European Early Childhood Education Research Journal

Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/recr20

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Published online: 02 Jul 2014.

To cite this article: Paul P.M. Leseman & Pauline L. Slot (2014) Breaking the cycle of poverty: challenges for European early childhood education and care, European Early Childhood Education Research Journal, 22:3, 314-326, DOI: 10.1080/1350293X.2014.912894

To link to this article: http://dx.doi.org/10.1080/1350293X.2014.912894

European Early Childhood Education Research Journal, 2014
Vol. 22, No. 3, 314–326, http://dx.doi.org/10.1080/1350293X.2014.912894

Breaking the cycle of poverty: challenges for European early childhood education and care

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ABSTRACT: Poverty rates in European countries have increased during recent decades and are particularly high in East European countries. Young children are especially vulnerable to poverty. Poverty in early childhood can have irreversible negative consequences for cognitive, social and emotional development, academic achievement and behavioural adjustment. High quality early childhood education and care (ECEC) is one of the most effective means to break the cycle of poverty, but there are still many challenges. The coverage of ECEC in Europe is currently insufficient and varies widely between countries. Moreover the quality of ECEC needs to be raised and curricula should be adapted to meet the needs and cultural perspectives of communities living in poverty and enhance the inclusiveness of ECEC. Furthermore, ECEC needs to be combined with family support and support for bilingual development.

RÉSUMÉ: Le nombre de personnes vivant en précarité a augmenté les dernières décennies et est particulièrement élevé dans les pays de l'Eurpe de l'Est. Les jeunes enfants sont particulièrement touches par cette pauvreté, puisque la pauvreté dans la petite enfance peut avoir des conséquences irréversibles sur le développement cognitif, social et émotionnel, ainsi que sur les apprentissages scolaires et l'adaptation comportementale. L'accueil préscolaire est l'un des moyens les plus efficaces pour briser le cercle de la pauvreté, mail reste plusieurs défis. D'abord, il manque de places dans la plupart des pays d'Europe et leur nombre varie beaucoup d'un pays à l'autre. Ensuite, la qualité des milieux d'accueil et d'éducation des jeunes enfants devrait augmenter et être adaptée aux besoins et aux attentes des familles vivant en précarité. Finalement, ces milieux d'accueil et d'éducation devraient s'accompagner de soutien à la parentalité et de soutien au développement du multilinguisme.

ZUSAMMENFASSUNG: In den letzten Jahrzehnten hat Armut in Europa, insbesondere in den osteuropäischen Ländern, zugenommen. Insbesondere kleine Kinder sind von Armut betroffen. Kinderarmut kann irreversible negative Folgen für die kognitive, soziale und emotionale Entwicklung, für Schulerfolg und soziale Anpassungsfähigkeit haben. Frühkindliche Bildung mit hoher Qualität ist eine der effektivsten Maßnahmen, um den Kreislauf der Armut zu durchbrechen. Dennoch gibt es nach wie vor viele Herausforderungen. Angebote frühkindlicher Bildung sind in Europa unzureichend und in den einzelnen Ländern sehr unterschiedlich. Insgesamt muss die Qualität frühkindlicher Bildung verbessert werden. Curricula müssen an die Bedürfnisse und kulturellen Perspektiven von gesellschaftlichen Gruppen angepasst werden, die in Armut leben – auch im Sinne von Inklusion. Darüber hinaus muss frühkindliche Bildung mit der Unterstützung von Familien sowie mit bilingualer Entwicklung verbunden werden.

