities responsible for funding centre-based ECEC. Looking closer at these data, we see that most European countries combine at least two of the three levels of authority: central, regional (if applicable), and local. Given the uncertainly behind the degree of (de)centralisation in each country, these indicators are not fit for use in statistical analyses at the moment.

Finally, the pillar of *financing* relates to the public and private investment in the ECEC system. The ratio of public-to-private spending in the country varies, depending on the prevailing welfare regime, national wealth, whether the services are provided publicly or commercially, and whether the public services are universal or targeted at certain vulnerable groups (Bennett, 2004; Myers, 2000). In any case, sufficient public investment for the sector is essential for the services to be accessible because the higher the childcare cost for families, the lower is the probability of using childcare (Hofferth and Wissoker, 1992). Moreover, public investment in ECEC also reflects the importance attached to ECEC by that country (Bennett, 2004). One of our hypotheses regarding financing is that services are perceived as more accessible as the public spending per child in ECEC increases. The other hypothesis is, the lower the proportion of private funding (in particular from households), the higher the perceived accessibility will be.

As anticipated, the financing pillar contains other indicators as well, which would contribute to our understanding of whether there are equity measures in place. The Eurydice report (2014) lists three indicators with regard to the affordability of ECEC services: the average out of pocket childcare expense for parents, the type of financial support available to parents, and the criteria to offer fee reductions. Yet, none of these indicators qualifies for usage in statistical analysis. The first indicator is not standardised across countries (some provide data as average and some provide the range of fees). The countries vary too much in the second one, where quite many of them do not provide data at all. Finally, the last one demonstrates that most countries take multiple measures in determining whether a fee reduction is needed – which becomes irrelevant if the country provides the services free of charge. Better indicators are needed to dive deeper into the effect of financing of ECEC on the perceived accessibility of these services.

3.4. Data and Methods

In our empirical analysis of the relationship between the institutional setting of ECEC at the country-level and perceived accessibility of ECEC at the individual-level, we will test the following hypotheses.

Provision:

1. In countries that rely (partly) on private for-profit ECEC provision for older (3-6 year-old) children, perceived accessibility of childcare is lower.
2. The earlier the legal entitlement to ECEC starts, the higher the perceived accessibility of childcare.
3. The earlier children are entitled to free provision, the higher the perceived accessibility of childcare.

Regulation:

4. Perceived accessibility of childcare is higher in countries with unitary systems than in countries with split systems.
5. The higher the minimum qualification of ECEC staff is, the higher the perceived accessibility of childcare.
6. The higher the pre-school teacher wages are, the higher the perceived accessibility of childcare.

Financing:

7. The higher the public spending is per child, the higher the perceived accessibility of childcare.
8. The higher the proportion of funding from private sources, the lower the perceived accessibility of childcare.
9. The higher the proportion of daily fees (funding from households), the lower the perceived accessibility of childcare.

3.4.1. Data

Our dependent variable and micro-level control variables come from the third wave of the cross-sectional European Quality of Life Survey (EQLS) conducted in 34 countries in 2011/12 (Molinuevo, 2015), where one adult per household is interviewed. Note that in the multilevel analyses, the level-2 sample size is smaller due to the missing cases in country-level variables. Our units of analysis are adults responding on behalf of their households. Carried out every four years by Eurofound, EQLS includes questions regarding the accessibility of childcare in the four dimensions discussed above: availability, physical access, affordability, and quality. To our knowledge, this is the only international survey that collects data regarding the accessibility of childcare.

3.4.2. Method of Analysis

In the present study, we apply multilevel modelling because we look into the effect of higher-level (i.e. country- or system-level) variables on outcomes at the household-level. Multilevel modelling has been used in perception-related studies in social sciences on a diverse set of topics including the relationship between welfare regimes and disability and self-perceived health (Foubert et al., 2014), the effect of immigrant integration policies on perceived group threat (Schlueter et al., 2013), ethnocentrism (Bircan, 2012), and perceptions related to the economic, moral and social consequences of welfare state (van Oorschot et al., 2012). However, to our knowledge, there has been no study on the perceived accessibility of childcare services using this method. This makes our study a unique contribution to the field.

To assess the significance and goodness-of-fit of the models, we compare the deviances via a Chi-square test (also known as the 'likelihood ratio test') (Hayes, 2006). We also calculate the intra-class correlation (ICC) for every model to check if the country-level independent variables introduced in the analyses help explain a previously unexplained portion of the variance in the data. ICC is calculated by dividing the level-2 variance by the sum of level-1 and level-2 variances and reflects the proportion of country-level variance that is explained by the model. The ICC of the null model is 10,40% which is sufficiently high to pursue a multilevel analysis. For the analyses, we use the linear mixed models function in IBM SPSS (IBM Corp., 2015). The models for all independent variables are reported in the tables. Notwithstanding, among the models with interaction terms with income, we report only the ones where both the interaction effect is significant and the overall model is better than the model without the interaction term.

There is no clear consensus on the use of weights in multilevel analysis within the field of statistics (Cai, 2013). Although some research suggest that multilevel modelling already assumes multi-stage sampling (Goldstein, 2003; Hox and Kreft, 1994; Kaplan and Elliott, 1997; Muthén, 1994), a solid body of literature argues the necessity of introducing sample weights to provide robustness against model misspecification (Asparouhov, 2006; Carle, 2009; Chantala et al., 2005; Pfeffermann, 1993; Pfeffermann et al., 2006, 1998). In order to avoid biased estimates, we considered the sampling process in the model specification and applied sampling weights in our random intercept models. Moreover, the data were weighted also to acquire the descriptive statistics using the final national weights (Eurofound, 2013a).

3.4.3. Dependent Variable

The dependent variable of this study is the "perceived childcare accessibility index" (PCAI), which was obtained by combining four variables reflecting the four dimensions of accessibility. These four questions were asked only to the respondents who had previously stated that either 'they themselves or someone in their household' or 'someone close to them outside the household' had used childcare services in the past 12 months.

To what extent did each of the following factors make it difficult or not for you, or someone close to you, to use childcare services? (1=very difficult, 2=a little difficult, 3=not difficult at all)

a) Q55a Cost
b) Q55b Availability (e.g. waiting lists, lack of services)
c) Q55c Access (e.g. because of distance or opening-hours)
d) Q55d Quality of care

Before combining them, in order to ensure that all these four aspects can form a single latent construct, a Categorical Principal Component Analysis (CATPCA) was conducted. The findings indicated that all four variables indeed load mainly onto one component both across the whole sample as well as in every country. This means that these four variables measure one latent concept. Hence, we are confident that our dependent variable measures perceived accessibility of childcare taking into account its four dimensions. However, for the multilevel analyses, we opted for a composite score assigning equal weights to all four dimensions in the latent construct in all countries.

The composite score was calculated in the same manner that Eurofound did for their analyses (Eurofound, 2013b, p. 110). Accordingly, the values corresponding to the categories of responses for the variables q55a (cost), q55b (availability), q55c (physical access) and q55d (quality) were re-coded and thus, assigned equivalent weights. Variables were re-coded as follows:

$$cost(p_i)\colon g_1(p_i) = \begin{cases} -1, Q55a = 1 \\ -0.5, Q55a = 2 \\ 1, Q55a = 3 \\ 0, Q55a = 98 \end{cases}$$

$$availability\ (p_i)\colon g_2(p_i) = \begin{cases} -1, Q55b = 1 \\ -0.5, Q55b = 2 \\ 1, Q55b = 3 \\ 0, Q55b = 98 \end{cases}$$

$$access\ (p_i)\colon g_3(p_i) = \begin{cases} -1, Q55c = 1 \\ -0.5, Q55c = 2 \\ 1, Q55c = 3 \\ 0, Q55c = 98 \end{cases}$$

$$quality\ (p_i)\colon g_4(p_i) = \begin{cases} -1, Q55d = 1 \\ -0.5, Q55d = 2 \\ 1, Q55d = 3 \\ 0, Q55d = 98 \end{cases}$$

As a result of summing up the response categories for each respondent with its allocated weight, the index is computed as follows:

$$Perceived\ Childcare\ Accessibility\ Index\ (p_i) = \sum_{j=1}^{4} g_j\ (p_i) \qquad j = 1, \dots, 4$$

To summarise, the category "very difficult" was assigned the value -1, "a little difficult" the value -0.5, and "not difficult at all" the value 1. This re-coding slightly corrects the non-normal distribution of responses because, given the wording of the response categories, it is possible that the three categories are not at an equal distance from each other. In the original coding, the presence of difficulty is measured with two categories, whereas its absence is measured with only one. Moreover, the majority of responses fall into the third category where the elements of cost, availability, physical access and quality of services 'do not make use difficult at all'. Since the questions are also negatively worded, the respondents are not given any chance to rate accessibility in different levels of positivity.

When these values are added up, the perceived childcare accessibility index ranges between -4 and +4 and can be treated as a continuous variable. Since there are quite a number of people who responded with a "don't know" (DK) to either of these questions, in order not to lose information, the DK responses were recoded as 0. In this way, their responses to other variables are not lost and their DK reply corresponds to the middle point of the scale. However, the respondents who responded DK to all four questions of accessibility were deleted from the analysis listwise, because they did not state any opinion. Respondents who "refused" to answer any one of the four questions were also excluded from the analyses because, unlike DK where the respondent is willing to respond but unable to do so, refusal means that the respondent is not willing to answer a question (Blohm and Koch, 2009). Thus, the answers of a respondent who refrained from disclosing information on one or more aspects of the accessibility of childcare would not be reliable.

3.4.4. Independent Variables

3.4.4.1. Micro-level Control Variables

The level-1 control variables were selected based on the socio-ecological model proposed and developed by quite a number of scholars over the past two decades (Liu, 2015; Pungello and Kurtz-

Costes, 1999; Rose and Elicker, 2010; Seo, 2003; Sibley et al., 2015; Tang et al., 2012; Vandenbroeck et al., 2008). This model suggests that we take into account various dimensions such as the child-, mother- (and sometimes the father), family- and environment-related characteristics, as well as maternal well-being and cultural beliefs and preferences with regard to childcare when identifying the determinants of the type and intensity of ECEC used. A similar list of variables is also used in a recent study on attitudes towards public childcare (Chung and Meuleman, 2017). This framework also meets our needs in controlling for the individual-, household- or family-related factors that may affect the perception of childcare accessibility. Since EQLS does not contain data on all of these aspects, we included eight variables to control for the main determinants of ECEC use at the individual and/or household level. These are gender, age (continuous), employment status (at work or not at work), education level (below secondary vs. secondary or higher), partnership status (married or partnered vs. non-partnered) of the respondent, the degree of urbanisation (urban vs. rural) of the area where the respondent lives, whether childcare is used in the household, and the self-assessed income level.

As a demographic variable, age is usually controlled for in perception studies (Bircan, 2012). In the context of choice of childcare, maternal age is used as a more specific variable because, although its effect is sometimes significant (Barnes et al., 2006), it mostly is not (Fram and Kim, 2008; Sylva et al., 2007; Zachrisson et al., 2013). However, younger age at childbirth has been associated with less participation in formal childcare (Geoffroy et al., 2012). In this study, the age of respondent was included as a control variable for generational differences may have an effect on how accessible services are perceived.

Likewise, gender is also controlled for as a demographic variable in this research. Note that in previous research employing the socio-ecological theory, gender is usually not controlled for, since the demographics in the model refer only to the mother (Geoffroy et al., 2012; Sylva et al., 2007; Tang et al., 2012; Zachrisson et al., 2013). Nevertheless, there is proof that women and men may differ in their needs for social support (Rosenthal et al., 1986), which may, in turn, cause them to have different standards when it comes to the accessibility of childcare.

Level of (parental) education attained is another control variable taken into account in this study, because education level is significantly associated with the choice of ECEC use (Sibley et al., 2015) and the use of formal or parental care (Geoffroy et al., 2012; Tang et al., 2012).

Similarly, employment status (being at work or not at work) is also significant in determining the childcare preference of mothers (Geoffroy et al., 2012; Tang et al., 2012); hence, it is included as a control variable.

The partnership status of the respondent (married or partnered vs. non-partnered) is also included as a control variable for it reflects the presence of alternate caregivers in the household. Nonetheless, except for the decision to use childcare before the child reaches 18 months of age (Zachrisson et al., 2013), this variable is found to have a significant effect neither in the type or intensity of childcare use (Geoffroy et al., 2012; Sylva et al., 2007; Tang et al., 2012), nor when it comes to the attitudes toward public childcare provision (Chung and Meuleman, 2017).

Literature suggests that the residents of rural areas have a lower chance of accessing childcare services compared to the ones who live in urban areas (Habibov, 2012; Liu, 2015). Accordingly, the degree of urbanisation is also controlled for in the analysis.

Another key control variable was whether a child from the household uses childcare services or not, as individuals who use the services personally may assess the accessibility differently.

Finally, we also control for the self-assessed income level of respondents as a proxy for their socio-economic status (Chung and Meuleman, 2017) using the following variable:

> *Q57. Could you please evaluate the financial situation of your household? In comparison to most people in [COUNTRY], would you say it is: Much worse, somewhat worse, neither worse nor better, somewhat better, much better*

We combined the first two and last two responses and created a three-category variable of the worse, average and better income. Besides testing our hypotheses regarding the institutional setting of ECEC for the whole sample, we also check whether the effects are stronger or weaker depending on the childcare use status and self-proclaimed income level of the respondents.

There are no missing data for age, gender, childcare self-use, and employment status. However there are some missing values in the form of refusals or "don't know" in relation to education level, the degree of urbanisation, partnership status, and income self-assessment. The missing data do not follow a particular pattern when we cross-tabulate them by country, gender, childcare use or employment status. Assuming that these variables were missing at random, we exclude the cases with missing variables from the analyses. For the descriptive statistics of micro-level control variables, see Table 3-1.

Table 3-1: Descriptive statistics of micro-level variables (EQLS, 2012, weighted, n=7213)

	Mean or %	St. Dev.	Min	Max
Dependent Variable				
Perceived Accessibility Index	0,94	2,37	-4	4
Level-1 Control Variables				
Continuous Variables				

Age of the respondent	43,09	15,51	18	95
Categorical Variables				
Gender				
Male	43,7%			
Female	56,3%			
Employment status				
Not at work	40,2%			
At work	59,8%			
Education level				
Secondary or lower	66,4%			
Post-secondary	33,6%			
Income self-assessment				
Worse than average	18,6%			
Average	50,6%			
Better than average	30,9%			
Urbanisation				
Countryside or village	42,8%			
Town or city	57,2%			
Marital/partnership status				
Non-partnered	32,0%			
Married or partnered	68,0%			
Childcare use				
Only outside the household	52,7%			
In the household	47,3%			

3.4.4.2. Macro-level Independent Variables

In another study, we researched the way the intensity of ECEC use is linked with the institutional setting of ECEC (Chapter 2). In the present study, we use the same macro-level variables to be able to compare and contrast the effect of the institutional setting on the take-up of the services with their perceived accessibility. For the descriptive statistics of the independent variables, see Table 3-2.

Table 3-2: Descriptive statistics of independent variables

	Mean or %	St. Dev.	Min	Max	Sample size
Continuous variables					
Start of legal entitlement (age in months)	44,30	22,36	6	84	n=30
Start of free provision (age in months)	47,33	21,60	0	84	n=30
Staff qualification level for 3-6 year-olds (years after secondary education)	3,07	1,25	0	5	n=30
Teachers' salary after 10 years of service (PPP in thousands)	34,30	17,19	10,94	91,20	n=20
Spending per child in care or education (0-5 year-olds) (PPP in thousands)	24,74	16,48	5,39	73,57	n=24
Percentage of total education expenditure in ISCED 0 from private sources	11,57	9,14	0	27,8	n=27

Percentage of total education expenditure in ISCED 0 from households		10,89	8,10	0	26,8	n=17
Categorical variables						
Existence of private centre-based ECEC (3-6 year-olds)						n=30
	Non-existent	50,0%				
	Existent	50,0%				
ECEC system being split or integrated						n=31
	Split	51,6%				
	Mixed	19,4%				
	Integrated	29,0%				

We use three variables for *provision*: The first one is a binary variable reflecting whether or not the country allows for self-financing private provision at all for children aged 3 to 6 (data for the school year 2012-2013) (Eurydice, 2014). Since it is more common to have private self-financing provision for younger children in Europe, private provision for 3-6 year-old children may be an indication of that country excluding pre-school from its mainstream education system. The other two variables for the provision segment are the *starting age of legal entitlement* and *starting age of free provision* (Eurydice, 2014). Both legal entitlement and free provision variables refer to the earliest age (in months) where children can receive these services in the school year 2012-2013. For countries that do not provide either of these services, we assigned the start of compulsory education (pre-primary or primary) as the corresponding value in both variables, because compulsory education means both legal entitlement and free access to school. For federal countries (e.g. Belgium, Germany, UK), the values for the great majority of the country are adopted.

As for *regulation*, we check whether the *ECEC system being split or unitary* has an effect on the perceived accessibility of services (Eurydice, 2014). The nominal variable has three categories – split, mixed and unitary – where 'mixed' refers to the presence of facilities that cater for either both age groups or only younger or older children. The second and third variables in the regulation segment refer to the structural quality of ECEC services, measured via the *minimum qualification of professionals* in 2012-2013 (Eurydice, 2014) and the *salary of staff working in pre-schools* in 2013 (Education at a Glance, 2015). The former is measured in years of post-secondary education received, and the latter in thousand Dollars converted to PPPs.

The effect of *financing* on perceived accessibility is also measured with three variables. *Public expenditure per child in ECEC settings* measures the public spending for care and education of 0-5 year-olds in the year 2011 in thousand Dollars converted to PPPs (OECD Family Database, 2011) as the generosity of support from the government. Two variables are used to account for private sources of funding: the *proportion of funding for ISCED 0 from private sources* and the proportion of funding for

ISCED 0 from households (Education at a Glance, 2013). These two variables measure only the expenditure for 3-6 year-olds, the less privatised segment of ECEC. While the former takes into account all types of private funding, the latter measures only the funding that comes from households that use the system.

3.5. Results

The average Perceived Childcare Accessibility Index (PCAI) results across countries can be seen in **Figure 3-1**. Respondents in the Nordic countries (Sweden, Finland, Iceland, and Denmark) find childcare much more accessible compared to the European average. They are followed by Cyprus, Netherlands, Austria, Belgium, Lithuania, Luxembourg, Bulgaria, Croatia and Germany; while the rest falls below the European average. Figure 3-2 shows how accessible childcare services are perceived by the respondents with below- versus above-average income (subjectively compared to their country average). In this figure, the countries are ranked according to their average scores for perceived accessibility by low-income families. Note that the PCAI ranges between -4 and +4. Overall, the ranking of countries differs slightly from the ranking in **Figure 3-1**. With the exception of Lithuania and Spain, lower-income people find childcare less accessible compared to higher-income people. Even for people with a below-average income, the Nordic countries lead the way in accessibility, while some Southern and Eastern European countries tend to score poorly. The gap between the average PCAI for lower- and higher-income people at the country level is usually smaller in Northern and Western European countries, whereas it gets extremely large for Southern and Eastern European countries such as Croatia, Hungary, Portugal and Bulgaria. Only in Finland, Lithuania, and Serbia, the scores are very equal. Moreover, there are striking outliers in terms of inequality: the scores of the low-income group drop far below the European average for countries such as Belgium and Bulgaria, where the average PCAI is relatively high.

Figure 3-1: Perceived Childcare Accessibility Index across Europe (source: EQLS 2012, weighted data)

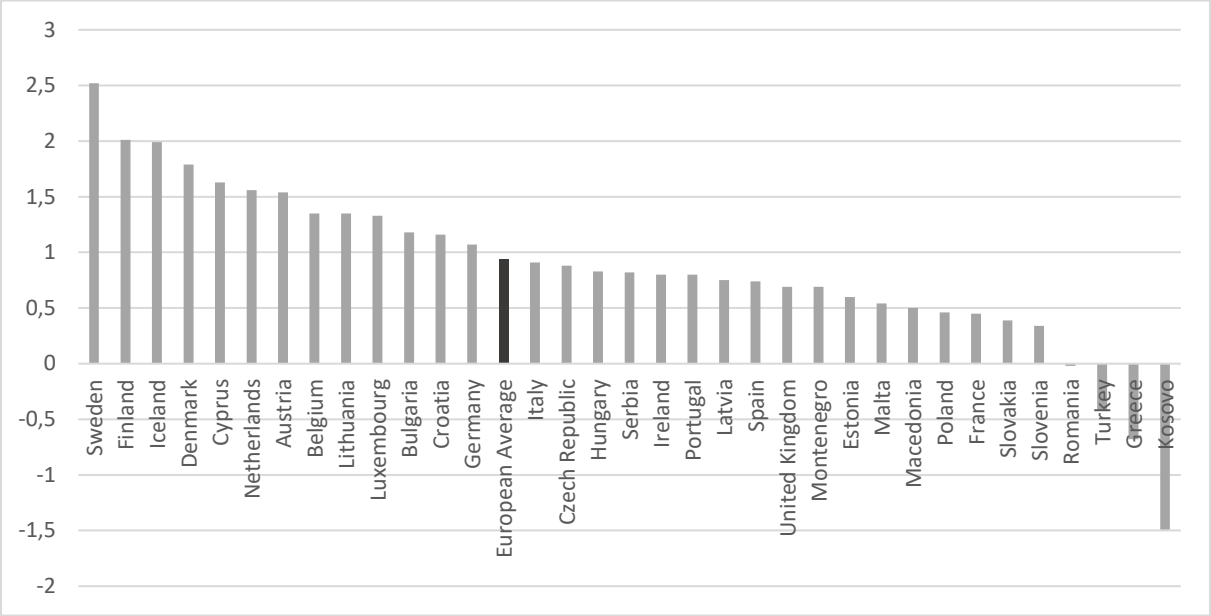
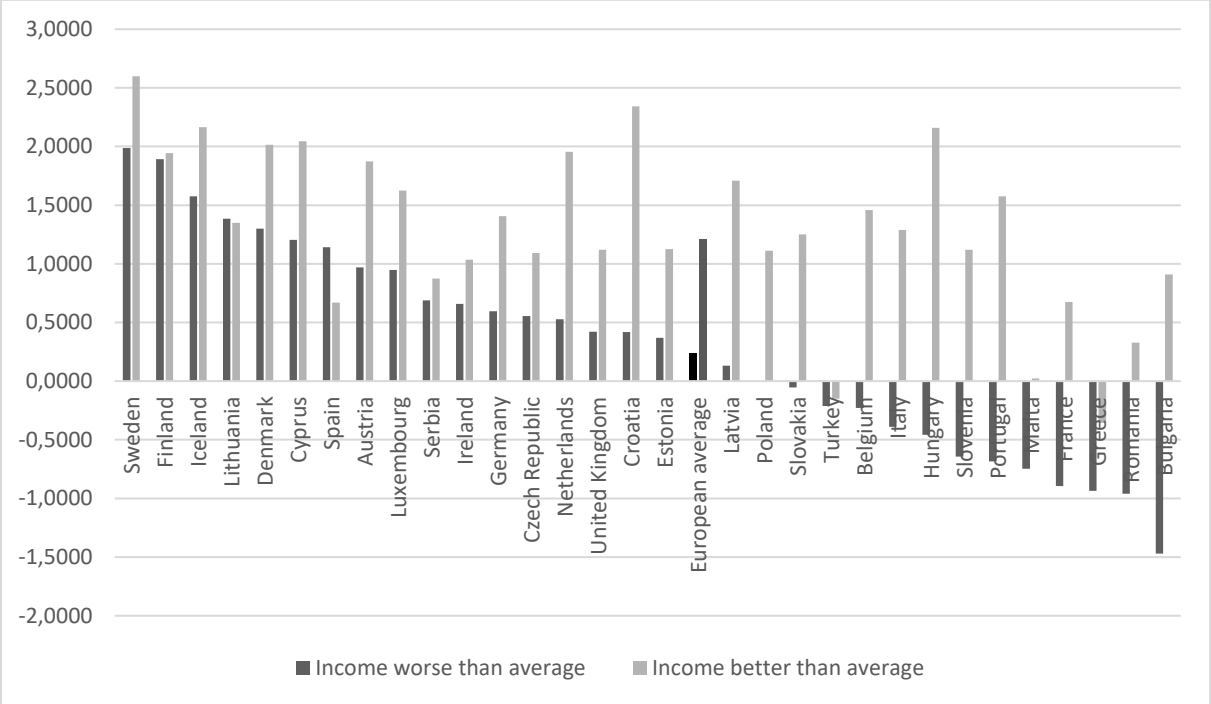


Figure 3-2: Perceived Childcare Accessibility Index (PCAI) for households with an income lower and higher than average (self-proclaimed) across Europe (source: EQLS 2012, weighted data)



The null model with the PCAI as the dependent variable exhibits an intra-class correlation (ICC) of 10,40%, which is the proportion of the variance to be explained at the country-level. When Model 1 is fitted with only the eight level-1 control variables, the ICC increases to 10,70% even though all parameters except for the partnership status are significant. To shortly summarise the effects of the

control variables, male respondents and respondents who are older, non-employed, living in rural areas, and with above-average income reported higher perceived accessibility. Furthermore, as expected, respondents who use childcare services themselves report higher perceived accessibility. Education at secondary or higher level is only marginally significant in the baseline model, with differing significance levels in the presence of the different level-2 variables. Marital or partnership status is not significant in the baseline model, and stays not significant in all other analyses in the presence of level-2 independent variables. The effect sizes of most individual-level variables remain similar throughout the multilevel analyses, and their significance levels remain mostly unchanged. This means that regardless the demographics of the respondents, the extent to which they find childcare services accessible depends on the country they live in, and thus, the childcare policies in place in the country.

As discussed earlier, the reason for higher perceived accessibility reported by males could be due to men and women having different needs and criteria to assess accessibility. Similarly, older age is already associated with more participation in childcare (Geoffroy et al., 2012), which could be the reason why older people reported higher accessibility. Not being at work would decrease the acute need for childcare, which may be the reason why non-employed respondents reported higher accessibility compared to employed respondents. Although previous research revealed that access to childcare is more difficult in rural areas (Habibov, 2012; Liu, 2015); however this argument is not supported by our results. In some countries, it is easier to access to childcare in rural areas due to lower demand, while in others, provision is limited in rural areas which leads to difficulty in access (Eurydice, 2014). In this research, the respondents from urban areas reported lower accessibility probably due to the high demand in cities. Respondents with higher education reported higher accessibility only marginally, which is not completely in line with previous research that revealed higher use of formal childcare by higher educated people (Geoffroy et al., 2012; Tang et al., 2012). Not surprisingly, respondents who reported higher income than average, also found childcare to be more accessible compared to people with average or low-income levels. Finally, users of services reported higher accessibility compared to respondents who do not use childcare, as non-user respondents may be unable to access the services in the first place.

Table 3-3: Determinants of perceived accessibility, multilevel analysis

		Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Fixed Part (individual-level)		Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Intercept		0,845*** (0,160)	0,655** (0,184)	1,379*** (0,292)	0,669* (0,313)	0,665*** (0,177)	0,810* (0,351)
Gender	*Ref: female*						

	Male	0,153** (0,051)	0,169** (0,055)	0,168** (0,055)	0,168** (0,055)	0,171** (0,054)	0,168** (0,055)
Employment status	*Ref: at work*						
	Not at work	0,183** (0,057)	0,172** (0,062)	0,172** (0,062)	0,172* (0,062)	0,177** (0,060)	0,171* (0,062)
Education level	*Ref: Secondary or higher*						
	Below secondary	-0,128° (0,066)	-0,158* (0,071)	-0,167* (0,071)	-0,166* (0,071)	-0,158* (0,069)	-0,166* (0,071)
Income self-assessment	*Ref: better*						
	Same as average income	-0,260*** (0,058)	-0,269*** (0,063)	-0,269*** (0,063)	-0,270*** (0,063)	-0,274*** (0,061)	-0,269*** (0,063)
	Worse income	-0,896*** (0,078)	-0,866*** (0,085)	-0,864*** (0,084)	-0,866*** (0,084)	-0,877*** (0,082)	-0,864*** (0,084)
Rural/urban	*Ref: urban*						
	Rural	0,225*** (0,053)	0,244*** (0,057)	0,243*** (0,057)	0,245*** (0,057)	0,248*** (0,056)	0,245*** (0,057)
Partnership status	*Ref: married/partnered*						
	Non-partnered	-0,070 (0,059)	-0,016 (0,063)	-0,015 (0,063)	-0,015 (0,063)	-0,028 (0,061)	-0,015 (0,063)
ECEC own use/non-use	*Ref: self use*						
	Self non-use	-0,598*** (0,055)	-0,687*** (0,059)	-0,687*** (0,059)	-0,685*** (0,059)	-0,668*** (0,058)	-0,685*** (0,059)
Age		0,010*** (0,002)	0,010*** (0,002)	0,011*** (0,002)	0,011*** (0,002)	0,010*** (0,002)	0,011*** (0,002)
Fixed Part (country-level)							
Private self-financing ECEC provision for 3-6 year-olds	*ref: allowed*						
	Not allowed		0,550* (0,230)				
Start of legal entitlement (age in months)				-0,010° (0,005)			
Start of free provision (age in months)					0,005 (0,006)		
	ref: split						
ECEC system being split or integrated	Mixed					0,557° (0,285)	
	Unitary/integrated					0,689* (0,257)	
Minimum staff qualification for 3-6 year-olds (years of post-secondary education)							0,036 (0,100)

Random Part						
Level 1 Individuals (residual variance)	4,727*** (0,077)	4,789*** (0,083)	4,789*** (0,083)	4,789*** (0,083)	4,747*** (0,081)	4,789*** (0,083)
Level 2 Countries (intercept variance)	0,566*** (0,143)	0,351*** (0,100)	0,382*** (0,107)	0,414*** (0,117)	0,326*** (0,091)	0,427*** (0,120)
Model Fit Statistics						
Deviance (-2LL)	33431,108	29397,993	29399,998	29402,334	30346,549	29403,063
Change in Deviance (Δ -2LL)	330,938	4033,115	4031,110	4028,774	3084,559	4028,045
Nr of estimated parameters	12	13	13	13	14	13
Change in nr of est'd parameters	9	1	1	1	2	1
Intra-class Correlation	10,70%	6,83%	7,38%	7,96%	6,43%	8,18%
Sample Size						
Level-1 n	7481	5864	5864	5864	6075	5864
Level-2 n	34	29	29	29	30	29

° $p < ,10$; * $p < ,05$; ** $p < ,01$; *** $p < ,001$

Table 3-4: Determinants of perceived accessibility, multilevel analysis (continued)

		Model 1	**Model 7**	**Model 8**	**Model 9**	**Model 10**	**Model 11**
Fixed Part (individual-level)		Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Intercept		0,845*** (0,160)	0,529 (0,393)	0,386 (0,254)	0,538° (0,268)	0,967*** (0,207)	1,287*** (0,280)
Gender	*Ref: female*						
	Male	0,153** (0,051)	0,195** (0,063)	0,171** (0,057)	0,174** (0,057)	0,198*** (0,055)	0,202** (0,065)
Employment status	*Ref: at work*						
	Not at work	0,183** (0,057)	0,222** (0,072)	0,176** (0,064)	0,176** (0,064)	0,175** (0,062)	0,179 (0,074)
Education level	*Ref: Secondary or higher*						
	Below secondary	-0,128° (0,066)	-0,089 (0,083)	-0,126° (0,074)	-0,124° (0,073)	-0,130° (0,071)	-0,004 (0,086)
Income self-assessment	*Ref: better*						
	Same as average income	-0,260*** (0,058)	-0,270*** (0,070)	-0,261*** (0,064)	-0,419** (0,147)	-0,256*** (0,062)	-0,273*** (0,072)
	Worse income	-0,896*** (0,078)	-0,871*** (0,098)	-0,839*** (0,088)	-1,206*** (0,187)	-0,844*** (0,084)	-0,866*** (0,103)
Rural/urban	*Ref: urban*						
	Rural	0,225*** (0,053)	0,216** (0,066)	0,271*** (0,059)	0,273*** (0,059)	0,252*** (0,057)	0,238*** (0,068)
Partnership status	*Ref: married/partnered*						
	Non-partnered	-0,070 (0,059)	-0,085 (0,073)	-0,032 (0,065)	-0,034 (0,065)	-0,024 (0,062)	-0,027 (0,074)
ECEC own use/non-use	*Ref: self use*						
	Self non-use	-0,598*** (0,055)	-0,682*** (0,068)	-0,703*** (0,062)	-0,701*** (0,062)	-0,718*** (0,059)	-0,760*** (0,071)

Age		0,010*** (0,002)	0,009*** (0,002)	0,011*** (0,002)	0,012*** (0,002)	0,012*** (0,002)	0,011*** (0,002)
Fixed Part (country-level)							
Salary of staff working in pre-schools (10 years experience)			0,015 (0,010)				
Public spending per 0-5 year-olds in care and education				0,024** (0,008)	0,019* (0,008)		
	Ref: better income						
Public spending per 0-5 year-olds in care and education X Income	Same as average income				0,005 (0,004)		
	Worse income				0,014* (0,006)		
Proportion of funding for ISCED 0 from private sources						-0,001 (0,013)	
Proportion of funding for ISCED 0 from households							-0,020 (0,019)
Random Part							
Level 1 Individuals (residual variance)		4,727*** (0,077)	4,667*** (0,093)	4,627*** (0,085)	4,624*** (0,085)	4,577*** (0,081)	4,459*** (0,095)
Level 2 Countries (intercept variance)		0,566*** (0,143)	0,533** (0,177)	0,318** (0,097)	0,310** (0,100)	0,320** (0,095)	0,366** (0,136)
Model Fit Statistics							
Deviance (-2LL)		33431,108	22075,561	26019,304	26014,334	27963,944	19325,721
Change in Deviance (Δ -2LL)		330,938	11355,547	7411,804	7416,774	5467,164	14105,387
Nr of estimated parameters		12	13	13	15	13	13
Change in nr of estd parameters		9	1	1	2	1	1
Intra-class Correlation		10,70%	10,26%	6,43%	6,29%	6,54%	7,59%
Sample Size							
Level-1 n		7481	4469	5273	5273	5621	3922
Level-2 n		34	20	22	22	26	16

° $p < ,10$; * $p < ,05$; ** $p < ,01$; *** $p < ,001$

As per our first hypothesis, we checked whether the presence of private (unsubsidised) provision for 3-6 year-olds makes a difference in perceived accessibility (Model 2). Our analysis confirms that in countries where no private provision is available, perceived accessibility of childcare services is higher. Thus, the first hypothesis is confirmed. However, no significant interaction of this variable with the perceived income level of the respondents is found. In other words, the existence of private for-profit provision tends to make ECEC less accessible for everyone living in the country, regardless of income level.

