

The socio-emotional development of language-minority children entering primary school in Ireland

Socio-emotional development is increasingly recognised as playing a central role in children's academic achievement. However, little is known about the socio-emotional development of language-minority children on entry to school and how these children fare in comparison to their language-majority peers. To address this gap, longitudinal data on the socio-emotional outcomes of language-minority children in Ireland at five years of age was analysed. Teacher ratings on the Strengths and Difficulties Questionnaire (SDQ) indicated comparable outcomes for language-minority and language-majority children upon entry into formal schooling. Further, language-minority children with poor English vocabulary skills were rated more favourably by their teachers than language-majority peers with poor English vocabulary skills. Finally, language-minority children had better socio-emotional ratings even after accounting for important child and family factors in regression modelling. These findings support an emerging body of literature reporting positive socio-emotional development for young language-minority children. However, advantages associated with learning two or more languages may not be conferred as the child progresses through school if poorer vocabulary skills in the majority language are not addressed early. Educators may be able to capitalize on the positive socio-emotional outcomes reported here when working with language-minority children to support literacy in the majority language.

Keywords: socio-emotional outcomes; language-minority children; ~~dual language learners~~; entry to primary school; vocabulary skills

Introduction

Socio-emotional development in early childhood

Early socio-emotional development plays a central role in all aspects of children's lives (Isakson, Higgins, Davidson, & Cooper, 2009; National Research Council, 2008; Thompson & Lagattuta, 2006) and is increasingly recognised in educational research and practice as central to children's wellbeing and development (O'Kane, 2016). Socio-emotional development refers to 'the relationships an individual has with others, the level of self-control, and the motivation and perseverance a person has during an activity' (Shala, 2013, p.787) and to how children change with age in terms of their processing of emotions in a social and communicative setting (Nicoladis, Charbonnier & Popescu, 2016). It is a critical aspect of the development of overall brain architecture with lifelong consequences (National Scientific Council on the Developing Child, 2004), and is especially important for academic success (La Paro & Pianta, 2000; Olson, 2012; Zins, Bloodworth, Weissberg & Walberg, 2004).

Socio-emotional skills are closely related to language development (Sandhofer & Uchikoshi, 2013; Vallotton & Ayoub, 2011) and are important for school adjustment, and academic achievement (Blair & Diamond, 2008; Halle et al., 2009; Konold & Pianta, 2005; Romano, Babchishin, Pagani & Kohen, 2010). Emotional regulation, following directions, forming positive social bonds, and expressing feelings play a role in school success (Espinosa, 2013; McClelland, Morrison & Holmes, 2000), with social skills and emotional regulation upon entry into primary school linked to greater wellbeing and success in later life, and the ability to work cooperatively, relate to others and handle one's own emotions highlighted as key skills and dispositions (Jones, Greenberg & Crowley, 2015). However, given that contemporary views of school readiness imply an interaction between the child and his or her family, school and

community (Ahtola et al., 2011; Dockett & Perry, 2009), children's adjustment to primary school should be examined in terms of both children's socio-emotional and cognitive skills and dispositions, and the context of broader social and demographic factors such as childcare and early educational experiences, socio-economic status, and the language spoken in the child's home (Barnett & Taylor, 2009; Dockett & Perry, 2009; Margetts, 2007).

Socio-emotional development of language-minority children

Despite a wealth of understanding of socio-emotional development and its centrality in child development, much less is understood about the socio-emotional development of language-minority children (Palermo, Liew, & Gamez, 2017). Language-minority speakers are speakers whose first language is any language other than the most frequently spoken, majority language of a country (i.e. in Ireland, for example, the majority language is English). Most of what is known comes from studies of second language or dual language learning among immigrant and ethnic minorities in the US where a significant body of research has established language-minority children's strengths in cognitive skills and their role in ensuring school readiness and academic success. Much less attention has been paid to 'non-cognitive' skills (Garcia, 2014), the socio-emotional development and the social skills of young dual or additional language learners children whose first language is not the majority language (Winsler, Kim & Richard, 2014, p. 2244), despite growing evidence that such skills are equally critical for academic and school success. Promoting social and emotional skills and competencies has been shown, for instance, to improve reading, writing, and mathematics performance (Garcia, 2014, p.3-4). Non-cognitive skills develop from infancy and continue to develop and to support cognitive development throughout

children's school years. It is therefore important to balance the focus on the cognitive skills of language-minority ~~and dual language learning~~ children with closer attention to non-cognitive skills and fostering socio-emotional development.