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RESUMEN: Las tasas de pobreza en los países europeos se han incrementado en las últimas décadas y son especialmente elevadas en los países de Europa del Este. Los niños pequeños son especialmente vulnerables a la pobreza. La pobreza en la primera infancia puede tener consecuencias negativas irreversibles para el desarrollo cognitivo, social y emocional, el rendimiento académico y el ajuste del comportamiento. La Educación y atención de la Primera Infancia (EAPI) de alta calidad es uno de los medios más eficaces para romper el ciclo de la pobreza, pero todavía existen muchos desafíos. La cobertura de la EAPI en Europa es actualmente insuficiente y varía mucho entre países. Además, la calidad de la EAPI tiene que ser elevada y los planes de estudio deben ser adaptados para satisfacer las necesidades y las perspectivas culturales de las comunidades que viven en la pobreza, también con el fin de mejorar la integración en la EAPI. En otro orden, la EAPI tiene que ser combinada con el apoyo familiar y el apoyo para el desarrollo bilingüe.

Keywords: early childhood education and care; quality; curriculum; culture-sensitivity; inclusiveness; family support; support for bilingual development

Introduction

Many children in Europe grow up in poverty (TÁRKI 2010). Recent statistics on the 27 member states of the European Union show that especially in Latvia, Lithuania, Hungary, Romania and Bulgaria poverty rates are very high, with figures ranging from 30% to 42% of the population. Even in the richest European countries, poverty rates are still around 15%. Poverty rates are especially high for young children, who grow up with several siblings in low-income single parent families and families with an immigrant background. An indigenous at risk population in Europe is the Roma people for whom much higher poverty rates have been found. Poverty rates in Europe have been steadily increasing during recent decades, and the economic crisis (which began in 2008), has had a profound effect. The current high unemployment rates among youth and young adults are worrisome because this concerns the next generation of parents who start families under very disadvantaged conditions.

Poverty is an overarching concept, referring to constellations of risks such as an unfavourable income-to-needs ratio (insufficient income to satisfy basic needs), low quality housing, unsafe and polluted neighbourhoods, reduced access to public health services and good quality education, and several associated psychosocial problems at the family level, in particular family stress (Shonkoff et al. 2012). Whereas one or two risk factors present in the family may not be detrimental to child development, a further accumulation of risks has been found to substantially increase the likelihood of negative outcomes (Atzaba-Poria, Pike, and Deater-Deckhard 2004; Sameroff and Fiese 2000). Preschool children are especially vulnerable to poverty. Poverty in early childhood, more so than in later years, often results in low academic achievement, behavioural difficulties, and poor mental health.

According to several studies, growing up with a different language than the majority language is considered to be a risk factor. For instance, in the Programme for Internal Student Assessment (PISA) studies students who learned the school language as a second language tended to achieve (far) below the national average (Stanat and Chistensen 2006). However, to what extent this reflects developmental risks of bilingualism as such, or the effects of socioeconomic risks – that in immigrant groups go together with bilingualism – including poverty, low parental education and illiteracy, is still to be decided. Evidence indicates that acquiring two or more languages to native-like proficiency is possible and can have several advantages, such as better cognitive

control skills, increased metalinguistic awareness and greater total language knowledge (Bialystok and Barac 2012; Blom et al. 2013; Carlson and Meltzoff 2008; Engel de Abreu et al. 2012). However, sufficient exposure to good quality first language input in a variety of situations of language use is an important prerequisite that not all families are able to meet due to limited educational and financial resources (Bowers and Vasilyeva 2011; Place and Hoff 2011; Unsworth et al. 2011).

Poverty often runs in families and is transmitted from one generation to the next. Providing poor children and families with access to early childhood education and care (ECEC) provisions of high quality is one of the most costs-effective means to combat the negative effects of poverty on child development and to break the cycle of disadvantage (Camilli et al. 2010; Heckman 2006; Magnuson and Shager 2010; Melhuish 2011; Nores and Barnett 2010; Shonkoff et al. 2012). Both the academic and non-academic effects of ECEC are important. Cognitive effects support the child to learn and to profit from the educational opportunities that primary and secondary schools provide. The non-cognitive effects, in particular self-regulation, have an even wider-ranging impact. They contribute to educational efficiency, but also to social integration, physical and mental health, and positive work attitudes. However, for ECEC to have a substantial impact on poverty rates in Europe a number of challenges have to be faced first, concerning the coverage, quality and inclusiveness of ECEC. Moreover, ECEC needs to be combined with additional support for families, as we will argue below.

