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The wrong side of the tracks:

Starting school in a socially disadvantaged London borough Elizabeth Alsford, Andrew Ralephata, Sarah Bolderson, Martina Curtin, Esther Parish, Victoria Klaber, Sue Griffin (Whittington Hospital NHS Trust), Lisa Nash, Rachel McAleenan, Brenda Musoke, Sangheeta Bhalla, Lindsay Walker, Luisa Duffer, Sylvia O'Sullivan, Victoria Knowland, Suzanne Budd, Lindsey Evans, Bernard Camilleri, Suzan Halil, Rachael Furze, Jade Leung, Ciara O'Gorman, Verity Carver, Dorothy Young and Tim Pring (Division of Language and Communication Science, City University)

Abstract

Substantial evidence exists that social circumstances can affect children's language development. As a result many children in socially deprived areas start school with delayed language which may persist and adversely affect their attainment. We assessed the language of children in seven reception classes in a London borough and followed the progress of children with English as their first language (EFL) and with English as an additional language (EAL) during their first two years at school. Significant differences were found between schools. The effect of social factors on performance was reflected in a high correlation between the mean language score for each school and the percentage of children in the school receiving the pupil premium. Many of the children with EAL had very low scores reflecting their limited exposure to English prior to starting school. Most of these children attended schools where children with EFL also had low scores increasing the demands on the schools and their teachers. Children who had low initial scores made modest but significant progress during their reception year but failed to improve further during year 1 despite having non-verbal ability appropriate for their age. These results support previous findings that social deprivation can seriously delay language development and that many children start school with weak communication skills. They add to previous findings by showing that the level of delay may differ substantially across schools in the same borough, by reporting data on children with EAL and by showing that children struggle to improve their abilities in the first two years of school. Introduction

Introduction

Many children living in socially deprived areas of the UK begin school with poorly developed language abilities. Locke et al (2002) assessed children in four nursery schools in socially deprived areas of Sheffield with the Pre-School CELF (Wiig et al 2006). Of 240 children 55.6% were more than one standard deviation below the mean for their age and 9.4% had severe delays with scores more than two standard deviations below their expected mean. The children's non-verbal ability though also below the expected level was significantly better than their verbal ability. Locke and Ginsborg (2003) retested the children two years later. The percentage of children with mild delays decreased slightly but the percentage of those with severe delays increased to 25.6% showing that attendance at school was failing to benefit their language. These findings were replicated by Law et al (2011) who assessed primary school children aged between five and 12 in a socially disadvantaged area of Scotland. The children's mean score was close to one standard deviation below the score for their age and was lower than their nonverbal mean. Children with low scores were present throughout the age range tested again suggesting that attending school had failed to improve their ability.

The relationship between social deprivation and language delay is well established and substantially supported in the literature. Hart and Risley (1995) recorded verbal interactions of families with young children. Three year old children of professional parents had larger vocabularies than children of working class parents and knew more than twice as many words as children of families receiving welfare. The quantity of language and style of interaction used by parents with their children differed. Professional parents used a conversational style, working class parents used a more directive style.

Subsequent studies have substantiated these findings. Cohort studies have shown the long term effects of deprivation and detected variables which may counter these effects. Feinstein (2003) used data from the British Cohort study of 1970. Assessments at 22 months of age differed with socioeconomic status and predicted educational achievement at 26 years of age. Using data from the millennium cohort study, Blanden and Machin (2010) found that the vocabulary of children from families in the top fifth of incomes were more than a year ahead of those in the bottom fifth by age 5. Studies show that even short periods of poverty early in a child's life can be as harmful for their development as persistent poverty (Dickerson and Popli 2012, Holmes and Kiernan 2013, Kiernan and Mensah, 2009, 2011). This early vulnerability confirms the importance of early experience on language and is consistent with the need for early intervention. The long term advantages achieved by interventions such as the Perry High Scope programme (Schweinhart et al, 2005) have encouraged publically funded interventions in the US (Head Start) and the UK (Sure Start). These programmes recognised the harmful effects of existing levels of social deprivation. The initiation of Sure Start in the UK in 1998 formed a part of a government attempt to reduce poverty and social exclusion. A period of economic growth and provision of more generous benefits to poor families led to a decline in the numbers of children living in poverty, a trend which culminated in the passing of the Child Poverty Act 2010 which set a target that less than 10% of children would be in poverty by 2020.