Research on the development of young language-minority children typically focuses on emerging bilingualism or what is referred to as dual language learning (DLL). However, within this literature there is a dearth of research looking at the socio-emotional development of these dual language learners (DLLs). A recent review of research published between 2000 and 2011 found only 14 peer-reviewed studies that examined the socio-emotional outcomes of ~~dual language learners (DLLs)~~DLLs in family, school and peer contexts (Halle et al., 2014) and the majority of these involved Spanish speakers. Findings across those studies are inconsistent, with reports of no differences (Rumberger & Tran, 2006), poorer socio-emotional skills in DLLs (Gallindo & Fuller, 2009) and greater socio-emotional skills in DLLs, primarily as rated by teachers (Crosnoe, 2007; DeFeyter & Winsler, 2009; Han 2010). These mixed findings are partly due to the lack of systematic study of young ~~additional language learner's~~DLLs socio-emotional development and partly to the fact that this research is beset by operational difficulties and confounds, such as the ability to control for factors which are highly correlated with socio-emotional development, including the parent-child relationship and children's broader social and cultural environment. However, findings are continuing to emerge suggesting that young language-minority children in immigrant families show better socio-emotional and behaviour control skills compared to language-majority children (Guirguis & Antigua, 2017; Winsler et al., 2014) and that these skills play an important role in emerging bilingualism and academic achievement (Winsler et al., 2014).

Studies which compare the socio-emotional development of language-minority children with their language-majority peers must take into account characteristics of the child and broader family and social contexts of their socio-emotional development (Halle, 2014). Attachment has been identified as a particularly important process in children's early socio-emotional development (Ainsworth, 1979; Bowlby, 1988) and the lack of research on attachment patterns among young language-minority children and their caregivers has been highlighted as a major limitation of socio-emotional research, despite the 'foundational nature of these relationships for socio-emotional development' (Halle et al., 2014). The quality of the parent-child relationship in early childhood has also been identified as a key aspect of socio-emotional development, with relationships that are rated as positive and low in conflict linked to fewer child behaviour and externalising problems and better socio-emotional development (Weaver, Shaw, Crossan, Dishion & Wilson, 2015).

Socio-emotional development may also be impacted by the family's socioeconomic status which has been robustly associated with socio-emotional outcomes (Hoff, 2013; Iruka, Dotterer & Pungello, 2014; Mendive, Lissi, Bakeman, & Reyes, 2016; Luo, Pace, Masek, Hirsh-Pasek, & Golinkoff, 2016). The Family Stress Model (FSM) (Conger & Conger, 2002) proposes that poverty or financial hardship is associated with conditions that stress parents, disrupt familial and parent-child relationships and lead to diminished quality of parenting. Indeed, maternal stress has been negatively associated with language-minority children's social functioning (Farver, Xu, Eppe & Lonigan, 2006). High levels of parental education, especially maternal education, are robustly associated with better developmental outcomes for children (Jeong, McCoy & Fink, 2017), including greater warmth in parenting practices (Klebanov, Brooks-Gunn & Duncan, 1994).

Socio-emotional development of language-minority children in Ireland

Given that the socio-economic profile of language-minority children may vary considerably by region as well as individually, SES must be taken into account when analysing children's socio-emotional development. Language-minority children who are learning English as a second language ~~English language learners (ELLs)~~, are one of the fastest growing pupil populations in Ireland, making up an estimated minimum of 8.7% of the enrolled primary school population (Tickner, 2017), and as a group have a considerably different profile to that of Spanish-speaking ~~dual-English~~ language learners that are the focus of much of the research literature to date. Ireland has the third highest share of educated immigrants in the European Union, with 48% of immigrants having a third-level qualification, following a wave of migration from accession states and Eastern Europe during the boom years (pre-2009) (OECD, 2015). Thus while children of immigrant families may have lower incomes on average in Ireland, levels of maternal education are likely on average to be high.

~~Children in immigrant families~~ Language-minority children may also have different experiences of childcare and early education before school entry which may impact proficiency in the majority language as well as socio-emotional development. While findings regarding the impact of non-parental childcare on socio-emotional development are mixed, one recent study on the socio-emotional outcomes of children in Ireland who have experienced non-parental childcare before the age of five found significantly higher teacher ratings of children's socio-emotional problems for children who had experienced centre-based care at three years of age (although the effect sizes were small), particularly for long amounts of time (Russell, Kenny, & McGinnity, 2016).