Coverage of ECEC

At the European Council in Barcelona in 2002, EU member states agreed to provide full day care to support parents in work to at least 90% of children between three years of age and compulsory school age by 2010. In 2009, the Ministers of Education set a new benchmark for early education: at least 95% of children between four years of age and compulsory school age across Europe should be able to participate in ECEC by 2020. Clear policies have been defined for the expansion of ECEC, but Europe is still a long way from reaching these targets and big differences between countries continue to exist. According to recent statistics, the provision of ECEC for children from zero to three years of age and from four years of age to school age differs enormously across Europe (OECD 2013; SOFRECO 2012). Most countries provide universal preschool from the age of five, with almost 100% participation. Below five years of age, however, the coverage is much less and varies much more between countries. For example, in Greece and Poland about 50% of three- to five-year-olds attend a preschool or day-care centre, whereas in the Nordic countries it is over 90% and in France close to 100%. For children below the age of three, education and care is even less well developed and attendance rates vary widely, from only a few percent of the zero- to three-year-olds (Czech Republic, Slovakia) to about 50% (Belgium, Netherlands, Norway, Sweden) and even close to 70% (Denmark).

There is growing evidence that the years from zero to three are formative years for important basic cognitive and emotional skills, which depend strongly on the quality of the child-rearing environment. Brain research has revealed sensitive periods in which the developing brain is highly susceptible to environmental influences (Shonkoff Gardner et al. 2012; Tau and Peterson 2010). This holds especially for the cognitive and emotional control systems that emerge around the age of three. Although these systems show prolonged development into adulthood, the fundaments laid out in early childhood exert strong influence in almost every domain of psychological

functioning and behaviour later in life (Crone and Dahl 2012; Moffitt et al. 2011). The reverse side of the brain's susceptibility is that low-supportive and deprived environments in early childhood can have irreversible consequences for brain development (Hackman, Farah, and Meaney 2010). In this regard, the current provision of ECEC for poor zero- to three-year-olds is in many European countries insufficient.

Quality and impact

The beneficial impact of ECEC is dependent on the quality of the education and care provided. In the UK the Effective Pre-school and Primary Education (EPPE) project has demonstrated the beneficial role of ECEC in the longer-term educational and social development for all children, but stronger for children of low income families. However, the effects are moderated by the quality of the provisions, with higher quality provisions being associated with greater benefits for children (Sylva et al. 2011). Studies in the US provide evidence that high quality ECEC leads to increased cognitive outcomes and moderates the negative effect on social-emotional development of long hours in the centres (Dearing, McCartney, and Taylor 2009; NICHD ECCRN 2006; Vandell et al. 2010; Votruba-Drzal et al. 2010). Furthermore, studies show that only high quality ECEC can protect children against the negative effects of low quality home environments, whereas low quality can increase the negative outcomes for children from disadvantaged homes (Watamura et al. 2011).

Quality can be defined as the general way of approaching children, interacting with them and providing them with experiences that help them to become competent members of society. This aspect of quality is commonly referred to as *process quality*. Studies have identified characteristics such as responsive and affectionate adult–child interaction that is characterised by a high level of verbal stimulation and guidance, a general positive affective classroom climate with positive social relationships between children, and opportunities to learn and to develop competences. Quality can also be related to aspects such as the design and furnishings of the indoor and outdoor space, availability of play and learning materials, group size, children-to-staff ratio, and staff professional competences, commonly referred to as *structural quality*. Furthermore, children's experiences have particular knowledge contents and the activities and interaction settings provided for children are meant to serve particular developmental and educational goals. Planning what children can experience, the knowledge and skills they can develop and the values they can appropriate, is often referred to as the *curriculum*. An important function of the curriculum is to coordinate the different contexts of child development, including the wider context of society, and to reconcile the interests of all stakeholders (Oberhuemer 2005).