Children's home life and quality of parenting offer some protection against social deprivation. Holmes and Kiernan (2013) found that cognitive outcomes improved where mothers read regularly to a child, interacted positively with them and felt in control of their lives. Participation in Sure Start increased mothers' life satisfaction and allowed them to provide a more stable and stimulating home background (NESS, 2010, 2012).

These findings are for children with EFL. Minority ethnic groups are overrepresented in lowest quintile of socio-economic status (Dearden and Sibieta 2010) and many children with EAL attend schools in socially deprived areas. Sylva et al (2008) state that the impact of EAL on children's English is much reduced by age 7 compared to ages 3 and 5. However the children they studied had attended pre-school education so their 'much reduced' disadvantage may only follow after three or four years of exposure to English. Mahon and Crutchley (2006) found 4 to 9 year old children with EAL were significantly behind on the British Picture Vocabulary Test (Dunn et al 1997).

The gap narrowed with age but remained in the oldest children. Two studies (Hutchison et al 2003, Burgoyne et al 2009) have shown effects of EAL on subsequent attainment. In both studies children aged between six and eight were behind in comprehending spoken and written texts. The latter deficit existed despite their having similar ability in phonics as children with EFL. Their comprehension failure was due to poor vocabulary knowledge and persisted across the age range of the children tested. These results recall the distinction made by Cummins (2008) of Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) and his view that these are acquired at different rates by children with EAL. BICS allows peer appropriate conversational ability and is usually reached after two years of exposure. In contrast CALP which is required for academic attainment may take from five to seven years.

An analysis of the National Pupil Database by Strand et al (2015) found that children with EAL are behind children with EFL at the end of the reception year but that this disadvantage decreases at subsequent assessments and the percentage obtaining 5 GCSEs differs by only 2.6 per cent. This finding needs some qualification however. Children with EAL on the database include all those exposed to a language other than English. For some, English may be their main language (or only language where another exists only as part of a family's cultural heritage). Inclusion of these children in the comparison above will reduce the difference between the groups. Strand and Demie (2005) found that children with EAL who are fluent in English do significantly better than monolingual English speakers and children with EAL who are not fluent do significantly worse. Strand et al also found that the differences in attainment between children with EFL and with EAL were greater in some ethnic groups than others.

These results present a challenge to speech and language therapy services. Conventional forms of service delivery by referral and individual therapy are unlikely to be practical and adoption of a 'public health' model has been suggested (Law et al 2011). This approach will be difficult for services in socially deprived areas. The Bercow review (Department for Children, Schools and Families 2008) found that more therapists were employed in these areas but with substantial variation among services with similar needs. Pring (in press) also found substantial variation among boroughs with high levels of deprivation in London.

We assessed children in reception classes in schools in a London borough. The borough is one of the most deprived local authorities in England and a majority of children starting school are from homes where English is not the first language. Despite the overall level of deprivation the borough is diverse containing areas of high deprivation and comparative affluence. Our aims in the research were

- 1. To assess the English language skills of children with EFL and of children with EAL as they started school.
- 2. To compare the schools and to discover whether differences in the character of their catchment areas influenced the children's scores.
- To assess the progress made by children with low scores (EFL and EAL) in their first two years at school and to compare their verbal and non-verbal abilities.

Method

Design

The study assessed children starting school in a London borough in 2012. The borough is the 13th most deprived of 326 local authorities in England (English Indices of deprivation, 2010). The Marmot Review (Marmot 2010) found that only 41.9% of children achieved a satisfactory level of development at age 5, the lowest of any local authority in England. It is the most divided of London boroughs. Four of its wards are in the richest 10% in the country; five are in the poorest 10%. In the most deprived ward 44% of children live in poverty, in the least deprived only 5% do (London poverty profile 2014). As our title suggests areas of high and low deprivation are separated by a main railway line.

Seven schools within the borough were randomly selected and a randomly selected reception class in each was assessed on the core sub tests (word

structure, sentence structure and expressive vocabulary) of the pre-school CELF (Wiig et al 2006). The CELF is standardised on English speakers allowing their scores to be converted into percentile scores. Normally it would not be used to assess children with EAL since it cannot give an indication of their general language ability. Here it was used to assess the adequacy of the children's English relative to children with EFL and to allow us to monitor their acquisition of English over time. All children in each class were assessed subject to availability and parental consent. Testing took place in November 2012 when the children had been attending school for two months.