Given the particularly important role of socio-emotional development in academic achievement and children's wellbeing in school and throughout the lifespan, the present study focussed on the socio-emotional development of language-minority children in Ireland as they enter formal schooling for the first time. Data from the infant cohort of the national Growing Up in Ireland study was used to examine the socio-emotional development of children at five years of age while taking into account children's language status (language-minority versus language-majority speakers) and a host of individual and family characteristics which are associated with socio-emotional development as established in the literature.

Method

Sample

This study used data from three waves of the Infant Cohort of the Growing Up in Ireland (GUI) longitudinal study to conduct secondary analysis on children's socio-emotional development and to investigate if this was related to their language status (language-minority versus language-majority speakers). Growing Up in Ireland is a government-funded study of children which started in 2006 and is being carried out jointly by the ESRI and Trinity College Dublin. Infant Cohort Data was collected when children were aged nine months (wave one; n=11,134), three years (wave two; n=9,793) and five years (wave three; n=9,001). Survey data were collected through interviews with the primary caregiver (99.7% of whom were the child's mother at wave one) conducted by trained interviewers in the children's homes at wave one (September, 2008 to April, 2009), wave two (December, 2010 to July, 2011) and wave three (March to September, 2013). Primary caregivers' responses were recorded on a laptop and

sensitive questions were self-completed by the primary caregiver. Children completed two cognitive tests at three and five years of age, including the British Ability Scales Naming Vocabulary scale used in this analysis.

The sample [for the Infant Cohort of the GUI study](#) was randomly selected using the Child Benefit Register in Ireland as a sampling frame. Child benefit is a universal welfare entitlement in Ireland and had almost full coverage of all children resident in the Republic of Ireland at the time of the study. The sample was selected on a systematic basis, pre-stratifying by marital status, county of residence, nationality and number of children. A simple systematic selection procedure based on a random start and constant sampling fraction was used (Williams, Greene, McNally, Murray & Quail, 2010). This paper used data from participants who participated in all three waves ($N = 8,712$). Differential attrition was accounted for using weights applied to the data ([variable 'WGT 5YRb in the dataset](#)) and which adjust the internal structure of the sample in line with the population summing to the actual number of cases who took part at all three waves (Murray, Williams, Quail, Neary, & Thornton, 2015). [A subsample of children from the infant cohort were identified as language-minority speakers using information provided by primary caregivers on the child's first language at three years of age and on the primary caregivers' country of birth.](#)

Materials and procedures for Growing Up in Ireland were reviewed and approved by a Research Ethics Committee, and written informed consent was obtained from the child's primary caregiver at each wave of the study.

Materials and procedures

Outcome variable

Strengths and Difficulties Questionnaire (SDQ) Teacher Rating. The SDQ (Goodman, 1997) is a 25 item behavioural screening questionnaire designed to assess emotional health and problem behaviours in children aged three to sixteen years of age and is completed by the child's parent or teacher. The teacher questionnaire was used in this study when children were five years of age. The psychometric properties of the teacher SDQ have been found to be particularly strong (Stone, Otten, Engels, Vermulst, & Janssens, 2010) and is particularly relevant for this analysis of children's socio-emotional development as they enter school for the first time. Using the teacher version of the SDQ instead of the parental report also contributes another perspective of the child's development in addition to the exclusively parental reports before the age of three. The SDQ comprises five subscales: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and pro-social behaviour. A Total Difficulties score, ranging from 0 to 40, is obtained by summing scores across the first four scales which are deficit-focused. A higher score indicates greater emotional difficulties and problem behaviours. The Total Difficulties score was used for this analysis as it indicates the presence of conduct problems, difficulties attending and peer relationship problems which are particularly relevant for school readiness. The measure has good validity (Hawes & Dadds, 2004; Goodman, 2001) and reliability (McCrorry & Layte, 2012).

Co-Variates

Language Status (Language-Majority Children/Language-Minority Children).

This variable was derived using information on the child's first language at three years of age and primary caregiver's place of birth. During the first-second wave of data collection (at nine-three yearsmonths) primary caregivers were asked 'What is child's

first language?'. The primary caregiver was also asked if they were born in Ireland as a further indication that the study child was likely to be growing up in a language-minority environment. ~~if their infant's-child's~~ first language was a language other than English or Irish, and if the primary caregiver, was born outside of Ireland in Ireland. ~~Infants-children for whom English or Irish was not their first language, and whose primary caregiver was not born in Ireland,~~ were classified as language-minority for the purposes of this study. ~~children for the purposes of this study.~~

Gender. Children were categorised as male or female.