Whereas clear policies have been defined at the European level to expand the ECEC systems, the quality and curriculum of ECEC has received remarkably little attention. From international comparative reviews it is clear that the systems differ strongly in the organisational forms, the age at which children access the provision, the level of state subsidy, and governance structures. Information regarding structural quality aspects such as group size, children-to-staff ratio and teacher education requirements also shows wide diversity between European countries (OECD 2006), but it is not clear what this means for process quality and child outcomes. In studies in the US and Canada, higher process quality has been associated with smaller group sizes and lower children-to-staff ratios (Cost, Quality, and Child Outcomes Study Team 1995; Goelman et al. 2006; Howes and Smith 1995; Phillips et al. 2000). However, other

studies, including studies in European countries, found no effects of structural characteristics on process quality and child outcomes (Barros and Aguiar 2010; Cryer et al. 1999; De Kruif et al. 2009; Mashburn et al. 2008; Montie, Xiang, and Schweinhart 2006; Pianta et al. 2005; Rentzou and Sakellariou 2011; Slot et al. 2013). Similar mixed findings exist on the effect of teachers' pre-service education level and specialised training (De Haan et al. 2013; Early et al. 2006; Leach et al. 2008).

The mixed evidence suggests that the structural quality characteristics have complex interactions in affecting process quality and child outcomes. For example, a high children-to-staff ratio can be compensated by a high level of professional competence of the teacher. It is a challenge for future research to find out which combinations of structural quality characteristics provide optimal conditions for high process quality in the most efficient way, which may reveal that different solutions are valid.

Culture-sensitive curricula

Regarding process quality and curriculum, several cultural issues are at stake which are particularly relevant for linguistic and cultural minority children living in poverty. According to child development research, core developmental goals in the preschool period are: establishing emotionally secure relationships with adults, fostering emotional independence and establishing social relationships with peers (e.g. Phillips and Lowenstein, 2011). However, studies in non-Western cultural communities, including immigrant communities in Europe, reveal important differences in emphasis concerning in particular the value of emotional independence and expectations regarding children's behaviour towards adults (Ceglowski 2005; Citlak et al. 2008; Kağıtçıbaşı and Ataca, 2005; Keller et al. 2006; Pels and De Haan 2006; Tulviste, Mizera, and De Geer 2012). These differences in cultural beliefs can have profound consequences for how parents evaluate ECEC practice and may be a reason for parents to decide not to use ECEC.

The question of what constitutes an appropriate curriculum for children in ECEC has raised debate around the developmental and educational goals of ECEC, the role of play and academic content in the curriculum, and what can be considered appropriate ways of interacting with young children (Bennet 2005). Current policies in many countries tend to emphasise academic goals – that is, preparing for reading and mathematics, often through teacher-directed instruction. However, a strong emphasis on academic content and direct instruction can be at the expense of promoting social-emotional development and important learning-related skills, such as cognitive control functions and self-regulation (Barnett et al. 2008; Lillard and Else-Quest 2006; McClelland, Acock, and Morrison 2006). Nonetheless, early informal learning about language, literacy, mathematics and science at home is an important factor in preparing children for school and it shows strong differences between families, leading to 'the early education gap' (Brooks-Gun and Markman 2005; Jordan and Levine 2009; Leseman and Van Tuijl 2006; Melhuish 2010; Scheele et al. 2012; Tudge et al. 2003). In fighting poverty, reducing the early education gap is an important task for ECEC. Therefore, the challenge is to design curricula that embed academic content in playful, child-centred approaches.

To establish partnerships with parents living in poverty and especially parents from immigrant communities, requires agreement on the curriculum and pedagogical approach. This provides another challenge to Europe's ECEC systems, because the views of parents and professionals may not smoothly coincide. In the Children Crossing

Borders project the views and expectations of immigrant parents regarding the curriculum and pedagogy of ECEC in France, Germany, Italy, England and the US were examined (Tobin and Kurban 2010). The results indicated that immigrant parents in all countries tended to emphasise academic goals more than the ECEC teachers did and they also preferred a more authoritarian and teacher-centred pedagogy. The challenge here is to engage in dialogues with parents and to construct together a curriculum and pedagogy that integrate parents' values and goals, on the one hand, and the professional knowledge emerging from the science of early childhood, on the other.