Our second hypothesis is that an earlier age of the legal entitlement enhances the accessibility of childcare (Model 3). The effect size is marginally significant. When controlling for the interaction effect of legal entitlement age and self-proclaimed income, the model does not improve. Hence, our

hypothesis is rejected and we cannot confirm that earlier legal entitlement leads to a higher perceived accessibility of childcare services.

The final hypothesis for the provision pillar is that free ECEC hours at a younger age have a favourable effect on the perceived accessibility of childcare (Model 4). Neither this variable nor its interaction with self-proclaimed income level has a significant effect on the PCAI. Accordingly, we cannot confirm that earlier free entitlement to ECEC services contributes to the perceived accessibility of childcare.

In the pillar of *regulation*, our first hypothesis that unitary ECEC systems would lead to a higher perceived accessibility of childcare is confirmed (Model 5). Nonetheless, the PCAI was only marginally affected in countries with mixed systems, but significantly in those that have fully achieved unification. These countries are Iceland, Norway, Sweden, Finland, Latvia, Lithuania, Estonia, Croatia and Slovenia. Apart from the positive effect of integrated ECEC systems, none of the structural quality variables yielded positive results. Whether teachers working with 3-6 year-olds receive longer post-secondary education and whether these teachers earn higher salaries do not affect the public perception regarding childcare accessibility (Models 6 and 7).

The effect of public spending per 0-5 year-old child in ECEC was the first to be tested when it comes to *financing* (Model 8). As expected, the perceived accessibility of childcare increases with the spending per child. Moreover, the interaction term of this variable with self-proclaimed income level reveals that this positive effect of higher spending per child is most appreciated by low-income families (Model 9). Contrary to our expectations, however, the proportion of funding for ISCED 0 (pre-school) coming from private sources in general (Model 10), and from households in particular (Model 11) does not have significant effects on PCAI. Thus, although the generosity of public spending is crucial for perceived accessibility, we cannot confirm that lower contributions from households as a whole lead to lower perceived accessibility.

Throughout the analyses, we controlled for the interaction terms of the country-level independent variables with both self-assessed income level of the respondent and whether the respondent lives in a household that uses childcare services. None of the interaction terms with childcare use were significant. Thus, the perceptions of the users and the ones who do not (directly) use the services are not affected differently by the system-level variables. With regard to the income level, except for the variable *public spending on ECEC per child*, none of the independent variables have significant interaction terms leading to better models either. In the cases of unitary systems and the earlier start of legal entitlement, we found marginally significant interaction terms with average income, suggesting that these two system features benefit families with average income most. However, these

models were not significantly better than the models without interaction terms. Since we cannot derive clear conclusions with regard to these effects, these models are not reported in the tables.

All of these models with level-2 variables were also controlled for GDP per capita to check for robustness. We used the 2011 GDP per capita information already provided in the EQLS dataset in PPS. GDP per capita has also a significant link with the accessibility of childcare: as expected, the wealthier the country, the more accessible is childcare. When models were augmented with GDP per capita, the results for most variables of the institutional setting of ECEC were found not to change. However, there are two exceptions. Foremost, teachers' salary variable becomes marginally significant when controlled for GDP per capita, although it does not seem to have a significant link when modelled on its own. Moreover, the interaction term of teachers' salary and GDP per capita yields a negative effect, which reflects that teachers' salary is significantly related to the accessibility of childcare in countries with a lower GDP per capita. Assuming that pre-school teachers' salary level to some extent demonstrates the importance given to ECEC in a country; having a higher pre-school teacher salary rate despite a not so high GDP per capita can be interpreted as there is an overall inclination to make childcare perceived as more accessible for all children in that country.

Table 3-5: Models with GDP per capita as a control variable

	Model 7	**Model 7a**	**Model 7b**
Fixed Part (country-level)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Salary of staff working in pre-schools (10 years experience)	0,015 (0,010)	-0,036° (0,018)	-0,001 (0,016)
GDP per capita in PPS (divided by 1000)		0,079* (0,028)	0,175*** (0,030)
Salary * GDP per capita			-0,001*** (0,0003)
Random Part			
Level 1 Individuals (residual variance)	4,667*** (0,093)	4,611*** (0,093)	4,610*** (0,093)
Level 2 Countries (intercept variance)	0,533** (0,177)	0,305** (0,107)	0,142** (0,051)
Model Fit Statistics			
Deviance (-2LL)	22075,561	21442,892	21429,158

	Model 8	**Model 8a**	**Model 8b**
Fixed Part (country-level)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Public spending per 0-5 year-olds in care and education	0,024** (0,008)	0,031° (0,015)	0,047** (0,015)
GDP per capita in PPS (divided by 1000)		-0,018 (0,022)	0,043 (0,033)
Public spending * GDP per capita			-0,0009* (0,0004)
Random Part			
Level 1 Individuals (residual variance)	4,627*** (0,085)	4,579*** (0,085)	4,579*** (0,085)
Level 2 Countries (intercept variance)	0,318** (0,097)	0,236** (0,078)	0,186** (0,062)
Model Fit Statistics			
Deviance (-2LL)	26019,304	25391,301	25386,524

Change in Deviance (Δ -2LL)	11355,547	632,669	13,734	Change in Deviance (Δ -2LL)	7411,804	628,003	4,777
Nr of estimated parameters	13	14	15	Nr of estimated parameters	13	14	15
Change in nr of estd parameters	1	1	1	Change in nr of estd parameters	1	1	1
Intra-class Correlation	10,26%	6,21%	2,99%	Intra-class Correlation	6,43%	4,91%	3,91%
Sample Size				**Sample Size**			
Level-1 n	4469	4350	4350	Level-1 n	5273	5154	5154
Level-2 n	20	19	19	Level-2 n	22	21	21

° $p < ,10$; * $p < ,05$; ** $p < ,01$; *** $p < ,001$

The second exception is related to the spending per child in ECEC. When modelled in combination with GDP per capita, the effect of this variable keeps its significance, but the main effect of GDP per capita becomes not significant. When we checked the interaction term to understand better what this result meant, we found that the interaction of spending per child and GDP per capita has also a negative effect. This implies that in countries with a higher spending per child in ECEC, childcare becomes even more accessible if the GDP per capita in that country is on the lower side. Similar to the explanation for teachers' salaries, we argue that if a country invests more on ECEC despite financial hardships, perceived accessibility of childcare increases significantly. These results are very encouraging to argue that ECEC should be prioritised even in times of austerity. From the accessibility point of view, these results demonstrate that investment pays off.

3.6. Discussion

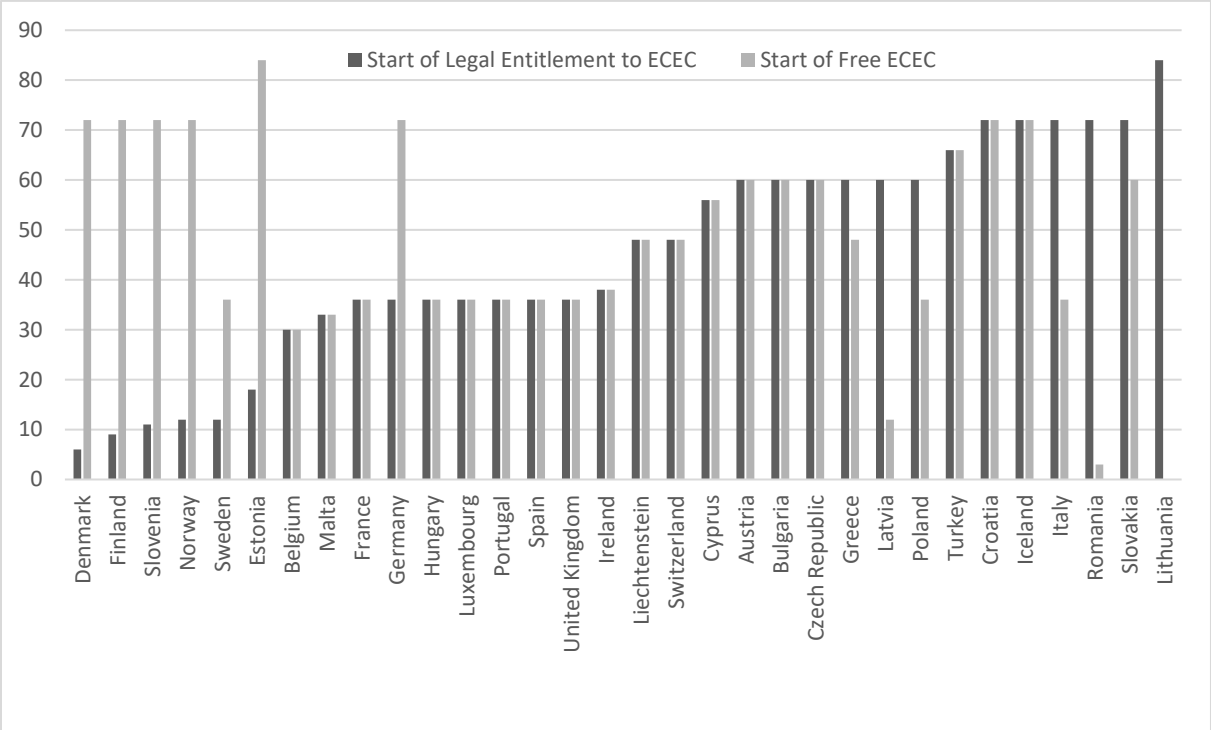
Due to the small country-level sample size in this study, it is a good start to investigate individual-level associations initially. The first variable that has a significant relationship with perceived accessibility at the respondent-level is whether private self-financing ECEC services are allowed for older children of 3-6 years. Private provision at the pre-school level is more widespread in Central and Eastern, as well as southern European countries as opposed to the Nordic and Baltic countries.[22] Nevertheless, there are notable exceptions to both, which makes it difficult to predict which countries would allow for private pre-school provision based on their geographical and socio-economic proximity to each other.

22 The countries that allow for private provision for 3-6 year-olds that needs to be financed by the users are Bulgaria, Croatia, Cyprus, France, Germany, Greece, Hungary, Italy, Luxembourg, Malta, Portugal, Romania, Spain, Turkey and the United Kingdom. The countries that do not allow for private provision for 3-6 year-olds that needs to be funded by the users are Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Poland, Slovak Republic, Slovenia, Sweden.

For instance, although Ireland and the United Kingdom are the two countries representing liberalism, the former does not allow for private provision while the other does.

Additional provision-related variables such as the start of legal entitlement to ECEC services or the start of the right to free attendance do not have a significant relationship with perceived accessibility. Still, the start of legal entitlement can still be considered as marginally significant at the level of $p < 0{,}10$. It is surprising to see that the start of legal entitlement does not have the expected effect on perceived accessibility, because research indicates that availability of slots is a key element of accessibility (Kreyenfeld and Hank, 2000).

Figure 3-3: Starting month of legal entitlement to ECEC and free ECEC (any number of hours in education or childcare) (source: Eurydice 2014)



Nevertheless, the irrelevance of the start of free entitlement is in line with previous studies that prioritise availability of places over affordability (Del Boca, 2002; Farfan-Portet et al., 2011; Kreyenfeld and Hank, 2000). However, this variable regarding free entitlement confines affordability to services being completely free. The fact that provision is not 'free of charge' does not mean that the users find these services unaffordable. Henceforth, these results depict that making the services free of charge is not necessary, as long as there are other measures to make childcare more affordable via means-testing or fee reductions based on the socio-economic situation of users. Finally, the countries that start providing free entitlement are mostly Central and Eastern European countries, where perceived accessibility is not high, to begin with.

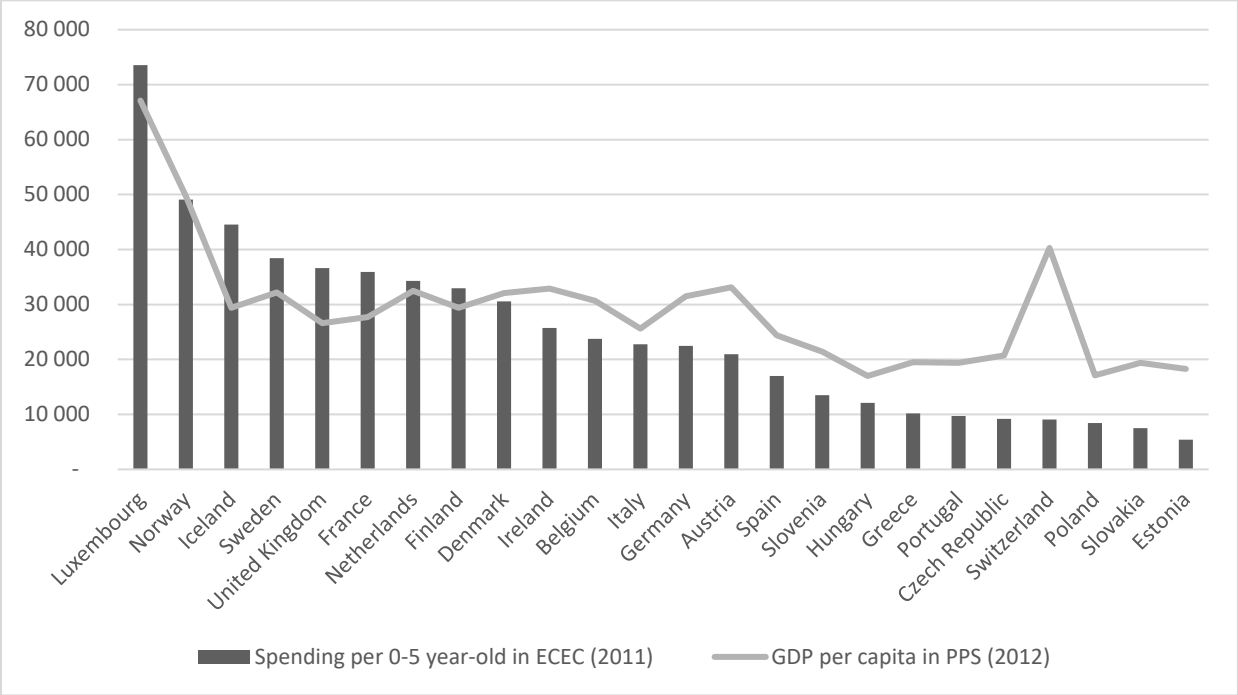
The element of regulation that has a significant link between perceived accessibility at the individual level is the system being split or integrated (or mixed). Almost half of the European countries have a split system and almost one-fourth of them have mixed systems that have both types of facilities (catering to both younger and older children or only one of these groups).[23] According to our analyses, ECEC systems are perceived to be most accessible in countries with a unitary system, which is the case in Nordic and Baltic countries as well as Croatia and Slovenia.

None of the two structural quality variables included in this study proved to have a link with the degree of perceived accessibility. This could be due to the fact that the chosen indicators are about *quality* itself, rather than being a measure of accessibility. This implies that accessibility and quality of ECEC should be treated separately. The measures to improve one are not necessarily effective for the other. As discussed in the introductory sections, accessibility and even affordability have been studied as components of quality to date in many studies. However, accessibility is a pre-requisite in order to start experiencing the more specific aspects of quality (Leseman, 2014). Among different dimensions of quality, structural quality measures are the more general requirements put into place by governments to standardise the quality at a minimum. Research shows that structural quality measures such as high teacher qualification level, low group size, low children-to-staff ratio, and professional development opportunities for teachers have a clear influence on process quality (e.g. classroom organisation, emotional support) (Slot et al., 2015).

The third country-level variable with a significant relationship with perceived accessibility of childcare is public spending per 0-5 year-old in the ECEC system. Not surprisingly, the higher the spending per child, the more accessible childcare is. Figure 3-4 demonstrates that European countries are highly diverse with regard to their public spending per child in ECEC. Note that one limitation of this variable is the small number of countries for which there is available information. The countries with high spending do not exactly correspond to the countries with the most accessible ECEC (see Figures 1 and 2). Still, the analysis reveals that higher perceived accessibility is significantly correlated with higher spending at the country level. Also note that the positive effect of high spending increases if the country is not very wealthy, but prioritises ECEC spending.

23 The European countries with an integrated/unitary ECEC system are Croatia, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Slovenia, Sweden. The countries with a mixed ECEC system are Austria, Bulgaria, Denmark, Germany, Spain, and the United Kingdom. The countries with a split ECEC system are Belgium, Cyprus, Czech Republic, France, Greece, Hungary, Ireland, Italy, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Switzerland, and Turkey.

Figure 3-4: Spending per 0-5 year-old in ECEC and GDP per capita (sources: OECD Family Database and Eurostat)



Finally, the finding regarding the irrelevance of the cumulative percentage of pre-school funding coming from private sources for the perceived accessibility of the services, also supports the argument that making ECEC completely free or low cost is not necessary in order to make it accessible. In order to find better insight on what type of financing structure benefits parents the most, future studies need to look more in-depth into what parents actually pay, how means-testing works, and whether there are sufficient resources for the disadvantaged families to be included in the system. The indicators in the OECD Family Database regarding the out of pocket childcare expenditure of dual and single-earner families were also not significant in our analyses. These results point to the fact that financing needs to be studied in a more case by case basis in relation to perceived accessibility.

3.7. Limitations and Avenues for Further Research

There are several limitations to this research, which are mainly related to the unavailability of data at the respondent and country levels. One of the limitations is the lack of a variable clarifying the immigration background of the respondent in European Quality of Life Survey. Research indicates that children with an immigration background are disadvantaged when it comes to access to ECEC (Nusche, 2009), however due to the lack of data we could not control for immigration status. This variable could have been collected in the context of EQLS via various means such as asking whether a family member

(or the parents of the family member) migrated into the country, or the language spoken at home and whether it is different from the language(s) of the country. The only available variable that could be used as a proxy to immigration status is the citizenship status of the respondent, with three categories: citizenship of the country one is interviewed, citizenship of another EU member state, and the citizenship of a non-EU country. Using this variable would be an ineffective way of accounting for immigration background because migration may not always be related to citizenship status. The variable is inefficient even if the aim would be to test the effect of citizenship status since there is no further information on the country of citizenship (whether it is an equally developed country, whether it is outside Europe if the third category is the case, etc.).

With regard to the country-level variables, availability of the data is a big problem. The most detailed and up-to-date source of data for this work has been the Eurydice report (2014), which provided a good overview, but still not in-depth data. Moreover, comparability of data across countries is an issue with regard to data being available on different levels. For example, in countries with federal systems, regions may report very different information, and it is not possible to derive countrywide policies from those. Moreover, we could not check for several potential determinants such as equity policies, means-testing policies, targeted programmes or (de)centralisation due to the unavailability of comparative data. For this reason, it is important to note that, based on this study, we cannot conclude that affordability and structural quality do not matter for perceived accessibility. Considering the lack of a large sample size, these indicators should be studied further.

One of the shortcomings in the field of ECEC policy research we had to navigate through, has been the non-standard ECEC terminology across Europe. Even though our preferred term has been ECEC, given the use of “childcare” in the EQLS data and some other publications in the field, we used the two terms almost interchangeably. Some of the country-level data used for this research are available for the whole age range of 0-6 years of age, while some are either for the period of 0-3 years or 3-6 years of age. Despite our best efforts, we could not completely take into account the whole 0-6 age range. Yet, note that throughout the article, we used the term ECEC when referring to the ECEC policies. The term “childcare”, however, was used mostly to refer to the empirical side of the present study.

Finally, a comparison between the subjective (perceived) accessibility and objective accessibility would be interesting to pursue. Having the possibility to measure perceived accessibility using the EQLS data is already a big step forward. The next step would be developing an ‘objective childcare accessibility index’, where access to ECEC services is evaluated by a third party in a cross-country manner. The objective accessibility index would also serve as a diagnostic tool whether access improves across countries as intended by policy-makers.

3.8. Concluding remarks

Provision, regulation and financing are the three pillars of the institutional setting of early childhood education and care. This article addresses a gap in the literature by examining the effect of these system characteristics on the public perception of accessibility of services in a comparative manner across Europe. At the individual- or household-level, female, younger, employed and lower-income respondents and those living in urban areas find childcare services less accessible.

According to the present study, childcare is perceived as more accessible in countries that (1) do not allow private self-financing ECEC services for 3-6 year-old children, (2) adopt a unitary ECEC system where services for 0-3 year-olds and 3-6 year-olds are harmonised, and (3) provide generous public support per 0-5 year-old child in the ECEC system. The latter has an even stronger effect on the families with an income below average. These results are interesting because they offer evidence with regard to the policies that contribute to increased perceived accessibility of childcare by families. The insights offered in this article are helpful to policy-makers who need further direction for the making of future childcare policies.

3.9. References

Anderson, K.J., Minke, K.M., 2007. Parent Involvement in Education: Toward an Understanding of Parents' Decision Making. The Journal of Educational Research; Bloomington 100, 311–323,328.

Asparouhov, T., 2006. General Multi-Level Modeling with Sampling Weights. Communications in Statistics - Theory and Methods 35, 439–460. https://doi.org/10.1080/03610920500476598

Barbarin, O.A., McCandies, T., Early, D., Clifford, R.M., Bryant, D., Burchinal, M., Howes, C., Pianta, R., 2006. Quality of Prekindergarten: What Families Are Looking for in Public Sponsored Programs. Early Education and Development 17, 619–642. https://doi.org/10.1207/s15566935eed1704_6

Barnes, J., Leach, P., Sylva, K., Stein, A., Malmberg, L.-E., Families, C., 1, C.C. team, 2006. Infant care in England: mothers' aspirations, experiences, satisfaction and caregiver relationships. Early Child Development and Care 176, 553–573. https://doi.org/10.1080/03004430500317408

Bastos, P., Cristia, J., 2012. Supply and quality choices in private child care markets: Evidence from São Paulo. Journal of Development Economics 98, 242–255. https://doi.org/10.1016/j.jdeveco.2011.08.001

Bennett, J., 2004. Early Education Financing: What is Useful to Know?

Bircan, T., 2012. Community Structure and Ethnocentrism. A Multilevel Approach: A case Study of Flanders (Belgium). KU Leuven, Leuven.

Blohm, M., Koch, A., 2009. Item Nonresponse in the European Social Survey. ASK. Research & Methods 45–65.

Bowers, A.P., Strelitz, J., Allen, J., Donkin, A., 2012. An Equal Start: Improving Outcomes in Children's Centres. UCL Institute of Health Equity, Brussels.

Burchinal, M., Howes, C., Kontos, S., 2002. Structural predictors of child care quality in child care homes. Early Childhood Research Quarterly 17, 87–105. https://doi.org/10.1016/S0885-2006(02)00132-1

Cai, T., 2013. Investigation of Ways to Handle Sampling Weights for Multilevel Model Analyses. Sociological Methodology 43, 178–219. https://doi.org/10.1177/0081175012460221

Carle, A.C., 2009. Fitting multilevel models in complex survey data with design weights: Recommendations. BMC Med Res Methodol 9, 49. https://doi.org/10.1186/1471-2288-9-49

Ceglowski, D., Bacigalupa, C., 2002. Four Perspectives on Child Care Quality. Early Childhood Education Journal 30, 87–92. https://doi.org/10.1023/A:1021245017431

Chantala, K., Suchindran, C.M., Blanchette, D., 2005. Adjusting for Unequal Selection Probability in Multilevel Models: A Comparison of Software Packages. IDEAS Working Paper Series from RePEc; St. Louis.

Chung, H., Meuleman, B., 2017. European parents' attitudes towards public childcare provision: the role of current provisions, interests and ideologies. European Societies 19, 49–68. https://doi.org/10.1080/14616696.2016.1235218

Cleveland, J., Susman-Stillman, A., Halle, T., 2013. Parental Perceptions of Quality in Early Care and Education.

Cunha, F., Heckman, J.J., Lochner, L., Masterov, D.V., 2006. Interpreting the Evidence on Life Cycle Skill Formation. Handbook of the Economics of Education 1, 697–812.

Davis, E.E., Connelly, R., 2005. The Influence of Local Price and Availability on Parents' Choice of Child Care. Popul Res Policy Rev 24, 301–334. https://doi.org/10.1007/s11113-005-8515-y

Del Boca, D., 2002. The effect of child care and part time opportunities on participation and fertility decisions in Italy. J Popul Econ 15, 549–573. https://doi.org/10.1007/s001480100089

Dumčius, R., Peeters, J., Hayes, N., Van Landeghem, G., Siarova, H., Peciukonytė, L., Cenerić, I., Hulpia, H., 2014. Study on the effective use of early childhood education and care (ECEC) in preventing early school leaving (ESL): Annex 1. Literature review. Publications Office of the European Union, Luxembourg.

Education at a Glance, 2015. Table D3.1a – Teachers' statutory salaries, based on typical qualifications, at different points in teachers' careers (2013). OECD.

Education at a Glance, 2013. Table B3.2a – Relative proportions of public and private expenditure on educational institutions, by level of education (2000, 2010). OECD.

Eurofound, 2013a. 3rd European Quality of Life Survey: Weighting Report - EU27 and non-EU countries. GfK EU3C.

Eurofound, 2013b. Third European Quality of Life Survey – Quality of society and public services. Publications Office of the European Union, Luxembourg.

Eurydice, 2014. Key Data on Early Childhood Education and Care in Europe (Eurydice and Eurostat Report). Publications Office of the European Union, Luxembourg.

Farfan-Portet, M.-I., Lorant, V., Petrella, F., 2011. Access to Childcare Services: The Role of Demand and Supply-Side Policies. Popul Res Policy Rev 30, 165–183. https://doi.org/10.1007/s11113-010-9184-z

Forry, N.D., Simkin, S., Wheeler, E.J., Bock, A., 2013. 'You know how it makes you feel': Low-income parents' childcare priorities and definitions of ideal high-quality childcare. Journal of Children and Poverty 19, 107–126. https://doi.org/10.1080/10796126.2013.843508

Foubert, J., Levecque, K., Van Rossem, R., Romagnoli, A., 2014. Do welfare regimes influence the association between disability and self-perceived health? A multilevel analysis of 57 countries. Social Science & Medicine 117, 10–17. https://doi.org/10.1016/j.socscimed.2014.07.023

Fram, M.S., Kim, J., 2008. Race/ethnicity and the start of child care: A multi-level analysis of factors influencing first child care experiences. Early Childhood Research Quarterly 23, 575–590. https://doi.org/10.1016/j.ecresq.2008.04.002

Fuller, B., Holloway, S.D., Rambaud, M., Eggers-Pierola, C., 1996. How do mothers choose child care? Alternative cultural models in poor neighborhoods. Sociology of Education; Albany 69, 83.

Gamble, W.C., Ewing, A.R., Wilhlem, M.S., 2009. Parental Perceptions of Characteristics of Non-Parental Child Care: Belief Dimensions, Family and Child Correlates. J Child Fam Stud 18, 70–82. https://doi.org/10.1007/s10826-008-9208-z

Geoffroy, M.-C., Séguin, J.R., Lacourse, É., Boivin, M., Tremblay, R.E., Côté, S.M., 2012. Parental Characteristics Associated With Childcare Use During the First 4 Years of Life: Results From a Representative Cohort of Québec Families. Can J Public Health 103, 76–80.

Ghysels, J., Van Lancker, W., 2011. The unequal benefits of activation: an analysis of the social distribution of family policy among families with young children. Journal of European Social Policy 21, 472–485. https://doi.org/10.1177/0958928711418853

Goldstein, H., 2003. Multilevel statistical models, 3rd ed. ed, Kendall's library of statistics. E. Arnold ; Oxford University Press [Distributor], London : New York.

Habibov, N., 2012. Early childhood care and education attendance in Central Asia. Children and Youth Services Review 34, 798–806. https://doi.org/10.1016/j.childyouth.2012.01.006

Hayes, A.F., 2006. A Primer on Multilevel Modeling. Human Communication Research 32, 385–410. https://doi.org/10.1111/j.1468-2958.2006.00281.x

Heckman, J.J., 2006. Skill Formation and the Economics of Investing in Disadvantaged Children. Science 312, 1900–1902. https://doi.org/10.1126/science.1128898

Henly, J.R., Lyons, S., 2000. The Negotiation of Child Care and Employment Demands Among Low-Income Parents. Journal of Social Issues 56, 683–706. https://doi.org/10.1111/0022-4537.00191

Herczog, M., 2012. Rights of the Child and Early Childhood Education and Care in Europe. European Journal of Education 47, 542–555. https://doi.org/10.1111/ejed.12008

Hofferth, S.L., Wissoker, D.A., 1992. Price, Quality, and Income in Child Care Choice. The Journal of Human Resources 27, 70–111. https://doi.org/10.2307/145913

Hox, J.J., Kreft, I.G.G., 1994. Multilevel Analysis Methods. Sociological Methods & Research 22, 283–299. https://doi.org/10.1177/0049124194022003001

IBM Corp., 2015. IBM SPSS Statistics for Windows. Armonk, NY: IBM Corp.

Kaga, Y., Bennett, J., Moss, P., 2010. Caring and Learning Together: Study on the integration of ECCE within education. UNESCO, Paris.

Kaplan, D., Elliott, P.R., 1997. A Model-Based Approach to Validating Education Indicators Using Multilevel Structural Equation Modeling. Journal of Educational and Behavioral Statistics 22, 323–347. https://doi.org/10.2307/1165288

Kim, J., Fram, M.S., 2009. Profiles of choice: Parents' patterns of priority in child care decision-making. Early Childhood Research Quarterly 24, 77–91. https://doi.org/10.1016/j.ecresq.2008.10.001

Kreyenfeld, M., Hank, K., 2000. Does the availability of child care influence the employment of mothers? Findings from western Germany. Population Research and Policy Review 19, 317–337. https://doi.org/10.1023/A:1026556309080

Lehrer, J.S., Lemay, L., Bigras, N., 2015. Parental Perceptions of Child Care Quality in Centre-Based and Home-Based Settings: Associations with External Quality Ratings. IJEC 47, 481–497. https://doi.org/10.1007/s13158-015-0147-8

Leseman, P.P.M., 2014. Quality of the early years provisions: a European perspective.

Leseman, P.P.M., 2009. The Impact of High Quality Education and Care on the Development of Young Children: Review of the Literature, in: Tackling Social and Cultural Inequalities through Early Childhood Education and Care in Europe. Education, Audiovisual and Culture Executive Agency, Brussels, pp. 17–49.

Li-Grining, C.P., Coley, R.L., 2006. Child care experiences in low-income communities: Developmental quality and maternal views. Early Childhood Research Quarterly 21, 125–141. https://doi.org/10.1016/j.ecresq.2006.04.001

Liu, M., 2015. An Ecological Review of Literature on Factors Influencing Working Mothers' Child Care Arrangements. Journal of Child and Family Studies 24, 161–171. https://doi.org/10.1007/s10826-013-9822-2

Mahon, R., 2002. Child Care: Toward What Kind of "Social Europe"? Soc Pol 9, 343–379. https://doi.org/10.1093/sp/9.3.343

Manning, M., Garvis, S., Fleming, C., Wong, G.T.W., 2017. The Relationship between Teacher Qualification and the Quality of the Early Childhood Care and Learning Environment: A Systematic Review. Campbell Collaboration.

McLean, C., 2014. Market managers and market moderators: Early childhood education and care provision, finance and regulation in the United Kingdom and United States. Journal of European Social Policy 24, 122–134. https://doi.org/10.1177/0958928713517916

Meyers, M.K., Gornick, J.C., 2003. Public or Private Responsibility? Early Childhood Education and Care, Inequality, and the Welfare State. Journal of Comparative Family Studies 34, 379–411.

Molinuevo, D., 2015. Childcare for all: making early childhood education and care more accessible and inclusive. European Commission DG Employment, Social Affairs and Inclusion. URL http://ec.europa.eu/social/main.jsp?catId=89&furtherNews=yes&langId=en&newsId=2420 (accessed 2.11.16).

Muthén, B.O., 1994. Multilevel Covariance Structure Analysis. Sociological Methods & Research 22, 376–398. https://doi.org/10.1177/0049124194022003006

Myers, R.G., 2000. Financing early childhood education and care services. International Journal of Educational Research 33, 75–94. https://doi.org/10.1016/S0883-0355(99)00044-0

Neuman, M.J., 2009. The Politics of (De)centralisation: Early Care and Education in France and Sweden, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 157–179.

NICHD, E.C.C.R.N., 2002. Child-Care Structure → Process → Outcome: Direct and Indirect Effects of Child-Care Quality on Young Children's Development. Psychological Science 13, 199–206. https://doi.org/10.1111/1467-9280.00438

Noailly, J., Visser, S., 2009. The Impact of Market Forces on Child Care Provision: Insights from the 2005 Child Care Act in the Netherlands. Journal of Social Policy 38, 477–498. https://doi.org/10.1017/S0047279409003109

Nusche, D., 2009. What Works in Migrant Education? (OECD Education Working Papers). Organisation for Economic Co-operation and Development, Paris.

OECD, 2012. Starting Strong III: A Quality Toolbox for Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2006. Starting Strong II: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2001. Starting Strong: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD Family Database, 2011. PF1.6 Public spending by age of children. Organisation for Economic Co-operation and Development.

Penn, H., 2009. International Perspectives On Quality in Mixed Economies of Childcare. National Institute Economic Review 207, 83–89. https://doi.org/10.1177/0027950109103687

Peyton, V., Jacobs, A., O'Brien, M., Roy, C., 2001. Reasons for choosing child care: associations with family factors, quality, and satisfaction. Early Childhood Research Quarterly 16, 191–208. https://doi.org/10.1016/S0885-2006(01)00098-9

Pfeffermann, D., 1993. The Role of Sampling Weights When Modeling Survey Data. International Statistical Review / Revue Internationale de Statistique 61, 317–337. https://doi.org/10.2307/1403631

Pfeffermann, D., Moura, D.S., Antonio, F., Silva, D.N., Luis, P., 2006. Multi-level modelling under informative sampling. Biometrika 93, 943–959. https://doi.org/10.1093/biomet/93.4.943

Pfeffermann, D., Skinner, C.J., Holmes, D.J., Goldstein, H., Rasbash, J., 1998. Weighting for unequal selection probabilities in multilevel models. Journal of the Royal Statistical Society: Series B (Statistical Methodology) 60, 23–40. https://doi.org/10.1111/1467-9868.00106

Phillips, D., Mekos, D., Scarr, S., McCartney, K., Abbott–Shim, M., 2000. Within and beyond the classroom door: assessing quality in child care centers. Early Childhood Research Quarterly 15, 475–496. https://doi.org/10.1016/S0885-2006(01)00077-1

Phillipsen, L.C., Burchinal, M.R., Howes, C., Cryer, D., 1997. The prediction of process quality from structural features of child care. Early Childhood Research Quarterly 12, 281–303. https://doi.org/10.1016/S0885-2006(97)90004-1

Pungello, E.P., Kurtz-Costes, B., 1999. Why and How Working Women Choose Child Care: A Review with a Focus on Infancy. Developmental Review 19, 31–96. https://doi.org/10.1006/drev.1998.0468

Rose, K.K., Elicker, J., 2010. Maternal child care preferences for infants, toddlers, and preschoolers: the disconnect between policy and preference in the USA. Community, Work & Family 13, 205–229. https://doi.org/10.1080/13668800903314366

Rosenthal, K.R., Gesten, E.L., Shiffman, S., 1986. Gender and Sex Role Differences in the Perception of Social Support. Sex Roles; New York, N.Y. 14, 481–499.