Maternal education at three years. Mothers reported their highest level of educational attainment at the wave one sweep of data collection. An original list of 13 levels ranging from 'no formal education' to 'Doctorate' was reduced to four categories as follows: lower second-level or less (a maximum of 11 years of formal education), higher second-level (13 to 14 years of formal education), certificate/diploma (14 to 15 years of formal education), degree or postgraduate (a minimum of 16 years of formal education).

Net household family income at three years. The family's total household net equivalised income was used in this study which adjusts for family size (i.e. income from all sources and all household members, net of the statutory deductions of income tax and social insurance contributions). Income quintiles were included as a categorical variable in the analysis.

Use of childcare at three years. Primary caregivers reported on whether the child was in any regular non-parental care (including care by relatives, non-relatives such as childminders, or centre-based care), defined as eight hours or more of care. Use of childcare when the study child was three years of age was included in the analysis as more children were in non-parental childcare at wave two than at wave one (50% of the

infant cohort and 27% of the language-minority sample) whereas almost all children availed of the free preschool year before entry to school. Participation in childcare may impact children's socio-emotional development before school as well as provide additional exposure to the majority language. It is represented as a dichotomous (yes/no) variable in the analysis.

Parent-Child Relationship at three years. This was assessed through parental report using the Quality of the Parent-child relationship (Child Parent Relationship Scale – Short Form. Pianta, 1992). The Pianta CPR-S is a fifteen-item measure that reflects both positive and negative aspects of the parent-child relationship. ~~It produces a~~ Both the Positive Aspects subscale and ~~a Conflicts~~ subscale, the positive subscale was subscale were used in this analysis.

Expressive Language at 5 years. The Naming Vocabulary test from the British Abilities Scales II (Early Years) was used as a measure of expressive vocabulary in this study (Elliott, Smith and McCulloch, 1997). Children completed this measure in the home when they were five years of age. Trained survey interviewers administered the test having received formal instruction from a Level B qualified psychologist. Raw scores from the test were transformed into an ability score and subsequently into a t-score based on tables provided by the test publishers. The t-scores constitute the unit of analysis in this paper. The test was administered in English so only answers given in English were acceptable. Children did not complete the vocabulary assessment if the primary caregiver felt that the child would be unable to reasonably attempt the test due to insufficient English or a specific learning disability. This means that results regarding the socio-emotional development of language-minority children in Ireland reported here do not include children who had insufficient English to attempt the BAS and therefore we cannot report on the socio-emotional development of 5-year-old children in Ireland

who had very limited English vocabulary skills. Interviewers were instructed not to penalise children for difficulty with pronunciation. The BAS (II) Naming Vocabulary test has been used in similar circumstances by other cohort studies including the Millennium Cohort Study and Growing Up in Scotland). The test authors (Elliott et al. 1997) report internal reliability of .86 for the Naming Vocabulary scale at ages 3:0 – 3:5 years. They also report a correlation of .68 with the Verbal IQ score on the Wechsler Preschool and Primary Scale of Intelligence – Revised, based on a sample of children aged between 3:6 and 5:10 years.

Statistical Analysis Plan

All analyses were undertaken in IBM SPSS Statistics 23 using the GUI birth cohort Anonymised Microdata File (AMF) (Irish Social Sciences Data Archive, ISSDA). The basic characteristics of the sample are described using survey weighted means and standard deviations or proportions for each of the variables as appropriate, and are presented first. Hierarchical linear regression analysis was used to examine effects of language status (language-majority English-speakers / language-minority speakers) on socio-emotional outcomes controlling for known covariates of socio-emotional outcomes.

Results

Sample characteristics and descriptive statistics

Sample characteristics for language-majority and language-minority children at five years of age are provided in Table 1. Descriptive statistics for scaled measures are provided in Table 2. Analysis of variance showed that language-minority children had

~~significantly higher scores on the teacher rating of the SDQ, $F(.,) = , p = .0$. Primary caregivers of language-minority children also reported significantly higher levels of parental stress $F(.,) = , p = ,$ greater levels of parent-child conflict $F() = , p =$ and lower levels of attachment $F() = , p =$. Parental reports of positive aspects of the parent-child relationship did not differ between the groups. Finally, language minority children had significantly lower vocabulary scores at age five ($F(.,) = , p = .0$). (Performance of the language minority children to their English speaking peers was comparable on all measures except for the BAS Naming Vocabulary test. Significantly poorer scores on the measure of English vocabulary were expected given that English was not the first language of these children during infancy.~~

[Insert Tables 1 and 2 near here.]