Access and use of ECEC

On the scale of society, ECEC will only contribute to significantly narrowing the education gap if the use of high quality provisions by low income and ethnic minority families is massively increased (Magnuson and Waldfogel 2005). Providing sufficient places and extending the coverage is the first issue to be solved, but reducing tendencies of selective use that places disadvantaged children in lower quality provisions is equally important. Research indicates that in many countries, including European countries, low income families and immigrant families have less access to ECEC (Arnold and Doctoroff 2003; Kuger and Kluczniok 2008; Leu and Schell 2009; LoCasale-Crouch et al. 2007; Magnuson and Shager 2010; SOFRECO 2012; Sylva et al. 2007; Vandenbroeck et al. 2008).

Even when ECEC is available and affordable, *high quality* is still not equally accessible for all communities due to social selection effects (Tang, Coley, and Votruba-Drzal 2012). For example, in the US, Phillips et al. (2000) found that ECEC centres with higher educated and better paid staff, with lower child-to-staff ratios and higher classroom quality, had higher parental fees, thus making high quality provisions less accessible for low income groups. In Germany, Leu and Schell (2009) found that children who grow up with languages other than German tend to make less use of high quality ECEC and if they make use of ECEC, they tend to be in centres with few native German speaking children. In the UK, Sylva et al. (2007) found that parents with lower socioeconomic background preferred informal (familial) day care for children of lower quality, whereas parents with higher socioeconomic background chose more often for high quality professional day care. Other studies indicate that emotional process quality is lower in classrooms with higher proportions of cultural minority children and that children in these classrooms engage less in stimulating activities (Early et al. 2010; Kuger and Kluczniok 2008; Tonyan and Howes 2003).

The major factors explaining the selective access to ECEC are the availability of ECEC provisions; the costs relative to the income of the family; particular admission criteria; targeted policies; and readily available alternatives for care (Early and Burchinal 2001; Edwards, Fuller, and Liang 1996; Tang, Coley, and Votruba-Drzal 2012). In addition, cultural factors also play a role (Augustine, Cavanagh, and Crosnoe 2009; Döge and Keller 2012; Leseman 2002; Pungello and Kurtz-Costes 1999; Rose and Elicker 2010). In particular the cultural child-rearing beliefs of parents, their perceptions of quality, and their degree of social and cultural integration, influence parents' choices and may cause differences between communities in ECEC participation. Cultural factors that are particularly important in this regard are parents' view that young children should be cared for by their mothers, and parents' views on important socialisation and education goals that do not match the curriculum and pedagogy of ECEC.

Family support

To combat poverty effectively, access to high quality ECEC needs to be accompanied by support to families. Parenting requires a strong child-centred motivation, often at the expense of parents' own concerns. However, an increased number of risks resulting from poverty that cannot be dealt with effectively cause chronic stress among parents and can lead to a shift in the balance between child-centred and self-centred goals, influencing child-rearing negatively. For example, parental stress undermines the motivation to stimulate the child and to monitor the child's safety and well-being; it often leads to harsh parenting, child abuse and child neglect (Ackerman, Brown, and Izard 2004; Conger et al. 2002; Shonkoff et al. 2012). The negative effects of risk accumulation can be offset by support from persons who together constitute the social network of the family (Repetti, Taylor, and Seeman 2002). The net effect of social support is to reduce stress and to help parents maintain positive child-centred emotions in the face of adversity. However, a reduced social network, or a low quality social network marked by low emotional involvement, is a risk factor in itself. Immigrant families have been reported to have less extensive and less supportive social networks compared to low- and middle-income indigenous families (Leseman and Hermanns 2002).