Two sub groups of children with low scores were retested at the end of their reception year and again at the end of year one to assess their progress. The first contained children with EAL whose scores placed them below the 25th percentile for English speakers. The second contained Children with EFL with scores below the 50th percentile. We anticipated that both groups would improve, the former because they were now consistently exposed to English in their classrooms, the latter because their initial scores may have been reduced by social disadvantage. These children were also assessed on the pattern construction subtest of the British Ability Scales (Elliott et al 1997) to assess their non-verbal ability.

All testing took place in a quiet room within the children's schools and lasted approximately 20 minutes. It was conducted by a number of speech and language therapists. Children who were followed until the end of year 1 were tested three times, on each occasion by a different therapist. Ethical consent for the research was given by City University; parental consent was obtained by the local speech and language therapy service.

Results

One hundred and eighty seven children were assessed. Seven children were not tested because of absences and two because parents refused consent. Eighty one were EFL, 106 (56.7%) were EAL. The latter spoke 34 different first languages. The percentage of children with EAL in the borough is 52.8%. Table 1 gives the number of EFL and EAL speakers in each of the schools and their mean percentile score. The final column gives the overall mean percentile score for the children in each school. The schools differ widely in the balance of children with EFL and children with EAL. School 1 located in the affluent part of the borough has the highest overall score, high scoring children with EFL and the fewest children with EAL. Schools 3-7 appear similar in general character having substantial numbers of children with EAL who mainly have low scores and children with EFL also with below average scores. School 2 has the most diverse classroom with high scoring children with EFL and low scoring children with EAL.

School	EFL	Mean %	EAL	Mean %	Overall mean %
		score		score	score
1	24	60.12	3	40.33	57.92
2	17	61.42	12	10.08	40.17
3	12	48.25	12	25.83	37.04
4	13	39.46	12	8.20	24.46
5	6	38.00	24	19.79	23.43
6	8	33.25	17	14.21	20.60
7	1	50.00	26	16.07	17.33
All	81	50.90	106	16.91	31.63

Table 1. Numbers of children with EFL and children with EAL and their mean percentile scores on the pre-school CELF.

The overall mean percentile scores for the schools were broadly consistent with their location within the borough. To assess this more rigorously we examined the relationship between the children's mean percentile score in each school and the percentage of children for whom the school received the pupil premium. The pupil premium is a payment made to schools for each socially disadvantaged child; the main criteria is that the child is eligible to receive free school meals. A significant inverse correlation was obtained (r (5) = -0.84, p = .01) showing a strong association between a high level of pupil premium and a low mean language scores in the schools. This correlation might arise if children with EAL with low scores are also the main

source of pupil premium. However, a similar correlation was obtained when only the children with EFL were analysed (r (5) = -0.86, p < .01).

A one factor ANOVA found a significant difference between the overall mean percentile scores for the schools (F (6, 173) = 2.36, p <.05). This comparison is heavily influenced by the numbers of low scoring children with EAL in the schools. Differences also existed between schools when only children with EFL were considered. Their overall mean was 50.90%, close to the expected score for a randomly selected group of children. The schools differ significantly (F (6, 81) = 2.28, p <.05). Table 2 shows that children with EFL divide almost equally between the two high scoring schools (41) and the five lower scoring schools (40). One sample t tests showed that children in the low scoring schools were significantly below the mean (t (39) = 2.57, p < .01) and that those in the two high scoring schools were significantly above the mean (t (40) = 1.77, p < .05).

Schools	n	Mean % score	Std. dev.
1 and 2	41	60.66	26.38
3 - 7	40	40.90	24.37

Table 2. High and low scoring children with EFL by schools.

A two factor between subjects ANOVA examined differences associated with gender and language status. Significant effects of gender (F (1, 183) = 9.90, P < .01) and language status (F (1, 183) = 85.62, p < .001) were found. Table 3 shows that girls and children with EFL had higher scores. The advantage for girls appears particularly marked in the EAL group. However, the interaction between gender and language status was not significant.