Schlueter, E., Meuleman, B., Davidov, E., 2013. Immigrant Integration policies and perceived Group Threat: A Multilevel Study of 27 Western and Eastern European Countries. Social Science Research 42, 670–682. https://doi.org/10.1016/j.ssresearch.2012.12.001

Seo, S., 2003. Early child care choices: a theoretical model and research implications. Early Child Development and Care 173, 637–650. https://doi.org/10.1080/0300443032000088230

Sibley, E., Dearing, E., Toppelberg, C.O., Mykletun, A., Zachrisson, H.D., 2015. Do increased availability and reduced cost of early childhood care and education narrow social inequality gaps in utilization? Evidence from Norway. International Journal of Child Care and Education Policy 9. https://doi.org/10.1007/s40723-014-0004-5

Slot, P.L., Lerkkanen, M.-K., Leseman, P.P.M., 2015. D2.2: The relations between structural quality and process quality in European early childhood education and care provisions: Secondary analyses of large scale studies in five countries.

Sosinsky, L.S., Lord, H., Zigler, E., 2007. For-profit/nonprofit differences in center-based child care quality: Results from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development. Journal of Applied Developmental Psychology, N 28, 390–410. https://doi.org/10.1016/j.appdev.2007.06.003

Sylva, K., Stein, A., Leach, P., Barnes, J., Malmberg, L.-E., 2007. Family and child factors related to the use of non-maternal infant care: An English study. Early Childhood Research Quarterly 22, 118–136. https://doi.org/10.1016/j.ecresq.2006.11.003

Tang, S., Coley, R.L., Votruba-Drzal, E., 2012. Low-income families' selection of child care for their young children. Children and Youth Services Review 34, 2002–2011. https://doi.org/10.1016/j.childyouth.2012.06.012

van Oorschot, W., Reeskens, T., Meuleman, B., 2012. Popular perceptions of welfare state consequences: A multilevel, cross-national analysis of 25 European countries. Journal of European Social Policy 22, 181–197. https://doi.org/10.1177/0958928711433653

Vandenbroeck, M., De Visscher, S., Van Nuffel, K., Ferla, J., 2008. Mothers' search for infant child care: The dynamic relationship between availability and desirability in a continental European welfare state. Early Childhood Research Quarterly 23, 245–258. https://doi.org/10.1016/j.ecresq.2007.09.002

Vandenbroeck, M., Lazzari, A., 2014. Accessibility of early childhood education and care: a state of affairs. European Early Childhood Education Research Journal 22, 327–335. https://doi.org/10.1080/1350293X.2014.912895

White, L.A., Friendly, M., 2012. Public Funding, Private Delivery: States, Markets, and Early Childhood Education and Care in Liberal Welfare States – A Comparison of Australia, the UK, Quebec, and New Zealand. Journal of Comparative Policy Analysis: Research and Practice 14, 292–310. https://doi.org/10.1080/13876988.2012.699789

Zachrisson, H.D., Janson, H., Nærde, A., 2013. Predicting early center care utilization in a context of universal access. Early Childhood Research Quarterly 28, 74–82. https://doi.org/10.1016/j.ecresq.2012.06.004

4. Chapter IV – Opinion-Policy Congruence in Public Provision and Financing of Childcare in Europe

ABSTRACT

Citizens' preferences regarding who should provide and finance childcare and whether these preferences are linked to the current policies in place have been understudied. Two sets of multilevel analyses are conducted to determine whether the current governmental involvement in childcare provision and financing is supported by the citizens in European countries and the results are discussed in terms of political representation and issue salience. In countries where public provision and financing are more prominent, the demand for public childcare is higher. Citizens support public childcare more in countries where the government is more involved in childcare provision and financing.

KEYWORDS

Public policy, public opinion, pre-school, early childhood education and care, ECEC

4.1. Introduction

Early childhood education and care (ECEC) has been gaining importance across the world in the last decades for two reasons: firstly, the availability of childcare frees up mothers' time to pick up paid work (Mahon, 2002); and secondly, high-quality formal ECEC has a positive and long-lasting effect on children's development (Cunha et al., 2006; Leseman, 2009). With this increased interest, to make ECEC more accessible, new policies came into place regarding ECEC provision and financing (McLean, 2014; Meyers and Gornick, 2003). Provision is concerned with 'who provides what', while financing is about 'who finances and how'.

The main actors in the provision and financing of ECEC are the family, the public sector (i.e. the government), and the market; while there are other actors in some countries such as the non-profit sector or the church. Governments have been trying to find the optimum way to regulate the provision and financing of childcare with a view to finding a compromise among these main actors in order to improve the availability, affordability and accessibility of ECEC. Hence, one of the most debated issues about childcare policies is the question of 'public versus private'.

Several studies have documented the consequences of increased marketization of ECEC in different countries and contexts in the last decade. One of these was carried out in the Netherlands by Noailly and Visser (2009), comparing the accessibility of childcare before and after the 2005 Childcare Act that tremendously increased the power of the liberal market forces in the ECEC system. They found that privatized childcare shifted toward wealthier urban areas, non-profit provision weakened in poorer areas, and the whole system became less accessible especially for disadvantaged families. Another study carried out by Bastos and Cristia (2012), using administrative data from Sao Paulo, also confirmed that private suppliers tend to concentrate in higher-income areas. Moreover, private providers vary largely in terms of service quality and the majority of them operate with lower quality standards. We know for sure that, in order to have a positive impact on children, ECEC should be of high quality (Penn, 2011).

These two examples bring about questions to tackle in-depth: who should provide childcare, the government or private providers? Who should finance childcare, parents or the government, and to what extent? Should childcare be left to market forces for the regulation of supply and demand? Whose responsibility is it to make sure that there is sufficient provision in poorer and/or rural areas where the demand is lower? The list can go on.

This article contributes to this discussion from a different angle: opinion-policy congruence regarding childcare services. While there is literature discussing who should provide and finance childcare (Baker et al., 2006; Meyers and Gornick, 2003; Myers, 2000; OECD, 2006; Penn, 2009;

Stoney and Greenberg, 1996), there is still a research gap about citizens' preferences on the ideal division of responsibility among the main actors.

Speaking of the relationship between public opinion and policies, we inevitably step into the realm of political representation: some theorists argue that it is the government that responds to the citizens' demands (policy responsiveness), and some claim that public opinion is shaped based on the government's policies (policy feedback). However, this article is not concerned with the direction of causality, but whether public opinion and policies are congruent with each other about who should provide and finance childcare. To shed some light on the circumstances that make it more likely for people to prefer public or private provision and financing of childcare, we conduct two sets of multilevel analyses with country-level indicators on provision and financing in order to determine whether the current policies are supported by the citizens in European countries.

4.2. Theoretical Framework

4.2.1. Political Representation

Scholars have studied the relationship between public preferences and policy-making for decades. Two major schools of thought emerged with regard to the causal relationship between public opinion and public policy. The first one is the policy responsiveness theory arguing that public opinion precedes and has an influence on public policies (Brooks and Manza, 2006; Burstein, 2003). The second is the policy feedback theory that argues that public policy and political institutions affect public opinion greatly and generate their own supporters over time (Jordan, 2013; Pierson, 1993). We are not aware of any particular research on policy responsiveness regarding childcare; however, there has been one on policy feedback (Ellingsæter et al., 2017), in which the authors state that, after a decade of childcare policy reforms in Norway, parents' attitudes regarding institutional childcare has changed: as formal and institutional childcare became more mainstream, more parents subscribed to the idea that institutional childcare is the most favourable setting for children below the school age.

As there is considerable empirical evidence for both policy responsiveness and policy feedback theories, some scholars suggested an alternative explanation where these two opposite views are not mutually exclusive but interdependent, also called the 'thermostatic model', where governments continuously react to public opinion while citizens adjust their preferences according to the policies in place (Page and Shapiro, 1983; Wlezien and Soroka, 2012). The aim

of this paper is not to add to the discussion of causal direction, but to investigate whether policy-makers and the public share the same perspective, based on the idea of the thermostatic model.

4.2.2. Issue Salience

The key variable to explain the thermostatic model is issue salience (Page and Shapiro, 1983). The term 'salience' has been used to designate the importance individuals (i.e. voters) give to certain issues (Rabinowitz et al., 1982; Wlezien, 2005). Opinion and policy tend to move together especially in salient policy domains, which is not necessarily the case in non-salient ones (Wlezien and Soroka, 2012). Some issues are more salient to some people than others: "People who have a stake in an issue are more likely to have an opinion on that issue, people with strong opinions on an issue are more likely to perceive accurately the difference in party positions on that issue, and individuals are better able to distinguish party positions on issues they select than they are on issues chosen by some research group" (Jones and Jones, 1971).

Is childcare a salient issue? We believe so, given that childcare policies affect people's daily lives. Research shows that there is more congruence between policy and public opinion for large-scale social issues (e.g. abortion, civil rights and liberties) than economic or foreign policies where opinion changes tend to be smaller (e.g. collective security and national defence) (Page and Shapiro, 1983). Although there is no direct evidence for the salience of childcare, there is indirect evidence: motherhood tends to foster particular interest in issues regarding children and family, including education (Greenlee, 2014). Furthermore, mothers support funding for childcare and public schools more than childless women (Greenlee, 2014).

4.2.3. Opinion-Policy Congruence

'Opinion-policy congruence' refers to the agreement between voters and political representatives in their positions regarding public policy, which is an indicator of a healthy democracy (Lesschaeve, 2017). Some studies found that legislatures tend to favour the policy preferences of privileged social groups (higher income, higher educated, etc.), and hence, there is an increasing concern that politicians do not represent less privileged people (Lesschaeve, 2017; Winters and Page, 2009; Wlezien and Soroka, 2012). While the legislatures are more likely to be in line with the preferences of the privileged groups when social groups differ in policy positions (e.g. economic and tax policies which are vital for privileged groups), representatives are less biased against the society's worse-off segments regarding the issues related to social

welfare (e.g. job training and childcare for welfare recipients) that are crucial for the underprivileged (Gilens, 2009; Lesschaeve, 2017).

These nuances were discovered only recently because, especially in comparative studies, congruence has usually been studied in the left-right dimension, and not in relation to specific policy issues; which means that once the voter is represented on the left-right scale, it was assumed that he or she is represented in all policy issues correctly (Thomassen, 2012). This implicit representativeness made researchers overlook the inner workings of opinion-policy congruence and the need to study congruence on issues that may have a weaker link to the left-right scale. The present study aims to kick-start the discussion on the opinion-policy congruence in the understudied area of childcare policies.

4.2.4. Provision and Financing of Childcare

All countries in Europe have varying degrees of public or market-based provision and financing, with public and publicly subsidized private childcare being more widespread for 3-6 year-olds compared to 0-3 year-olds (Eurydice, 2014). Some countries rely more on the basic market principle that more competition will result in cheaper, more efficient, responsive, innovative, flexible and high-quality services, and that entrepreneurship would balance the demand and the supply. However, most of the time, affordable and quality childcare becomes less accessible with increased marketization (Bennett, 2004; Noailly and Visser, 2009; OECD, 2006; Penn, 2009; Sosinsky et al., 2007). Other countries have a predominantly public provision where private self-financing childcare is not allowed. Literature suggests that the less childcare is commercialised and the more it shifts from private to public responsibility, the stronger is its impact on diminishing inequalities (Meyers and Gornick, 2003). Hence, we expect citizens to support public provision and financing more in countries where private self-financing pre-schools are not allowed for 3-6 year-olds (*Hypothesis 1*), because they would already have experienced more accessible services provided by the government.

Another provision-related issue is the age from which access to ECEC is guaranteed. In most countries, children are legally entitled to childcare or pre-school from a certain age onwards, and some countries make one or more years of pre-school even compulsory. Both of these (legal entitlement and compulsory pre-school) usually cover only 3-6 year-olds, if at all (Eurydice, 2014). When places are guaranteed by the government, parents have a stronger incentive to take up formal childcare, and the availability of places is more important than these services being for free for maternal labour market participation as well as the perceived accessibility of

these services (Del Boca, 2002; Farfan-Portet et al., 2011; Kreyenfeld and Hank, 2000). Thus, we expect the preference for public childcare provision and financing to be higher in countries where the legal entitlement to ECEC starts early (*Hypothesis 2*), since parents would already be enjoying legally guaranteed availability.

Each country invests in ECEC on a different level, and most of the time, parents and other private financers are expected to contribute to the costs. However, the level of public financing is one of the indicators of the importance given to the ECEC as social investment. Even more important than the percentage of GDP earmarked for ECEC, is the public spending per child, which corrects for the number of children who use these services. We argue that, in the countries where the spending per 0-5 year-old in ECEC is higher, the higher would be the support for public childcare provision and financing (*Hypothesis 3*).

Finally, we also consider the overall percentage of funding coming from private sources for pre-school education (ISCED 0) for older children between 3 and 6 (Eurydice, 2014). We expect that, the higher the percentage of overall financing from private sources, the lower would be the preference for public childcare provision and financing (*Hypothesis 4*).

4.3. Data and Methodology

4.3.1. Data

The dependent variables and micro-level control variables used in the analyses are from the 2012 data of the International Social Survey Program (ISSP), the fourth wave with the theme "family and changing gender roles". We used ISSP data because, to our knowledge, this is the only international survey that collects data regarding public preference on childcare provision and financing. The units of analysis are adults responding on behalf of their households.

4.3.2. Dependent Variables

Two dependent variables are used in the analyses: one regarding the public preference for childcare provision, and the other for childcare financing:

- *Provision*: "People have different views on childcare for children under school age. Who do you think should primarily provide childcare?"
  Respondents were allowed to choose one of the following: family members, government agencies, non-profit organizations, private childcare providers, employers.

- *Financing*: "Who do you think should primarily cover the costs of childcare for children under school age?"

  Respondents were allowed to choose one of the following: the family itself, the government/ public funds, the employers.

The responses to both questions were recoded as binary: government vs. others. The respondents who responded "can't choose, no answer, don't know, or refused" were removed from the analysis.

4.3.3. Independent Variables

4.3.3.1. Country-level Independent Variables

We have four independent contextual variables, two regarding provision and two regarding financing. All four are modelled to see if they are correlated with the preference towards public provision and/or financing at the individual-level.

Table 4-1: Descriptive statistics of country-level independent variables

	Mean or %	St. Dev.	Min	Max	Sample size
Continuous variables					
Start of legal entitlement (age in months)	42,59	21,55	6	84	n=22
Spending per child in care or education (0-5 year-olds) (PPP in thousands)	24,28	12,31	7,53	49,11	n=19
Percentage of total education expenditure in ISCED 0 from private sources	12,50	8,98	0	27,8	n=20
Categorical variables					
Whether private self-financing centre-based ECEC is allowed (3-6 year-olds)					n=22
Non-existent	56,0%				
Existent	44,0%				

Whether private self-financing provision for 3-6 year-olds is allowed: a binary variable on whether the state allows for private self-financing provision for older (3-6 year-old) children. We chose to test for the provision for older children because it is more common to have private self-financing childcare for younger children, while private self-financing pre-school provision is an indication that pre-school is not seen as a part of the educational trajectory. The data are for the school year 2012-2013 from Eurydice (2014).

Starting age of legal entitlement: the earliest age (in months) children have a legal entitlement to a place in ECEC. For countries that do not provide legal entitlement, we used the start of compulsory education as the corresponding value. For federal countries (e.g. Belgium, Germany,

UK), the value for the majority of the country is adopted. The data are for the school year 2012-2013 from Eurydice (2014).

Public expenditure per child in ECEC settings: public spending for care and education for 0-5 year-olds in ECEC from 2011 in thousand Dollars converted to PPPs (OECD Family Database, 2011).

Proportion of funding for ISCED 0 from private sources: This variable consists mostly of parental fees, but still accounts for all types of private funding (Education at a Glance, 2013), for the expenditure for 3-6 year-olds, the less commercialised segment of ECEC.

4.3.3.2. Individual-level control variables

We control for the *age* of the respondent because age is shown to have a significant effect on the choice of childcare (Barnes et al., 2006), which may also be the case for the respondent's preference for governmental childcare. While one study with a similar focus did not find a significant relationship between age and preference for public provision (Chung and Meuleman, 2017), another one did (Dobrotić and Juroš, 2016).

Similarly, the *sex* of the respondent is accounted for, because women and men differ in need for social support (Rosenthal et al., 1986) and women are more likely to support public childcare provision (Alwin et al., 1992; Chung and Meuleman, 2017).

Another variable is the *education level* of the respondent, as education is associated with the use of childcare (Sibley et al., 2015), the choice of formal or parental care (Fram and Kim, 2008; Geoffroy et al., 2012; Tang et al., 2012), and preference towards governmental childcare (Chung and Meuleman, 2017; Dobrotić and Juroš, 2016).

Legal partnership status of the respondent indicates the presence of alternate caregivers, which may have an effect on the need for public childcare that is available and affordable, even though many studies did not find a significant effect (Chung and Meuleman, 2017; Dobrotić and Juroš, 2016; Geoffroy et al., 2012; Sylva et al., 2007; Tang et al., 2012).

Employment status is another variable that determines childcare preference, especially for mothers (Geoffroy et al., 2012; Tang et al., 2012).

Residents of rural areas report lower access to childcare services (Anderson and Mikesell, 2017; Habibov, 2012; Liu, 2015). Hence, we control for the *degree of urbanization* to see if it has any effect on the preference for governmental provision or financing.

As a proxy for *socio-economic status*, we control for the respondents' self-placement on the top-bottom income scale because the SES influences the social context where decisions to use

childcare are made (Vincent et al., 2008). A similar subjective income variable is used in other studies when an objective measure is not available (Chung and Meuleman, 2017).

The number of children in the household is controlled for since it reinforces the need for affordable and available childcare (Dobrotić and Juroš, 2016; Geoffroy et al., 2012; Sibley et al., 2015; Tang et al., 2012). We control for the *number of toddlers in the household* to keep the focus on children at the age of childcare.

Whether the mother of the respondent has ever worked, which was also used by Dobrotić and Juroš (2016), is controlled for because having a working mother while growing up might influence the preferences of the participants.

Respondent's *attendance to religious services* is accounted for regardless of the respondent's religion (Goerres and Tepe, 2012). The same variable was shown to be non-significant by Dobrotić and Juroš (2016), however the authors had transformed this variable into a dummy. In the present study, this variable was used in its original form, indicating the frequency of attendance to religious services.

We also control for the respondent's *life satisfaction*, because it has been shown to be significantly linked with people's attitudes regarding other areas of life such as the internet (Chang et al., 2015), advertising receptivity (Ju et al., 2017), marriage and career (Luhmann et al., 2013). Hence, life satisfaction may be associated with the preference for or against governmental childcare.

Finally, we know that respondents' *ideologies about childcare and female labour market participation* influence their attitudes on childcare use as well as the type of childcare they choose (Sylva et al., 2007). As a proxy for one's attitudes with regard to the consequences of motherhood, we control for two variables where respondents state their opinion regarding the effect of childcare on the mother and the child on a Likert scale from strongly agree to strongly disagree:

- "A working mother can establish just as warm and secure a relationship with her children as a mother who does not work."
- "A preschool child is likely to suffer if his or her mother works."

The response categories were collapsed into two, and both variables were turned into binary variables (agree vs. other response categories).

Table 4-2: Descriptive statistics of individual-level variables

	Mean or %	**St. Dev.**	**Min**	**Max**

Dependent Variables

Preference for Provider				
Government	31,6%			
Others	68,4%			
Preference for Financer				
Government	43,7%			
Other	56,3%			

Level-1 Control Variables

Continuous Variables

Age of the respondent	48,88	17,45	15	102
Years of schooling of the respondent	12,44	4,22	0	30
Socio-economic status (top-bottom)	5,54	1,78	1	10
Number of toddlers in the household	0,20	0,55	0	9
Frequency of attendance to religious services (8 categories)	5,59	2,28	1	8
Life satisfaction (7 categories)	2,75	1,02	1	7

Categorical Variables

Sex	
Male	45,3%
Female	54,7%
Employment status	
Not at work	43,5%
At work	56,5%
Urbanization	
Thinly populated	31,4%
Intermediate	42,1%
Densely populated	26,5%
Marital/partnership status	
Non-partnered	41,7%
Married or civil partnership	58,3%
Work status of the mother of the respondent	
Never worked	42,0%
Worked	58,0%
Working mothers are able to have a warm relationship with their children	
Agree	69,8%
Do not agree	30,2%
Preschool aged child suffers if mother works	
Agree	39,7%
Do not agree	60,3%

4.3.4. Method of Analysis

We investigate whether there is a relationship between country-level variables and individual-level outcomes, which requires multilevel modelling so that we can observe individual-level and country-level variance simultaneously. Our dependent variables are dummy variables. For this reason, we use the binary logistic regression function of generalized linear mixed models (GLMM) in IBM SPSS Statistics version 25 (IBM Corp., 2017). In non-linear multilevel modelling, the goodness-of-fit of models is not determined in the same way as done for linear models. In order to decide whether one model is a better fit to the data than another, we observe the drop in AIC and BIC, as well as the 'accuracy' indicator. To determine which variable works in the models, we also use the significance level of the variables and the decrease in intra-class correlation (ICC), which is calculated by adding 3,29 to the denominator for logistic models (Hox, 2010).

A similar study has been published recently by Dobrotić and Juroš (2016) using the same dataset and the same method of analysis, regarding the public perspective on childcare financing only. However, this study focused on the effect of welfare regime types along with development-related indicators such as unemployment rate, Human Development Index, female labour participation, proportion of seats held by women in parliament, and the mainstream religion of citizens (Dobrotić and Juroš, 2016). Another recent study on the topic is by Chung and Meuleman (2017) who also use multilevel modelling to explain the relationship between country-level welfare state-related variables and individuals' attitudes towards the government's responsibility in providing childcare, using the European Social Survey from 2008-2009. Despite these similarities, our research is a new contribution to the field, because (1) public opinion regarding both provision and financing is within the scope of this study, and (2) we investigate whether childcare provision- and financing-related policy indicators at the country-level coincide with the public preference on who should provide and finance childcare.

4.4. Results and Discussion

As expected, respondents who are more educated and those with a lower socio-economic status prefer public provision and financing more. Unlike in previous studies (Chung and Meuleman, 2017; Dobrotić and Juroš, 2016), having a partner means a lower preference for public provision and financing. People who are currently at work also prefer public provision and financing more. Contrary to previous research on public provision (Chung and Meuleman, 2017), but in line with the literature on public financing (Dobrotić and Juroš, 2016), the more toddlers in the

household, the higher the preference for public childcare provision and financing. Residents of more urbanised areas prefer public provision and financing more, which may be a result of city dwellers finding childcare less accessible (Chapter 3). Confirming previous research, females prefer public provision more (Alwin et al., 1992; Chung and Meuleman, 2017). Hence, we can confirm the link between womanhood/motherhood and finding childcare salient (Greenlee, 2014). Children of working mothers also prefer public provision and financing (Dobrotić and Juroš, 2016).

Age has opposite associations with the preference for public provision and financing preference. Contrary to a previous study that found no effect, we found that older people prefer public provision more (Chang et al., 2015). However, in line with another previous study, we found that younger people also prefer public financing more (Dobrotić and Juroš, 2016). The preference for public provision may be a more traditional and conservative stand, while young people may be more concerned with the affordability of services. Moreover, the more people practice their religion, the more they opt for governmental provision. Public financing preference was found to be unrelated to the frequency of attendance to religious services, which is in line with previous research (Dobrotić and Juroš, 2016).

With regard to the two ideology variables, people who think that "working mothers are not able to establish a warm relationship with their children" and that "pre-school children suffer when their mothers work" tend to oppose governmental childcare provision. This confirms that ideologies do not only affect the type and intensity of childcare used (Sylva et al., 2007), but also the preference for public provision. However, note that these are not related to the preference for public *financing*. Finally, the more the respondents are satisfied with their lives, the more they prefer public childcare provision and financing.

Table 4-3: Preference for governmental childcare provision

		Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**
Fixed Part (individual-level)		Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Intercept	*Ref: other providers*							
	Government	-1,765*** (0,240)	-2,525*** (0,395)	-2,324*** (0,400)	-0,933° (0,519)	-2,775*** (0,548)	-2,175*** (0,445)	-1,853*** (0,456)
Employment status	*Ref: never or past*							
	Currently at work	0,128*** (0,032)	0,138*** (0,036)	0,138*** (0,036)	0,138*** (0,036)	0,167*** (0,038)	0,169*** (0,037)	0,166*** (0,037)
Degree of urbanization	*Ref: thinly populated*							
	Intermediate	0,100** (0,034)	0,088* (0,037)	0,087* (0,037)	0,088* (0,037)	0,129** (0,039)	0,102** (0,038)	0,100** (0,038)

	Densely populated	0,194*** (0,038)	0,213*** (0,043)	0,213*** (0,043)	0,214*** (0,043)	0,265*** (0,046)	0,230*** (0,044)	0,229*** (0,044)
Marital/partnership status	*Ref: partnered*							
	Not partnered	-0,105** (0,031)	-0,100** (0,034)	-0,098** (0,034)	-0,100** (0,034)	-0,131*** (0,037)	-0,131*** (0,036)	-0,129*** (0,036)
Sex	*Ref: female*							
	Male	-0,051° (0,028)	-0,060° (0,032)	-0,059° (0,032)	-0,060° (0,032)	-0,077* (0,033)	-0,054 (0,033)	-0,054 (0,033)
Working mom able warm relationship	*Ref: agree*							
	Don't agree	-0,207*** (0,034)	-0,231*** (0,039)	-0,230*** (0,039)	-0,230*** (0,039)	-0,276*** (0,042)	-0,245*** (0,040)	-0,244*** (0,040)
Preschool child suffers working mom	*Ref: agree*							
	Don't agree	0,329*** (0,032)	0,364*** (0,036)	0,365*** (0,036)	0,364*** (0,036)	0,380*** (0,039)	0,365*** (0,038)	0,364*** (0,038)
Work status of the mother of the respondent	*Ref: not working*							
	Working mother	0,083** (0,032)	0,119** (0,036)	0,117** (0,036)	0,120** (0,036)	0,110** (0,038)	0,120** (0,038)	0,122** (0,038)
Age		0,003** (0,001)	0,005*** (0,001)	0,006*** (0,001)	0,005*** (0,001)	0,006*** (0,001)	0,006*** (0,001)	0,006*** (0,001)
Top-bottom self-placement		-0,020* (0,010)	-0,011 (0,011)	-0,053** (0,017)	-0,011 (0,011)	-0,004 (0,011)	-0,010 (0,011)	-0,063** (0,019)
Number of toddlers in the household		0,063* (0,028)	0,062° (0,034)	0,061° (0,034)	0,062° (0,034)	0,056 (0,035)	0,057 (0,035)	0,058° (0,035)
Years of education		0,019*** (0,004)	0,018*** (0,004)	0,019*** (0,004)	0,019*** (0,004)	0,018*** (0,005)	0,019*** (0,005)	0,018*** (0,005)
Religious attendance		0,036*** (0,007)	0,048*** (0,009)	0,048*** (0,009)	0,048*** (0,009)	0,058*** (0,009)	0,051*** (0,009)	0,052*** (0,009)
Satisfaction with life		0,067*** (0,015)	0,064*** (0,018)	0,065*** (0,018)	0,064*** (0,018)	0,072*** (0,019)	0,066*** (0,018)	0,064*** (0,018)
Fixed Part (country-level)								
Private self-financing ECEC provision for 3-6 year-olds	*ref: allowed*							
	Not allowed		1,160* (0,466)	0,815° (0,479)				
Private self-financing ECEC provision for 3-6 year-olds * top-bottom self-placement	*ref: allowed*							
	Not allowed			0,064** (0,021)				
Start of legal entitlement (age in months)					-0,020° (0,010)			
Public spending per 0-5 year-old in care and education (1000 Euro)						0,038° (0,020)		
Proportion of funding for ISCED 0 from private sources							0,031 (0,027)	0,002 (0,028)
Proportion of funding for ISCED 0 from private sources * top-bottom self-placement								0,005*** (0,001)

Random Part							
Level 1 Individuals (residual variance)	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Level 2 Countries (intercept variance)	1,243*** (0,335)	1,097** (0,349)	1,068** (0,340)	1,210** (0,386)	1,215** (0,419)	1,230** (0,413)	1,241** (0,417)
Model Fit Statistics							
AIC	137639,80	106927,22	109448,67	106933,26	95114,69	97432,37	97447,45
BIC	137648,10	106935,27	109456,75	106941,31	95122,63	97440,34	97455,42
Number of parameters estimated	23	25	27	24	24	24	25
Change in number of estimated parameters	21	2	2	1	1	1	1
Accuracy	74,70%	73,40%	73,10%	73,40%	73,20%	72,80%	72,90%
Intra-class Correlation	27,42%	25,00%	24,51%	26,89%	26,97%	27,21%	27,39%
Sample Size							
Level-1 n	29672	23181	23181	23181	20645	21293	21293
Level-2 n	29	22	22	22	19	20	20

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; ° $p < .10$

Whether the country allows private self-financing pre-schools is very much correlated with the preference for public provision (Model 2, Table 4-3). Even people with a higher SES tend to prefer public provision more in countries where no private profit-making pre-schools are allowed (Model 3, Table 4-3). Moreover, in countries where legal entitlement to ECEC starts earlier, the preference for public provision is higher (Model 4, Table 4-3). The higher the public spending per 0-5 year-old child, the more people opt for governmental provision, but only marginally (Model 5, Table 4-3). Thus, the generosity of governmental funding is not strongly linked to the preference for governmental provision. Finally, the proportion of pre-school funding from private sources is uncorrelated with preference for public provision (Model 6, Table 3). However, in countries where a higher proportion of pre-school funding comes from private sources, the preference of both the higher and lower SES respondents goes towards public provision (Model 7, Table 4-3).

Table 4-4: Preference for governmental childcare financing

	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**
Fixed Part (individual-level)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)	Coeff. (s.e.)
Intercept *Ref: other financers*							

	Government	-0,036 (0,157)	-0,375 (0,264)	0,300 (0,353)	-0,023 (0,368)	-0,130 (0,338)	0,242 (0,353)	-0,513 (0,275)
Employment status	*Ref: never or past*							
	Currently at work	0,076** (0,027)	0,058° (0,032)	0,058° (0,032)	0,058° (0,032)	0,059° (0,034)	0,059° (0,034)	0,059° (0,033)
	Ref: thinly populated							
Degree of urbanization	Intermediate	0,115*** (0,029)	0,143*** (0,032)	0,143*** (0,032)	0,143*** (0,032)	0,161*** (0,034)	0,160*** (0,034)	0,132*** (0,034)
	Densely populated	0,172*** (0,033)	0,211*** (0,038)	0,211*** (0,038)	0,213*** (0,038)	0,279*** (0,041)	0,277*** (0,041)	0,195*** (0,039)
	Ref: partnered							
Marital/partnership status	Not partnered	-0,073** (0,026)	-0,078* (0,030)	-0,078* (0,030)	-0,079* (0,030)	-0,119*** (0,032)	-0,119*** (0,032)	-0,079* (0,032)
	Ref: female							
Sex	Male	-0,020 (0,024)	0,026 (0,028)	0,026 (0,028)	0,025 (0,028)	0,018 (0,029)	0,018 (0,029)	0,031 (0,029)
Work status of the mother of the respondent	*Ref: not working*							
	Working mother	0,088** (0,027)	0,095** (0,032)	0,096** (0,032)	0,093** (0,032)	0,090** (0,033)	0,088** (0,033)	0,097** (0,033)
Age		-0,007*** (0,001)	-0,008*** (0,001)	-0,008*** (0,001)	-0,008*** (0,001)	-0,008*** (0,001)	-0,008*** (0,001)	-0,007*** (0,001)
Top-bottom self-placement		-0,056*** (0,008)	-0,054*** (0,009)	-0,054*** (0,009)	0,003 (0,019)	-0,049*** (0,010)	-0,112*** (0,020)	-0,045*** (0,010)
Number of toddlers in the household		0,138*** (0,023)	0,146*** (0,030)	0,146*** (0,030)	0,145*** (0,030)	0,183*** (0,031)	0,181*** (0,031)	0,187*** (0,031)
Years of education		0,011** (0,003)	0,010** (0,004)	0,011** (0,004)	0,010** (0,004)	0,012** (0,004)	0,011** (0,005)	0,013** (0,004)
Satisfaction with life		0,061*** (0,013)	0,067*** (0,015)	0,068*** (0,015)	0,067*** (0,015)	0,066*** (0,016)	0,065*** (0,016)	0,068*** (0,016)
Fixed Part (country-level)								
Private self-financing ECEC provision for 3-6 year-olds	*ref: allowed*							
	Not allowed		0,636* (0,303)					
Start of legal entitlement (age in months)				-0,006 (0,007)	0,001 (0,007)			
Start of legal entitlement (age in months) * top-bottom self-placement					-0,001** (0,000)			
Public spending per 0-5 year-old in care and education (1000 Euro)						0,009 (0,012)	-0,007 (0,013)	
Public spending per 0-5 year-olds in care and education (1000 Euro) * top-bottom self-placement							0,003*** (0,001)	
Proportion of funding for ISCED 0 from private sources								0,034* (0,016)
Random Part								

Level 1 Individuals (residual variance)	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Level 2 Countries (intercept variance)	0,471*** (0,125)	0,462** (0,148)	0,542** (0,173)	0,550** (0,176)	0,441** (0,153)	0,439** (0,152)	0,432** (0,147)
Model Fit Statistics							
AIC	138422,91	103563,84	103573,69	103607,81	92324,09	92351,24	95716,85
BIC	138431,28	103571,91	103581,77	103615,89	92332,05	92359,21	95724,85
Number of parameters estimated	18	20	19	20	19	20	19
Change in number of estimated parameters	16	2	1	1	1	1	1
Accuracy	62,70%	62,50%	62,60%	62,70%	62,70%	62,50%	62,10%
Intra-class Correlation	12,52%	12,31%	14,14%	14,32%	11,82%	11,77%	11,61%
Sample Size							
Level-1 n	31873	23833	23833	23833	21296	21296	22063
Level-2 n	30	22	22	22	19	20	20

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; ° $p < .10$

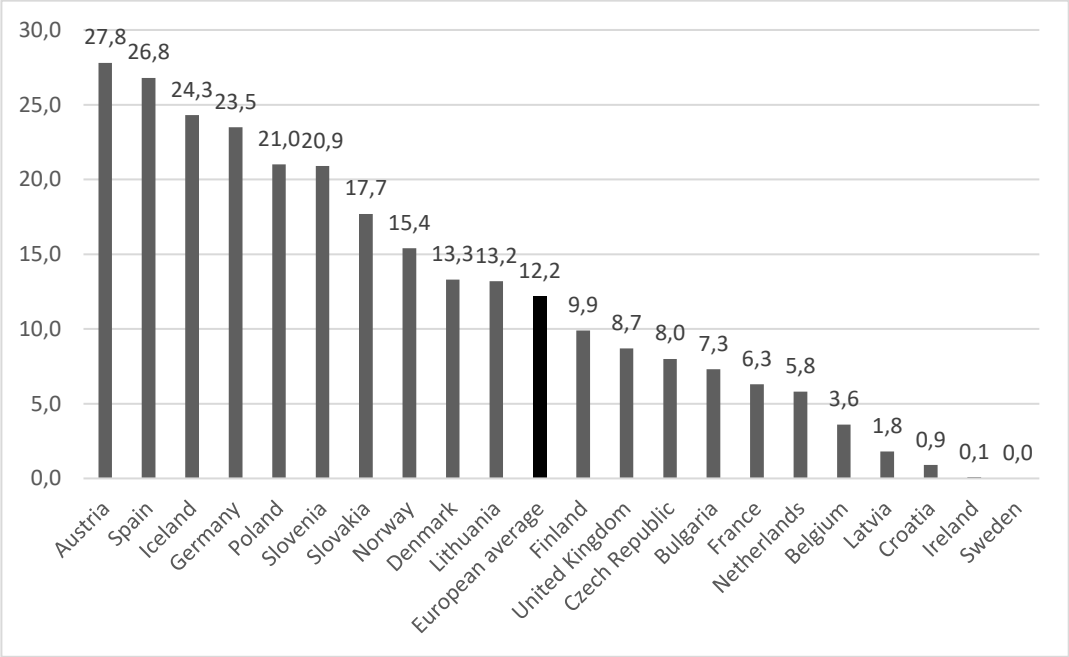
In line with the results for public provision preferences, in countries where private self-financing pre-schools are not allowed, the preference for public financing is much higher (Model 2, Table 4-4). While the start of legal entitlement seems to be uncorrelated with public financing preference at first sight, in countries where legal entitlement starts early, higher SES respondents prefer public financing more (Models 3 and 4, Table 4-4). Public spending per 0-5 year-old is also insignificant on its own (Model 5, Table 4-4), but when interacting with SES, we see that, in countries with higher public spending per child, even higher SES people prefer public financing more, just like lower SES people (Model 6, Table 4-4). Similarly, a high proportion of private contributions to pre-school funding is correlated with the preference for public financing (Model 7, Table 4-4).

