MULTILITERACY IN ACTION: LEARNING TO READ IN THE HERITAGE LANGUAGE SUPPORTS LITERACY SKILLS IN THE MAJORITY LANGUAGE

Theo Marinis & Theodora Papastefanou

ECSPM Workshop | Darmstadt | 26-27 September 2018
PARADIGM SHIFT IN LANGUAGE EDUCATION FOR THE DEVELOPMENT OF MULTILITERATE AND PLURILINGUAL AGENCIES
BILINGUALISM & LITERACY

→ STARTING POINT:

- Growing up bilingually and acquiring two languages in their spoken and sometimes written form has been shown to influence literacy development positively (Durgunoglu, Nagy and Hancin-Bhatt, 1993; Niolaki and Masterson, 2012);

- BUT, it is not clear whether learning to read in the heritage language supports literacy skills in the majority language and whether this changes over time.
WHY SHOULD WE BE INTERESTED IN WHETHER OR NOT THERE ARE POSITIVE EFFECTS FROM THE HERITAGE LANGUAGE TO THE MAJORITY LANGUAGE?

THERE IS A GROWING NUMBER OF BILINGUAL CHILDREN IN EUROPE
UK CONTEXT

• In the UK there are more than a million children between 5–18 years old in schools who speak more than 360 different languages between them. (National Association for Language Development in the Curriculum, www.naldic.org.uk)

• According to the School Census (2013), one in six primary school pupils in England (612,160) have English as an Additional Language.

• In secondary schools the figure stands at 436,150, just over one in eight. (National Association for Language Development in the Curriculum, www.naldic.org.uk)
THERE IS LIMITED OR NO SUPPORT OF HERITAGE LANGUAGES IN MAINSTREAM SCHOOLS DUE TO:

1. LACK OF RESOURCES
2. LACK OF UNDERSTANDING ABOUT THEIR IMPORTANCE
3. MISCONCEPTION THAT SUPPORT OF THE HERITAGE LANGUAGES MAY BE AT THE EXPENSE OF THE MAJORITY LANGUAGE AND MAY AFFECT INTEGRATION IN THE SOCIETY
THIS IS THE CONTEXT FOR THE PRESENT STUDY → INVESTIGATE THE HERITAGE AND MAJORITY LANGUAGES OF BILINGUAL CHILDREN IN THE UK
HETEROGENEITY IN BILINGUALS

• Bilingual children: a heterogeneous population;
• Some may speak two languages from birth (simultaneous);
• Others may begin learning a second language later in their life (sequential, early/late, second language learners).
• The amount of **input and use** of their languages may differ due to various factors:
  • the status of each language (majority, minority);
  • which language is used in the school, and
  • whether they have literacy in one or both languages.
The children’s language ability depends to a large extent on the use of each language (Silva-Corvalan & Treffers-Daller, 2016);

The two languages are usually not acquired to the same level (Montrul, 2008, 2013) → LANGUAGE DOMINANCE

**Language dominance** – construct: based on language use (references) and/or language proficiency (Li Wei, 2000; Montrul, 2016, among others)
PREVIOUS RESEARCH

• Growing up bilingually and acquiring two languages in their spoken and sometimes written form influences literacy development positively (Durgunoglu, Nagy and Hancin-Bhatt, 1993; Niolaki and Masterson, 2012).

• However, bilinguals do not use both languages for the same purpose and frequency but use languages complementary (Grosjean, 2006).

• Language use may change over time as a function of experience, and therefore, language dominance may also change.
PREVIOUS RESEARCH

• Change in language dominance when children speak a minority language in the home and enter a school that follows a monolingual curriculum in the majority language.

BUT it is unclear

  1) if language dominance changes during school years and

  2) whether it differs across different domains of language and literacy.
GAPS IN PREVIOUS RESEARCH

• There is limited research on how the two languages, e.g., heritage/minority language (Greek) and majority language (English) develop side by side and how schooling in a majority language affects children’s language acquisition and literacy skills.