Thirty seven children with EFL (45.7 %) had scores below the mean for their age. As table 2 shows most of these children attended schools in the deprived parts of the borough. Eighty three children with EAL (78%) had scores below the 25th percentile for English speakers and 51 of these (48%) were within the bottom 5% for English speakers. The progress of these two

Language	Gender	n	Mean % score	Std. Dev.
EFL	girls	46	54.61	23.36
	boys	35	46.03	31.09
EAL	girls	47	24.49	24.62
	boys	59	10.87	17.37

Table 3 Mean CELF percentile scores by gender and language group.

groups was followed during their first two years in school. At issue here is whether attendance at school benefits, in the former case children whose language may have been delayed by social deprivation and in the latter, children who are learning English.

As there was attrition over time (14 children were unavailable at the end of reception and a further 6 at the end of year 1) we report the progress of the children in two stages, first at the end of their reception year; then at the end of year 1. Table 4 gives the per centile scores of children at the end of their reception year.

	n	CELF Nov 2012	CELF July 2013	NV scores
EAL	74	7.48	16.95	53.42
		(9.63)	(22.94)	(22.51)
Girls	26	11.15	25.55	61.11
		(11.99)	(23.62)	(21.37)
Boys	48	5.48	12.29	49.25
		(7.49)	(12.19)	(22.21)
EFL	32	23.12	36.78	50.53
		(15.74)	(24.39)	(25.19)
Girls	15	27.53	44.93	60.00
		(14.28)	(23.95)	(19.75)
Boys	17	19.23	29.59	42.17
		(16.35)	(23.09)	(27.02)

Table 4. Percentile scores at the initial assessment and at the end of reception.

Both groups improved significantly (EAL t (73) = 5.98 p < .001; EFL t (31) = 4.39, p <.001) during their reception year although the scores at the end of the year remain low particularly so for the children with EAL. The weakness of language scores is emphasised by the percentile scores on the pattern construction test in which both groups performed normally. As in the overall analysis, girls outperformed boys (F (1, 104) =14.31 p < .001) and also made significantly greater improvement (F (1, 104) = 7.17, p <.01). They also had higher non-verbal scores than boys (t (104) = 2.97, p < .01).

Table 5 gives the scores of children retested at the end of year 1. These results are a marked contrast with those at the end of the reception year. Here, the progress made by children with EAL was slight and not significant and the scores of children with EFL had declined significantly (t (30) = 2.49, p <.05). In general the effects of year 1 at school appear to have slowed the children's progress. Girls continued to out-score boys but whereas they had previously progressed significantly faster they are now marking time.

	n	CELF Nov	CELF July	CELF July	
		2012	2013	2014	NV scores
EAL	69	7.37	17.59	21.44	52.34
		(9.10)	(18.25)	(22.97)	(21.44)
Girls	25	11.56	26.56	27.80	59.60
		(12.06)	(23.54)	(26.93)	(20.34)
Boys	44	5.48	12.29	17.82	48.22
		(7.49)	(12.19)	(19.82)	(21.17)
English	31	23.84	37.93	33.09	51.64
		(15.46)	(24.39)	(24.03)	(24.79)
Girls	15	27.53	44.93	41.13	60.00
		(14.28)	(23.95)	(25.13)	(19.75)
Boys	16	20.37	31.37	25.56	43.81
		(16.17)	(22.60)	(20.98)	(27.02)

Table 5. Percentile scores at end of year 1.

We investigated whether the children's progress differed across schools. The scores of children with EFL and with EAL were combined in this analysis to increase the numbers of children in each school. School 1 (see table 1) was excluded as only 6 children were followed through to year 1. A two factor mixed ANOVA found a highly significant interaction between school and time of assessment (F (10, 83) = 3.53, p < .001). Table 6 shows that school 3 had the strongest gains in reception and continued to improve in year 1 when other schools remained static or fell back. These results should be treated cautiously due to the relatively small numbers of children per school (13-19). Nevertheless they suggest that there are differences between schools in the way they seek to help children with poor English language abilities.