Social support can also be provided by accessible, low threshold family support services. The support needs of families may be diverse and the support provided by agencies should range commensurately from financial support, labour market guidance, housing improvement and neighbourhood innovation to health care and education, parent education and family counselling. Based on a meta-analytic review, Blok et al. (2005) conclude that providing centre-based education and care programmes combined with family support services and parent coaching is the most effective strategy to obtain sizeable and lasting effects on child outcomes. A compelling example of the combined approach is the Chicago Child–Parent Centres project in which a half-day preschool programme for three- to six-year-old poor inner-city children was provided together with family support, including a range of support measures and parent education activities. A recent follow-up study of the Chicago Child–Parent Centres demonstrates the lasting benefits for disadvantaged populations to the age of 28 for subsequent education, socio-economic status, health, and reduction of crime (Reynolds et al. 2011).

Support for bilingual development

Several studies in Europe and outside indicate that, given the choice, most immigrant parents and parents from indigenous language minorities, value maintenance of the first language and are willing to make an effort in helping their children to maintain the first language (Moin, Schwartz, and Breitkopf 2011; Nesturuk 2010; Szecsi and Szilagyi 2012; Yağmur 2004). Current policies in many European countries, however, tend to emphasise second language learning, often with the pretext that this will promote integration, but a different policy is possible and, as we suggest, recommended. Bilingual preschool programmes that provide both first and second language support for language minority children are as effective as second language immersion programmes for second language acquisition, but, in addition, they also support first language development (Barnett et al. 2007; Durán, Roseth, and Hoffman 2010; Winsler et al. 1999). Countries in Europe differ strongly in the support offered to language minorities to maintain the first language (Berry et al. 2006). For instance, in Scandinavian countries, immigrant children are still entitled to bilingual education, whereas in countries such as France and the Netherlands the focus is on learning the majority language and on

assimilation of the national cultural identity. The study by Berry et al. (2006) among youth in 13 European countries suggests that immigrant youth have better mental health, better school achievement and integrate better in countries that do *not* force assimilation, but instead support maintenance of the minority's own language and culture.

To implement a first language support policy in ECEC will encounter many difficulties and even practical impossibilities. For example, in a mixed preschool classroom with 10 or more different first languages, as is sometimes found in inner-city areas, it is impossible to implement a bilingual programme and to hire qualified teachers for each language. In that case, providing parents with education programmes that they can work with at home, in parallel to the education programme in the centre, can be a good alternative. Implementing such an approach in the Netherlands with Turkish-Dutch immigrant families showed promising results: compared to controls, preschool children who received the home-based programme had accelerated development in first language skills and, remarkably, also in conceptual knowledge and mathematical skills in Dutch, while their Dutch language skills also improved due to participating in the Dutch language preschool (Leseman and Van Tuijl 2001).

Conclusion

There is solid evidence that good quality ECEC can make an important cost-effective contribution to breaking the cycle of poverty, more so if ECEC is provided along with family support. In order to increase the impact and to meet the high expectations in this regard, several challenges stand out. First, the coverage should be increased, because in many European countries the capacity of ECEC is still below the targets that were set. Second, especially ECEC for the under threes should be expanded along with the provision of family support services. Third, the quality and impact of ECEC should be improved. Fourth, to reach out to the most disadvantaged in Europe, including immigrant communities and indigenous cultural minorities such as the Roma, increasing the culture-sensitivity of ECEC is needed. Responding to the needs of linguistic minorities and providing support to first language development will contribute to improved partnerships with the parents and to child development. Finally, especially for the cultural reasons of not participating in ECEC, a dialogue with parents based on mutual respect is needed to co-construct a quality concept that receives broad support and can lower participation thresholds. To conclude, improving the quality and curriculum of ECEC in order to increase the impact on reducing poverty is a clear challenge for European ECEC systems, the more so because current research evidence is inconclusive and clear standards that integrate the views and values of parents with professional knowledge are still lacking.

Funding

This work was supported by the European Union, contract agreement 613318, Project CARE.

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