Three out of four of our hypotheses that assumed congruence between policies and public opinion were confirmed. Irrespective of their SES, respondents support public provision and financing more in countries where private for-profit pre-schools are not allowed (*H1*). In countries where the legal entitlement to childcare or pre-school starts early, the preference for public childcare provision and financing is higher (*H2*), and even higher SES people prefer public financing in countries where legal entitlement starts early. In the countries where the spending per 0-5 year-old in ECEC is higher, the support for public childcare provision and financing is higher (*H3*), and even higher SES people support public financing.

Finally, we expected that higher percentages of overall financing from private sources would lead to a lower preference for public childcare provision and financing (*H4*). This was the only hypothesis that was rejected. In countries where the percentage of private funding is high, the

preference for public financing is higher. In the case of preference for public provision, the correlation is present even for higher SES people. When we look at the countries that have a lower proportion of funding from private sources (Figure 4-1), we see that there are several Central, Eastern and Southern European countries (e.g. Spain, Germany, Poland, Slovenia, Slovakia) where childcare is not perceived to be very accessible (Chapter 3). Hence, it is not surprising that the respondents living in these countries demand more public provision to have accessible services.

Figure 4-1: Proportion of education expenditure from private sources (ISCED 0), 2010 (Eurydice, 2014)



By default, lower SES respondents are more in favour of public provision, and especially financing. However, higher SES people were also found to be more in favour of public provision and financing in countries where the government already has a more prominent role in the provision and financing of ECEC (for *public provision* preference, existence of private provision and proportion of private sources for pre-school; and for *public financing* preference, start of legal entitlement, public spending per child and proportion of private sources for pre-school). In other words, in countries where public provision and financing is more prominent, even the higher income segment of the society supports the childcare policies in place, to make childcare more accessible and affordable for all. This finding contradicts what was reported in the literature so far, namely, that every socio-economic group would insist on the policies that

would benefit them the most (Lesschaeve, 2017). Our result points to a possible solidarity in the society where better-off people are willing to support more accessible, affordable and available ECEC for everyone. It is also an indication of the salience of childcare for both higher- and lower-income segments of the society, because we already know from previous research that opinion-policy congruence is more present in salient domains (Wlezien and Soroka, 2012).

4.5. Limitations

Ideally, GDP per capita and Gini index would be controlled for along with the independent variables, because the overall wealth and income equality in the country were shown to be significantly related to opinion–policy congruence (Bîea, 2012). The female employment rate can also be added to this list in the case of childcare. However, these potential control variables are correlated with several independent variables (Table 4-5), which is the reason why they were not included in the models. GDP per capita and part-time female employment rate have already been shown to be linked with support for public childcare (Chung and Meuleman, 2017).

Table 4-5: Correlations of country-level variables

	Whether private self-financing provision allowed for 3-6 year-olds	Start of legal entitlement	Spending per 0-5 year-old in ECEC	Proportion of ISCED 0 funding from private sources	Female employment rate	Gini coefficient	GDP per capita in PPS
Whether private self-financing provision allowed for 3-6 year-olds	1						
Start of legal entitlement	,079**	1					
Spending per 0-5 year-old in ECEC	-,140**	-,421**	1				
Proportion of ISCED 0 funding from private sources	,136**	,084**	-,289**	1			
Female employment rate	-,278**	-,343**	,577**	,225**	1		
Gini coefficient	,579**	,385**	-,321**	,018**	-,619**	1	
GDP per capita in PPS	-,235**	-,565**	,631**	,057**	,555**	-,576**	1

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; ° $p < .10$

Another limitation is the fact that the independent variables do not accurately reflect whether the government is the main provider or financer of childcare in these countries. Unfortunately,

childcare policy-related indicators are far from perfect, and the data are very limited. Hence, the independent variables used in this study merely approximate the level of involvement of the government in childcare provision and financing.

The unavailability of data at the respondent level is also a limitation. For instance, variables such as the immigrant status or the actual amount of income (rather than the self-assessed SES) of the respondent would be valuable to control for. However, such information is not available in the ISSP data. Finally, we would ideally weight the micro-level data in order to account for sampling design. However, the data were not weighted because the country design weights were not available for six countries (i.e. Denmark, Norway, Slovenia, Sweden, Switzerland, and Turkey) (ISSP, 2016).

4.6. Concluding Remarks

This study assesses whether public opinion is congruent with the childcare policies that are in place. We do not assume a unidirectional causal mechanism, but the interdependency of both public opinion and public policies, as per the thermostatic model (Page and Shapiro, 1983; Wlezien and Soroka, 2012). According to our findings, public opinion and childcare policies are mostly congruent in Europe. Moreover, even though Europeans are generally supportive of the idea that governments should be responsible for providing and financing childcare, the differences across countries as well as individuals are eminent.

In countries where public childcare provision and financing are more prominent, the demand for public childcare is higher. More specifically, in countries where private self-financing pre-school is not allowed for 3-6 year-olds, legal entitlement to ECEC starts early, or public spending per 0-5 year-old child is high, the public prefers public provision and financing. These findings indicate that people may be supporting governmental childcare more as they experience its positive consequences. One possible explanation is that, until citizens experience the improved accessibility and affordability via better investment in childcare by the government, they do not realize what is coming short.

There is one case of incongruence: in countries where the proportion of private funding for pre-school is high, the preference for public provision and financing is also high. According to 2010 data, seven countries – namely, Austria, Cyprus, Germany, Iceland, Poland, Slovenia, and Spain – rely on private sources for more than 20% of the funding of ISCED 0 (Eurydice, 2014). This is a rather mixed group of countries in several respects. For instance, ECEC participation is relatively high in Germany, Iceland, Slovenia, and Spain (Eurydice, 2014). On the other hand, ECEC is

perceived to be accessible above the European average in Austria, Cyprus, Germany, and Iceland, whereas it is accessible below the European average in Poland, Slovenia, and Spain (Chapter 3). Since these countries have little in common, high proportion of private funding may not be an obstacle to the accessibility of ECEC. Nevertheless, the country-specific financing and means-testing schemes need to be studied in detail to explain this relationship.

While previous research found evidence that the preferences of privileged social groups are favoured more by policy-makers compared to less privileged people (Lesschaeve, 2017; Winters and Page, 2009; Wlezien and Soroka, 2012), our findings point to an opinion-policy congruence regarding the provision- and financing-related childcare policies regardless of the socio-economic status.

Opinion-policy congruence is an indicator of a healthy democracy (Lesschaeve, 2017), especially in salient policy domains (Wlezien and Soroka, 2012). Although this study does not investigate whether childcare is a salient issue, the congruence we found regardless of the socio-economic status provides yet another indirect evidence for the salience of childcare as a policy domain. Further research is needed to determine the true level of salience of childcare for the European public.

4.7. References

Alwin, D.F., Braun, M., Scott, J., 1992. The Separation of Work and the Family: Attitudes towards Women's Labour-Force Participation in Germany, Great Britain, and the United States. European Sociological Review 8, 13–37.

Anderson, S., Mikesell, M., 2017. Child care type, access, and quality in rural areas of the United States: a review. Early Child Development and Care 0, 1–15. https://doi.org/10.1080/03004430.2017.1412959

Baker, M., Gruber, J., Milligan, K., 2006. Universal Childcare, Maternal Labor Supply, and Family Well-Being. Federal Reserve Bank of St Louis, St. Louis, United States.

Barnes, J., Leach, P., Sylva, K., Stein, A., Malmberg, L.-E., Families, C., 1, C.C. team, 2006. Infant care in England: mothers' aspirations, experiences, satisfaction and caregiver relationships. Early Child Development and Care 176, 553–573. https://doi.org/10.1080/03004430500317408

Bennett, J., 2004. Early Education Financing: What is Useful to Know?

Bîea, N., 2012. (In)Congruence: A Study of Opinion-Policy Distance in 33 Democracies. CEU Political Science Journal 290–324.

Brooks, C., Manza, J., 2006. Social Policy Responsiveness in Developed Democracies. Am Sociol Rev 71, 474–494. https://doi.org/10.1177/000312240607100306

Burstein, P., 2003. The impact of public opinion on public policy: A review and an agenda. Political Research Quarterly; Salt Lake City 56, 29–40.

Chang, Y.-C., Tsai, C.-L., Chiu, W.-Y., 2015. The influence of life satisfaction and well- being on attitude toward the internet, motivation for internet usage and internet usage behavior. Journal of Interdisciplinary Mathematics 18, 927–946. https://doi.org/10.1080/09720502.2015.1108111

Chung, H., Meuleman, B., 2017. European parents' attitudes towards public childcare provision: the role of current provisions, interests and ideologies. European Societies 19, 49–68. https://doi.org/10.1080/14616696.2016.1235218

Cunha, F., Heckman, J.J., Lochner, L., Masterov, D.V., 2006. Interpreting the Evidence on Life Cycle Skill Formation. Handbook of the Economics of Education 1, 697–812.

Del Boca, D., 2002. The effect of child care and part time opportunities on participation and fertility decisions in Italy. J Popul Econ 15, 549–573. https://doi.org/10.1007/s001480100089

Dobrotić, I., Juroš, T.V., 2016. Who Should Finance Childcare? Multilevel Analysis of 24 Countries. Revija za socijalnu politiku 23, 323–358. https://doi.org/10.3935/rsp.v23i3.1392

Education at a Glance, 2013. Table B3.2a – Relative proportions of public and private expenditure on educational institutions, by level of education (2000, 2010). OECD.

Ellingsæter, A.L., Kitterød, R.H., Lyngstad, J., 2017. Universalising Childcare, Changing Mothers' Attitudes: Policy Feedback in Norway. Journal of Social Policy 46, 149–173. https://doi.org/10.1017/S0047279416000349

Eurydice, 2014. Key Data on Early Childhood Education and Care in Europe (Eurydice and Eurostat Report). Publications Office of the European Union, Luxembourg.

Farfan-Portet, M.-I., Lorant, V., Petrella, F., 2011. Access to Childcare Services: The Role of Demand and Supply-Side Policies. Popul Res Policy Rev 30, 165–183. https://doi.org/10.1007/s11113-010-9184-z

Fram, M.S., Kim, J., 2008. Race/ethnicity and the start of child care: A multi-level analysis of factors influencing first child care experiences. Early Childhood Research Quarterly 23, 575–590. https://doi.org/10.1016/j.ecresq.2008.04.002

Geoffroy, M.-C., Séguin, J.R., Lacourse, É., Boivin, M., Tremblay, R.E., Côté, S.M., 2012. Parental Characteristics Associated With Childcare Use During the First 4 Years of Life: Results From a Representative Cohort of Québec Families. Can J Public Health 103, 76–80.

Gilens, M., 2009. Preference Gaps and Inequality in Representation. PS: Political Science & Politics 42, 335–341. https://doi.org/10.1017/S1049096509090441

Goerres, A., Tepe, M., 2012. Doing It for the Kids? The Determinants of Attitudes towards Public Childcare in Unified Germany. Journal of Social Policy 41, 349–372. https://doi.org/10.1017/S0047279411000754

Greenlee, J.S., 2014. The Political Consequences of Motherhood, The CAWP series in gender and American politics. University of Michigan Press, Ann Arbor.

Habibov, N., 2012. Early childhood care and education attendance in Central Asia. Children and Youth Services Review 34, 798–806. https://doi.org/10.1016/j.childyouth.2012.01.006

Hox, J.J., 2010. Multilevel Analysis: Techniques and Applications, 2. ed. ed, Quantitative methodology series. Routledge, Taylor & Francis, New York.

IBM Corp., 2017. IBM SPSS Statistics for Windows. Armonk, NY: IBM Corp.

ISSP, 2016. International Social Survey Programme 2012 - Family and Changing Gender Roles IV, Variable Report (No. 2016/12), GESIS-Variable Reports. GESIS, Köln.

Jones, R.S., Jones, E.T., 1971. Issue Saliency, Opinion-Holding, and Party Preference. The Western Political Quarterly 24, 501–509. https://doi.org/10.2307/446918

Jordan, J., 2013. Policy feedback and support for the welfare state. Journal of European Social Policy 23, 134–148. https://doi.org/10.1177/0958928712471224

Ju, I., Jun, J.W., Dodoo, N.A., Morris, J., 2017. The influence of life satisfaction on nostalgic advertising and attitude toward a brand. Journal of Marketing Communications 23, 413–427. https://doi.org/10.1080/13527266.2015.1051093

Kreyenfeld, M., Hank, K., 2000. Does the availability of child care influence the employment of mothers? Findings from western Germany. Population Research and Policy Review 19, 317–337. https://doi.org/10.1023/A:1026556309080

Leseman, P.P.M., 2009. The Impact of High Quality Education and Care on the Development of Young Children: Review of the Literature, in: Tackling Social and Cultural Inequalities through Early

Childhood Education and Care in Europe. Education, Audiovisual and Culture Executive Agency, Brussels, pp. 17–49.

Lesschaeve, C., 2017. Finding inequality in an unlikely place: Differences in policy congruence between social groups in Belgium. Acta Polit 52, 361–383. https://doi.org/10.1057/s41269-016-0033-x

Liu, M., 2015. An Ecological Review of Literature on Factors Influencing Working Mothers' Child Care Arrangements. Journal of Child and Family Studies 24, 161–171. https://doi.org/10.1007/s10826-013-9822-2

Luhmann, M., Lucas, R.E., Eid, M., Diener, E., 2013. The Prospective Effect of Life Satisfaction on Life Events. Social Psychological and Personality Science 4, 39–45. https://doi.org/10.1177/1948550612440105

Mahon, R., 2002. Child Care: Toward What Kind of "Social Europe"? Soc Pol 9, 343–379. https://doi.org/10.1093/sp/9.3.343

McLean, C., 2014. Market managers and market moderators: Early childhood education and care provision, finance and regulation in the United Kingdom and United States. Journal of European Social Policy 24, 122–134. https://doi.org/10.1177/0958928713517916

Meyers, M.K., Gornick, J.C., 2003. Public or Private Responsibility? Early Childhood Education and Care, Inequality, and the Welfare State. Journal of Comparative Family Studies 34, 379–411.

Myers, R.G., 2000. Financing early childhood education and care services. International Journal of Educational Research 33, 75–94. https://doi.org/10.1016/S0883-0355(99)00044-0

Noailly, J., Visser, S., 2009. The Impact of Market Forces on Child Care Provision: Insights from the 2005 Child Care Act in the Netherlands. Journal of Social Policy 38, 477–498. https://doi.org/10.1017/S0047279409003109

OECD, 2006. Starting Strong II: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD Family Database, 2011. PF1.6 Public spending by age of children. Organisation for Economic Co-operation and Development.

Page, B.I., Shapiro, R.Y., 1983. Effects of Public Opinion on Policy. The American Political Science Review 77, 175–190. https://doi.org/10.2307/1956018

Penn, H., 2011. Policy Rationales for Early Childhood Services. ICEP 5, 1–16. https://doi.org/10.1007/2288-6729-5-1-1

Penn, H., 2009. International Perspectives On Quality in Mixed Economies of Childcare. National Institute Economic Review 207, 83–89. https://doi.org/10.1177/0027950109103687

Pierson, P., 1993. When Effect Becomes Cause: Policy Feedback and Political Change. World Politics 45, 595–628. https://doi.org/10.2307/2950710

Rabinowitz, G., Prothro, J.W., Jacoby, W., 1982. Salience as a Factor in the Impact of Issues on Candidate Evaluation. The Journal of Politics 44, 41–63. https://doi.org/10.2307/2130283

Rosenthal, K.R., Gesten, E.L., Shiffman, S., 1986. Gender and Sex Role Differences in the Perception of Social Support. Sex Roles; New York, N.Y. 14, 481–499.

Sibley, E., Dearing, E., Toppelberg, C.O., Mykletun, A., Zachrisson, H.D., 2015. Do increased availability and reduced cost of early childhood care and education narrow social inequality gaps in utilization? Evidence from Norway. International Journal of Child Care and Education Policy 9. https://doi.org/10.1007/s40723-014-0004-5

Sosinsky, L.S., Lord, H., Zigler, E., 2007. For-profit/nonprofit differences in center-based child care quality: Results from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development. Journal of Applied Developmental Psychology, New findings from Secondary Data Analysis Results from the NICHD Study of Early Child Care and Youth Development Friedman Special Issue 28, 390–410. https://doi.org/10.1016/j.appdev.2007.06.003

Stoney, L., Greenberg, M.H., 1996. The Financing of Child Care: Current and Emerging Trends. The Future of Children 6, 83–102. https://doi.org/10.2307/1602420

Sylva, K., Stein, A., Leach, P., Barnes, J., Malmberg, L.-E., 2007. Family and child factors related to the use of non-maternal infant care: An English study. Early Childhood Research Quarterly 22, 118–136. https://doi.org/10.1016/j.ecresq.2006.11.003

Tang, S., Coley, R.L., Votruba-Drzal, E., 2012. Low-income families' selection of child care for their young children. Children and Youth Services Review 34, 2002–2011. https://doi.org/10.1016/j.childyouth.2012.06.012

Thomassen, J., 2012. The Blind Corner of Political Representation. Representation 48, 13–27. https://doi.org/10.1080/00344893.2012.653229

Vincent, C., Braun, A., Ball, S.J., 2008. Childcare, choice and social class: Caring for young children in the UK. Critical Social Policy 28, 5–26. https://doi.org/10.1177/0261018307085505

Winters, J.A., Page, B.I., 2009. Oligarchy in the United States? Perspectives on Politics 7, 731–751. https://doi.org/10.1017/S1537592709991770

Wlezien, C., 2005. On the salience of political issues: The problem with 'most important problem.' Electoral Studies 24, 555–579. https://doi.org/10.1016/j.electstud.2005.01.009

Wlezien, C., Soroka, S.N., 2012. Political Institutions and the Opinion–Policy Link. West European Politics 35, 1407–1432. https://doi.org/10.1080/01402382.2012.713752

PART II – Inclusiveness of ECEC

5. Chapter V – Inclusiveness of Early Childhood Education and Care for Low-income Families with an Immigration Background across Europe

Abstract

The present study explores the extent of inclusiveness of early childhood education and care (ECEC) for a particularly disadvantaged group of low-income families with an immigration background in Europe based on focus groups in five towns in five different Western European countries (Belgium, Finland, Germany, Italy, and the United Kingdom). We start from the premise that inclusiveness can be examined from three angles (equal opportunities, equal treatment and equal outcomes), and we explore the experiences of these disadvantaged families with ECEC in relation to the current practices supporting or hindering inclusiveness in the countries they live in. Low-income parents with an immigration background have similar experiences across Europe and the findings are reported thematically.

Keywords

ECEC, childcare, pre-school, vulnerable families, disadvantaged families, focus group

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5.1. Introduction

Recent research shows that early childhood education and care (ECEC) can have an equalising effect on the educational outcomes of children with a lower socio-economic background by substituting parental involvement and parental education (Cebolla-Boado et al., 2017). This makes ECEC a crucial policy instrument to alleviate social and economic inequalities given that it has a more profound and lasting effect on children's learning potential than any other intervention in their later life, especially for disadvantaged children (Burger, 2010; Cunha et al., 2006; Heckman, 2006; Leseman, 2009; Leseman and Slot, 2014; Nusche, 2009).

Despite the increased focus on both the quality and accessibility of ECEC in Europe in recent years, cost and availability remain the biggest barriers to the accessibility of ECEC in Europe (Molinuevo, 2015). However, in order to increase children's ECEC participation and improve their experiences with ECEC, it is necessary to go beyond merely focusing on cost and availability of places and address all barriers disadvantaged families face. Mere access is not the panacea to the integration challenges European countries face with regard to low-income families with an immigration background. The services need to be inclusive in order to have a positive effect. In other words, ECEC should cater for the specific needs of each child and families should feel welcome in the ECEC centres.

This article analyses the experiences and perceptions of low-income families with an immigration background regarding the inclusiveness of ECEC in Europe. Having conducted focus groups with parents in five urban localities in five different Western European countries, we assess the extent to which ECEC services are inclusive for this group. Our intention is not to sketch a complete picture of the inclusiveness of ECEC across Europe (not even in the respective countries of our case studies), but to help understand obstacles as well as positive efforts and policies to provide more inclusive ECEC. For this reason, this article narrates a common story of low-income immigrant families in Europe within the ECEC system. Some inspiring good practices to improve the inclusion of disadvantaged families in the education system as well as society at large are also highlighted.

More inclusive ECEC systems would pay off in two ways: Firstly, the parents' participation in the labour market would be facilitated as a result of having a realistic possibility for their children to be cared for while they are at work. Specifically, for low-income families, this would provide the parents (especially mothers) with more opportunities to focus on training and job search and secure a better living standard for their families. Secondly, disadvantaged (especially immigrant) children would be more ready for school and would have the opportunity to further familiarise themselves with the culture and language of the society they live in by attending high-quality ECEC. It is, therefore, important to eliminate all barriers that impede the access to and effective use of ECEC.

This article contributes to the literature in two aspects: Firstly, to our knowledge, this is the first article that defines 'inclusiveness' of ECEC in a comprehensive way and offers some clarification of the related terminology. Secondly, this is the first study of its kind with a specific focus on the inclusiveness of ECEC from the perspective of low-income immigrant families in Europe.

5.2. Equal Opportunities, Equal Treatment, and Equal Outcomes

Starting from birth, disadvantaged children face inequalities that prevent them from reaching their full potential directly or indirectly. The widespread discourse is that education is the best strategy to break the cycle of disadvantage; however, if not accessible, inclusive and high-quality, education may as well contribute to the continuation of disadvantage. For this reason, it is crucial to identify the aspects of the education system that can either contribute further to existing inequalities or provide opportunities to address them. Nicaise (2000) classifies strategies to address different types of inequalities in education into three groups: strategies for more equal opportunities, more equal treatment and more equal outcomes. The present study adapts this framework to the context of ECEC to illustrate the experiences of families with regard to their use of ECEC.

Equal opportunities strategies are all about securing the preconditions so that children from all backgrounds can access and use ECEC on equal footing. In order to do so, mechanisms of equal opportunities need to compensate for disadvantages that are related to the child and his/her home environment which are exogenous to the education system (e.g. differences in material resources, parental education, parenting skills, children's health, social support) (Nicaise, 2000). Major schemes to ensure equal opportunities include universal entitlement, public provision, free entitlement or low-cost services, and supporting services such as health care or transportation for ECEC users.

Equal treatment strategies relate to the elimination of direct and indirect discrimination within education. These are related to the functioning of ECEC services and aim to make the services equally effective for all users. The way children are treated within the ECEC system may depend on the quality and geographical distribution of services, but also the communication and treatment by caregivers, and the adaptability of the services to the children's diverse needs (including, for example, differences in language and culture, disabilities, etc.) (Nicaise, 2000). Quality standards set by the law are important instruments to ensure equal treatment, but these are no guarantee. In market-driven services, unequal demands from parents may result in unequal quality and segmentation of services by socio-economic or ethnic background (Bastos and Cristia, 2012; Bennett, 2004; Meyers and Gornick, 2003; Noailly and Visser, 2009; OECD, 2006; Penn, 2009; Sosinsky et al., 2007). Even when equal treatment and equal opportunities are ensured on paper, ECEC providers may discriminate against

vulnerable groups directly or indirectly by prioritizing children from more advantaged social groups over the disadvantaged ones, especially in the case of excess demand (Schober and Spiess, 2013). Other forms of (often unconscious) discrimination arise from imperfections in communication such as language barriers or intercultural differences in reference frameworks or interpretation (Nicaise, 2000).

Finally, the *equal outcomes* strategies are geared towards 'positive discrimination' so that disadvantaged youth can overcome their initial disadvantages and achieve educational outcomes that are similar to those of the more privileged groups. In the case of ECEC, the objective is to bring all children to the same level of school readiness (as much as possible), even though their initial state of development may be unequal (Magnuson and Shager, 2010). This necessitates compensatory and additional resources for disadvantaged children who lag behind or are at greater risk than others. In other words, it is necessary to pre-empt the problems that may arise in the future instead of trying to mend them after they become deeply rooted (Horvai, 2010). For disadvantaged children, equal standards are not enough and most of the time additional measures must be taken (e.g. better equipped centres, better personnel, priority access, etc.) in order to close the initial gaps in children's development by the end of ECEC (Nicaise, 2000; OECD, 2006; Vandenbroeck, 2011). Two types of approach may be used for this purpose: (1) targeted programmes developed particularly for disadvantaged children and (2) extra resources/services within the mainstream ECEC system (e.g. language stimulation, lower pupil per teacher ratio, additional physiotherapy or speech therapy services) (Fallon, 2005).

5.3. Inclusiveness in ECEC

It is important to distinguish between *inclusion* and *inclusiveness* in the jargon of education policy. The term 'inclusion' was already used to refer to the possibility for pupils or students with physical or cognitive impairments or disabilities to receive education with their non-disabled peers within mainstream settings and without getting segregated (Onaga and Martoccio, 2015; Poon-McBrayer and Wong, 2013; Strnadová and Hájková, 2012). Hence, inclusive education means the adaptation of the mainstream education system in a way that children with special educational needs would be catered for in the same settings and classrooms. Some scholars started to use the term 'social inclusion' referring to special treatment of socio-economically disadvantaged children in education (Ojala, 2010; Penn, 2015). Referring to 'social inclusion' of disadvantaged children, the term *inclusiveness* proliferated in the recent years.

In practice, inclusiveness is a gradual rather than absolute, and relational rather than legalistic quality feature. To be considered socially inclusive, ECEC systems should have various qualities such as being available, accessible, affordable, adaptable, adequate, non-discriminative, and effective in redistributing resources. Our conceptual triad of equal opportunities, treatment, and outcomes also encompasses these same qualities with further classification to differentiate between particular strategies. Hence, in this article, *inclusiveness* refers to the presence of adequate strategies aiming for equal opportunities, treatment, and outcomes.

5.4. Method

In the light of the aforementioned conceptual framework, our research question is the following: "What are the challenges low-income families with an immigration background face in ECEC that result in unequal opportunities, treatment, and outcomes?". Given the exploratory and broad nature of our research question, we opted for the focus group method that enables interaction within the group to generate information through the experiences shared by participants individually and collectively (Morgan, 1997). Focus groups usually include a semi-structured session with multiple participants in an informal setting and are moderated by a facilitator (Carey and Asbury, 2012; Krueger and Casey, 2009).

This research was conducted within the context of the CARE project,[24] and hence, has been the result of a collaborative effort by several project partners in five European countries (Belgium, Finland, Germany, Italy, and the United Kingdom).[25] The first author of this article was responsible for the overall coordination of the fieldwork in the five countries and the principal investigator of the fieldwork conducted in Belgium.[26] In order to answer the abovementioned research question, focus groups were conducted with socio-economically disadvantaged parents with an immigration background (users as well as non-users of ECEC) in five urban localities in different European countries: Beringen (Flanders, Belgium), Finland (city not disclosed for anonymity), Berlin (Germany), Pavia (Italy), and Oxford (England, UK).

The use of focus groups in cross-national research is rare and there are not many examples. One example of such research was led by Brannen and her colleagues and in the book they published upon the completion of the project, they shared the challenges of applying the focus group method cross-

24 CARE was funded by the 7th Framework Programme for Research and Innovation of the European Commission (grant number 613318).

25 Poland and Portugal were also involved in the research but kept out of the present study, because the target group in Poland did not include immigrants and the data collection method was different in Portugal.

26 Fieldwork in the other four locations was conducted by the research partners of the CARE project; these partners are mentioned in the Acknowledgements section.

nationally (Smithson and Brannen, 2002) – differences in concepts and terminology, the cost of translating transcriptions into English (the common language of the researchers), the time-consuming nature of coordinating such a study, to name a few. This collective endeavour was no exception.

In this case, due to budget constraints and language barriers, the focus groups were conducted in each of the five locations by different project partners. The project partners were advised to get in touch with the national or local associations working with one of the target groups that fitted the criteria for selecting participants: low-income and immigration background. Serving as intermediaries and gate-keepers, these associations helped the project partners find the participants who would participate in the focus groups. Project partners were given the freedom to recruit participants with any age, gender, level of education, nationality, and ethnic background, as long as they fitted the two major selection criteria (income and immigration background) (see 5.8.2 for more on sampling in each country). As a result of this freedom, two partners (Belgium and Germany) proceeded with a homogenous sampling method as they focused on a certain group of immigrant population (mothers with Turkish origin), while the other three (Finland, Italy and the UK) proceeded with a maximum variation sampling method where they recruited participants from different ethnic backgrounds and interviewed them in mixed-gender groups (Patton, 2002). The recruitment process had been long and challenging in all countries.[27]

Table 5-1: Focus group participants

Country	City	Target group	Language of interaction	Number of participants
Belgium (Flanders)	Beringen	Low-income mothers with Turkish background	Turkish	8
Finland		Immigrants from various countries	Finnish & English	7
Germany	Berlin	Families with Turkish background	German with Turkish translation	7
Italy	Pavia	Immigrants from various countries	Italian	7
UK (England)	Oxford	Ethnically diverse and low-income families in Southeast Oxford	English	5 (in 2 focus groups)

All moderators were asked to use a common 'moderator's guide' where all important topics of interest were listed (5.8.1). The partners also received guidelines as to how they could deal with practical issues, moderate the focus groups in a semi-structured way, and analyse the data they collect. Since the list of themes and questions were shared beforehand (as well as the template to be used while writing the reports), a general scheme for coding was introduced a priori. Unfortunately, due to the

27 Despite all efforts, due to the difficulty in recruiting participants, some partners had the stretch the two criteria imposed on them: In England, one participant in the focus group was native. In Germany, two of the participants were educated at the university level and working as teachers in primary and secondary school. However, the rest of the participants were either lowly or middle educated, and/or either employed in lowly skilled jobs or not working due to reasons such as not speaking the language,

nature of the research, it was not possible to check whether each partnering research were interpreting the concepts in the same way, even though many issues were addressed in the guiding documents provided to the partners in advance.

One or two focus groups were conducted in each location between April and December 2015. The focus groups were tape-recorded and transcribed by the partners (McLellan et al., 2003) and the data were analysed thematically (Maguire and Delahunt, 2017; Stone, 1997) in accordance with the guidelines provided to them. The project partners organised, moderated, transcribed and analysed the focus groups in their respective countries in the native language of either the country or the participants. Only the excerpts selected by the partnering researchers were translated into English. The national reports produced by each project partner were eventually synthesised by the first author. The synthesis was carried out mainly horizontally with the aim of finding similarities (and also differences) among the experiences of immigrant parents across different settings in Europe. At this point, the existing coding scheme was broadened based on the newly identified context- and country-specific themes. The sub-themes of each overarching theme of equal opportunities, equal treatment and equal outcomes were identified in this way. This article is based on the abovementioned synthesis.

All countries except Finland have split ECEC systems where provision of day care (typically for 0-3 year-olds) and pre-school (typically for 3-6 year-olds) is organised separately. Finland, on the other hand, has a unitary system where the ECEC provision before the start of compulsory primary schooling is organised and financed by the same ministry for both age groups. Such unitary systems tend to give more weight to social and educational objectives in ECEC especially for younger children, compared to countries with split systems where the economic function of child-minding during the working hours of parents is more prominent (Kaga et al., 2010). The profile of immigrant populations also differ between our study countries: While England (UK) widely hosts English-speaking African and Asian immigrants from former colonies so that language barriers are far less of a problem than in the other countries, immigrants in Berlin (Germany) and Flanders (Belgium), on the other hand, combine language barriers with a low socio-economic status, as the majority are the impoverished offspring of post-war unskilled guest workers in the mining and heavy industries. For these reasons, the current study is based on the maximum variation sampling method, since it is a synthesis of five distinct focus group studies carried out in five different countries, contexts, and samples (Suri, 2011).

5.5. Findings and Discussion

5.5.1. (Un)Equal Opportunities

5.5.1.1. Cultural Barriers

Every culture has its own ideal way(s) of caring for children appropriately regarding where care should be provided (child's home, carer's home, ECEC centre, etc.), by whom it should be provided (mothers, both parents, grandparents, childminders, pedagogues, etc.), and in what way care contributes to the upbringing of children (socialising together, being educated individually, simply 'looked after', etc.) (Kremer, 2007). As ever-changing constructs, care ideals affect ECEC policies and in return, they get influenced by these policies (as well as other contextual characteristics such as women's empowerment and activation, changing gender roles, new research on the best practices to encourage the cognitive and behavioural development of children, etc.); and it is not surprising that the care ideals of minority communities in a country differ from the care ideals of the majority (Grace et al., 2014; Radey and Brewster, 2007).