School	Number of CELF No		CELF July	CELF July
	Children	2012	2013	2014
2	14	7.28	21.03	28.21
3	13	18.69	36.15	48.84
4	16	17.03	25.68	19.50
5	19	9.31	15.95	16.06
6	15	11.33	26.73	20.35
7	17	6.11	12.02	16.47

Table 6 Progress of children until the end of Year 1 (% scores on CELF)

Discussion

These results confirm previous findings (Locke et al 2002, Law et al 2011) that children starting school in socially deprived areas have weak English language skills. They are also consistent with the recent report from the Institute of Health Equity (2014) that only 51.7% of children nationally gained a good level of development after completing their reception year at school and with the UK's poor ranking for education on UNICEF's (2013) assessment of child well-being.

Disproportionate numbers of children with EAL are found in many socially deprived areas. Our results highlight both the extent of the problems facing some schools and the differences that can exist between schools in the same borough. They emphasise the differing levels of need of the children within the schools and the differing demands placed upon teachers and other professionals who work with them. For several of the schools tested the combined effects of social deprivation and lack of exposure to English mean that a majority of children in a class may be performing well below their nationally expected levels. In this environment it may be difficult for children to catch up or for teachers to accurately assess the level of need of individual children. As children progress in school and face other competing demands it may become increasingly difficult to offer the help they need to improve their communication skills.

It is important to state that we do not attribute blame to the schools for the poor language abilities of the children. When first tested the children had little chance to progress having been at school for only two months. To our observation the schools provided a stimulating and encouraging environment and the great majority of the children were happy and enthusiastic. These observations were supported by good and outstanding Ofsted reports.

The slow improvement of the children during their first two years at school is as alarming as their initial poor levels of English. Here we followed children with low initial scores – children with EFL below the mean for their age and more than three guarters of the children with EAL, all below the 25th percentile for English speakers. Both groups were otherwise unselected; both may include a few children with additional problems affecting their language development. Nevertheless, the mean scores on the pattern construction test suggest that both groups had a normal range of non-verbal abilities. Both groups made modest but significant gains during their reception year but failed to progress in year one. It appears that year one classes and the greater demands they place on children is less conducive to their language development. As a result the competence of both groups of children in English after two years at school was far below that expected for their ability. Their scores are particularly alarming given that, by selecting the lowest scoring children some purely statistical improvement might have been expected due to regression to the mean.

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Children in one school appeared to be an exception to this finding. They improved more strongly in their reception year and further progress in year 1 took them close to their expected level of language ability. The small numbers of children in this comparison suggests caution in interpreting this finding. Nor do we have information about the methods used in the individual schools that might explain the differences in the children's progress. Strand et al (2015) also detected differences in children's progress across schools but were unable to find a common underlying cause of these differences. Nevertheless the possibility that some school environments are more beneficial for these children than others merits further investigation.

Learning objectives in year 1 include a strong emphasis on phonics as an essential part of acquiring literacy. That children with EAL will find this progression difficult is borne out by the findings of Hutchison et al (2003) and Burgoyne et al (2009) that children with EAL acquired good decoding skills but had poor reading comprehension. Mahon and Crutchley (2006) also found that children with EAL remained behind their peers at 9 years of age on single word comprehension, a task that makes relatively low demands on their understanding.

There were strong effects of gender in our data. Girls had significantly higher scores overall and made better progress than boys during their reception year. The large gender difference in the initial scores of the children with EAL is notable. If their limited exposure to English is the cause of their low scores, then it appears that girls require less input than boys to acquire the language.

Although we have only followed children with EAL over the first two years of school their lack of progress in English appears inconsistent with research showing that their eventual attainment is comparable with children who are monolingual English speakers. Although a few of the children with EAL we assessed had scores within the normal range, the great majority had very low scores which suggest that they are from homes where little English is spoken. They may not be comparable with the national sample on which Strand et al (2015) reported which included children who, though exposed to other

languages may be proficient in English. Moreover, many of the children came from ethnic groups (black African and white other with EAL) who do less well in improving their English and in school attainment (Strand et al 2015).