• It is unclear how they compare to monolingual children and also have the two languages compare to each other.
AIMS

1. Investigate how primary school children with Greek as heritage speaking perform in Greek vs. English in phonological awareness and reading tasks
2. Compare them with scores from monolingual children
3. Address how language dominance changes over time and how that relates to the children’s performance on phonological awareness and reading.
RESEARCH QUESTIONS

• Do children perform better in English (majority) or Greek (minority)?
• Do they have better performance in Year 3 vs. Year 1?
• Is there a relationship between language dominance, phonological awareness and reading skills?
• Do bilingual children have better literacy skills than monolingual children?
PARTICIPANTS

- 40 Greek-English bilingual children (Year 1=20; Year 3=20) and
- 40 monolingual English speaking children (Year 1=20; Year 3=20)

- SES: middle to upper middle
- No history in speech and/or language delay or impairment
- No parental concerns about language development
METHODS

• Standardised and non-standardised assessments in both languages: English and Greek.
# TASKS USED

<table>
<thead>
<tr>
<th>Phonological Awareness</th>
<th>Reading Decoding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blending</td>
<td>Real-Words</td>
</tr>
<tr>
<td>Elision</td>
<td>Pseudo-words</td>
</tr>
<tr>
<td><strong>English</strong></td>
<td><strong>Test of Word Reading Efficiency-2</strong></td>
</tr>
<tr>
<td>Comprehensive Test of Phonological Processes-2 (CTOPP-2; Wagner, Torgesen, Rashotte &amp; Pearson, 2013)</td>
<td>(TOWRE-2; Wagner, Torgesen &amp; Rashotte, 2011)</td>
</tr>
<tr>
<td><strong>Greek</strong></td>
<td>Greek adaptation of TOWRE-2 by Georgiou, Parrila &amp; Papadopoulos (2005)</td>
</tr>
<tr>
<td>Experimental tasks adapted in Greek by CTOPP-2</td>
<td></td>
</tr>
</tbody>
</table>
EXAMPLES OF TASKS USED

Blending
• Participants listened to the sounds of a word separately and had to put them together to create the word, e.g. i-p-n-o-s (ύπνος) (= nap), a-r-i-θ-m-o-ς (αριθμός) (= number).

Elision
• Participant had to say a word without saying one syllable (e.g. /lemoni/ (λεμόνι) (= lemon) without /le/ is /moni/ (μόνη).
EXAMPLES OF TASKS USED

Real-word Reading Decoding
• Assesses the number of real printed words that can be read accurately.

Pseudo-word Reading Decoding
• Measures the number of pseudo-words that can be decoded accurately.
The LITMUS-PABIQ questionnaire (Tuller, 2015) was provided to the participants’ parents in order to obtain data in terms of the children’s language history, quantity and quality of input, and use.
BILINGUAL CHILDREN
COMPARISON BETWEEN
ENGLISH AND GREEK
## LANGUAGE HISTORY - DOMINANCE

<table>
<thead>
<tr>
<th></th>
<th>Greek</th>
<th></th>
<th>English</th>
<th></th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Language exposure before 4 years</td>
<td>2.4</td>
<td>.675</td>
<td>1.88</td>
<td>.686</td>
<td>t (39) = 2.72, p &lt; 0.05</td>
</tr>
<tr>
<td>Language use in the home</td>
<td>6.2</td>
<td>1.92</td>
<td>7.73</td>
<td>2.75</td>
<td>t (39) = -2.554, p &lt; 0.05</td>
</tr>
<tr>
<td>Language use outside the home</td>
<td>6.5</td>
<td>2.32</td>
<td>11.65</td>
<td>1.42</td>
<td>t (39) = -13.74, p &lt; 0.001</td>
</tr>
<tr>
<td>Current skills</td>
<td>10.8</td>
<td>2.5</td>
<td>13.6</td>
<td>1.7</td>
<td>t (39) = -6.92, p &lt; 0.001</td>
</tr>
</tbody>
</table>
RESULTS - VOCABULARY

Main effect of Language
F (1, 38) = 85.841, p < .05

Main effect of Year
F (1, 38) = 24.020, p < .05

No interaction
RESULTS - BLENDING

Main effect of Language
F (1, 38) = 60.386, p < .05

Main effect of Year
F (1, 38) = 18.990, p < .05

No interaction
RESULTS - ELISION

Main effect of Language
\[ F (1, 38) = 12.220, p < .001 \]

Main effect of Year
\[ F (1, 38) = 51.370, p < .05 \]

No interaction
RESULTS – REAL WORD READING

Main effect of Language
\[ F (1, 38) = 5.489, \ p = .024 \]

Main effect of Year
\[ F (1, 38) = 21.139, \ p < .05 \]