In Beringen and Berlin, the participants with a Turkish migration background stated that the mother is expected to look after her child in the Turkish culture. In this respect, the ideal of maternal child care is prevalent in the Turkish society where the grandmother is the second-best option, a day care facility being the last resort. Another reason given in favour of maternal care for under 3 year-olds is the opportunity for the child to learn her or his mother tongue at home which is considered to be crucial by the participants for the proper acquisition of the second language. While German children start ECEC usually at age 1, Turkish mothers interviewed in Berlin generally did not want their children to attend formal childcare until they were 2 or 3 years old.

However, there is evidence that such cultural beliefs can change when ECEC is presented as an accessible and desirable option. Research shows that the provision of universally available, accessible, and affordable childcare can shift care ideals (Ellingsæter et al., 2017; Tang et al., 2012). In line with this evidence, the participants with an immigration background in Finland[28] were willing to enrol their children in day care facilities. They valued ECEC especially because their children learn the Finnish language and culture, as well as social and self-regulation skills. Furthermore, while it is already very affordable for the general population, day care in Finland is free of charge for families with no income (e.g. when the immigrant parent is following a training). Hence, it seems that the more inclusive is ECEC, and the more it is accepted as standard practice for children to attend formal ECEC from early on, the higher the chance for parents with a different ethno-cultural background to consider formal

28 The focus group in Finland was conducted with a diverse group of immigrant parents born in Sudan, Morocco, Iraq, Uganda and Cuba.

ECEC as a standard practice. Note that the cultural barriers are problematic mainly for the ECEC participation of younger children; the pre-school participation of older children is more easily accepted as a cultural norm given the high participation rates of older children in all of these countries.

5.5.1.2. Financial Barriers

Affordability is one of the biggest obstacles to using ECEC services, especially for younger children. Even though many participants listed cultural reasons for not enrolling their children in formal ECEC facilities, upon probing, they always mentioned the high cost of ECEC (especially for younger children), even when financial support schemes (e.g. means-testing, tax returns or deductions) are in place. In countries such as Belgium and Finland, where a more generous means-testing is in place, the cost of day care is less of a problem. However, in such cases, the late reimbursement becomes problematic (Immervoll and Barber, 2005). For example, although parents are entitled to receive tax returns when they use day care in Flanders, the reimbursement occurs almost two years after the time they pay a higher amount at the time they use these services. This is a serious delay for families trying to make ends meet, which was mentioned by many respondents in Beringen.

England is a problematic case because the means-testing for access to free ECEC is dichotomous: only if the child is classified as 'disadvantaged', she or he has the right to free ECEC; otherwise, the services are to be paid fully by the parents. Even though the children are entitled to free ECEC, it is much more difficult to access the services full-time (outside the fixed hours of free provision). Some participants in Oxford prefer not to work rather than using centre-based ECEC because the parental fees for two children may add up to the mother's monthly wage. This creates a vicious cycle of work poverty for disadvantaged families.

One of the biggest differences between the provision for younger (0-3 years old) and older (3-6 years old) children is the cost of services. Day-care for younger children is more expensive in most countries because, traditionally, in many countries the upbringing of small children has been left to the families' initiative, which resulted in the separate development of ECEC for both age groups, also known as 'split systems' (Kaga et al., 2010). Over the years, pre-school for 3-6 year-olds gradually became a fully-fledged part of the education system in most countries, but not day care for 0-3 year-olds.

However, affordability is still a problem for pre-schoolers, in a different way. For instance, some focus group participants in Beringen mentioned additional costs for extracurricular activities (e.g. school trips, celebrations) as a barrier for their children to fully participate in social activities with their peers. Even though the schools in Flanders have a strict legal ceiling for the costs charged to parents, such extra expenses can be too high for them, especially when they are collected at short notice or simultaneously for several children.

Food and canteen costs in pre-schools may also be a problem for low-income families. Some participants in Pavia stated that, especially if several siblings attend pre-school at the same time, lunch and snack costs can be heavy for parents, even when the pre-school is free of charge. In this sense, the system in Flanders where every child brings their own food from home can be seen as a better practice. However, even this practice sometimes leads to the stigmatisation of low-income families that can afford only certain types of food.

5.5.1.3. Lack of Sufficient Supply

Long waiting lists for places in day care facilities are a major issue in Flanders and Italy for younger children. The parents who were interviewed in these countries stated that there are very long waiting lists and priority is given to families where both parents work. This practice points to the fact that the ECEC system favours dual-earner families with higher income in some countries. Participants in Finland also reported that employed parents are given priority access to day care centres while unemployed parents end up in waiting lists. Affordability and availability are usually less problematic for older children around the pre-school age since all five countries except Italy provide a legal entitlement to free pre-school provision for all children in the target age group (Motiejūnaitė-Schulmeister, 2017).

5.5.1.4. Lack of Awareness and Information

Finally, the lack of awareness and information is an often overlooked barrier to accessing ECEC for families with a socio-economically disadvantaged immigration background. These families may not be aware of their right to legal entitlement to places and/or the importance of ECEC for their children's development and future school success. Moreover, even though there are financial support schemes to help low-income families access day care, disadvantaged people who need financial support are under-informed about their availability. For instance, while day care facilities in Flanders have to grant priority access to vulnerable families at least up to a quota of 20%, the participants in Beringen were under-informed about such possibilities as well as the means-testing for parental fees. Even for the ones who know, the bureaucracy and cumbersome application procedures may hinder their access.

5.5.2. (Un)Equal Treatment

5.5.2.1. School Segregation

"From a minority perspective, segregation refers to relative absence (versus presence) of majority students in the school" (Baysu and de Valk, 2012). Segregation manifests itself in many ways (e.g. residential, socio-economic, educational, occupational) and widens the gap between social groups through unequal treatment (Nusche, 2009). Children who are residentially segregated, tend to attend

segregated schools where other students also come from similar socio-economic backgrounds, which may end up offering a lower quality education (Alba et al., 2011). School segregation is an issue especially in the areas where immigrant workers settled decades ago, which resulted in residential segregation of people with the same social, economic and cultural background over the coming decades and generations. Negative effects of school segregation on immigrant children's success have been documented (Baysu and de Valk, 2012): school segregation limits everyday contact with native speakers and hence, limits the acquisition of the language of the majority group, which has a direct effect on school success.

Note that the evidence regarding ethnic segregation is quite mixed, especially when socio-economic status is controlled for. According to a study from the US, as the proportion of Black and Latino students in the school increases, the educational attainment of the students decrease, even when the socio-economic status is controlled for – while the proportion of Black and Latino people in the neighbourhood does not have a significant effect (Goldsmith, 2009). However, according to another study from Flanders, the negative effect of the school's ethnic composition disappears once both immigrant and native pupils' socio-economic status is controlled for (Agirdag et al., 2012).

The issue of segregation was brought up by the participants in Flanders and Berlin, two regions where immigrants are known to be concentrated in particular areas. While some parents do not have problems with segregation, others expressed their wish for more diversity of both children and caregivers in ECEC facilities. Hence, some parents chose to enrol their children in pre-schools that are further from their home instead of opting for the closest one, so that their children have the opportunity to interact with children from other social and cultural backgrounds, especially natives.

> *"If day care centres are almost exclusively attended by Turkish children and they speak mostly Turkish, I wouldn't appreciate this because my child wouldn't learn German at all."* (Berlin, female)

Still, parents cannot achieve diversity in schools by their personal efforts only. One of the common points made by many participants across the five countries was that cultural and linguistic diversity should be achieved in ECEC by balancing the proportion of children with and without an immigration background to stimulate learning and support friendships between the majority and minority groups. There is enough evidence that children from disadvantaged backgrounds have better educational outcomes once they attend school with their non-disadvantaged peers (de Haan et al., 2013; OECD, 2018). Hence, segregation needs to be addressed at the policy level starting with ECEC provision.

5.5.2.2. Language-related Challenges

Coupled with the lower socio-economic status and residential segregation, some members of the most disadvantaged communities (especially women not engaged in the labour market) live in isolation and end up not being able to speak the language of the host country. Our findings suggest that language acquisition continues to be a major problem for the second and third generation Turkish immigrants in Flanders and Berlin, starting from early years.

The language barrier manifests itself in different ways in the context of day care for younger children and pre-school for older children. While younger children attend day care, language is less a problem for children than for their parents. Parents who do not speak the language of the host country find it difficult to communicate with care-givers and teachers. Language comes forward as the cause of most communication-related problems between ECEC providers and parents (see the following section). In most countries, in the case where the parent is not able to communicate with the school or teachers effectively, a third party (e.g. interpreter, other people with the same mother tongue who also speak the native language of the country) may play a mediating role.

In Pavia, some schools have a 'cultural mediator' – a professional who conducts mediation activities between foreigners and the local community, promoting, supporting and guiding both parties. Cultural mediators collaborate with organisations and institutions, both public and private, and step in when people of different cultures have trouble with understanding each other. Quite often, cultural mediators are immigrants themselves or have two cultural and linguistic references or identities. Both teachers and immigrant parents consider cultural mediators very useful also in the context of ECEC.

Language acquisition starts being an issue when older children start pre-school. At this stage, children face the necessity to speak the language of the majority culture in the context of education. In pre-school, children are usually not encouraged to learn their mother tongue, and even discouraged to speak it at all. However, we know that learning one's mother tongue properly is critical in learning a second language (Leseman and Slot, 2014). Moreover, prohibiting children with an immigration background from speaking their mother tongue often alienates them (Agirdag et al., 2014). While poor language acquisition is strongly related to the combination of poor parental involvement and education, it is also a result of wrong policies.

5.5.2.3. Challenges Related to Cultural Practices

Communication between parents and ECEC providers is sometimes hindered due to cultural differences other than language-related problems. As a result of having a big Turkish community, Beringen has a number of crèches that are run by Turkish-Belgians. Turkish families prefer these

crèches if they need one. Similarly in Berlin, parents wish to have more ECEC centres that employ qualified caregivers with a Turkish immigration background. A reason mentioned for families of Turkish origin not sending their children to mainstream day care facilities is their distrust regarding caregivers' respect and acceptance towards the cultural and religious practices of the Turkish community.

One of the topics of discussion was the food provided in these centres. As halal nutrition is a religious requirement in Islam, parents are concerned about what their children eat throughout their children's educational life. This issue has been addressed in other research and is important in understanding why people of Turkish origin are reluctant to mix with natives in social gatherings involving food (Göktuna Yaylaci, 2014).

> *"(...) I think – especially here in Neukölln – child care centres need to adapt themselves to having a lot of Muslim children who want to eat halal or they need to offer at least vegetarian food. And when such a large kindergarten is not adapted to that – I am talking about a kindergarten with a lot of Arab children which was not adapted to this – I was surprised about how the Arab parents handle that. Maybe some do not have this kind of sensitivity (…) and also that these caregivers don't know that, from my point of view they need to have a certain knowledge about cultures at one's disposal in Neukölln."* (Berlin, female)

Some ECEC facilities in these countries offer food incorporating the requirements of different religions. This inclusive and exceptional attitude attracts more Muslim children to these facilities. Accommodating such religious and/or cultural practices would encourage more families with an immigration background to get involved in ECEC.

The need for more cultural sensitivity from the ECEC professionals' side and more diversity among ECEC providers was also strongly emphasised by the participants; and this request is two-sided as cultural differences can become an issue for both parents and ECEC professionals. Often times, ECEC professionals find it difficult to communicate with parents regarding the behavioural and developmental problems of their children. Two of the focus group participants in Berlin work as school teachers, and thus, were able to provide the perspective of both sides: as teachers who need to abide by the rules and as parents with a Turkish immigration background. One of them explained that their training did not include any modules on working with children with a mother tongue other than German. As a result, most teachers in Germany did not know how to handle heterogeneity and resulting issues such as language and communication problems.

> *"(…) There were three children from Bulgaria in a class, they could barely speak German in first grade. One child had tremendous behavioural problems. (…) I myself*

was a teacher at that school. In the beginning, I did not understand why, but also as a teacher you are not prepared for this. You don't have that training. I studied at the Freie Universität, I was not prepared for this, for recognizing those things and knowing how to react correctly. And that is a big deficit. I had two lecturers - one male, one female - they just graduated and there you realize that they taught us different things. (…) [They] addressed more those problematic areas at the university. Yes, how do you handle children who don't speak the language or with behavioural problems. That is also the biggest problem. Yes, those things that are barely ever taught. Those two hours of intercultural pedagogy, one seminar that we did there, that is somehow, that was nice, I learned a lot there, but anyhow that is not much." (Berlin, female)

5.5.3. Equal Outcomes Strategies: Good Practices

There are plenty of initiatives across Europe that aim to bring vulnerable children to an equal footing with their non-disadvantaged peers in terms of school readiness. While they may be led by different authorities (local administration, regional government, or national government), we consider such initiatives as examples of *equal outcomes* strategies. In this study, we discuss two local initiatives aimed at achieving equal outcomes.

With a tailored equal outcomes strategy targeting (mainly) immigrant children, *IN-Zetje* in Beringen is an example of proactive local outreaching and functions as a playgroup for children and a meeting place for parents. Although it is not an alternative to institutional day care, it is beneficial for families who do not have access to these services by helping children to get ready for school. Funded by the Flemish government, *IN-Zetje* brings children aged 0 to 12 years and their parents (or grandparents) together in an informal setting, stimulating child development and offering a social network to parents. There are three age groups for children: from 0 to 18 months, from 18 months to 2,5-3 years, and (after-school care) from 2,5-3 to 12 years.[29] Children attend these groups with their parents and while they play, the parents or carers socialise. *IN-Zetje* also helps parents through parenting courses on various topics. Although there are similar initiatives all over Flanders aiming to bring parents together called 'ontmoetingsruimte (meeting place)', *IN-Zetje* is different in the sense that it operates in a disadvantaged area and mostly deals with vulnerable parents.

29 In Belgium, children can start pre-school when they reach 2,5 years of age. However due to practical issues, the actual starting age ranges between 2,5 and 3 years. For this reason those 6 months are inclusive both in crèche and pre-school programmes.

One mother in the Beringen focus group enthusiastically stated that *IN-Zetje* is especially beneficial for stay-at-home mothers to get out of home, meet new people, and improve their Dutch. This mother recommended *IN-Zetje* to another participant in the focus group who was pregnant at the time.

> *"Also, I definitely advise you, when your child becomes six months old, what was that… Before it was called OPSTAP, what is it now?* (Others respond "IN-Zetje".) *IN-Zetje! It's fantastic! Mothers' psychology improves, children develop. It's very beneficial. It's for mothers and children together. Children are between 0 and 2,5 years old.* Kind en Gezin *will inform you when you give birth, don't worry."* (Beringen, female)

Another local initiative we came across is the 'Stadtteilmutter (neighbourhood mothers)' in Neukölln, Berlin where women with an immigration background aim to raise awareness within their communities after following a six-month training program on ten topics that are specifically focused on 0-6 year-olds: German ECEC and educational system, bilingual education, children's rights, preventive healthcare, sexual development and education, physical development, German media, nutrition, addiction prevention, and household safety (Brantley et al., 2009).

5.6. Conclusions

The present study presents some common barriers to inclusive ECEC experienced by socio-economically disadvantaged immigrant families, building on the conceptual framework of equal opportunities, equal treatment and equal outcomes as the three complementary dimensions of inclusiveness. In this study, equal opportunities refer to the exogenous (non-educational) determinants conditioning children's equitable access to ECEC services, equal treatment stands for the absence or elimination of endogenous barriers within ECEC, and finally equal outcomes strategies aim to bring all children to the same level of cognitive, social, and emotional development through positive discrimination of the disadvantaged.

Unequal opportunities are especially problematic for younger children with a disadvantaged background, while pre-school provision for older children is gradually becoming more widespread and of homogeneous quality. Financial barriers, cultural barriers, lack of available places, and lack of awareness and information are identified as major causes of unequal opportunities for low-income immigrant families in ECEC. Among these, financial barriers are relevant to both younger and older children, but in different ways: High parental fees are a major obstacle for the participation of younger

children. Lack of awareness regarding one's rights and lack of information on the financial support schemes in place also lead to lower participation in day care for families with younger children.

As for the cultural barriers, immigrant families with different care ideals than the majority community may be less inclined to adopt the mainstream ECEC practices in the country (Kremer, 2007), especially when coupled with other obstacles. For instance, families with a migrant background in Flanders opt for formal child care only if grandparents live very far away and when the means-testing makes formal ECEC for 0-3 year-olds more accessible (Vande Gaer et al., 2013). Still, despite the evidence that supports cultural care ideals, there is also research suggesting that "the availability and accessibility of child care in the family's environment has priority over mothers' culturally-based child care preferences" (Tang et al., 2012, p. 2008). This explains why there is much less resistance to older children's pre-school participation even when pre-school is not compulsory and the mothers are not working. Hence, the lower ECEC take-up levels by immigrants cannot be explained only by cultural values, but also the availability and accessibility of services.

Unlike unequal opportunities which are more problematic for younger children, *unequal treatment* is a more critical issue for older children especially if they have an immigration background. We identified three main challenges for equal treatment: segregation, language, and cultural practices. Among these, cultural differences are an issue for both younger and older children, as they relate to the accommodation of certain religious prescriptions such as food as well as the need for more cultural diversity among ECEC providers and training for ECEC professionals to accommodate and handle diversity better. Miscommunication occurs more often in the absence of diversity among ECEC staff and the tools needed to manage diversity, which later on leads to teachers blaming immigrant families for the failure of their children in education (Gatt et al., 2011).

Older children in pre-school start experiencing the problematic side of the education system especially in the form of school segregation and difficulties with language acquisition. Many disadvantaged children face segregation quite early on, which inhibits their acquisition of the language of the majority community and causes less favourable developmental outcomes compared to disadvantaged children attending ECEC with their non-disadvantaged peers (de Haan et al., 2013). In some cases, children from families with an immigration background are forced to comply with the monolingual ideology in education (Agirdag, 2010), that may contribute to the isolation and marginalisation of these children in the future. Some schools with a high number of immigrant children involve the parents more in different areas such as decision making processes, curriculum development and evaluation, family education, and organisation of learning spaces (Gatt et al., 2011). Community involvement is also known to support integration (Gatt et al., 2011; Nicaise, 2002).

We were able to identify two local initiatives that indirectly contribute to the development of children in their early years, regardless of their participation in ECEC: *IN-Zetje* in Beringen and the *Stadtteilmutter* in Berlin. These initiatives can be considered as contributing to *equal outcomes* because they are both aimed at educating parents in an inclusive manner. Among the two, IN-Zetje involves also the children themselves in playgroups, helps them socialise with other children from different backgrounds, and hence, by countering segregation, contribute to their integration and acquisition of the Dutch language.

In this article, we operationalised inclusiveness in ECEC as conscious effort in the elimination of barriers for equal opportunities, equal treatment and equal outcomes as much as possible in order to achieve the social inclusion of the socially disadvantaged children in the ECEC system. Paradoxically, the target groups that appear to benefit most from attending ECEC tend to be severely under-represented among the actual users. In particular, we found that, younger children are lacking more in terms of equal opportunities compared to older children, while older children face more problems regarding equal treatment compared to their younger peers. Both younger and older children, however, need strategies for them to achieve equal outcomes with their non-disadvantaged peers.

5.7. References

Agirdag, O., 2010. Exploring bilingualism in a monolingual school system: insights from Turkish and native students from Belgian schools. British Journal of Sociology of Education 31, 307–321. https://doi.org/10.1080/01425691003700540

Agirdag, O., Jordens, K., Van Houtte, M., 2014. Speaking Turkish in Belgian Primary Schools: Teacher Beliefs versus Effective Consequences. Bilig 70, 7–28.

Agirdag, O., Van Houtte, M., Van Avermaet, P., 2012. Why Does the Ethnic and Socio-economic Composition of Schools Influence Math Achievement? The Role of Sense of Futility and Futility Culture. Eur Sociol Rev 28, 366–378. https://doi.org/10.1093/esr/jcq070

Alba, R., Sloan, J., Sperling, J., 2011. The Integration Imperative: The Children of Low-Status Immigrants in the Schools of Wealthy Societies. Annual Review of Sociology 37, 395–415. https://doi.org/10.1146/annurev-soc-081309-150219

Bastos, P., Cristia, J., 2012. Supply and quality choices in private child care markets: Evidence from São Paulo. Journal of Development Economics 98, 242–255. https://doi.org/10.1016/j.jdeveco.2011.08.001

Baysu, G., de Valk, H., 2012. Navigating the school system in Sweden, Belgium, Austria and Germany: School segregation and second generation school trajectories. Ethnicities 12, 776–799. https://doi.org/10.1177/1468796812450857

Bennett, J., 2004. Early Education Financing: What is Useful to Know?

Brantley, A., Cho, M., Langer, R., 2009. Stadtteilmütter: Approaching Integration Through Education in Berlin-Neukölln. Humanity in Action.

Burger, K., 2010. How does early childhood care and education affect cognitive development? An international review of the effects of early interventions for children from different social backgrounds. Early Childhood Research Quarterly 25, 140–165. https://doi.org/10.1016/j.ecresq.2009.11.001

Carey, M.A., Asbury, J.-E., 2012. Focus Group Research, Qualitative essentials. Left Coast Press, Walnut Creek, CA.

Cebolla-Boado, H., Radl, J., Salazar, L., 2017. Preschool education as the great equalizer? A cross-country study into the sources of inequality in reading competence. Acta Sociologica 60, 41–60. https://doi.org/10.1177/0001699316654529

Cunha, F., Heckman, J.J., Lochner, L., Masterov, D.V., 2006. Interpreting the Evidence on Life Cycle Skill Formation. Handbook of the Economics of Education 1, 697–812.

de Haan, A., Elbers, E., Hoofs, H., Leseman, P., 2013. Targeted versus mixed preschools and kindergartens: effects of class composition and teacher-managed activities on disadvantaged children's emergent academic skills. School Effectiveness and School Improvement 24, 177–194. https://doi.org/10.1080/09243453.2012.749792

Ellingsæter, A.L., Kitterød, R.H., Lyngstad, J., 2017. Universalising Childcare, Changing Mothers' Attitudes: Policy Feedback in Norway. Journal of Social Policy 46, 149–173. https://doi.org/10.1017/S0047279416000349

Fallon, J., 2005. Targeting Disadvantage among Young Children in the Republic of Ireland: An Overview. Child Care in Practice 11, 289–311. https://doi.org/10.1080/13575270500151821

Gatt, S., Ojala, M., Soler, M., 2011. Promoting social inclusion counting with everyone: Learning Communities and INCLUD-ED. International Studies in Sociology of Education 21, 33–47. https://doi.org/10.1080/09620214.2011.543851

Göktuna Yaylaci, F., 2014. Simultaneous Lives: Daily Life Practices of Turks in Belgium as Migrant. ZfWT 6.

Goldsmith, P.R., 2009. Schools or Neighborhoods or Both? Race and Ethnic Segregation and Educational Attainment. Soc Forces 87, 1913–1941. https://doi.org/10.1353/sof.0.0193

Grace, R., Bowes, J., Elcombe, E., 2014. Child Participation and Family Engagement with Early Childhood Education and Care Services in Disadvantaged Australian Communities. IJEC 46, 271–298. https://doi.org/10.1007/s13158-014-0112-y

Heckman, J.J., 2006. Skill Formation and the Economics of Investing in Disadvantaged Children. Science 312, 1900–1902. https://doi.org/10.1126/science.1128898

Horvai, A., 2010. Recognising the Roma and their Rights: an analysis of exclusion and integration in the education system. Research in Comparative and International Education 5, 394. https://doi.org/10.2304/rcie.2010.5.4.394

Immervoll, H., Barber, D., 2005. Can Parents Afford to Work? (OECD Social, Employment and Migration Working Papers). Organisation for Economic Co-operation and Development, Paris.

Kaga, Y., Bennett, J., Moss, P., 2010. Caring and Learning Together: Study on the integration of ECCE within education. UNESCO, Paris.

Kremer, M., 2007. How Welfare States Care: Culture, Gender, and Parenting in Europe, Changing welfare states. Amsterdam University Press, Amsterdam.

Krueger, R.A., Casey, M.A., 2009. Focus Groups: A practical guide for applied research, Fourth. ed. SAGE, Los Angeles.

Leseman, P.P.M., 2009. The Impact of High Quality Education and Care on the Development of Young Children: Review of the Literature, in: Tackling Social and Cultural Inequalities through Early Childhood Education and Care in Europe. Education, Audiovisual and Culture Executive Agency, Brussels, pp. 17–49.

Leseman, P.P.M., Slot, P.L., 2014. Breaking the cycle of poverty: challenges for European early childhood education and care. European Early Childhood Education Research Journal 22, 314–326. https://doi.org/10.1080/1350293X.2014.912894

Magnuson, K., Shager, H., 2010. Early education: Progress and promise for children from low-income families. Children and Youth Services Review, Meeting Children's Basic Needs 32, 1186–1198. https://doi.org/10.1016/j.childyouth.2010.03.006

Maguire, M., Delahunt, B., 2017. Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. AISHE-J 9.

McLellan, E., MacQueen, K.M., Neidig, J.L., 2003. Beyond the Qualitative Interview: Data Preparation and Transcription. Field Methods 15, 63–84. https://doi.org/10.1177/1525822X02239573

Meyers, M.K., Gornick, J.C., 2003. Public or Private Responsibility? Early Childhood Education and Care, Inequality, and the Welfare State. Journal of Comparative Family Studies 34, 379–411.

Molinuevo, D., 2015. Childcare for all: making early childhood education and care more accessible and inclusive [WWW Document]. European Commission DG Employment, Social Affairs and Inclusion. URL http://ec.europa.eu/social/main.jsp?catId=89&furtherNews=yes&langId=en&newsId=2420 (accessed 2.11.16).

Morgan, D.L., 1997. Focus Groups as Qualitative Research, 2nd ed. ed, Qualitative research methods series. SAGE, Thousand Oaks, California.

Motiejūnaitė-Schulmeister, A., 2017. Structural indicators on early childhood education and care in Europe – 2016. (Eurydice Report). Publications Office of the European Union, Luxembourg.

Nicaise, I., 2002. The role of school community action in the context of the Flemish Educational Priority Policy. Presented at the Integration of nursery and primary school children from a migratory background, Frankfurt.

Nicaise, I., ed., 2000. The right to learn: educational strategies for socially excluded youth in Europe. Policy Press, Bristol.

Noailly, J., Visser, S., 2009. The Impact of Market Forces on Child Care Provision: Insights from the 2005 Child Care Act in the Netherlands. Journal of Social Policy 38, 477–498. https://doi.org/10.1017/S0047279409003109

Nusche, D., 2009. What Works in Migrant Education? (OECD Education Working Papers). Organisation for Economic Co-operation and Development, Paris.

OECD, 2018. Equity in Education: Breaking Down Barriers to Social Mobility, PISA. OECD, Paris. https://doi.org/10.1787/9789264073234-en

OECD, 2006. Starting Strong II: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

Ojala, M., 2010. Developing Multicultural Early Childhood Education in a Finnish. International Journal of Child Care and Education Policy 4, 13–22.

Onaga, E.E., Martoccio, T.L., 2015. Dynamic and Uncertain Pathways between Early Childhood Inclusion Policy and Practice. International Journal of Child Care and Education Policy 2, 67. https://doi.org/10.1007/2288-6729-2-1-67

Patton, M.Q., 2002. Qualitative research and evaluation methods, 3rd ed. ed. Sage, Thousand Oaks.

Penn, H., 2015. Policy Rationales for Early Childhood Services. International Journal of Child Care and Education Policy 5, 1. https://doi.org/10.1007/2288-6729-5-1-1

Penn, H., 2009. International Perspectives On Quality in Mixed Economies of Childcare. National Institute Economic Review 207, 83–89. https://doi.org/10.1177/0027950109103687

Poon-McBrayer, K.F., Wong, P., 2013. Inclusive education services for children and youth with disabilities: Values, roles and challenges of school leaders. Children and Youth Services Review 35, 1520–1525. https://doi.org/10.1016/j.childyouth.2013.06.009

Radey, M., Brewster, K.L., 2007. The influence of race/ethnicity on disadvantaged mothers' child care arrangements. Early Childhood Research Quarterly 22, 379–393. https://doi.org/10.1016/j.ecresq.2007.05.004

Schober, P.S., Spiess, C.K., 2013. Early Childhood Education Activities and Care Arrangements of Disadvantaged Children in Germany. Child Ind Res 6, 709–735. https://doi.org/10.1007/s12187-013-9191-9

Smithson, J., Brannen, J., 2002. Qualitative methodology in cross-national research, in: Brannen, J., Lewis, S., Nilsen, A., Smithson, J. (Eds.), Young Europeans, Work and Family: Futures in Transition, Routledge/European Sociological Association Studies in European Societies. Routledge, London; New York.

Sosinsky, L.S., Lord, H., Zigler, E., 2007. For-profit/nonprofit differences in center-based child care quality: Results from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development. Journal of Applied Developmental Psychology, New findings from Secondary Data Analysis Results from the NICHD Study of Early Child Care and Youth Development Friedman Special Issue 28, 390–410. https://doi.org/10.1016/j.appdev.2007.06.003

Stone, P.J., 1997. Thematic text analysis: New agendas for analyzing text content, in: Roberts, C.W. (Ed.), Text Analysis for the Social Sciences: Methods for Drawing Statistical Inferences from Texts and Transcripts, Routledge Communication Series. Routledge, Mahwah NJ.

Strnadová, I., Hájková, V., 2012. Striving for Inclusive Education in the Czech Republic. Intervention in School and Clinic 47, 307–311. https://doi.org/10.1177/1053451211430114

Suri, H., 2011. Purposeful Sampling in Qualitative Research Synthesis. Qualitative Research Journal 11, 63–75. https://doi.org/10.3316/QRJ1102063

Tang, S., Coley, R.L., Votruba-Drzal, E., 2012. Low-income families' selection of child care for their young children. Children and Youth Services Review 34, 2002–2011. https://doi.org/10.1016/j.childyouth.2012.06.012

Vande Gaer, E., Gijselinckx, C., Hedebouw, G., 2013. Het gebruik van opvang voor kinderen jonger dan 3 jaar in het Vlaamse Gewest (No. 12), Steunpunt Welzijn, Volksgezondheid en Gezin. Leuven, Belgium.

Vandenbroeck, M., 2011. Diversity in Early Childhood Services. Encyclopedia on Early Childhood Development [online].

5.8. Appendices

5.8.1. Focus Group Moderator Guide (Belgium as reference)

Start:

Raise your hands:

- Who in the room has a child below the age of six?
- Who sends her child to a crèche or pre-school?
- Who doesn't send her child to a crèche or pre-school at all? Sometimes?
- Who in the room is working? – part-time, full-time, etc.

Discussion (first phase):

- "Research shows that migrants don't send their children to crèches and pre-schools as much as natives." Their opinion about this.
- Experiences with crèches and pre-schools in Belgium

Equal opportunities:

- **Encouraging and discouraging factors** to send children to crèches and pre-schools
- Opinion if crèches and pre-schools are **accessible** (opening hours, proximity, reservation process, etc.)
- Opinion if crèches and pre-schools are **affordable** (*Probe in relation to:* out of pocket fees, financial support from the government, transportation costs, means-tested or fixed, diapers, food, full-time payment when part-time needed, etc.)
- Barriers experienced when registering for crèche or pre-school (e.g. work requirements, proof of income, regular attendance, language, advance payments, other conditions...)

Maternal employment & home care:

- Maternal non-employment due to having had a child
- Personal preference for caring for child at home
- "Child home care allowance" if/when working
- Experiences with **informal childcare** by a childminder – who is the carer, how do they know her, satisfaction with service, etc.

Migrants vs host society?

- Opinion of **natives** – parents' and their children's relationship with natives

- **Attitude** of natives toward them – their attitude toward natives
- **Cultural differences**, differences in child rearing
- Their **relationship with carers** and educators in ECEC institutions

Discussion (second phase):

Equal treatment:

- Parents' opinion on whether their **children are treated the same** as native children
- Current type of care being their 'first choice' or not
- Opinion and expectations on the **quality** of crèches and pre-schools (language learning, school readiness, etc.)

Equal outcomes:

- Opinion of their children **performing the same as other children** at the same age
- Opinion of whether their children will have any **difficulties when starting primary school** and the effect of crèche and/or pre-school attendance on school readiness
- "It is argued that migrant children have **lower school readiness** due to language barrier." Their opinions and experiences about this
- Whether they get any **priority treatment** or **additional services** in relation to financial/access conditions (*Probe in relation to:* language stimulation, special classes, etc.)

Recommendations:

- How the ECEC services in Belgium could be improved in terms of accessibility and inclusiveness?

Closing:

Is there anything we missed that you would like to talk about?

Is your (partner's) opinion the same as yours?

What is the most important point we discussed?

5.8.2. More on Sampling and Participants

Belgium: The focus group in Belgium was held during one of the meetings of the Mothers' Club of the NGO called Turkse Unie van België. The participants of the Club were informed about this special session, and especially mothers with young children were encouraged to join the meeting. All participants were residents of Beringen and knew each other from previous meetings. This was an advantage as the participants could speak their mind in an environment that was already familiar to them. The focus group was conducted in Turkish by a researcher with a background in social and cultural anthropology. Among the eight participants of the focus group, three had children 6 years old or younger and three of them had 7 and 8 year-old children. One participant had children in their early twenties, and one participant had two grand-children of 6 and 4 years. Three second generation participants were either born and/or raised in Belgium, while five had moved to Belgium in their adulthood. Among the eight participants, only four were fluent in Dutch as a result of being raised in Flanders (second generation) or having lived in Flanders for a very long time (arrived in 1972).

Finland: The focus group was held in October 2015 in a middle-sized city in Finland. The largest groups of immigrants in the city are Russians, Estonians and Afghans. At the end of 2015 the number of immigrants substantially increased after immigration of refugees in the city. The participants of the focus group were contacted via the city multicultural centre. The centre is an interactive forum where people and cultures meet. The aim of the centre is to offer multicultural activities to every individual in the city. On Friday mornings a "Family Café" is held in the centre, which aims to serve as a meeting place for individuals from all ages. The focus group was contacted during the Family Café. Seven (six women and one man) immigrant parents (born in Sudan, Morocco, Iraq, Uganda and Cuba) agreed to participate. All participants had lived in Finland for several years. Four participants had university or higher education and three participants had upper secondary education. Among the seven participants in the focus group, five had children younger than 6 and two of them also had children at school age. One participant had children in their early twenties with previous experience with municipal ECEC services, and one participant was pregnant planning to use ECEC. One participant was working part-time, the others were not employed.