Examining the profile of language-minority speakers further, Table 3 provides the mean SDQ total difficulties scores as rated by teachers for language-minority and language-majority children who scored in the lowest decile of the BAS Naming Vocabulary test. While over half of the language-minority children scored in the lowest decile on this test of English vocabulary, these children had significantly lower total difficulties scores than their English-speaking peers, indicating better socio-emotional outcomes on average at five years of age $\chi^2 (2, N = 170) = 14.14, p < .01$.

[Insert Table 3 near here.]

Associations of language status with socio-emotional outcomes at five years

To examine potential differences in the socio-emotional development of five-year-old children in Ireland by language status, a hierarchical linear regression was conducted

with the SDQ Total Difficulties score as the outcome variable and language status as the primary predictor. Covariates established in the literature as important for socio-emotional development were subsequently added to the model. These were: child's gender, attachment to parent at nine months, quality of the parent-child relationship at three years, level of maternal stress at three years, experience of childcare at three years, family income and maternal education, and English vocabulary skills at five years. The fully adjusted model is reported in Table 4.

Teacher reports of children's socio-emotional outcomes at five years of age, as measured by the SDQ, indicate ~~no greater difficulties for language-minority children, significant difference in children's SDQ Total Difficulties scores based on language status.~~ However, when factors associated with socio-emotional development were included in the regression model, language-minority children were significantly more likely to fare better on the SDQ (i.e., have a lower Total Difficulties scores) than their language-majority peers ($\beta = -0.03$; $p < 0.01$). Being a boy, having lower attachment ratings at nine months, having a parent-child relationship that is rated by the parent as less positive and having high levels of conflict, higher levels of maternal stress, experience of childcare at age three, lower family income and levels of maternal education were all significantly associated with higher Total Difficulties scores on the SDQ at five years in the fully adjusted model. Having poorer English vocabulary skills at age five was also significantly associated with higher total difficulties scores on the SDQ independent of the language status of the child.

[Insert Table 4 here.]

Discussion

The findings of this study of language-minority children in Ireland mirrors the picture emerging from a small but growing international literature of enhanced socio-emotional well-being among ~~young dual or additional language learners~~ young children for whom the majority language is not their first language (Crosnoe, 2007; Dawson & Williams, 2008; Guirguis & Antigua, 2017; Winsler et al., 2014).

Not only were five-year-old children living in Ireland not adversely impacted by their language-minority status in terms of their socio-emotional outcomes when we controlled for other important variables in children's socio-emotional development but those children with the most limited vocabulary in the majority language, English, had significantly better socio-emotional ratings by teachers than their peers who performed equally poorly on the British Ability Scales Naming Vocabulary test. It is to be expected however that majority-language speakers with poor vocabulary may have additional challenges including social and behavioural issues, given the strong relation between language proficiency, social skills and self-regulation (Peterson et al., 2013).

To address some of the limitations of the research literature which has examined the socio-emotional development of language-minority children, this study used regression modelling to examine children's socio-emotional development in light of their language-status and while also taking into account ~~take into account language-learning status along with~~ factors known to impact on socio-emotional development. The results of this analysis indicated positive socio-emotional outcomes for children of language-minority status in Ireland when gender, the quality of relationships during early childhood, their experience of childcare, the socio-economic status of the family and children's vocabulary skills in the majority language were taken into account in the fully adjusted model.

In addition to including a number of covariates of socio-emotional development for five-year-olds entering schooling, the type of confounds included in this study is noteworthy. In particular, the inclusion of attachment at nine months of age and indicators of the quality of the early parent-child relationship, both of which are considered foundational for healthy socio-emotional development, addresses concern about the absence of these variables in studies of [dual language language-minority learners' socio-emotional development](#) (Halle et al., 2014, p. 745). The finding that minority-language children fare well even when taking into account vocabulary in the majority language suggests that vocabulary skills in the majority language may not be critical for socio-emotional development until formal schooling and socialising is well under way.

Implications for policy and practice

There is little evidence that children should be discouraged from learning two or more languages in early childhood, especially given the cognitive gains associated with acquiring two or more languages (Bialystock, 2009; Marian & Shook, 2012;) but recent findings point to the importance of ensuring language proficiency in the majority language as children enter more formal schooling (Hoff, 2013). In this study, most of the minority-language children (73%) were not in formal childcare at three years of age [possibly indicating less exposure to the majority language outside of the home in formal or informal childcare contexts](#)~~indicating exposure primarily to the language(s) spoken in the home~~. However, almost all children in this cohort attended the free preschool year provided to all children in the Republic of Ireland and had at least one year of this sessional preschool education (3.5 hours per day for five days a week) before beginning primary school education.