The scale of the problems presented by children from socially deprived areas and by children with non-English home languages is likely to exceed the resources available to help them. Law et al (2011) have suggested that a public health approach is required. What form this approach should take is unclear. Early intervention in the pre-school and early school years is important and the awareness of carers and teachers in these contexts should be raised. Government is aware of the need for early intervention (see for example, Allen 2011) and of the relationship between social disadvantage and speech, language and communication needs (All Party Parliamentary Group on Speech and Language Difficulties, 2013). Two interventions, in particular, the Sure Start programme and the introduction of the pupil premium, have targeted children from disadvantaged homes. Evaluation of Sure Start (NESS 2010, 2012) has shown positive effects on the parents involved and on their behaviour towards and encouragement of their children but direct effects on the children's cognitive outcomes are unclear. The pupil premium introduced in 2011 gives schools extra funding initially set at £430 per child eligible for free school meals but subsequently increased to £1320 for primary schools (Jarrett et al 2015). Not all of this money is new since it replaced other sources of funding previously available to schools (see Lupton and Thomson 2015, Lupton et al 2016) but the latter figure appears generous and as those authors point out a merit of the system is that it is redistributive, increasing funding in schools in more deprived areas and drawing attention within those schools to the needs of children with social deprivation. Schools may choose how the money is spent (although they must report this on their web sites and it is examined by Ofsted). Schools are encouraged to use the Educational Endowment Foundation's findings on what methods benefit children and nearly two thirds report doing so (NAO 2015).

Given the close relationship between children's language and the level of pupil premium in their schools, a strong case can be made for using the resulting funds to improve their communication skills. Speech and language therapy despite limited resources has an important role here given its expertise in language development and remediation. Some interventions have shown promise. At the pre-school level parents can be trained to improve their interactions with their children (Buschman et al 2009, Van Balkom et al 2010, Falkus et al 2015) and interventions within schools have been shown to improve the language skills of children with EFL and children with EAL (Dockrell et al 2010, Fricke et al 2013, Lee and Pring in press). Further research in this area, particularly with children who are socially disadvantaged and children with EAL is needed.

The association between social deprivation and language suggests that poverty is an important influence on language development. In 2010 when the Child Poverty Act was passed, 17.5% of children (two and a quarter million children) in the UK were living in poverty (households with incomes below 60% of median income). This figure was a result of a slow decline over the previous decade driven substantially by the provision of benefits and tax credits to families with children. The reversal of this policy has seen poorer families disproportionately affected by cuts to benefits (De Agostini et al 2014, Browne and Elming 2015) as well as suffering from stagnant or declining levels of real incomes (ONS 2014). Cuts to local authority budgets have meant that spending on early years services (early education, child care and Sure Start) have fallen in real terms by 25% (Stewart and Obolenskaya 2015). In 2015-16, the number of children in poverty had increased only slightly to 17.8%, but was predicted to increase more sharply in the coming years reaching 25.7% by 2020 (nearly 3.5 million children) (Browne and Hood 2016).

These conditions are likely to result in financial stress for families. The extent of the social changes that have resulted is disputed; for some the number of households with precarious financial circumstances constitute a new social class 'the precariat' (Standing 2014, Savage et al 2015). Objectively they are reflected in the fact that more than half of children and working age adults in poverty are in working households (Aldridge et al 2012). Given the evidence that even short periods of poverty early in life can affect children's language development, the present economic climate might be thought designed to achieve this. While interventions can help children, the extent of the problem can only realistically be addressed by changes in economic and social circumstances.

References

Aldridge H. Kenway P. MacInnes T and Parekh A. (2012) Monitoring poverty and social exclusion 2012. Joseph Rowntree Foundation. Available at http://www.jrf.org.uk/publications/monitoring-poverty-2012

Allen G (2011) *Early intervention: The next steps*. An independent report to Her Majesty's Government. London: Department of Work and Pensions Cabinet Office.

All Party Parliamentary Group on Speech and Language Difficulties (2013) *The links between speech, language and communication needs and social disadvantage.* London: House of Commons.

Blanden J and Machin, S. (2010) Changes in inequality and intergenerational mobility in early year's assessments. In K.Hansen, H.Joshi and S.Dex (Eds.) *Children of the 21st century: The first five years.* Bristol: Policy Press.