Germany: The discussion with the focus group took place in a family centre in Berlin Neukölln (a district of Berlin) in October 2015. Like in the neighbourhoods Kreuzberg, Mitte and Schöneberg, a very high proportion of Neukölln's population are immigrants. Therefore the family centre located in Neukölln seemed to be the ideal setting for the focus group discussion. The centre offers a wide range of services like information and counselling, relaxation and exercise for pregnant women and mothers, suggestions for parents on how to play with babies or toddlers as well as support and family education.

In particular, the family centre offers various courses in different languages, half of which are free of charge. One of the courses called “griffbreit” is a German-Turkish play group for mothers and their children. Mothers can participate with their babies or toddlers once a week and free of charge. They can talk to each other and sing together, but also seek advice and support from the staff (two employees organize the play group, one German-speaking, one Turkish-speaking). With the help of the manager of the family centre we were able to arrange an appointment with seven mothers with Turkish immigration background during the time slot of the “griffbereit” group. Five of the mothers participated in the “griffbereit” group and two were friends of two of the mothers.

Italy: The participants come from five different countries (Sudan, Colombia, China, El Salvador, and Peru), are of different ages and have different migration experiences. Their link with the country of origin is different: some did not go back for years, others have daily contact, at least by telephone. They are all first generation immigrants, none were born in Italy. Some of their children were born in Italy, others migrated with infants. Four out of the seven children are currently attending ECEC, two are in first grade and one (9 months) has not yet been enrolled. Two of the participants were married (Sudanese). Six out of seven parents have a university degree from their country of origin, one has a secondary degree. Only one parent works in her field of expertise: a Chinese lady who studied languages at the university and is currently employed as a teacher in a school, in addition to working as a cultural and linguistic mediator.

United Kingdom: The focus groups were carried out in East Oxford, an urban area with a high proportion of disadvantaged families. Meetings took place at two occasions, and in two separate children’s centres. Children’s centres in England are for children under the age of five and their families. While being inclusive for all families regardless of their background, they target disadvantaged groups. Children’s centres aim to support learning, health and development through a range of services for young children and their families, tailored to the needs of the community. For both groups, 5-6 mothers had agreed to take part in the focus group meetings. However, only three mothers showed up for the first group, and only two attended the second. The age of the participants was between 30 and 38. All were married. One participant was born in England and married to a French, two were born in Zimbabwe and Ruanda, and their husbands too were from immigrant families. Two parents were born locally, one of them to immigrant parents (speaks Urdu and English to her child). In four of the five families, more than one language is spoken, but only one of the parents has taken English language courses. Mothers’ highest level of educational qualification is secondary school (general or vocational). In all families fathers work full-time, while mothers either work part-time, on maternity leave, or currently not working. All participants have at least one child aged 3 or younger.

6. Chapter VI – Interactive Acculturation of Turkish-Belgian Parents and Children in Flanders: A Case Study of Beringen

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Abstract

This article tackles the relationship between the interactive acculturation patterns of Turkish-Belgian families with the Flemish society, within the specific context of their experiences with early childhood education and care (ECEC) system in Flanders. Our findings are based on a focus group with mothers in the town of Beringen. The intercultural dimension of the relationships between these families and the majority culture is discussed using the Interactive Acculturation Model (IAM). The acculturation patterns are discussed under three main headlines: language acquisition, social interaction and maternal employment. Within the context of IAM, our findings point to some degree of separationism of Turkish-Belgian families, while they perceive the Flemish majority to have an assimilationist attitude. This combination suggests a conflictual type of interaction. However, both parties also display some traits of integrationism, which points to the domain-specificity of interactive acculturation.

Keywords

Migration, integration, ECEC, pre-school, childcare

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6.1. Introduction

Belgium is one of the pioneers in Europe for providing accessible pre-schooling where the history of public pre-schools goes back to mid-19th century. Willekens (2009, p. 55) describes the development of pre-school in Belgium as "a kind of accident of history" since it started to develop even before women's activity in the labour market increased. Currently, as of two-and-a-half years old, every child is expected to attend pre-school until they turn six and start primary schooling. Although pre-school attendance is not compulsory by law, attendance is strongly encouraged by the government and parents consider it as an obligatory step in their children's educational trajectory.

The three (Dutch-, French-, and German-speaking) communities of Belgium have split systems for early childhood education and care (ECEC). In the Flemish region, day care facilities for the 0-3 year-olds are under the responsibility of Department of Child and Family (Kind en Gezin), while pre-primary education (integrated in the system of elementary education) is handled by the Ministry of Education. While private care centres have their own price-setting, parental fees for the publicly subsidised services for 0-3 year-olds is means-tested. Pre-school (2½ - 6 years of age) is free for all children except for meals and extra activities. According to the 2015 figures, the ECEC participation rate of two year-olds is 82.2%, reaching to 99% for five year-olds in Flanders (Vlaanderen Onderwijs, 2015a).

As a developed country that has been attracting immigrants, 11.6% of Belgium's population consists of non-nationals – among whom one third are citizens of non-EU countries (Eurostat, 2015). Non-national children's ECEC attendance in Flanders is always less regular compared to the nationals (non-national non-EU citizens' attendance is also more irregular than non-national EU citizens') (Vlaanderen Onderwijs, 2015b). Following Moroccan-Belgians, Turkish-Belgians are the second largest non-EU minority group in Belgium who are often disadvantaged due to having lower income, education and social status than Belgians (Baysu and Phalet, 2014; Van Acker and Vanbeselaere, 2011).

Participation in ECEC strongly depends on the family dynamics, education system, and maternal employment. While ECEC is usually the first context in which children with an immigration background are faced with the differences between their home culture and the majority culture of the country they live in (Mantovani and Tobin, 2016), it is also one of the major instances where immigrant parents have to find their way in the majority culture. Especially pre-school is an integral part of the education

trajectory in Belgium, which makes ECEC a major social setting where minority and majority cultures meet each other.[30]

This article tackles the way Turkish-Belgian families are situated in the Flemish society as an ethno-cultural minority group in relation to their experiences with the ECEC system. We make use of the data gathered through a focus group with eight mothers and discuss the intercultural dimension of the experiences of these families with the ECEC system using the Interactive Acculturation Model we borrow from the acculturation literature in social psychology.

6.2. Interactive Acculturation Theory

Acculturation means "individual changes in attitudes, behaviours, values and cultural identity" as a result of intercultural contact (Nekby and Rödin, 2007, p. 2). This two-dimensional model for identity formation combines the degree of identification with the majority and the minority cultures, allowing individuals to feel affinity to both groups (Bourhis et al., 2004; Nekby and Rödin, 2007). The Interactive Acculturation Model (IAM) has been used in determining the accultural orientation of minority and majority groups (Bourhis et al., 1997; Piontkowski et al., 2002). The 'interactive' aspect of acculturation is emphasised because both dominant and non-dominant groups are influenced by each other (Montreuil and Bourhis, 2001).

'Interactive acculturation' refers to the degree of willingness to maintain one's culture (cultural maintenance) and to engage in contact with the other (contact and participation). Different combinations of these two form different acculturation attitudes. Willingness for cultural maintenance and contact with the other group leads to *integration*. Preference against cultural maintenance and willingness to interact with the other leads to *assimilation*. Willingness for cultural maintenance and reluctance against contact with the other leads to *separation* (by the minority group) or *segregation* (by the majority group). Rejection of both cultural maintenance and contact with the other results in *marginalisation* (by the minority group) or *exclusion* (by the majority group). Finally, when the individual does not define himself or herself as a member of either the minority or the majority group, the attitude is called *individualism* (Table 6-1).

30 Pre-school is deeply rooted within the overall education system in Flanders and the pre-school experiences of children and their families are very similar to their experiences with primary education. Consequently, Belgians simply use the term "school" when speaking about pre-school. Adhering to the cultural terminology, the terms "pre-school" and "school" are used interchangeably throughout this article.

Table 6-1: Acculturation patterns

Non-dominant Group's Perspective			
Attitudes towards contacts with host country		Attitudes towards their own cultural identity	
		Positive	Negative
	Positive	Integration	Assimilation
	Negative	Separation	Marginalisation Individualism

Dominant Group's Perspective			
Attitudes towards contact with immigrants		Attitudes towards immigrants' cultural identity	
		Positive	Negative
	Positive	Integration	Assimilation
	Negative	Segregation	Exclusion Individualism

Combinations of acculturation orientations of dominant and non-dominant groups result in consensual, problematic or conflictual acculturation patterns (Table 6-2). As long as both groups adopt the same strategy for the acculturation of the immigrant group, the acculturation model would be 'consensual'. If there is discordance in the attitudes on cultural maintenance, the relationship would be 'culture-problematic'; and if the discordance is in the mismatch of the attitudes about the contact between these groups, the relationship would be 'contact-problematic'. Finally, if there is a mismatch on both contact and cultural maintenance, the relationship would be 'conflictual' (Bourhis et al., 1997; Piontkowski et al., 2002).

Table 6-2: Interactive acculturation outcomes resulting from combination of patterns

		Immigrant Community				
		Integration	**Assimilation**	**Separation**	**Marginalisation**	**Individualism**
Host Community	**Integration**	Consensual	Culture-problematic	Contact-problematic	Conflictual	Culture-problematic
	Assimilation	Culture-problematic	Consensual	Conflictual	Contact-problematic	Culture-problematic
	Segregation	Contact-problematic	Conflictual	Consensual	Contact-problematic	Contact-problematic
	Exclusion	Conflictual	Conflictual	Conflictual	Conflictual	Conflictual
	Individualism	Culture-problematic	Culture-problematic	Contact-problematic	Contact-problematic	Consensual

Acculturation patterns of both majority and minority groups have been studied for several decades. Van Oudenhoven et al. (1998) assessed the attitudes of both the majority (Dutch) and two minority (Moroccan and Turkish) groups in the Netherlands. They found that the Dutch majority valued *integration* and *assimilation* the most. Minorities also valued integration as the ideal acculturation pattern, however did not live up to their own expectations and ended up in *separation*. Van Acker and Vanbeseleare (2011) studied the majority views in Flanders towards Turkish immigrant community. From the dominant group's perspective, Turkish immigrants seem eager to maintain their cultural heritage and have limited contacts with the host culture (Van Acker and Vanbeselaere, 2011).

Montreuil and Bourhis (2001) found that the Quebecois majority supported *integration* the most (along with *individualism*). However, these patterns were endorsed for 'valued' immigrants only, while assimilation, segregation and exclusion were deemed more proper for 'devalued' immigrants. Valued immigrants with a common language, ethnic and/or religious background (e.g. French Europeans) are associated with positive stereotypes while negative stereotypes are attached to the devalued immigrants with an uncommon language, ethnic and/or religious background (e.g. Haitians, Moroccans, Algerians) (Montreuil and Bourhis, 2001; Bourhis et al., 2004). The scheme of valued and devalued immigrants was also applied to the case of Flanders – where valued immigrants were Italians and the devalued were Moroccans – and the survey results were similar: majority members had more integrationist and individualist attitudes toward Italians and more assimilationist, segregationist and exclusionist attitudes toward Moroccans (Bourhis et al., 2004). People with a Turkish background are another large group of 'devalued' immigrants in Western Europe (Alba et al., 2011), including Belgium.

Finally, it is noteworthy to acknowledge the emerging literature regarding the minority and majority groups preferring different levels of cultural maintenance and contact with the other specific to the domain they consider, i.e. public versus private (Arends-Tóth and Van de Vijver, 2004; Rojas et al., 2014; Tip et al., 2015). This literature points to the importance of the domain-specific nature of acculturation, along with the bi-dimensionality of 'cultural maintenance' and 'contact and participation'. For instance, it has been shown that, Turkish-Dutch minority living in the Netherlands prefer adapting to the Dutch culture in the functional and utilitarian public domain (e.g. education and language), while cultural maintenance is more important in the socio-emotional and value-related private domain (e.g. child-rearing and marriage) (Arends-Tóth and Van de Vijver, 2004).

6.3. Methodology

The research was conducted in the town of Beringen, located in the province of Limburg in Flanders, known for its coal mines that were very active in the aftermath of World War II and attracted workers from Turkey, Italy, and Morocco. Since the 1970s, coal mines as well as other heavy industries were gradually shut down, pushing many immigrant families into poverty (Wets, 2006; Phalet et al., 2015).

Our study aims to develop an understanding of Turkish-Belgian mothers' perceptions and feelings about childcare and pre-school in Belgium by listening to their learning from their experiences. As being congruent with the objectives of the study and the relevant theoretical framework, the focus group methodology was adopted (Beaudin and Pelletier, 1996; Kitzinger, 1995; Krueger and Casey, 2009). The focus group method is a group interview where "the reliance is on the interaction within the group, based on topics that are supplied by the researcher who typically takes the role of a moderator" (Morgan, 1997, p. 2). In other words, focus groups generate data through the opinions expressed by participants individually and collectively. The definition of "focus group" vary but usually include a semi-structured session with multiple participants, an informal setting, moderation by a facilitator, the use of general guideline questions and/or other data elicitation stimuli such as photos, and a means to record the information generated through group interactions (Carey and Asbury, 2012; Krueger and Casey, 2009).

As it is crucial that the selection of potential participants is on the basis of their ability to provide insight into and information about the topic of interest (Krueger and Casey, 2009), we selected Turkish-Belgian mothers with an experience of the day-care and pre-school education in Belgium to articulate their perspective on relevant issues. Moreover, considering the size of the focus group, it is generally considered that the adequate group size is between 4 and 12 participants, with the optimal size being between 5 and 10 individuals (Beyea and Nicoll, 2000; Guest et al., 2013; Krueger and Casey, 2009; Morgan, 1998).

Our focus group consisted of eight Turkish-Belgian mothers and was held in Turkish by the first author, in April 2015, during one of the meetings of the Mothers' Club of Turkse Unie van België.[31] All participants were residents of Beringen and knew each other from previous meetings. Only four participants were fluent in Dutch as a result of being raised in Flanders (second generation) or having lived in Flanders for a long time. While the participants' children all have attended pre-school, none have attended day care because their mothers were not working at that time (Table 6-3).

31 Turkse Unie van België (Turkish Union of Belgium) is an umbrella organisation of Turkish and non-Turkish associations in Belgium, whose aim is to build a bridge between the Belgian society and Turkish community living in Belgium.

Table 6-3: Profile of participants in focus group in Beringen

Code name	Age	Country of birth	Arrival to Belgium	Education	Work status	Children's age
Zehra	44	Turkey	1991 (14 years of residence)	Primary school	Stay-at-home mother	16 and 7
Rana	37	Turkey	2012 (3 years of residence)	High-school	Stay-at-home mother	13 and 8 (pregnant at the time of interview)
Leyla	40	Turkey	2009 (6 years of residence)	Primary school	Stay-at-home mother	5 and 4
Aylin	57	Turkey	1972 (43 years of residence)	Primary school	Incapacity leave	Children (35, 38, 40) Grandchildren (4, 6, 14)
Yesim	35	Belgium	Birth (35 years of residence)	High-school	Stay-at-home mother	13 and 8
Hale	36	Turkey	2003 (12 years of residence)	Primary school	Stay-at-home mother	11 and 5
Bahar	49	Belgium	Birth (49 years of residence)	Higher	Full-time	25 and 19
Ceren	32	Turkey	Childhood (20+ years of residence)	High-school	Part-time	11, 6, 4,5 and 3

The focus group was audio-recorded and then transcribed verbatim following a detailed transcription protocol (McLellan et al., 2003). Thematic analysis was used to explore emerging key themes (Braun and Clarke, 2006; Maguire and Delahunt, 2017; Stone, 1997). The objective of a thematic analysis is looking through the text for central themes and use theoretical preconceptions or empirical word frequencies and word contingencies to address the research question (Maguire and Delahunt, 2017; Stone, 1997).

6.4. Findings: Challenges Experienced by Turkish-Belgians

6.4.1. The Language Barrier

Despite the literature that recommends otherwise, policy-makers in Flanders do not see the mother tongue of pupils with an immigration background as an added value but merely an element of identity (Pulinx and Avermaet, 2014). As a result, the Flemish language ideology is constructed upon the premise that proficiency in Dutch is the most important condition for success in school and the job market.

While the Turkish and the Moroccans constitute the largest immigrant groups in Belgium, due to the large language fractionalisation in the Moroccan community, the largest minority language is Turkish (Agirdag et al., 2014). The Turkish minority is attached to their language and use Turkish extensively in their daily lives to the point that many adults do not feel the need to learn Dutch. This is the case especially for the ones who were born in Turkey (Altinkamis and Agirdag, 2014).

Half of the focus group participants reported that they spoke only Turkish at home, while the other half spoke both Turkish and Dutch. One of the motivations for the latter was to improve their children's fluency in Dutch. Participants were well aware that, although their children were able to attain the Dutch proficiency necessary to start primary school by the time they finish pre-school, this did not mean that they were at the same level with native Flemish children. The participants stated that the first encounter with Dutch in pre-school is usually not a smooth experience for children with an immigration background, as these children are not exposed to the language outside school.

As Beringen has a large Turkish-Belgian community, some schools in the area have a majority of Turkish-Belgian pupils. Participants say that this is sometimes a handicap for their child to master Dutch since their children tend to speak Turkish among themselves. In line with the findings of Agirdag et al. (2014), some Turkish-Belgians deliberately send their children to schools with the least number of Turkish pupils. In Belgium, children are typically enrolled in schools closest to their home and, as various minority groups tend to get concentrated in certain neighbourhoods, these schools may have an overwhelming majority of students from similar backgrounds. Many studies concluded that school segregation may have a negative effect on immigrant children's success (Baysu et al., 2014; Goldsmith, 2009; Nordin, 2013; Szulkin and Jonsson, 2007). This does not necessarily mean that the percentage of immigrants in the school is the problem, because further evidence suggests that the low socio-economic status is more problematic than ethnic composition (Agirdag et al., 2012). Hence, if not ethnic composition, SES composition is likely to create challenges for children from low-income immigrant families – which is the case for the participants of this study. Moreover, school segregation in Beringen is increasing, not only because the neighbourhood is increasingly populated by Turkish immigrants, but also Flemish families prefer other schools with the fear of quality being diminished.

More studies report that learning one's mother tongue properly is critical in learning a second language (Leseman and Slot, 2014), and that speaking Turkish more frequently does not necessarily have a negative effect on academic achievement in Dutch (Agirdag et al., 2014). Some teachers in the Flemish education system also agree that properly learning one's mother tongue should be one of the goals of education and that forcing children to speak Dutch exclusively in school is doing more harm by

alienating them (Agirdag et al., 2014). Still, one of the consequences of the monolingual ideology in Flanders is the prohibition of speaking one's mother tongue at school.

Aside from the ones who prefer to avoid the Turkish community in their children's education, there were also participants who preferred their children to socialise and go to school with other Turkish children. They believe that it would be easier for their children to learn Dutch if they are already proficient in their mother tongue.

Note that, although the Turkish-Belgian participants fully support and encourage their children to learn Dutch, some participants stated that they are unable and unmotivated to learn Dutch themselves. Mothers who were born and raised in Turkey and arrived in Belgium via family reunion found learning Dutch very difficult. Some noted that their husbands did not speak Dutch either.

6.4.2. Social Barriers between the Turkish Families and the Flemish Majority

Turkish-Belgian mothers in the focus group report having minimal interaction with native Flemish people in Beringen. The schools their children attend have either a few or no Flemish pupils. Only two participants' children attend schools where Turkish children are the minority. Turkish children usually socialise either with other Turkish children or with other minority groups such as Moroccans. Rana said that her child socializes with Flemish children and deliberately avoids Turkish children (due to the 'bad words' those Turkish children use), which triggered a discussion on the preservation of Turkish culture. Some participants approved their children 'hanging out' with Flemish children, while others argued that this would mean giving up on a part of their identity, which is undesirable. Ceren noted that in her teenage years, her father discouraged her from having Flemish friends, which is a well-justified attitude in her opinion.

> "Now, when you're a child it's no problem. But as you grow up… […] I used to live in Genk. I went to primary school there. When I started middle school, we started to go to each other's homes with my friends. After a while my father opposed my seeing those friends outside school. […] In any case, as a Turkish teenager you start to step into their culture." (Ceren)

> "But you know in every society there are good people and bad people." (Rana)

> "But we're not saying they're bad. There are cultural differences. For example they can wear miniskirts. It's allowed for them. But it's not allowed in my culture. My daughter

> cannot wear it. I had two younger sisters who went to a Flemish school. They used to take the bus with their skirts here [showing below her knee], and when they were in the bus they would fold their skirts to make them shorter. [...] I never had such a problem; I didn't need such things. Everyone around me was like me, there was no difference. But this wasn't the case for my sister. Why? Because she was attending a Flemish school. It's not because they're bad people, it's their habit. […] There are cultural differences and (when there's a lot of interaction, our children) start to slip into their culture." (Yesim)

Another participant told the story of her now 19 year-old son's childhood. He had lots of Flemish friends when he was younger and had to change his circle of close friends as he got older. The mother is glad that her son did not start going on trips with his friends or drink alcohol, which is quite different from the customs and traditions she grew up with.

Participants noted that social interactions are different for adults and that they were discriminated against or at least 'not understood enough' by Flemish people in their own social contacts. Religion seems to play a key role in this context, sharply separating the two cultures. However, they all said their children are not discriminated against at school.

6.4.3. Employment Barrier: Turkish Mothers in the Labour Market

The issue of female employment naturally came up in the focus group. Participants noted that the Flemish majority discriminated against them in the labour market due to the way they look and dress. The participants who did not speak Dutch stated their inability to find work despite their efforts. These statements are in line with the evidence found in the literature regarding the prevalence of negative attitudes towards the Turkish (and Muslims in general) in Western Europe (Baysu and Phalet, 2014).

> "First of all, you can't find work because of your name." (Bahar)

> "Your name, your face, the way you look…" (Yesim)

> "I was speaking with a young man the other day. He said he had applied for a job and they had asked his name. He said his name was Mustafa and when they heard this they told him 'the vacancy is filled'. He told me that this happened on the phone, before they even saw him." (Bahar)

> "[Even] for cleaning work, they say 'you should speak Dutch'. Huh! What am I going to do with Dutch? OK, we should speak; after all we live in Belgium. But, you know, they'll build a new mine here. I said, for the love of God, hire people from Beringen. This mine is being built with our taxes here; you should give priority to the person living in Beringen. […] If I spoke Dutch, why would I work for you doing a cleaning job? The year I finished school here I applied for a job. (The hiring person) looked at me and said 'we're not hiring people with headscarves', not even asking my education. […] I lost my motivation." (Yesim)

After this experience Yesim still found a job and worked for a while until she gave birth to her first son who is disabled. From then on, she gave up working due to the very high cost of care for disabled children.

6.5. Discussion and Conclusions

Turkish-Belgian parents' experiences with the Flemish ECEC system reflect some of the fundamental differences between Turkish and Flemish cultures. The focus group participants are reluctant to become close friends with the Flemish people; and their main motivation is preserving their own culture. Hence, the participants of this study clearly opt for cultural maintenance even to the point of reducing contact with the majority group, which points to a separationist attitude.

On the other hand, the participants value integration a lot in their discourse. They want to learn Dutch and to get a job. In this sense, our findings are in line with the findings of Van Oudenhoven et al. (1998) regarding the separationist attitudes of the Moroccan and Turkish minority group in the Netherlands even though they value integrationism more. Our findings also support the study by Nekby and Rödin (2007), who showed that labour market outcomes depend on the strength of the immigrants' identification with the majority culture (i.e. an attitude of assimilation or integration) and not much with the strength of ethnic identity.

As regards the participants' perception of the acculturation pattern of the Flemish majority, the mainstream attitude is more *assimilationist*, which is especially evident in the labour market and language policies. While the Flemish majority members are respectful and accepting in day-to-day relationships in the private domain, when it comes to the public domain of employment and education, monolingualism creates a barrier for many people from the Turkish community. Moreover, the Turkish community in Belgium tends to be 'devalued' due to the combination of uncommon ethnic background, religion, and language, as well as lower education and employment levels.

The combination of the *separation-oriented* attitude from the Turkish minority and *assimilationist* attitude from the Flemish majority leads to a '*conflictual'* acculturation pattern according to IAM. However, note that the acculturation attitudes explained above are not static but fluid. Both parties' acculturation patterns display some degree of *integrationism* as well. For instance, while the Turkish minority parents are reluctant to have close relationships with the Flemish majority in the private domain, they do want to participate in the public domain especially in education and labour market.

In contrast to the multiculturalist attitudes in countries with a historical immigration background such as Australia, Canada and the United States, the national cultures and identities in Europe are more rooted in ethnicity, which makes European countries less open to ethnic diversity (Verkuyten and Martinovic, 2012; Phalet et al., 2015). Most majority group members in Western Europe expect immigrants to assimilate, i.e. to adopt the majority's way of life and abandon their cultural identity, especially when it comes to Muslim immigrants (Van Acker and Vanbeselaere, 2011; Phalet et al., 2015). Muslim immigrants' political participation is also more likely to be perceived as a threat if they have a *separationist* attitude and more likely to be accepted if they have an *assimilationist* attitude (Hindriks et al., 2015). As regards the minority groups' acculturation, separation is sometimes preferred over integration, and Turkish minority is one of these groups (Phalet et al., 2015).

Finally, in line of the study by Arends-Tóth and Van de Vijver (2004) on the domain-specificity of the acculturation patterns of the Turkish-Dutch in the Netherlands, the present study found that the separationism of Turkish-Belgians is related to the private domain such as friendships, while their integrationism relates to the public domain such as language acquisition and employment. Turkish-Belgian participants of this study perceive the host community as assimilationist in the public domain and integrationist in the private domain. Analysed from this perspective, our findings point to a *culture-problematic* acculturation pattern in the public domain (assimilationism by the majority group and integrationism by the minority group) and *contact-problematic* acculturation pattern in the private domain (integrationism by the majority group and separationism by the minority group).

The present study provides only partial information on the acculturation attitudes of the Flemish majority, and that is based on the perception of Turkish-Belgian focus group participants. Further research that takes into account also the (domain-specific) perspective of native Flemish parents is needed in order to come to a clear conclusion of interactive acculturation of these particular minority and majority groups. However, despite its limitations, this study is valuable because it provides new insights as to how Turkish-Belgian parents' positioning in the Flemish society in relation to their experience of the first years of their children's educational trajectory.

6.6. References

Agirdag, O., Jordens, K., Van Houtte, M., 2014. Speaking Turkish in Belgian Primary Schools: Teacher Beliefs versus Effective Consequences. Bilig 70, 7–28.

Agirdag, O., Van Houtte, M., Van Avermaet, P., 2012. Why Does the Ethnic and Socio-economic Composition of Schools Influence Math Achievement? The Role of Sense of Futility and Futility Culture. Eur Sociol Rev 28, 366–378. https://doi.org/10.1093/esr/jcq070

Alba, R., Sloan, J., Sperling, J., 2011. The Integration Imperative: The Children of Low-Status Immigrants in the Schools of Wealthy Societies. Annual Review of Sociology 37, 395–415. https://doi.org/10.1146/annurev-soc-081309-150219

Altinkamis, N.F., Agirdag, O., 2014. Determinants of Language Use and Attitudes among Turkish Speakers in Flanders: A Focus on Generational Difference. Bilig 70, 59–80.

Arends-Tóth, J., Van de Vijver, F.J.R., 2004. Domains and dimensions in acculturation: Implicit theories of Turkish–Dutch. International Journal of Intercultural Relations 28, 19–35. https://doi.org/10.1016/j.ijintrel.2003.09.001

Baysu, G., Phalet, K., 2014. Avrupali Ikinci Nesil Türk Göçmenlerin Okul Basarisi. Turk Psikoloji Yazilari 17, 36–52.

Baysu, G., Phalet, K., Brown, R., 2014. Relative group size and minority school success: The role of intergroup friendship and discrimination experiences. Br. J. Soc. Psychol. 53, 328–349. https://doi.org/10.1111/bjso.12035

Beaudin, C.L., Pelletier, L.R., 1996. Consumer-based research: using focus groups as a method for evaluating quality of care. J Nurs Care Qual 10, 28–33.

Beyea, S.C., Nicoll, L.H., 2000. Learn more using focus groups. AORN Journal 71, 897–900. https://doi.org/10.1016/S0001-2092(06)62276-X

Bourhis, R.Y., Moïse, L.C., Perreault, S., Senécal, S., 1997. Towards an Interactive Acculturation Model: A Social Psychological Approach. International Journal of Psychology 32, 369–386. https://doi.org/10.1080/002075997400629

Bourhis, R.Y., Montreuil, A., Vanbeselaere, N., 2004. Perceived Threat and Host Community Acculturation Orientations toward Immigrants: Comparing Flemings in Belgium and Francophones in Quebec. Canadian Ethnic Studies 36, 113–142.

Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qualitative Research in Psychology 3, 77–101. https://doi.org/10.1191/1478088706qp063oa

Carey, M.A., Asbury, J.-E., 2012. Focus Group Research, Qualitative essentials. Left Coast Press, Walnut Creek, CA.

Eurostat, 2015. Non-national population by group of citizenship, 1 January 2015.

Goldsmith, P.R., 2009. Schools or Neighborhoods or Both? Race and Ethnic Segregation and Educational Attainment. Soc Forces 87, 1913–1941. https://doi.org/10.1353/sof.0.0193

Guest, G., Namey, E.E., Mitchell, M.L., 2013. Collecting Qualitative Data: A Field Manual for Applied Research. SAGE, London. https://doi.org/10.4135/9781506374680

Hindriks, P., Verkuyten, M., Coenders, M., 2015. The evaluation of immigrants' political acculturation strategies. International Journal of Intercultural Relations 47, 131–142. https://doi.org/10.1016/j.ijintrel.2015.04.002

Kitzinger, J., 1995. Qualitative Research: Introducing focus groups. BMJ 311, 299–302. https://doi.org/10.1136/bmj.311.7000.299

Krueger, R.A., Casey, M.A., 2009. Focus Groups: A practical guide for applied research, Fourth. ed. SAGE, Los Angeles.

Leseman, P.P.M., Slot, P.L., 2014. Breaking the cycle of poverty: challenges for European early childhood education and care. European Early Childhood Education Research Journal 22, 314–326. https://doi.org/10.1080/1350293X.2014.912894

Maguire, M., Delahunt, B., 2017. Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. AISHE-J 9.

Mantovani, S., Tobin, J., 2016. Introduction, in: Tobin, J. (Ed.), Preschool and Im/Migrants in Five Countries: England, France, Germany, Italy and United States of America. Peter Lang, Brussels.

McLellan, E., MacQueen, K.M., Neidig, J.L., 2003. Beyond the Qualitative Interview: Data Preparation and Transcription. Field Methods 15, 63–84. https://doi.org/10.1177/1525822X02239573

Montreuil, A., Bourhis, R.Y., 2001. Majority Acculturation Orientations Toward "Valued" and "Devalued" Immigrants. Journal of Cross-Cultural Psychology 32, 698–719. https://doi.org/10.1177/0022022101032006004

Morgan, D.L., 1998. The Focus Group Guidebook, Nachdr. ed, Focus Group Kit. SAGE, Thousand Oaks, California.

Morgan, D.L., 1997. Focus Groups as Qualitative Research, 2nd ed. ed, Qualitative research methods series. SAGE, Thousand Oaks, California.

Nekby, L., Rödin, M., 2007. Acculturation identity and labor market outcomes (IZA Discussion paper No. 2826). Institut zur Zukunft der Arbeit, Bonn.

Nordin, M., 2013. Immigrant School Segregation in Sweden. Popul Res Policy Rev 32, 415–435. https://doi.org/10.1007/s11113-013-9271-z

Phalet, K., Baysu, G., Van Acker, K., 2015. Ethnicity and Migration in Europe, in: Wright, J.D. (Ed.), International Encyclopedia of the Social & Behavioral Sciences (Second Edition). Elsevier, Oxford, pp. 142–147.

Piontkowski, U., Rohmann, A., Florack, A., 2002. Concordance of Acculturation Attitudes and Perceived Threat. Group Processes Intergroup Relations 5, 221–232. https://doi.org/10.1177/1368430202005003003

Pulinx, R., Avermaet, P.V., 2014. Linguistic diversity and education. Dynamic interactions between language education policies and teachers' beliefs. A qualitative study in secondary schools in Flanders (Belgium). Revue française de linguistique appliquée Vol. XIX, 9–27.

Rojas, A.J., Navas, M., Sayans-Jiménez, P., Cuadrado, I., 2014. Acculturation Preference Profiles of Spaniards and Romanian Immigrants: The Role of Prejudice and Public and Private Acculturation Areas. The Journal of Social Psychology 154, 339–351. https://doi.org/10.1080/00224545.2014.903223

Stone, P.J., 1997. Thematic text analysis: New agendas for analyzing text content, in: Roberts, C.W. (Ed.), Text Analysis for the Social Sciences: Methods for Drawing Statistical Inferences from Texts and Transcripts, Routledge Communication Series. Routledge, Mahwah NJ.

Szulkin, R., Jonsson, J.O., 2007. Ethnic Segregation and Educational Outcomes in Swedish Comprehensive Schools (No. Working Paper 2007:2), SULCIS Working Paper Series. The Stockholm University Linnaeus Center for Integration Studies (SULCIS), Stockholm.

Tip, L.K., González, R., Brown, R., De Tezanos-Pinto, P., Saavedra, P., Sagredo, V., Zagefka, H., Celeste, L., 2015. Effects of ingroup norms on domain-specific acculturation preferences: Experimental evidence from two cultural contexts. International Journal of Intercultural Relations 47, 113–130. https://doi.org/10.1016/j.ijintrel.2015.03.027

Van Acker, K., Vanbeselaere, N., 2011. Bringing together acculturation theory and intergroup contact theory: Predictors of Flemings' expectations of Turks' acculturation behavior. International Journal of Intercultural Relations 35, 334–345. https://doi.org/10.1016/j.ijintrel.2010.06.004

Van Oudenhoven, J.P., Prins, K.S., Buunk, B.P., 1998. Attitudes of minority and majority members towards adaptation of immigrants. Eur. J. Soc. Psychol. 28, 995–1013. https://doi.org/10.1002/(SICI)1099-0992(1998110)28:6<995::AID-EJSP908>3.0.CO;2-8

Verkuyten, M., Martinovic, B., 2012. Immigrants' National Identification: Meanings, Determinants, and Consequences. Social Issues and Policy Review 6, 82–112. https://doi.org/10.1111/j.1751-2409.2011.01036.x

Vlaanderen Onderwijs, 2015a. Ingeschreven leerlingen met geboortejaar 2006 en op 01/02/2015 in het lager onderwijs.

Vlaanderen Onderwijs, 2015b. "Onvoldoende afwezige" leerlingen met geboortejaar 2006 en op 01/02/2015 in het lager onderwijs.