Despite demonstrating comparable socio-emotional outcomes at five years, language-minority children in Ireland were more likely to score in the lowest decile on the BAS test of English vocabulary, as expected. The research literature points to high risk for poorer academic achievement and related outcomes where children are entering school with poor vocabulary skills in the majority language whereas emerging bilinguals (i.e., those who [rapidly are in the process of acquiring](#) the majority language in addition to their first language [and achieve proficiency in both](#)) demonstrate a cognitive advantage (Halle, Hair, Wandner, McNamara & Chien, 2012). Where language-minority children do not acquire effective language skills in the majority language, they are likely to have lower school attainment and related problems in later life (Halle, Hair, Wandner, McNamara & Chien, 2012). However, targeted language intervention for language-minority children in early primary school should be effective given their socio-emotional strengths which are established predictors of school readiness and academic achievement (Hoff, 2013) and which are linked to emerging bilingualism (Winsler et al., 2014). Research on children's proficiency in English as they progress through formal schooling and the role of early socio-emotional attainment will provide more insight into the extent to which language and socio-emotional development interact to impact academic success in primary schooling.

In research commissioned for the National Council for Curriculum and Assessment in Ireland, O'Kane noted the importance of cultural capital in children's successful transition to primary school and recommended increased recognition of this capital for language-minority children (O'Kane, 2016). Identifying an inclination to regard all children as the same upon entry into formal schooling, O'Kane (2016) highlighted that this view may unintentionally disadvantage children who have culturally different experiences in early childhood. The findings of our study support

this view and indicate that in addition to recognition of language-minority children's unique cultural capital, teachers in infant classrooms could capitalise on children's socio-emotional strengths (low levels of behavioural difficulties and problematic peer relationships, for example) and incorporate these in recommended pedagogical strategies for building vocabulary knowledge in the majority language which is a key part of literacy development (Kennedy et al., 2012). That is, if it is not possible to provide instruction in both the home and school language to children for whom English is an additional language (Kennedy et al., 2012), then working intensively with children to enhance literacy skills in English will require especially positive teacher-child relationships. The relatively low levels of problematic socio-emotional outcomes for language-minority children as they enter school should aid the development of a warm rapport with children and excellent working relationship to build vocabulary in the majority language.

Strengths and Limitations

This study contributes to the limited literature on language-minority populations outside of Spanish speakers in the US and provides rare data on the early socio-emotional development of children of immigrant families in Ireland. This is also one of just a few studies with indicators of infant and toddler development that can be used to examine socio-emotional outcomes as children enter formal schooling for the first time; research has tended to focus on middle childhood and adolescence, and this study therefore focuses on a group of language-minority children who have received very little attention (Puligni, Hoff, Zepeda & Mangione, 2014).

One of the limitations of the study is the reliance on self-report ratings of child development and parental wellbeing by children's teachers and parents' reports which

may be subject to biases (La Greca & Silverman, 1993). However, validity and reliability ratings for the SDQ are robust (Goodman, 2001; Hawes and Dadds, 2004; McCrory & Layte, 2012) and the measures included in this survey have been used in several other birth cohorts internationally. Information on the language development and skills in the first language of the language-minority children would be useful as a control but was not available and therefore not included in the analysis. Similarly, this analysis did not categorise families by ethnicity or include a breakdown of languages spoken in the home and the broad comparisons in this analysis in terms of language-minority versus language-majority status will obscure the significant heterogeneity existing within this population. To address this issue, the group of language-minority children selected for inclusion were sampled very conservatively from a large cohort to ensure that the primary caregiver was not born in Ireland and that the child's first language at birth and through to nine months of age was not the majority language, English.

Conclusion

Young language-minority children in Ireland are showing comparable socio-emotional outcomes at five years of age that could prove critical to their success in primary school and beyond. Despite demonstrating weaker vocabulary skills in the majority language, English, these children were, on average, significantly more likely to receive more positive ratings of their socio-emotional development at five years by their teachers when early predictors of socio-emotional development such as attachment and the quality of the parent-child relationship were taken into account. This contributes to a positive view of early child development for language-minority children while

acknowledging the importance of intensively targeting language skills in the majority language upon entry into formal schooling.

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