Browne, J and Elming, W (2015) The Effect of the Coalition's Tax and Benefit Changes on Household Incomes and Work Incentives. Institute of Fiscal Studies. <u>http://election2015.ifs.org.uk/uploads/publications/bns/BN159.pdf</u>

Browne, J and Hood, A (2016) Living Standards, Poverty and Inequality in the UK: 2015-16 to 2020-21. Institute of Fiscal Studies <u>http://www.ifs.org.uk/uploads/publications/comms/R114.pdf</u>

Burgoyne K. Kelly J.M., Whiteley H.E. and Spooner A. (2009) The comprehension skills of children learning English as an additional language. *British Journal of Educational Psychology* **79**, 735-747.

Buschmann A, Jooss B, Rupp A, Feldhusen F, Pietz J, and Philippi H (2009) Parent based language intervention for 2 year old children with specific expressive language delay: a randomised controlled trial. *Archives of Diseases in Childhood* **94**, 110-116.

Cummins J. (2008) BICS and CALP: Empirical and theoretical status of the distinction. In Street B. and Hornberger NH (Eds.) Encyclopaedia of Language and Education, 2nd Edition, Volume 2: Literacy. New York: Springer Science.

De Agostini P., Hills J. and Sutherland H. (2014) Were we all in it together? The distributional effects of the UK Coalition government's tax-benefit policy changes. Social Policy in a cold climate, Working Paper 10.

Dearden L. and Sibieta L. (2010) Ethnic inequalities in child outcomes. In K.Hansen, H.Joshi and S.Dex (Eds.) Children of the 21st century: The first five years. University of Bristol: The Policy Press.

Department of Children, Schools and Families, 2008, Bercow Review of Services for Children and Young people (0-19) with Speech, Language and Communication Needs, Interim Report.

Dickerson A and Popli G (2012) Evidence from the UK Millennium Cohort Study; Persistent poverty and children's cognitive development. Centre for Longitudinal Studies, Working Paper 2012/2 Institute of Education.

Dockrell J.E., Stuart M. and King D (2010) Supporting early oral language skills for English language learners in inner city preschool provision. *British Journal of Educational Psychology* 80, 497-515.

Dunn L. Dunn D. Whetton C. and Burley J. (1997) British Picture Vocabulary Scales 2nd Edition. NFER-Nelson.

Elliott C. D. Smith P. and McCulloch K. (1997). British Ability Scales II Windsor, Berkshire: NFER-NELSON Publishing Company.

English Indices of Deprivation (2010) <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/</u> <u>6871/1871208.pdf</u> Department for Communities and Local Government

Falkus G, Tilley, C., Thomas, C, Hockey, H, Kennedy, A, Arnold, T, Thorburn, B., Jones, K., Patel, B., Pimenta, C., Shah, R, Tweedie, F, O'Brien, F, Earney, R and Pring, T. (2015) Assessing the effectiveness of Parent Child Interaction Therapy with language delayed children: A clinical investigation. *Child Language, Teaching and Therapy*. In press.

Feinstein L (2003) "Inequality in the Early Cognitive Development of British Children in the 1970 Cohort," *Economica*, 70, 73-97

Fricke S., Bowyer-Crane C., Haley A.J., Hulme C. and Snowling M.J. (2013) Efficacy of language intervention in the early years. *Journal of Child Psychology and Psychiatry* 54, 280-290.

Hart B. and Risley T. R., (1995), Meaningful Differences in the Everyday Experience of Young American Children. Baltimore, MD: Brookes.

Holmes J. and Kiernan K. (2013) Persistent poverty and children's development in the early years of childhood. *Policy and Politics* 41, 19-42.

Hutchison JM. Whiteley HE. Smith CD. And Connors, L. (2003) The developmental progression of comprehension-related skills in children learning EAL. *Journal of Research in Reading* 1, 19-32.

Institute of Health Equity (2014) Marmot Indicators 2014. A preliminary summary with graphs. <u>http://www.instituteofhealthequity.org/projects/marmot-indicators-2014</u>

Jarrett T, Long R and Foster D (2015) School funding: Pupil premium. House of Commons briefing paper Number 06700.

Kiernan KE and Mensah FK. (2009) Poverty, Maternal Depression, Family Status and Children's Cognitive and Behavioural development in Early Childhood: a longitudinal study. *Journal of Social Policy* 38, 569-588.

Kiernan KE and Mensah FK. (2011) Poverty, family resources children's early educational attainment: the mediating role of parenting. *British Educational Research Journal* 37, 317-336.