Wets, J., 2006. The Turkish Community in Austria and Belgium: The Challenge of Integration. Turkish Studies 7, 85–100. https://doi.org/10.1080/14683840500520600

Willekens, H., 2009. How and Why Belgium Became a Pioneer of Preschool Development, in: Scheiwe, K., Willekens, H. (Eds.), Child Care and Preschool Development in Europe: Institutional Perspectives. Palgrave Macmillan, Basingstoke [England] ; New York, pp. 43–56.

Conclusion

7. Chapter VII – General Discussion and Conclusions

7.1. Summary of the Findings

Part I of this dissertation deals with the issue of accessibility of ECEC in Europe by means of quantitative research. Each of the three studies in this part are based on multilevel analyses, for they tackle the links between different policy instruments at the macro-level (in relation to the provision, regulation and financing of ECEC) and the experiences of the individuals at the micro-level.

Chapter 2 unearths the link between ECEC policy instruments and the intensity of ECEC participation using the EU-SILC data from 2014. The intensity of ECEC participation in terms of hours of attendance is, in this context, considered to be one of the consequences of accessibility of ECEC. By applying a method of analysis that has not been used hitherto in childcare policy research (multilevel Tobit analysis), this study takes into account the relevance of ECEC policy instruments both in the take-up of ECEC (attendance at any number of hours or not) and the intensity of use (the number of hours of attendance) simultaneously. The units of analysis are children below the age of 6. Two sets of multilevel Tobit analyses are conducted in order to capture the unique context of participation of younger (0-2 year-old) and older (3-5 year-old) children, and for this reason, despite referring to the same pillars, slightly different independent variables are used in the two sets of analyses. The analyses reveal that ECEC use is higher in countries where the legal entitlement to ECEC and free ECEC provision start early, pre-school is public or publicly subsidised, the ECEC system is unitary, the structural quality standards are high, and public spending per child is high while the share of private funding and the parental fees for lone parents are low. This study confirms that most policies aiming for universal access (provision) and high structural quality (regulation) are particularly favourable for disadvantaged children with an immigration or low-income background. However, while higher public spending and lower out-of-pocket financing do not correlate with the higher ECEC use of disadvantaged children, early free provision is correlated with a wider native-to-immigrant gap in ECEC use. These findings point to the risk of Matthew effects linked to generous (universal) public funding.

Chapter 3 deals with the accessibility of ECEC as perceived by the public in relation to the ECEC policies in place using the 2011/2012 data of the European Quality of Life Survey (EQLS). In this study, the units of analysis are the adults sharing their opinion regarding the accessibility of childcare services. The overall perceived accessibility of ECEC is calculated as a composite score based on the affordability, availability, quality and (geographical) accessibility of childcare as perceived by the respondents. Three independent variables per pillar of provision, regulation and financing are tested for their potential correlation with the perceived accessibility of childcare in the country. According to the analyses,

childcare is perceived to be more accessible in countries that do not allow private self-financing ECEC for 3-6 year-olds, adopt a unitary ECEC system where services for 0-3 year-olds and 3-6 year-olds are harmonised, and provide generous public financing per 0-5 year-old in ECEC. The latter has an even stronger effect on families with an income below average.

Similarly, Chapter 4 also has the opinion of the public in its focus: whether childcare should be provided and financed primarily by the government. Unlike the two previous studies, this one employs independent variables only related to the provision and financing of ECEC. Using the 2012 wave of the International Social Survey Program (ISSP), two sets of multilevel (binary) logistic analyses are conducted to determine whether the current governmental involvement in childcare provision and financing is supported by the citizens in European countries. The analyses reveal that the demand for *public childcare provision* is higher in countries where ECEC provision for older children is only public or publicly subsidised, the legal entitlement starts early, and public spending per child is high. These results point to a general opinion-policy congruence. The demand for *public childcare financing*, however, is higher in countries where ECEC provision for older children is only public or publicly subsidised and the proportion of pre-school funding from private sources is also high. The former finding points to a congruence while the latter to incongruence, with citizens of countries that rely more on private funding for pre-school demanding more governmental involvement in ECEC financing.

Part II investigates the inclusiveness of ECEC by means of qualitative research. Chapter 5 explores the extent of inclusiveness of ECEC for families with low income and an immigration background using focus groups in five towns from different Western European countries (Belgium, England, Finland, Germany, and Italy). Low-income parents with an immigration background have similar experiences across these five towns. Financial barriers, cultural barriers, lack of available places, and lack of awareness and information are the identified as major causes of *unequal opportunities* for low-income immigrant families in ECEC, while the challenges with regard to school segregation, language acquisition, and cultural practices contribute to *unequal treatment*. The findings suggest that the inequality of opportunities is more problematic for younger children while the inequality of treatment concerns older children more. However, for both younger and older children there is room for improvement in both areas. Moreover, provision for both younger and older children needs extra resources and strategies in order to become more inclusive.

Finally, Chapter 6 is concerned with the interactive acculturation patterns of highly disadvantaged Turkish-Belgian families with the Flemish society. The evidence comes from the focus group with low-income Turkish-Belgian mothers the ECEC system in Flanders. The intercultural dimension of the relationships between these families and the majority culture is discussed using the Interactive

Acculturation Model. Language acquisition, social interaction and maternal employment come forward as the areas of life closely related to the acculturation of this group in the context of ECEC. The findings point to some degree of separationism of Turkish-Belgian families in the private domain (e.g. friendships) while integrationism is more prominent in the public domain (e.g. education, language acquisition). However, the participants perceive the Flemish majority to have an integrationist attitude in the private domain and an assimilationist attitude in the public domain. The combination of the demonstrated and perceived interactive acculturation attitudes point to a problematic pattern between the minority and majority groups. ECEC is located in the nexus of the private and public domains, where the aspect of 'care' is closer to the former and the aspect of 'education' is closer to the latter. Hence, this study also makes it clear that improving the experiences of immigrant families with the ECEC system requires investigating and addressing the reasons why the majority and minority cultures clash.

7.2. General Discussion and Conclusions

Research conducted in the context of this doctoral study contributes to the understanding of families' experiences with ECEC across Europe, against the backdrop of the policy context in their respective countries of residence. Whereas the bulk of the literature focuses on the benefits of ECEC, this study focuses on social and ethnic inequalities in relation to two key concepts: *accessibility* and *inclusiveness*. Accessibility is the absence of barriers to participate in ECEC especially in terms of availability, geographical accessibility, affordability, and quality; whereas inclusiveness is the result of conscious effort to achieve equal opportunities, equal treatment, and equal outcomes for each and every child regardless of their individual circumstances. Accessibility is an essential aspect of inclusiveness; but it is highlighted throughout this dissertation because Part I specifically deals with accessibility using quantitative methods. The concept of inclusiveness is studied via qualitative methods in Part II.

7.2.1. Accessibility of ECEC

I define accessibility as the absence of practical barriers to participate in ECEC. Hence, the more accessible ECEC systems are, the higher is the participation in ECEC; because potential access that is created via the increased accessibility of the system itself drives realised access[32] which is the actual take-up and use of ECEC – which, of course, is a consequence of many other elements beside ECEC policies. I examined several policy instruments related to the way ECEC was provided, regulated, and

32 The terms potential access and realised access were proposed by Andersen and Aday (1978) with regard to the accessibility and actual take-up of healthcare services respectively.

financed as independent variables in my quantitative analyses in order to unearth the basic features of an accessible ECEC system.

The relationship between the accessibility of the ECEC system (instrumentalised via ECEC policy instruments) and realised access (i.e. actual use) of ECEC was covered in Chapter 2. This study focused on the repercussions of accessibility of ECEC in an objective manner, using the actual hours of use as the dependent variable. The second way I studied the accessibility of ECEC was from a subjective angle in Chapter 3: accessibility of ECEC perceived by the public. In the empirical research, I merged the four key dimensions of accessibility (i.e. availability, affordability, geographical accessibility, and quality) into a composite score called the Perceived Childcare Accessibility Index (PCAI). Finally, I investigated whether the public opinion with regard to the government's role as the main provider and financer of ECEC is congruent with the ECEC policies in place (Chapter 4).

Parental decisions to use ECEC depend on many determinants. The most elaborate theory to explain such decisions is the socio-ecological model that argues that the type and intensity of ECEC used is a consequence of the characteristics of the child, mother (and sometimes the father), family and the environment, as well as cultural beliefs and preferences (Liu, 2015; Pungello and Kurtz-Costes, 1999; Rose and Elicker, 2010; Seo, 2003; Sibley et al., 2015; Sylva et al., 2007; Tang et al., 2012; Vandenbroeck et al., 2008). For this reason, as many socio-ecological determinants of ECEC use as possible were controlled for in the three quantitative studies. Since individual circumstances are not the main focus of this PhD, I did not elaborate much on such findings, but it is not an understatement to conclude that the socio-ecological model has been the right starting point in understanding the accessibility of ECEC time and again, given the significance of almost every micro-level control variable in the analyses.

7.2.1.1. Affordability

High costs are a major barrier to the accessibility of ECEC in many countries especially for disadvantaged families. The cost was mentioned as a major barrier to the take-up of ECEC in all countries covered in the qualitative study, especially for younger children (Chapter 5). This was confirmed also in quantitative studies: as household income decreases, both realised and perceived access to ECEC also decrease (chapters 2 and 3). As reported in Chapter 2, household income has a higher impact on the realised access of younger children compared to older children. It is quite common in England for mothers with more than one child not to take up employment due to the high cost of childcare (Chapter 5). Even when ECEC is made more affordable through tax returns, late reimbursement is still a major barrier to the use of services (Immervoll and Barber, 2005).

I tested several country-level independent variables relating to the provision or financing of ECEC that may influence the affordability of ECEC. The *start of free provision of ECEC* is one of them. In countries where free provision starts below the age of 3, younger children attend ECEC more; especially children from low-income families enjoy ECEC more in these countries. The earlier the free provision starts, the higher the ECEC attendance of older children. However, this is mainly the case in higher-income groups, which points to a Matthew effect. There are only five countries that offer free provision to under-3-year-olds: Belgium, Lithuania, Latvia, Malta, and Romania. Moreover, some countries that are known to have an accessible ECEC with high participation rates such as Germany, Denmark, Finland, and Norway do not offer ECEC 'free of charge' (Eurydice, 2014), even though the provision is made more affordable through different mechanisms such as means-testing. The start of free provision was also found to be uncorrelated with the perceived accessibility. In the light of these findings, I conclude that ECEC provision that is completely free of charge is not an essential contributor to increased accessibility of ECEC.

Another indicator I used as an approximation of the affordability of ECEC for younger children at the country-level is the *average out-of-pocket childcare cost for a single-parent household*. The lower the percentage of childcare cost in the average salary, the higher the realised access for younger children. However, there is no additional benefit of this cost being low for low-income families. For older children, the *proportion of the preschool funding from private sources* is not as negatively correlated with the realised access of lower-income children as it is with the use of higher-income children. Still, perceived accessibility of ECEC is not correlated with this proportion.

Whether the government legally allows private self-financing ECEC is another determinant of the affordability of ECEC. In countries where ECEC provision for younger children is exclusively public or publicly subsidised, younger children attend ECEC more, especially immigrants – while no link was found for realised access of older children (Chapter 2). Still, ECEC is *perceived* to be more accessible in countries that do not allow private self-financing ECEC for older children (Chapter 3).

Last but certainly not the least, the *public spending per 0-5 year-old in care and education* is significantly associated with higher realised access of both younger and older children (even more so for the latter) (Chapter 2), as well as higher perceived accessibility of the ECEC system (Chapter 3). However, while high public spending is related to even higher perceived accessibility by the income-poor (Chapter 3), no such relationship was found for low-income children's ECEC use regardless of their age (Chapter 2). Moreover, even in countries with high public spending, younger children with an immigration background attend ECEC less compared to native children (Chapter 2). These findings may

be yet further indications of Matthew effect in the way ECEC is financed, as already discussed in the literature (Pavolini and Van Lancker, 2018; Van Lancker and Ghysels, 2012).

7.2.1.2. Availability

The abovementioned ECEC system-related indicators are often not solely related to the affordability of ECEC but also its availability. For instance, whether private self-financing ECEC is allowed is a policy instrument informs us not only with regard to the affordability of ECEC, but also regarding the extent to which the public sector is willing to take responsibility for the supply of ECEC in order to meet the demand, which relates to the availability of services. While it is more widespread that governments are only partially involved in the provision of ECEC for younger children (because childcare is still regarded as 'childminding' while mothers work), almost half of the European countries consider ECEC for older children increasingly as a part of the educational trajectory.

Previous research tells us that availability takes precedence even over affordability when it comes to encouraging ECEC participation (Del Boca, 2002; Farfan-Portet et al., 2011; Kreyenfeld and Hank, 2000). My results partly support this claim. This is evident especially given the contrast in findings relating to the effect of the start of free provision and the start of legal entitlement. Earlier *start of legal entitlement to ECEC* is correlated with higher ECEC use of both younger and older children (Chapter 2). For younger children, early legal entitlement is correlated even more with the increased ECEC use of disadvantaged children from immigration or low-income background. Moreover, ECEC is perceived to be more accessible in countries where the entitlement starts earlier (Chapter 3). The contrast between legal entitlement and free provision is more obvious when we look at the effect sizes: even though both variables have a significant association with realised access, the coefficients for legal entitlement are bigger and more solid. Hence, legal entitlement seems to be a better predictor of higher accessibility of ECEC than free provision. These findings from quantitative research are also supported by the findings from the focus group studies (Chapter 5), where parents reported that the insufficient supply of places, the long waiting lists, and the priority given to two-earner families are major barriers to the accessibility of ECEC. Hence, while affordability is a must for an accessible ECEC, it does not need to be in the form of free provision.

7.2.1.3. Split versus Unitary Systems

In the recent years, the ECEC systems being split or unitary for the whole ECEC period (from birth until the start of primary schooling) has been drawing more attention. Split ECEC systems are the ones where ECEC for younger and older children are provided, regulated, and financed separately and where there is no official continuity between the two (Herczog, 2012). Split systems sustain the historical divide between care for younger children and education for older children. On the other

hand, unitary systems where the services are harmonised for younger and older children are beneficial especially for younger children (0-3 years old) and they foster higher quality of ECEC provision as well as higher use (Kaga et al., 2010; Moss, 2012; OECD, 2012). The findings in the quantitative chapters provide sufficient evidence to support these claims. In countries with unitary systems, as opposed to split ones, younger children attend ECEC more (Chapter 2) and people find ECEC more accessible (Chapter 3).

The countries with 'partially integrated' systems were also tested as an additional category. These countries (Austria, Bulgaria, Denmark, Germany, Spain, and the United Kingdom) have both types of settings. In terms of perceived accessibility, these countries seem to be more accessible than the ones with split systems but only with marginal significance (Chapter 3). In terms of realised access, at first sight, younger children seem to participate in ECEC more in countries with both settings, but when controlled for the interaction with immigration background, both split and partially integrated systems seem to be less accessible for this group of disadvantaged children (Chapter 2). While it is best to cautiously interpret these mixed findings about the third category of partially integrated systems (given the methodological limitations regarding the small country-level sample size for these models in Chapter 2), it is very clear that in countries with unitary systems, ECEC is more accessible (perceived and realised).

7.2.1.4. Structural Quality

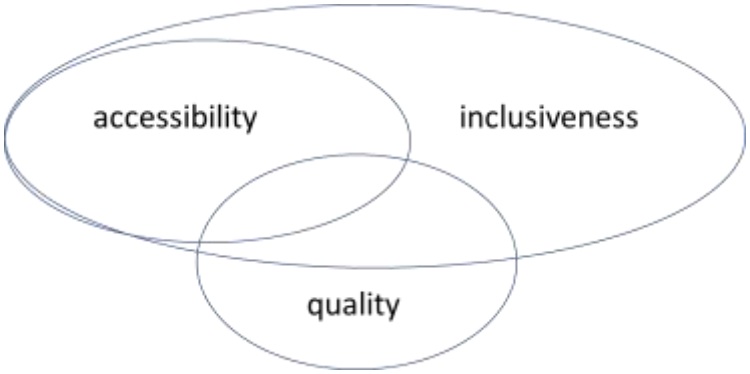
Some scholars have been studying the elements of accessible ECEC using the term 'quality' instead of 'accessibility' in the past few decades (Barbarin et al., 2006; Ceglowski and Bacigalupa, 2002; Forry et al., 2013; Lehrer et al., 2015; Li-Grining and Coley, 2006). However, treating cost, convenience and accessibility as a whole as the functions of quality in ECEC broadens the definition of quality immensely. 'Quality' is indeed an elusive concept (Ishimine et al., 2010), that is difficult to illustrate.

From a panoramic perspective, *quality* in ECEC is "an overarching multidimensional concept referring to the extent to which ECEC provides an environment that enhances child development and child wellbeing" (Leseman, 2014). It is widely accepted that quality can be studied in two types: structural and process (Ishimine et al., 2010). Structural quality refers to the framework for the processes that children experience and is largely controlled by authorities outside the ECEC settings at macro-level, while process quality pertains to the daily experience of children in ECEC settings at the micro-level (Dumčius et al., 2014).

Quality is not within the scope of this PhD work. Also note that parents tend to make decisions to use ECEC based on need, accessibility, and affordability rather than quality (Johnson et al., 2012). However, since quality has been listed as an essential dimension of accessibility by some scholars whose

conceptualisation was adopted in this research (Davis and Connelly, 2005; Peyton et al., 2001), the general quality of ECEC in the country may have a lot to do with the overall accessibility directly or indirectly. Moreover, the perceived accessibility index studied in Chapter 3 is a composite score of perceived availability, affordability, geographical accessibility, and quality, because (according to the results of the Categorical Principal Component Analysis) the responses to these four variables are sufficiently similar, meaning that these four dimensions have measured a single latent concept. Obviously, some aspects of quality – such as the overall homogeneity of quality across the country to the point that it is perceived by the public – belong under 'accessibility' (Figure 7-1). Since structural quality measures are major strategies for governments to set quality standards for ECEC, these were taken into account in this work, and to my knowledge, the present work is the first one to tackle the relationship between structural quality indicators and the accessibility of ECEC.

Figure 7-1: The conceptual link between accessibility, inclusiveness, and quality in this research



Even though correlations were found between structural quality and realised access (Chapter 2), no significant correlation was found between structural quality measures and perceived accessibility (Chapter 3). Younger children attend ECEC more in countries where *national educational guidelines (i.e. curriculum) exist for younger children* (Chapter 2). Children from families with lower income also attend ECEC more in countries where curriculum exists for younger children. For older children, the higher the *minimum educational staff qualification*, the higher is the ECEC use. However, no association was found between the realised access of older children and the *average salary of pre-school teachers* working in public facilities (Chapter 2). Note that there are a lot of missing data in teacher salaries, which may be affecting the results of quantitative analyses.

7.2.1.5. Ideals of care

Different ideals of care lead to different participation levels of children (especially the ones with an immigration background) as demonstrated in chapters 5 and 6, and it is especially the case for younger

children. This finding is in line with the literature (Grace et al., 2014; Pavolini and Van Lancker, 2018; Radey and Brewster, 2007). Chapter 4 also demonstrates that personal beliefs affect where people stand in relation to the provision and financing of childcare. Accordingly, there is a higher chance that people would be against the government being the primary provider of childcare if they think that preschool children suffer when their mothers work or that working mothers are not able to have a warm relationship with their small children. Moreover, the respondents who were brought up by working mothers are significantly more in favour of the government being the primary provider as well as financer of childcare.

Interestingly, there is mostly congruence between the demands of people and the current policies regarding the role of the government in the provision and financing of ECEC (Chapter 4). For instance, people with lower socio-economic status are also less demanding of the government being the main provider and financer of ECEC. Although my analyses did not claim any causal relationship, there is sufficient evidence in the political representation literature about policies influencing the public opinion (policy feedback theory) (Jordan, 2013; Pierson, 1993) and public opinion influencing the policies (policy responsiveness theory) (Brooks and Manza, 2006; Burstein, 2003). With regard to ECEC in particular, it is possible to change the society's ideals of care through consistent policies aiming for accessibility, availability and affordability (Ellingsæter et al., 2017; Tang et al., 2012).

7.2.2. Final Note on Accessibility of ECEC: A Quest for Benchmarks

Research suggests that the more ECEC is socialized and the more it shifts from private to public responsibility, the stronger is its impact on diminishing inequalities (Meyers and Gornick, 2003). Empirical studies carried out for this doctoral project provide yet further evidence that public provision and financing of ECEC improves the accessibility of these services. Accessibility increases proportionally to the involvement of the state in the provision and financing of ECEC via policy instruments such as early legal entitlement, early start of affordable provision, allowing only public or publicly subsidized provision, high public spending and low private and/or parental contributions.

As explained in the Introduction (section 1.2.1), some scholars argue that welfare states are converging and others argue that they are diverging in terms of policies. ECEC policies are no exception to this. On the one hand, there is evidence for convergence where ECEC policies are becoming similar (Mahon et al., 2012; Stahl and Schober, 2017). On the other hand, there are researchers who find fundamental dissimilarities among the ECEC systems of countries that are usually considered to belong in the same welfare state types (Javornik, 2014; Karila, 2012; McLean, 2014). Considering the ongoing debate on

this topic, I wanted to identify ECEC policy instruments that drive accessibility irrespective of the welfare typology the country is classified under.

Nordic countries are widely considered to provide the most accessible ECEC because of their predominantly public and universal provision and financing (Ellingsæter and Gulbrandsen, 2007; Mahon et al., 2012), even though ECEC policies have developed non-simultaneously in these countries (Ellingsæter et al., 2017; Javornik, 2014; Javornik and Kurowska, 2017; Karila, 2012). Even when the ECEC policy instruments are analysed separately and one by one, Sweden is the country in my sample wherein most of the good practices associated with high accessibility are concentrated (see Table 2-9). Sweden is followed by other Nordic countries – Denmark, Finland, Norway, and Iceland – in terms of the concentration of good practices, and those are followed by Slovenia and the three Baltic countries (Estonia, Lithuania, and Latvia). This list is nothing new and was also studied in the past (Javornik, 2014; Javornik and Kurowska, 2017).

Moreover, just like Javornik et al. (ibid.) pointed out, these countries do not always apply similar policy instruments. Besides having unitary ECEC systems (except for Denmark) and hence, curricula for younger children, and not allowing self-financing private provision, these countries are strong in different respects in their ECEC policies. For instance, Iceland, Lithuania, and Latvia are three European countries where legal entitlement starts the latest. On the other hand, none of them but Latvia and Lithuania offer free provision before the age of 3. While parental fees for single parents are among the lowest in Europe in Sweden and Denmark, they are high in Finland, Norway, Lithuania, and Latvia (but still much lower compared to countries like Malta, Ireland, Czechia, and Slovakia). The public spending data are missing for Latvia and Lithuania, but Slovenia and especially Estonia have much smaller budgets compared to the wealthier Nordic countries.

These countries do not even share similar ECEC participation rates. While Finland has the lowest participation rates among Nordic countries, Latvia, Estonia, and Lithuania have even lower rates of participation especially for younger children (Eurydice, 2014). In terms of perceived accessibility, four Nordic countries score very high as well as Lithuania; but Slovenia, Estonia and Latvia score lower than expected for having a relatively good concentration of ECEC policy instruments associated with high accessibility (Chapter 3).

Given the difficulty of finding a common ground even among the Nordic countries, comparing and contrasting other countries with moderate or good ECEC accessibility like France, Belgium, Spain, Austria and Portugal become even more challenging. Most Central and Eastern European countries (e.g. Slovakia, Czechia, Poland, Hungary, Romania, and Bulgaria) as well as Switzerland and Italy,

however, seem to have the lowest concentration of the good practices in their ECEC policies that are identified in this research. This is also reflected in the PCAI scores to a great extent (Chapter 3).

A closer look at the correlations between the independent variables used in Part I of this dissertation also supports the need to focus on ECEC policy instruments to improve accessibility. There are several significant correlations between the independent variables (see Table 2-8):[33]

- Firstly, understandably, whether the country allows for private self-financing provision for 0-3 year-olds and whether the country allows for private self-financing provision for 3-6 year-olds are correlated. However, there are still exceptions to this, as some countries allow such provision for younger children but not for older ones – namely, Belgium, Czechia, Ireland, Poland, and Slovakia.
- Secondly, most countries that allow for private self-financing provision are the ones with a split system. Croatia, however, has a unitary system but still allows for such provision for both age groups.
- Thirdly, the existence of curricula for younger children is correlated with the ECEC system being unitary. This is expected since, by definition, unitary systems treat both age groups similarly. Nevertheless, Greece, Hungary, Ireland, Malta, and Romania have split systems and offer national curricula for younger children. These countries also allow for private self-financing provision for younger children, which is also exceptional given the correlation between the existence of curriculum and allowing private self-financing provision.
- Fourthly, the higher the staff qualification for older children, the lower is the out-of-pocket costs of ECEC for younger children. Again, there are exceptions to this: out-of-pocket costs are lower than expected in Austria, Hungary, Germany and Belgium but higher in Bulgaria and Spain considering the number of years of education that needs to be completed.
- Fifthly, the higher the pre-school teacher salaries, the higher is the public spending per child. This is not a surprising correlation but the exceptions are Iceland with lower salaries despite its high spending and Portugal and Spain with higher salaries compared to the low level of public spending per child. Note that the coefficients of the indicator regarding teacher salaries were not significantly correlated with any of the dependent variables in the analyses.
- Finally, the longer duration of well-paid leave available to mothers is correlated with ECEC system being integrated and private self-financing provision not being allowed for younger children. The latter two are also correlated with each other. Exceptions are Romania, Hungary,

33 Note that the correlations reported in chapters 3 and 4 may be different because in those chapters, the reported correlations were limited to the data regarding the countries that were included in the analyses. In this section, I report the correlations for all European countries for which I have the data (unless deleted pairwise due to missingness) with n=31 at the maximum and n=20 at the minimum.

Czechia, Bulgaria, Poland, and Germany with relatively long parental leave schemes but mixed or split systems that allow for private provision for younger children.

While none of the Nordic or Baltic countries are listed among the exceptions to the abovementioned correlations, countries such as Belgium, Germany, Spain, Austria, and Portugal have more accessible ECEC systems (in terms of both use and perception) than countries such as Slovakia, Romania, Hungary, Czechia, Bulgaria, and Poland. The latter group of countries tend to require longer training for pre-school teachers and offer free provision earlier than Nordic countries. Lone parents on average pay even lower ECEC fees in Hungary, Poland, and Switzerland than the ones in Finland and Norway. These positive features need to be strengthened in order to make ECEC more accessible in these countries.

7.2.3. Inclusiveness of ECEC

Inclusiveness refers to features of ECEC systems such as availability, accessibility, affordability, adaptability, adequacy, acceptability, flexibility, non-discrimination, and redistributive effectiveness. Inclusiveness was used in this thesis as an all-encompassing notion – especially (but not only) relevant for disadvantaged children – and inclusive ECEC systems were defined as systems comprising strategies to provide equal opportunities, equal treatment and equal outcomes to all children, regardless of the background. Due to the multi-faceted nature of the concept and the lack of readily available data, inclusiveness was studied qualitatively in chapters 5 and 6. This approach provided lots of invaluable insights regarding the perceptions and daily experiences of disadvantaged families around Europe regarding ECEC.

As the needs of children and families are ever-changing, I avoided clear-cut and narrow definitions and kept a certain level of freedom when interpreting the results. I focused on the 'equal opportunities – equal treatment – equal outcomes' scheme and identified some of the pressing issues resulting from inclusiveness-related shortcomings. The findings related to "equal outcomes" are already discussed in the previous section, under accessibility, since accessibility is the pivot of strategies for equal opportunities. The issues below are barriers concerned with the equal treatment of children as well as priorities to achieve equal outcomes.

7.2.3.1. Segregation

Segregation – be it residential, socio-economic, educational or occupational – leads to the isolation of certain social groups from others and thus, widens gaps in the society (Nusche, 2009). In the case of socio-economically disadvantaged immigrants in some European countries, social segregation starts

with residential segregation (since families from the same or similar backgrounds concentrate in certain towns or neighbourhoods) and eventually leads to educational segregation.

The evidence regarding the effect of ethnic segregation on immigrant children's success has been mixed. While some researchers found significant negative effect of ethnic segregation on student outcomes (Alba et al., 2011; Baysu and de Valk, 2012; Goldsmith, 2009), others found that the ethnic composition of the school lost its significance when the socio-economic status is controlled for (Agirdag et al., 2012). However, the literature still suggest that the SES composition of the school has to do with the educational attainment of children attending such schools. Attending segregated schools does not minimise social risks for students with the combination of both disadvantages (immigration and low-SES) (Nicaise, 2019). Moreover, disadvantaged children's educational outcomes are higher when these children attend school in non-segregated environments with their non-disadvantaged peers (de Haan et al., 2013; OECD, 2018). The issue of segregation was brought up especially by the focus group participants in Belgium and Germany as a barrier to several processes that would foster success in education and in later life including language acquisition and integration (Chapter 5). Some participants prefer to enrol their children to ECEC facilities further from their home in order to increase the interaction between their children and native children.

7.2.3.2. Language Acquisition

Language acquisition can be problematic for both children and their parents in socio-economically disadvantaged immigrant families, also because learning the language becomes harder as they get more segregated and become less exposed to the majority language. In ECEC, this starts becoming a problem during pre-school where these children also start realising that they are 'different' from the majority group (Chapter 5). Even though there is evidence that learning one's mother tongue properly is a prerequisite to learning another language (Leseman and Slot, 2014) and that speaking one's mother tongue more frequently does not affect one's academic achievement (Agirdag et al., 2014), 'devalued' immigrant groups are sometimes even discouraged to speak their mother tongue in public places (Agirdag, 2010). The issues of language acquisition and language-related communication problems were mentioned by many respondents as a major barrier to equal treatment in both the society and the educational system including ECEC (chapters 5 and 6).

7.2.3.3. Cultural and Religious Practices

Devalued immigrant groups also face problems in relation to their cultural and religious practices that are different from the ones of the majority group. The minority and majority groups may have clashing cultural and/or religious practices such as attire, alcohol use, food, the nature of social interactions and friendships, etc. Many members of minority groups feel that they are either excluded from the

social life or job market due to their differences, and this also affects the future role of their children in these countries (chapters 5 and 6).

7.3. Limitations of the Study

As all scientific research, this one also has several limitations at different levels. The first thing I would like to recognise is the fact that some of the data regarding the policy instruments are already outdated. ECEC is a hot topic that has been receiving more and more attention by the international community as well as national governments. Hence, many countries have carried through policy reforms and already moved on from the ECEC system that was taken into account in this research. For instance, Germany is one of the European countries that made enormous progress towards a more accessible, available, affordable, and inclusive ECEC since the start of this research. For this reason, the reader should keep in mind the reference period of the country-level policies and data used in this research, which is typically 2014 or earlier. The analysis and the findings in relation the conditions that drive accessibility and inclusiveness remain nevertheless valuable.

The second limitation that affected the whole research (but especially Part I) has been the non-standard ECEC terminology across Europe. Even though ECEC is attracting more attention at the EU-level and more and more guidelines are produced for national governments, it is still a complex and multi-dimensional concept with persisting differences in definition and content across countries, which also affect the socio-cultural ideals of care. For the sake of simplicity, I refer to the 0-3 age range as the period for day-care and the 3-6 age range as the period for pre-school. However some countries start the latter period earlier or later (e.g. Belgium and Switzerland), or refer to the whole ECEC period with a single term (especially the countries with unitary systems) (Eurydice, 2014).

In Part I, which is based on quantitative research, the biggest limitation has been the shortage of ECEC-related data at both levels (micro and macro) of the multilevel analyses. At the micro level, several key variables were simply non-existent in the EQLS and ISSP datasets such as immigration background or actual income (chapters 3 and 4, respectively). While such data was available in EU-SILC, immigrants were not sufficiently sampled in most countries and when they were sampled their country of origin was missing; which made it difficult to come to reliable conclusions about this group (Chapter 2). Still, the most problematic data issues are related to the macro-level variables reflecting ECEC policy instruments.

For instance, private self-financed pre-schools being legally allowed does not mean that self-financed pre-schools are widespread in practice. The distinction between split, mixed or unitary ECEC systems

is also ambiguous due to ambiguity of the 'mixed' category – nevertheless, this distinction was kept because I did not want to add extra ambiguity by collapsing this middle category to either of the other categories. Moreover, data on key aspects of ECEC systems – such as (de)centralisation, equity policies, means-testing, targeting, the actual number of private and public facilities – were either not available or not fit for use in comparative quantitative analyses. Furthermore, the available data had many missing values, which made the level-2 sample sizes even smaller and sometimes made it difficult to derive meaningful results (e.g. data on pre-school teacher salaries). Finally, causal relationships between country-level variables and accessibility could not be analysed due to the lack of cross-country longitudinal data. I hope that this will be easier to do in the near future thanks to the ongoing efforts to collect standardised ECEC policy-related data periodically by international organisations such as Eurostat and the OECD.

Data limitations regarding ECEC and family policies have been pointed out by a number of scholars in the past (Javornik, 2014; Penn, 2014). Comparative welfare state and social policy research also heavily relies on the national averages assuming homogeneity and congruence across the national welfare states, which usually makes researchers overlook "important differences in welfare arrangements and the full range of actors and processes involved in the development, organization, and delivery of social policies" (Ciccia and Javornik, 2018, p. 2). Due to data limitations, this work was not immune to this shortcoming. However, by employing multilevel analyses, I was partly able to unearth the associations between such national averages and individual-level outcomes.

There were also methodological limitations related to the chosen method of analysis. Three types of multilevel modelling were used in the three chapters of Part I: Tobit (Chapter 2), linear (Chapter 3), and binary logistic (Chapter 4). The small level-2 sample size (typically less than 30 countries) prevented me from including several contextual variables in a single model, since I needed extra degrees of freedom to investigate the possible interactions between those and individual-level variables regarding income and immigration status. In fact, even testing for interactions meant pushing the limits of the method because linear multilevel models require a minimum of n=25 and logit multilevel models require a minimum of n=30 as the level-2 sample size (Bryan and Jenkins, 2016). This was also the reason why the interactions between the country-level variables and both the immigration and income background were not tested simultaneously in a single model in Chapter 2. Finally, besides small level-2 sample size, controlling for key country-level variables such as GDP, GDP per capita, and Gini index was also not possible due to the high multicollinearity between these variables and the policy indicators at hand (e.g. Table 4-5).