No interaction
RESULTS – PSEUDO WORD READ

Main effect of Language
F (1, 38) = 52.427, p < .05

Main effect of Year
F (1, 38) = 26.508, p < .05

No interaction
<table>
<thead>
<tr>
<th></th>
<th>Exposure before 4 years</th>
<th>Current skills</th>
<th>Use in the home</th>
<th>Use outside the home</th>
<th>Exposure before 4 years</th>
<th>Current skills</th>
<th>Use in the home</th>
<th>Use outside the home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Greek</td>
<td>English</td>
<td></td>
<td></td>
<td>Greek</td>
<td>English</td>
</tr>
<tr>
<td>Vocab</td>
<td>-.140</td>
<td>.303</td>
<td>.410**</td>
<td>.540***</td>
<td>.148</td>
<td>.358*</td>
<td>.184</td>
<td>.218</td>
</tr>
<tr>
<td>Blending</td>
<td>.301</td>
<td>.179</td>
<td>.021</td>
<td>.212</td>
<td>-.263</td>
<td>.331*</td>
<td>-.027</td>
<td>.181</td>
</tr>
<tr>
<td>Elision</td>
<td>.279</td>
<td>.150</td>
<td>.155</td>
<td>.348*</td>
<td>-.060</td>
<td>.235</td>
<td>.045</td>
<td>.097</td>
</tr>
<tr>
<td>Pseudo-word reading</td>
<td>.206</td>
<td>.180</td>
<td>.096</td>
<td>.351*</td>
<td>-.176</td>
<td>.392*</td>
<td>.093</td>
<td>.183</td>
</tr>
</tbody>
</table>
BILINGUAL CHILDREN COMPARED TO MONOLINGUAL CHILDREN
RESULTS - BLENDING

Effect of School Year:
$F(1,76)= 13.292, p < 0.001$;

Effect of Group (mono-/bilingual):
$F(1,76)= 109.5, p < 0.001$;

No interaction
RESULTS - ELISION

Effect of School Year:
\[ F(1,76)= 70.9, \ p < 0.001; \]

Effect of Group (mono-/bilingual):
\[ F(1,76)= 164.5, \ p < 0.001. \]

No interaction
RESULTS - REAL-WORD READING

Effect of School Year:
F(1,76)= 7652, p < 0.001;

Effect of Group (mono-/bilingual):
F(1,76)= 11.93, p = 0.001.

No interaction.
RESULTS - PSEUDO-WORD READ

Effect of School Year:
\[ F(1,76) = 112.3, \ p < 0.001; \]

Effect of Group (mono-/bilingual):
\[ F(1,76) = 94.6, \ p < 0.001. \]

No interaction.
RESEARCH QUESTIONS

• Do children perform better in English (majority) or Greek (minority)?

YES

• Do children have better performance in Year 3 vs. Year 1?

YES

• Is there a relationship between language dominance, phonological awareness and reading skills?

YES BUT

• Do bilingual children have better literacy skills than monolingual children?

YES in the dominant language
DISCUSSION ENGLISH VS. GREEK

• Language dominance in terms of language exposure changes when children enter school;

• Children have better phonological awareness & literacy skills in the dominant language (English) compared to the non-dominant heritage language (Greek);

• Language dominance doesn’t change from Year 1 to Year 3 in terms of language and literacy skills: children have better skills in the majority compared to the minority language in both Year 1 and 3.
DISCUSSION ENGLISH VS. GREEK

• A strong relationship between language use in and outside the home and performance only in the minority language suggests that parental effort should be directed towards the minority language because schooling levels out differences in the majority language.
DISCUSSION MONOLINGUAL VS. BILINGUAL CHILDREN

• Better performance in the dominant language of bilingual children could be an effect of cross-linguistic transfer;

• All bilingual children had reading instruction and had learnt to read in Greek, a language with transparent orthography;

• Learning to read the heritage language (Greek) may have facilitated phonological awareness and reading decoding skills in the majority language (English).
CONCLUSION

• Research on literacy provides a different dimension than research on language;
• Being bilingual is a strength for literacy development in the majority language;
• Implications for education:
  → Supporting heritage languages at school is not at the expense of the majority language;
  → Literacy development in the heritage language may benefit literacy development in the majority language.
Thank you!
to families, children, schools
&
YOU