Multilingualism and language learning
A study of Portuguese immigrant children growing up in a multilingual society

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Results I

<table>
<thead>
<tr>
<th>Task</th>
<th>Luxembourg (Lu)</th>
<th>Portuguese (Pt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digit recall</td>
<td></td>
<td></td>
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<tr>
<td>Backwards digit recall</td>
<td>7 (Lu)</td>
<td>7 (Pt)</td>
</tr>
<tr>
<td>Counting recall</td>
<td>6 (Lu)</td>
<td>8 (Pt)</td>
</tr>
<tr>
<td>Nonword Repetition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lu nonwords</td>
<td>26 (Lu)</td>
<td>23 (Pt)</td>
</tr>
<tr>
<td>Pt nonwords</td>
<td>34 (Pt)</td>
<td>31 (Pt)</td>
</tr>
</tbody>
</table>

Results II

Summary
Working memory skills, vocabulary and comprehension were investigated in native and second languages in a population of Portuguese immigrant children growing up in Luxembourg - a country in which Luxembourgish is mainly used in social interactions, and German and French are instructed in schools.

Participants
20 Luxembourgish children - 7 years old living in Luxembourg
40 Brazilian children - 7 years old, living in Brazil
20 low SES Luxembourg children
20 high SES Luxembourg children
20 low SES Brazilian children
20 high SES Brazilian children

Method
The monolingual children performed the tasks in their native language and the Portuguese immigrant children in both languages - Luxembourgish (Lu) and Portuguese (Pt).

Material
Expressive vocabulary
Receptive vocabulary
Syntactic comprehension

Discussion
As the Portuguese immigrant children and their monolingual peers from Luxembourg and Brazil performed at comparable levels on the working memory measures, their poor language performance in all three languages is unlikely to be related to a fundamental cognitive deficit. The fact that their knowledge of Portuguese vocabulary was even lower than that of children from impoverished backgrounds in Brazil also rules out the hypothesis that their poor language skills are simply a reflection of lower SES. Instead, the findings appear to be a direct consequence of growing up as an immigrant in a multilingual society raising the question of the necessity of specific language support for immigrant children.

Whereas language assessments may overestimate language learning difficulties in children with an immigrant background working memory measures might not. As working memory measures are highly associated with children’s language learning and more general academic progress, these tests can provide methods of identifying children with potential learning difficulties that are unlikely to be distorted by differences in wealth or other significant environmental factors that have an impact on language learning opportunities.