In Part II, chapters 5 and 6 are based on the same qualitative research (using the focus group method) conducted in several European countries. This study was conducted in the context of the CARE project[34] – just like the research reported in chapters 2 and 3 – and I coordinated the work of the partners under the supervision of my promoter. However, despite being the coordinator, due to budgetary and time constraints, I could only lead the focus group in Belgium but not in other countries. Thus, besides providing guidelines to the project partners, I had less control over the research process as well as the reporting of the results (which were collected in the native language of each country, and only the parts that were deemed valuable by the co-researchers were reported to me in English). Moreover, conducting only one focus group per country obviously did not lead to representative findings for each country. Ideally, there should have been more focus groups and further studies, but this was not possible also due to budgetary constraints. Finally, cross-country qualitative research, especially using the focus group method, is not common. For this reason, I had less support from scientific literature.

7.4. Avenues for Future Research

The standardisation and periodic collection of comparable cross-country data on ECEC policies is evidently a priority in order to analyse accessibility of ECEC in a more meaningful manner. Moreover, new indicators should be developed in order to capture other key characteristics of the way ECEC is provided, regulated and financed, such as (de)centralisation, equity policies, means-testing, targeting, the actual number of private and public facilities.

I believe that future studies should prioritise exploring the pillars of provision and financing of ECEC more in detail, because these two are theoretically more directly relevant for the accessibility and inclusiveness of ECEC. Nevertheless, the pillar of regulation also proved to be closely related to the accessibility of ECEC. Further research is needed to clarify the relationship between higher structural quality and higher accessibility (realised and perceived).

Unlike accessibility, the concept of inclusiveness of ECEC is less developed and thus, more research is needed in this area. On the one hand, inclusiveness needs to be developed further as a concept in the context of ECEC. On the other hand, there is a substantial shortage of empirical research (both qualitative and quantitative) regarding inclusiveness in ECEC. Ideally, these two should advance together and feed into each other. I focused on the inclusiveness of ECEC for socio-economically

34 The CARE project was funded by the Seventh Framework Programme of the European Union (grant agreement number 613318).

disadvantaged immigrants in five countries. It is worthwhile to expand such studies to the general population throughout Europe and beyond.

The experiences of immigrant families with ECEC is also closely related to their acculturation patterns as demonstrated in Chapter 6. Nonetheless this was studied one-sidedly in this research, and no data was collected about the point of view of the majority group. Such studies would be more helpful if the acculturation patterns are studied from both sides.

Finally, we should move beyond the debate of universal versus targeted and start investigating how progressive universalism can be applied to the provision and financing of ECEC. This can be done by both studying the good practices in countries that apply progressive universalism, identifying the policy instruments relevant for this approach, and making simulations as regards the outcomes (including but not only returns on investment) of different combinations of universalism and targeting. There is ample evidence that both are beneficial to (especially disadvantaged) children, and policy-makers would appreciate clear guidelines about the ideal combination of the two.

7.5. Policy Implications

7.5.1. Provision and Financing

7.5.1.1. More Public Provision

Chapters 2 and 3 clearly demonstrate that both perceived and realised access is high in countries where ECEC provision is public or publicly subsidised, a finding that has been repeatedly reported in the literature in the last two decades (Cloney et al., 2015; Meyers and Gornick, 2003; Noailly and Visser, 2009; OECD, 2006; Pfau-Effinger, 2005; van Huizen and Plantenga, 2018; Yerkes and Javornik, 2018). However, the coverage rate of publicly provided and/or financed ECEC is very low in some countries (Gambaro et al., 2015). For this reason, my first recommendation is to strengthen the role of the government and other public authorities in ECEC provision and aim for equal coverage across the country.

7.5.1.2. Early Legal Entitlement to ECEC

The early start of the legal entitlement to ECEC is consistently associated with higher accessibility in Part I. Early legal entitlement is crucially important for the accessibility of ECEC because it is the government that guarantees families a place in formal ECEC facilities. When places are guaranteed by the government, availability of services is ensured across the country and families have a stronger incentive to take up formal ECEC (Van Lancker and Ghysels, 2016). Moreover, the earlier the legal

entitlement starts, the shorter is the 'care gap' – i.e. the period of time between the end of the adequately compensated parental leave and the moment children start attending ECEC. Closing the care gap is widely recognised as a major strategy to make ECEC accessible (Ellingsæter and Gulbrandsen, 2007; Javornik, 2014; Yerkes and Javornik, 2018).

7.5.1.3. Smarter Public Financing

High public spending per child in ECEC is consistently associated with higher accessibility throughout Part I. The literature so far made it clear that the amount of overall spending and spending per child is crucial to the accessibility of ECEC, no matter the financing is universal or targeted (*cf.* Van Lancker and Van Mechelen, 2015). However, this does not mean that the countries that rely more on private financing are doing poorly. Chapter 2 demonstrates that income-poor older children's ECEC use is not as negatively correlated with high reliance on private pre-school financing as children from higher-income families. Moreover, the proportion of private funding in ISCED 0 is the only variable where public opinion and ECEC policies were incongruent (Chapter 4). According to these results, high public financing and high reliance on private financing may not be mutually exclusive.

In the light of these findings, while I recommend 'more' public provision, I do not necessarily recommend more but 'smarter' public financing. Both the amount and type of public financing are reflections of the relative importance governments attach to ECEC (Bennett, 2004). In supply-led ECEC financing, the government directly takes responsibility about which facilities to fund and under which conditions, and thus, has more control over the service provision and quality; while demand-led financing does not concern itself with how and by whom the service is provided and only provides financial support to families who use these services (Bennett, 2004; Penn, 2009). There is ample evidence regarding the accessibility and quality of ECEC being higher in countries that adopt a predominantly supply-led financing (OECD, 2006; Verbist and Matsaganis, 2014; White and Friendly, 2012). As a result, public financing needs to be supported with increased public provision.

7.5.1.4. Affordable Provision

Affordability continues to be a major barrier to the take-up of formal ECEC in many countries. Hence, affordability of the ECEC system should be ensured in order to give equal opportunities to all families to enjoy the benefits of ECEC. Free ECEC provision is one way to do this, but it does not always make ECEC more accessible (chapters 2 and 3). Affordability can be addressed in other ways such as means-testing. For instance, Denmark does not provide free-of-charge ECEC at all, but the out-of-pocket childcare cost for single-parent households is practically nil in the country.

7.5.1.5. Progressive Universalism

In countries where public provision is weak, targeting is used as a way to address unequal opportunities for disadvantaged children. However targeting is less desirable due to several reasons. Targeting is usually not effective because these services are either funded as pilot initiatives, which makes them unsustainable, or restricted in resources and catchment area, which makes them available to only a limited percentage of children in need (Fallon, 2005). Most importantly, targeted systems reinforce segregation by providing the services only to disadvantaged children from homogenous socio-economic backgrounds (Cloney et al., 2015). We know that disadvantaged children benefit from ECEC (and education, in general) the most, if they can receive these services together with their non-disadvantaged peers (de Haan et al., 2013; OECD, 2018).

Countries with universal access schemes treat such services as a right (Jordan, 2013). However, universal access to ECEC does not guarantee the alleviation of inequalities: Matthew effects in ECEC policies are documented in the literature (Van Lancker and Ghysels, 2012). The lack of significant interactions between income level and the two financing-related variables (public spending per child and out-of-pocket childcare costs for single-parent households) is a warning sign of a possible Matthew effect (Chapter 2). The gap in access persists even in countries that invest a lot in ECEC. In other words, "for every initiative to reduce inequality, there is an opposing (but not necessarily equal) reaction to preserve it" (Alba et al., 2011). The truly disadvantaged children need a more targeted approach to eventually increase their chances to break the cycle of disadvantage (Leseman and Slot, 2014; Nicaise et al., 2000).

Targeting within universalism has proven to be more beneficial in reducing child poverty because the success of this strategy stems from the combination of high redistributive budgets (a feature of universalism) and the higher benefit offered to disadvantaged families (a feature of targeting) (Van Lancker and Van Mechelen, 2015). This can be applied to the ECEC provision and financing. I recommend taking universalism one step further and applying 'progressive universalism', which is a balance between universal and targeted policies (European Commission, 2014; Johansson and Höjer, 2012). ECEC access should be universal where possible, targeted when necessary.

At the state level, one way to achieve this is applying equity funding schemes (also known as educational priority schemes) in ECEC (OECD, 2017b; Poesen-Vandeputte and Nicaise, 2015). Equity funding is the allocation of more funding to ECEC services in disadvantaged areas or services with a large number of pupils from disadvantaged backgrounds. Some countries already employ this strategy within mainstream ECEC, for example, by providing extra support for language acquisition to children with an immigration background (Ojala, 2010) or even tuition in the mother tongue of the child in

kindergarten (Cohen and Pay, 2011). Another way to increase targeting within universalism in ECEC provision is to introduce specific quotas or priority enrolment schemes for disadvantaged children that are known to be underrepresented in ECEC. For example, many European countries prioritise provision for children both of whose parents are working (Eurydice, 2014, p. 40). Although needs-based provision is understandable, it contributes to the underrepresentation of income-poor children with single-earner families – because stay-at-home mothers often mention that they do not need ECEC for their children (Chapter 5).

7.5.2. Regulation

7.5.2.1. Higher Structural Quality

The present work is the first one to tackle the relationship between structural quality indicators and the accessibility of ECEC. Realised access was found to be higher in countries with higher structural quality measures such as the presence of a national curriculum for younger children and higher staff qualification requirements for educational staff for older children (Chapter 2). High quality consistently produces positive child outcomes in ECEC (van Huizen and Plantenga, 2018). There are many studies that particularly stress that ECEC should be of high quality in order to work and that the lack of it may even have adverse effects (Penn, 2011). Hence, higher structural quality measures are recommended.

There are studies that argue that the more structural quality is regulated, the less affordable (and thus, less accessible) ECEC services become (Aran et al., 2016; Gorry and Thomas, 2017; Hotz and Xiao, 2011). However, the abovementioned studies were conducted in the United States and Turkey, countries with strong reliance on market-based ECEC provision. For this reason, it is important to make sure that availability and affordability are addressed by increased role of the government in the provision and financing, before imposing higher quality regulations.

7.5.2.2. Unitary ECEC Systems

Unitary systems are known to benefit the accessibility of ECEC especially for younger children (Kaga et al., 2010). The quantitative studies in this dissertation also found a positive association between more unitary ECEC systems and the perceived and realized access to ECEC (chapters 2 and 3). Still, note that the countries that adopted a unitary ECEC system are first and foremost the Nordic countries, where the services are already highly accessible because of a wide array of policies applied simultaneously over several decades, and not limited to ECEC but including parental leave, women's activation, education, etc. In order to boost accessibility and use of ECEC, countries with split or mixed ECEC systems may borrow ideas from the regulatory and policy framework of the countries that have unitary

systems. In other words, while I recommend switching to a unitary ECEC system in the long run, there is still a lot national governments can do before they make this transition.

7.5.3. Boosting Inclusiveness

7.5.3.1. Raising Awareness

Even when governments take measures to improve the availability and affordability of ECEC, these may not result in the desired levels of realised access if families with young children are not aware of the services. This is especially the case for disadvantaged families with a low-income and immigration background who do not have the human or social capital to actively pursue the use of ECEC. Even in countries with highly accessible ECEC systems, some disadvantaged families may not be aware of their rights, or depending on their socio-economic and educational backgrounds, they may not comprehend the importance of sending their children to formal ECEC centres.

As a result, another step in making ECEC accessible is raising awareness. In the two good practices discussed as examples of 'strategies for equal outcomes', raising awareness was one of the objectives of both initiatives directly or indirectly (Chapter 5). Raising awareness is important because, (1) families are informed about the support schemes (financial or otherwise) available to them if they decide to use ECEC, (2) families with a migration background are better integrated because they feel more included, and (3) the societal ideals of care can be influenced towards increased acceptance of formal ECEC (Ellingsæter et al., 2017).

7.5.3.2. Increasing Cultural Sensitivity

Another issue to keep in mind even once access is secured is cultivating cultural, linguistic and religious diversity in order not to alienate children in the beginning of their educational trajectory. In other words, we need to work *with* diversity instead of working *against* it. To make this happen, ECEC providers should involve parents and children more in different areas such as decision making processes, curriculum development and evaluation, family education, and organisation of learning spaces (Gatt et al., 2011). Another way to achieve this is training ECEC professionals for handling diversity in ECEC settings as well as being more sensitive in the face of cultural differences when communicating with children and parents with an immigration background (Chapter 5). ECEC staff should be respectful of the ways people rear their children in other cultures.

Kotok and DeMatthews (2018) argue that diversity should be deliberate and propose implementing a dual-language model which leads to developmental, academic, and social benefits. They argue that, in order to achieve dual-language ECEC and education, the providers must (1) express diversity as a

strategic goal in conjunction with a dual-language model, (2) find and develop dual-language teachers, (3) navigate their own path to dual language, and (4) develop organizational systems and structures that provide continual support for school leaders and teachers.

7.5.3.3. Support for Language Acquisition

Many children with an immigration background struggle with acquiring the language of the majority group (chapters 5 and 6). Among other things, this may be a consequence of segregation (Baysu and de Valk, 2012) as well as not helping children learn their mother tongue properly (Leseman and Slot, 2014). Hence, children should (1) be encouraged to learn their own mother tongue, and (2) get exposed to the second language longer and in a systematic way.

These can be done both within the formal ECEC provision (extra hours of education and care for disadvantaged children) or via supporting initiative outside formal ECEC provision. An example to the latter is IN-Zetje in Beringen, Belgium (Chapter 5). This initiative outside formal ECEC provision helps both children and their families with acquiring the language of the majority by exposing them to the language via various activities (e.g. playgroups, seminars for parents, etc.). Such initiatives are helpful but also very limited in coverage. National strategies such as extra teaching hours for non-native children or even dual-language education (Kotok and DeMatthews, 2018) would have a bigger impact in the alleviation of linguistic disadvantages in an equitable manner at large scale.

7.5.3.4. Managing Segregation

Many scholars agree that school segregation is unfavourable for disadvantaged children (Alba et al., 2011; Baysu and de Valk, 2012; Goldsmith, 2009) and the positive effect of desegregated education is clear (de Haan et al., 2013; OECD, 2018; Schleicher, 2014). Segregation is a problem both in countries where freedom of parental choice is exercised (Karsten et al., 2006) and in countries where the state has more control over the allocation of pupils to schools such as Spain and France (Bonal, 2012; Waldring, 2017). Some parents who participated in the focus groups are also aware of the ramifications of segregation and even try to find ways around schools segregation (Chapter 5).

One of the current difficulties in addressing segregation is the lack of conclusive evidence about the way segregation affects students and the type(s) of segregation that require immediate attention, but also the lack of a roadmap about the ways to cope with it. Regarding the first two, the debate is still going on as to whether the ethnic composition of schools have a significant effect on educational outcomes of students with an immigration background (Alba et al., 2011; Goldsmith, 2009) or not – and in the case of latter, researchers explain the effect of school segregation based on the SES composition (Agirdag et al., 2012; Van Houtte and Stevens, 2010). Part II of this dissertation specifically

focuses on children from income-poor and immigrant families. Hence, these children are at a high risk of being negatively affected by school segregation, be it based ethnic and/or socio-economic status. Regarding the latter matter of lack of a roadmap to cope with segregation, not much is being done. The Council of Europe Commissioner for Human Rights recently wrote a position paper on fighting school segregation and promoting inclusive education (Muižnieks, 2017). While this document lists objectives to help achieve desegregation and inclusiveness, it does not really tell us how. I am not aware of any research focusing on the ways to eliminate educational segregation.

Segregation (and finding ways to alleviate it) is not within the scope of this doctoral work. Thus, I do not have concrete recommendations on how to decrease the concentration of minority or disadvantaged groups in certain schools or ECEC facilities and increase diversity in the facilities where majority or privileged children are overrepresented. Nevertheless, I believe that the improvements made in the areas highlighted in this section (7.5) – i.e. better public provision and financing, progressive universalism, raising awareness, supporting language acquisition for immigrant children, and increasing cultural sensitivity of ECEC providers working with minority children – will have a positive impact on the way to desegregation or at least finding ways to handle segregation in a more conscious way. I also recommend specific and further research about *how* to eliminate segregation or reduce its negative effects.

7.5.4. More and Better Data on ECEC Policies

Data shortages limit the depth of investigation for policy-makers and researchers aiming to optimise ECEC systems by evaluating the outcomes of the policies in place. Despite the growing importance of ECEC in the international policy-making, we are still lacking longitudinal, standardised, consistent, comparable, high-quality, and sufficiently detailed cross-country data on ECEC policies and systems. While the OECD, Eurostat and other international agencies that are collecting such cross-country data are constantly seeking new and better ways to obtain high-quality data, there is still a big shortage. This necessitates further investigation of the optimal ways to collect international data as well as guidelines listing the most important indicators that are needed for reliable policy evaluation.

7.6. References

Agirdag, O., 2010. Exploring bilingualism in a monolingual school system: insights from Turkish and native students from Belgian schools. British Journal of Sociology of Education 31, 307–321. https://doi.org/10.1080/01425691003700540

Agirdag, O., Jordens, K., Van Houtte, M., 2014. Speaking Turkish in Belgian Primary Schools: Teacher Beliefs versus Effective Consequences. Bilig 70, 7–28.

Agirdag, O., Van Houtte, M., Van Avermaet, P., 2012. Why Does the Ethnic and Socio-economic Composition of Schools Influence Math Achievement? The Role of Sense of Futility and Futility Culture. Eur Sociol Rev 28, 366–378. https://doi.org/10.1093/esr/jcq070

Alba, R., Sloan, J., Sperling, J., 2011. The Integration Imperative: The Children of Low-Status Immigrants in the Schools of Wealthy Societies. Annual Review of Sociology 37, 395–415. https://doi.org/10.1146/annurev-soc-081309-150219

Aran, M.A., Boudet, A.M.M., Aktakke, N., 2016. Can Regulations Make It More Difficult to Serve the Poor? The Case of Childcare Services in Istanbul, Turkey. Journal of Human Development and Capabilities 17, 558–582. https://doi.org/10.1080/19452829.2016.1225703

Baysu, G., de Valk, H., 2012. Navigating the school system in Sweden, Belgium, Austria and Germany: School segregation and second generation school trajectories. Ethnicities 12, 776–799. https://doi.org/10.1177/1468796812450857

Bennett, J., 2004. Early Education Financing: What is Useful to Know?

Bonal, X., 2012. Education policy and school segregation of migrant students in Catalonia: the politics of non-decision-making. Journal of Education Policy 27, 401–421. https://doi.org/10.1080/02680939.2011.645168

Brooks, C., Manza, J., 2006. Social Policy Responsiveness in Developed Democracies. Am Sociol Rev 71, 474–494. https://doi.org/10.1177/000312240607100306

Bryan, M.L., Jenkins, S.P., 2016. Multilevel Modelling of Country Effects: A Cautionary Tale. Eur Sociol Rev 32, 3–22. https://doi.org/10.1093/esr/jcv059

Burstein, P., 2003. The impact of public opinion on public policy: A review and an agenda. Political Research Quarterly; Salt Lake City 56, 29–40.

Ciccia, R., Javornik, J., 2018. Methodological Challenges for Comparative Welfare State Research: Capturing Intra-Country Variation in Cross-National Analyses. Journal of Comparative Policy Analysis: Research and Practice 0, 1–8. https://doi.org/10.1080/13876988.2018.1551598

Cloney, D., Cleveland, G., Hattie, J., Tayler, C., 2015. Variations in the Availability and Quality of Early Childhood Education and Care by Socioeconomic Status of Neighborhoods. Early Education and Development 0, 1–18. https://doi.org/10.1080/10409289.2015.1076674

Cohen, B., Pay, N., 2011. Inspiring Change: An Early Childhood Education and Care Study Visit to Sweden and Poland. King Baudouin Foundation and Children in Scotland.

Davis, E.E., Connelly, R., 2005. The Influence of Local Price and Availability on Parents' Choice of Child Care. Popul Res Policy Rev 24, 301–334. https://doi.org/10.1007/s11113-005-8515-y

de Haan, A., Elbers, E., Hoofs, H., Leseman, P., 2013. Targeted versus mixed preschools and kindergartens: effects of class composition and teacher-managed activities on disadvantaged children's emergent academic skills. School Effectiveness and School Improvement 24, 177–194. https://doi.org/10.1080/09243453.2012.749792

Del Boca, D., 2002. The effect of child care and part time opportunities on participation and fertility decisions in Italy. J Popul Econ 15, 549–573. https://doi.org/10.1007/s001480100089

Dumčius, R., Peeters, J., Hayes, N., Van Landeghem, G., Siarova, H., Peciukonytė, L., Cenerić, I., Hulpia, H., 2014. Study on the effective use of early childhood education and care (ECEC) in preventing early school leaving (ESL): Annex 1. Literature review. Publications Office of the European Union, Luxembourg.

Ellingsæter, A.L., Gulbrandsen, L., 2007. Closing the Childcare Gap: The Interaction of Childcare Provision and Mothers' Agency in Norway. Journal of Social Policy; Cambridge 36, 649–669.

Ellingsæter, A.L., Kitterød, R.H., Lyngstad, J., 2017. Universalising Childcare, Changing Mothers' Attitudes: Policy Feedback in Norway. Journal of Social Policy 46, 149–173. https://doi.org/10.1017/S0047279416000349

European Commission, 2014. Investing in children: breaking the cycle of disadvantage. European Commission, Brussels.

Eurydice, 2014. Key Data on Early Childhood Education and Care in Europe (Eurydice and Eurostat Report). Publications Office of the European Union, Luxembourg.

Fallon, J., 2005. Targeting Disadvantage among Young Children in the Republic of Ireland: An Overview. Child Care in Practice 11, 289–311. https://doi.org/10.1080/13575270500151821

Farfan-Portet, M.-I., Lorant, V., Petrella, F., 2011. Access to Childcare Services: The Role of Demand and Supply-Side Policies. Popul Res Policy Rev 30, 165–183. https://doi.org/10.1007/s11113-010-9184-z

Gambaro, L., Stewart, K., Waldfogel, J., 2015. A question of quality: do children from disadvantaged backgrounds receive lower quality early childhood education and care? Br Educ Res J 41, 553–574. https://doi.org/10.1002/berj.3161

Gatt, S., Ojala, M., Soler, M., 2011. Promoting social inclusion counting with everyone: Learning Communities and INCLUD-ED. International Studies in Sociology of Education 21, 33–47. https://doi.org/10.1080/09620214.2011.543851

Goldsmith, P.R., 2009. Schools or Neighborhoods or Both? Race and Ethnic Segregation and Educational Attainment. Soc Forces 87, 1913–1941. https://doi.org/10.1353/sof.0.0193

Gorry, D., Thomas, D.W., 2017. Regulation and the cost of childcare. Applied Economics 49, 4138–4147. https://doi.org/10.1080/00036846.2016.1276275

Grace, R., Bowes, J., Elcombe, E., 2014. Child Participation and Family Engagement with Early Childhood Education and Care Services in Disadvantaged Australian Communities. IJEC 46, 271–298. https://doi.org/10.1007/s13158-014-0112-y

Herczog, M., 2012. Rights of the Child and Early Childhood Education and Care in Europe. European Journal of Education 47, 542–555. https://doi.org/10.1111/ejed.12008

Hotz, V.J., Xiao, M., 2011. The Impact of Regulations on the Supply and Quality of Care in Child Care Markets. The American Economic Review 101, 1775–1805.

Immervoll, H., Barber, D., 2005. Can Parents Afford to Work? (OECD Social, Employment and Migration Working Papers). Organisation for Economic Co-operation and Development, Paris.

Ishimine, K., Tayler, C., Bennett, J., 2010. Quality and Early Childhood Education and Care: A Policy Initiative for the 21st Century. International Journal of Child Care and Education Policy 4, 67. https://doi.org/10.1007/2288-6729-4-2-67

Javornik, J., 2014. Measuring state de-familialism: Contesting post-socialist exceptionalism. Journal of European Social Policy 24, 240–257. https://doi.org/10.1177/0958928714525815

Javornik, J., Kurowska, A., 2017. Work and Care Opportunities under Different Parental Leave Systems: Gender and Class Inequalities in Northern Europe. Social Policy & Administration 51, 617–637. https://doi.org/10.1111/spol.12316

Johansson, H., Höjer, I., 2012. Education for disadvantaged groups — Structural and individual challenges. Children and Youth Services Review, Educational Interventions, Practices, and Policies to Improve Educational Outcomes Among Children and Youth in Out-of-Home Care 34, 1135–1142. https://doi.org/10.1016/j.childyouth.2012.01.042

Johnson, A.D., Ryan, R.M., Brooks-Gunn, J., 2012. Child-Care Subsidies: Do They Impact the Quality of Care Children Experience? Child Development 83, 1444–1461. https://doi.org/10.1111/j.1467-8624.2012.1780.x

Jordan, J., 2013. Policy feedback and support for the welfare state. Journal of European Social Policy 23, 134–148. https://doi.org/10.1177/0958928712471224

Kaga, Y., Bennett, J., Moss, P., 2010. Caring and Learning Together: Study on the integration of ECCE within education. UNESCO, Paris.

Karila, K., 2012. A Nordic Perspective on Early Childhood Education and Care Policy. European Journal of Education 47, 584–595. https://doi.org/10.1111/ejed.12007

Karsten, S., Felix, C., Ledoux, G., Meijnen, W., Roeleveld, J., Schooten, E.V., 2006. Choosing Segregation or Integration? The Extent and Effects of Ethnic Segregation in Dutch Cities. Education and Urban Society 38, 228–247. https://doi.org/10.1177/0013124505282606

Kotok, S., DeMatthews, D., 2018. Challenging School Segregation in the Twenty-first Century: How Districts can Leverage Dual Language Education to Increase School and Classroom Diversity. The Clearing House: A Journal of Educational Strategies, Issues and Ideas 91, 1–6. https://doi.org/10.1080/00098655.2017.1336405

Kreyenfeld, M., Hank, K., 2000. Does the availability of child care influence the employment of mothers? Findings from western Germany. Population Research and Policy Review 19, 317–337. https://doi.org/10.1023/A:1026556309080

Leseman, P.P.M., 2014. Quality of the early years provisions: a European perspective.

Leseman, P.P.M., Slot, P.L., 2014. Breaking the cycle of poverty: challenges for European early childhood education and care. European Early Childhood Education Research Journal 22, 314–326. https://doi.org/10.1080/1350293X.2014.912894

Liu, M., 2015. An Ecological Review of Literature on Factors Influencing Working Mothers' Child Care Arrangements. Journal of Child and Family Studies 24, 161–171. https://doi.org/10.1007/s10826-013-9822-2

Mahon, R., Anttonen, A., Bergqvist, C., Brennan, D., Hobson, B., 2012. Convergent care regimes? Childcare arrangements in Australia, Canada, Finland and Sweden. Journal of European Social Policy 22, 419–431. https://doi.org/10.1177/0958928712449776

McLean, C., 2014. Market managers and market moderators: Early childhood education and care provision, finance and regulation in the United Kingdom and United States. Journal of European Social Policy 24, 122–134. https://doi.org/10.1177/0958928713517916

Meyers, M.K., Gornick, J.C., 2003. Public or Private Responsibility? Early Childhood Education and Care, Inequality, and the Welfare State. Journal of Comparative Family Studies 34, 379–411.

Moss, P., 2012. Caring and Learning Together: exploring the relationship between parental leave and early childhood education and care. European Journal of Education 47, 482–493. https://doi.org/10.1111/ejed.12003

Muižnieks, N., 2017. Position Paper on Fighting School Segregation in Europe through Inclusive Education.

Nicaise, I., 2019. Selectiemachine of sociale lift? Segregatie in het onderwijs tegengaan, in: Vlaamse Onderwijsraad VLOR (Ed.), Spots Op Onderwijs. Wetenschappers Voor Het Voetlicht. Lannoo Campus.

Nicaise, I. et al., 2000. Success for all? Educational strategies for disadvantaged youth in six European countries, in: Walraven, G., Parsons, C., van Veen, D., Day, C. (Eds.), Combating Social Exclusion through Education: Laissez-Faire, Authoritarianism or Third Way? Garant, Leuven, pp. 271–286.

Noailly, J., Visser, S., 2009. The Impact of Market Forces on Child Care Provision: Insights from the 2005 Child Care Act in the Netherlands. Journal of Social Policy 38, 477–498. https://doi.org/10.1017/S0047279409003109

Nusche, D., 2009. What Works in Migrant Education? (OECD Education Working Papers). Organisation for Economic Co-operation and Development, Paris.

OECD, 2018. Equity in Education: Breaking Down Barriers to Social Mobility, PISA. OECD, Paris. https://doi.org/10.1787/9789264073234-en

OECD, 2017. The Funding of School Education, OECD Reviews of School Resources. OECD Publishing. https://doi.org/10.1787/9789264276147-en

OECD, 2012. Starting Strong III: A Quality Toolbox for Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

OECD, 2006. Starting Strong II: Early Childhood Education and Care. Organisation for Economic Co-operation and Development, Paris.

Ojala, M., 2010. Developing Multicultural Early Childhood Education in a Finnish. International Journal of Child Care and Education Policy 4, 13–22.

Pavolini, E., Van Lancker, W., 2018. The Matthew effect in childcare use: a matter of policies or preferences? Journal of European Public Policy 25, 878–893. https://doi.org/10.1080/13501763.2017.1401108

Penn, H., 2014. International Indicators as a Measure of National Policies. IJEC 46, 33–46. https://doi.org/10.1007/s13158-013-0099-9

Penn, H., 2011. Policy Rationales for Early Childhood Services. ICEP 5, 1–16. https://doi.org/10.1007/2288-6729-5-1-1

Penn, H., 2009. International Perspectives On Quality in Mixed Economies of Childcare. National Institute Economic Review 207, 83–89. https://doi.org/10.1177/0027950109103687

Peyton, V., Jacobs, A., O'Brien, M., Roy, C., 2001. Reasons for choosing child care: associations with family factors, quality, and satisfaction. Early Childhood Research Quarterly 16, 191–208. https://doi.org/10.1016/S0885-2006(01)00098-9

Pfau-Effinger, B., 2005. Welfare State Policies and the Development of Care Arrangements. European Societies 7, 321–347. https://doi.org/10.1080/14616690500083592

Pierson, P., 1993. When Effect Becomes Cause: Policy Feedback and Political Change. World Politics 45, 595–628. https://doi.org/10.2307/2950710

Poesen-Vandeputte, M., Nicaise, I., 2015. Rich schools, poor schools. Hidden resource inequalities between primary schools. Educational Research 57, 91–109. https://doi.org/10.1080/00131881.2014.983722

Pungello, E.P., Kurtz-Costes, B., 1999. Why and How Working Women Choose Child Care: A Review with a Focus on Infancy. Developmental Review 19, 31–96. https://doi.org/10.1006/drev.1998.0468

Radey, M., Brewster, K.L., 2007. The influence of race/ethnicity on disadvantaged mothers' child care arrangements. Early Childhood Research Quarterly 22, 379–393. https://doi.org/10.1016/j.ecresq.2007.05.004

Rose, K.K., Elicker, J., 2010. Maternal child care preferences for infants, toddlers, and preschoolers: the disconnect between policy and preference in the USA. Community, Work & Family 13, 205–229. https://doi.org/10.1080/13668800903314366

Schleicher, A., 2014. Equity, Excellence and Inclusiveness in Education. Organisation for Economic Co-operation and Development, Paris.

Seo, S., 2003. Early child care choices: a theoretical model and research implications. Early Child Development and Care 173, 637–650. https://doi.org/10.1080/0300443032000088230

Sibley, E., Dearing, E., Toppelberg, C.O., Mykletun, A., Zachrisson, H.D., 2015. Do increased availability and reduced cost of early childhood care and education narrow social inequality gaps in utilization? Evidence from Norway. International Journal of Child Care and Education Policy 9. https://doi.org/10.1007/s40723-014-0004-5

Stahl, J.F., Schober, P.S., 2017. Convergence or divergence? Educational discrepancies in work-care arrangements of mothers with young children in Germany. Work, Employment and Society 0950017017692503. https://doi.org/10.1177/0950017017692503

Sylva, K., Stein, A., Leach, P., Barnes, J., Malmberg, L.-E., 2007. Family and child factors related to the use of non-maternal infant care: An English study. Early Childhood Research Quarterly 22, 118–136. https://doi.org/10.1016/j.ecresq.2006.11.003

Tang, S., Coley, R.L., Votruba-Drzal, E., 2012. Low-income families' selection of child care for their young children. Children and Youth Services Review 34, 2002–2011. https://doi.org/10.1016/j.childyouth.2012.06.012

Van Houtte, M., Stevens, P.A.J., 2010. School ethnic composition and aspirations of immigrant students in Belgium. British Educational Research Journal 36, 209–237. https://doi.org/10.1080/01411920902802180

van Huizen, T., Plantenga, J., 2018. Do children benefit from universal early childhood education and care? A meta-analysis of evidence from natural experiments. Economics of Education Review 66, 206–222. https://doi.org/10.1016/j.econedurev.2018.08.001

Van Lancker, W., Ghysels, J., 2016. Explaining patterns of inequality in childcare service use across 31 developed economies: A welfare state perspective. Intl Journal of Comparative Sociology 57, 310–337. https://doi.org/10.1177/0020715216674252

Van Lancker, W., Ghysels, J., 2012. Who benefits? The social distribution of subsidized childcare in Sweden and Flanders. Acta Sociologica 55, 125–142. https://doi.org/10.1177/0001699311433428

Van Lancker, W., Van Mechelen, N., 2015. Universalism under siege? Exploring the association between targeting, child benefits and child poverty across 26 countries. Social Science Research 50, 60–75. https://doi.org/10.1016/j.ssresearch.2014.11.012

Vandenbroeck, M., De Visscher, S., Van Nuffel, K., Ferla, J., 2008. Mothers' search for infant child care: The dynamic relationship between availability and desirability in a continental European welfare state. Early Childhood Research Quarterly 23, 245–258. https://doi.org/10.1016/j.ecresq.2007.09.002

Verbist, G., Matsaganis, M., 2014. The Redistributive Capacity of Services in the European Union, in: Vandenbroecke, F., Cantillon, B. (Eds.), Reconciling Work and Poverty Reduction: How Successful Are European Welfare States? Oxford University Press, New York, pp. 185–211.

Waldring, I., 2017. Practices of change in the education sector: professionals dealing with ethnic school segregation. Ethnic and Racial Studies 40, 247–263. https://doi.org/10.1080/01419870.2017.1245434

White, L.A., Friendly, M., 2012. Public Funding, Private Delivery: States, Markets, and Early Childhood Education and Care in Liberal Welfare States – A Comparison of Australia, the UK, Quebec, and New Zealand. Journal of Comparative Policy Analysis: Research and Practice 14, 292–310. https://doi.org/10.1080/13876988.2012.699789

Yerkes, M.A., Javornik, J., 2018. Creating capabilities: Childcare policies in comparative perspective. Journal of European Social Policy 0958928718808421. https://doi.org/10.1177/0958928718808421