Law J. McBean K and Rush R. (2011) Communication skills in a population of primary school-aged children raised in an area of pronounced social disadvantage. *International Journal of Language and Communication Disorders*, 46, 657–664.

Lee W and Pring T (in press) Supporting language in schools: Evaluating an intervention for children with delayed language in the early school years. *Child Language Teaching and Therapy*

Locke A. Ginsborg J. and Peers I. (2002), Development and disadvantage: implications for the early years and beyond. *International Journal of Language and Communication Disorders*, 37, 3–15.

Locke A. and Ginsborg J. (2003), Spoken Language in the early years: the cognitive and linguistic development of three- to five-year-old children from socio-economically deprived backgrounds. *Educational and Child psychology* 20, 68-79.

London Poverty Profile (2014) <u>http://www.londonspovertyprofile.org.uk/key-facts/overview-of-london-boroughs/</u>

Lupton R and Thomson S (2015) Socio-economic inequalities in English schooling under the coalition government 2010-15. London Review of Education 13, 4-20.

Lupton R. Thomson S and Obolenskaya P (2016) Schools. In Lupton L, Burchardt T, Hills J, Stewart K, and Vizard P (eds) Social Policy in a cold climate: Policies and their consequences since the crisis. University of Bristol: Policy Press, 59-79. Mahon M. and Crutchley A. (2006) Performance of typically-developing school-age children with English as an additional language on the British Picture Vocabulary Scales II. *Child Language Teaching and Therapy* 22, 333-351.

Marmot M. (2010) Fair Society Healthy Lives. Strategic review of health inequalities in England post-2010. The Marmot Review

National Audit Office (2015) Funding for disadvantaged pupils. <u>https://www.nao.org.uk/wp-content/uploads/2015/06/Funding-for-disadvantaged-pupils-summary.pdf</u>

National Evaluation of Sure Start (NESS, 2010) The impact of sure start local programmes on five year olds and their families. Department of Education Research Brief. November 2010.

National Evaluation of Sure Start (NESS, 2012) The impact of sure start local programmes on seven year olds and their families. Department of Education Research Brief. June 2012.

Office for National Statistics (2014) Annual Survey of Hours and Earnings. Available at <u>http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2014-provisional-results/stb-ashe-statistical-bulletin-2014.html</u>

Pring T. (in press) Inequalities in the provision of paediatric Speech and Language Therapy services across London boroughs. International Journal of Language and Communication Disorders

Savage M. Cunningham N. Devine F. Friedman S. Laurison D. McKenzie L. Miles A. Snee H. and Wakeling P. (2015) Social Class in the 21st Century. UK:Penguin

Schweinhart LJ. Montie J. Xiang Z. Barnett WS. Belfield CR. & Nores M. (2004). Lifetime effects: The HighScope Perry Preschool Study through age 40. Ypsilanti, MI:HighScope Press.

Silva K. Melhuish E. Sammons P. Siraj-Blatchford I. and Taggart B. (2008) Final report from the Primary Phase: Pre-school, school and family influences on children's development during key stage 2 (7-11). Research report No DCSF-RR061. Department for children, schools and families.

Standing G. (2014) The Precariat: The new dangerous class. Revised Edition. London:Bloomsbury.

Stewart K, and Obolenskaya P. (2015) The coalition's record on the underfives: Policy, spending and outcomes 2010-2015. <u>http://sticerd.lse.ac.uk/dps/case/spcc/WP12.pdf</u> Strand S. Malmberg L. and Hall J. (2015) English as an Additional Language (EAL) and educational achievement in England: An analysis of the National Pupil Database.

UNICEF Office of Research (2013). 'Child Well-being in Rich Countries: A comparative overview', Innocenti Report Card 11, UNICEF Office of Research, Florence. Available at http://www.unicef.org.uk/Images/Campaigns/FINAL_RC11-ENG-LORES-

http://www.unicef.org.uk/Images/Campaigns/FINAL_RC11-ENG-LOF fnl2.pdf

Van Balkom H. Verhoeven L. van Weerdenbugg M. and Stoop J. (2010) Effects of Parent-based video home training in children with developmental language delay. *Child Language Teaching and Therapy* **26**, 221-237.

Wiig EH. Secord W. and Semel E. (2006) Pre-School CELF (London:Pearson Assessment).