



CHAPTER 7: A CLOSER LOOK AT PARENT LANGUAGE ABILITY: WELSH AND ENGLISH VOCABULARY

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The above analyses have made it clear that bilingual parents' abilities in each of their languages can affect which language(s) they speak to their children. In order to gain further insight into the role that this might play, we conducted Welsh and English vocabulary tests on a subset of the parents interviewed. Research has shown that a speaker's general abilities in a language can be gauged by that person's vocabulary in that language (e.g., Bates & Goodman 1997, 1999). Furthermore, since bilinguals' vocabularies are spread across two languages, the range of vocabulary available in each of their languages can be affected (e.g., Umbel, Pearson, Fernandez, & Oller 1992). The following section explores to what extent the parents' language practices in speech to their children are a direct function of their relative abilities in the two languages.

METHOD

Participants

The participants for the vocabulary measures were recruited from the interviewees reported in Chapter 4. When time allowed, and when the interviewee was willing, we administered a Welsh and an English vocabulary test after the interview. In total, 106 interviewees (64 mothers, 42 fathers) participated in both the Welsh and English vocabulary tests.

Vocabulary Measures

English:

For English, we used the British Picture Vocabulary Scale (Dunn, Dunn, & Whetton, 1982) (BPVS). This test is a receptive vocabulary test designed for children and is standardised to age 18. The test is made up of 150 items that are ordered by difficulty. The tester shows the testee a set of 4 pictures, says a word, and asks the testee to point to the picture that best represents that word.

When the BPVS is used with children, the tester begins at set points in the vocabulary list based on the child's age. Depending on the given testee's performance, the tester either progresses from there (if the child gets at least the first 8 items correct) or, if the child makes an error in the first 8 items, the tester backtracks until the child correctly answers 8 items in a row. In either case, the

tester then proceeds forward until the child makes 6 errors out of 8 items in a row. In the normal administration of the test, standardised scores are obtained from raw scores (out of 150), to determine the vocabulary abilities of the testee relative to age-related peers.

For our purposes, we adapted the test for use with the adults we interviewed. We began at the vocabulary point appropriate for age 17 and progressed from there according to the procedures used in the normal administration of the test. (That is, if the respondent got the first 8 items correct, we continued forward until s/he got 6 out of 8 items incorrect; if the respondent got any of the first 8 items incorrect, we backtracked until s/he responded correctly to 8 items in a row, and then proceeded forward from there.) We entered participants' raw scores into the SPSS data file.

Welsh:

For the Welsh task, we adapted a receptive vocabulary test being developed by Gathercole & Thomas (in preparation) for use with Welsh-speaking children. This test has a similar format to the BPVS in that a participant is shown pictures of 4 items, is given a Welsh word, and is asked to point to the picture that best represents that word. The current version of the test consists of 240 items. These items were chosen on the basis of the following criteria: (a) 30 words were chosen for each of 8 levels of frequency in the adult language (based on Ellis, O'Dochartaigh, Hicks, Morgan, & Laporte, 2001)--from less than 25 occurrences per million words at the lowest frequency level to more than 600 occurrences per million words at the highest frequency level; (b) only words that were Welsh-origin words (i.e., not borrowings from English) were included; (c) only words that were pictureable were included. In pilot research, we have found clear effects of word frequency and home language on children's performance at each age on this test. That is, at each age, children generally find the words of higher frequencies easier than those of lower frequencies, and children from only-Welsh homes outperform those from Welsh&English homes, who in turn outperform those from English-only homes.

For our purposes we adapted this test by administering only the least frequent 108 words from the test, in order from more frequent to less frequent. We administered all items from vocabulary item 133 to vocabulary item 240. Respondents were given a raw score out of 240, and this was entered into the SPSS data file.

ANALYSIS OF RESULTS

Welsh and English vocabulary scores were compared with the major factors of the study (language spoken by the child, adult category, language(s) spoken by the mother and father to the child) and the interviewees' responses on questions concerning their own abilities in English and Welsh.

Correlational statistics are shown in Tables 7.1 and 7.2 for the mother interviewees and father interviewees, respectively.

Abilities in each language

It can be seen that the Welsh vocabulary scores correlate highly in the case of both the mothers and fathers with their (self-judged) abilities to speak, understand, read, and write Welsh, as well as with their confidence in Welsh. In the case of the mothers, the Welsh vocabulary scores also correlate negatively with their (self-judged) ability to speak English and their confidence in English.

The English vocabulary scores correlate highly in the case of both mothers and fathers with their (self-judged) abilities to speak and write English, and negatively with their (self-judged) ability to speak Welsh. In the case of the mothers, the English vocabulary also correlates highly with their (self-judged) abilities to read English and with their confidence in English, and negatively with their (self-judged) abilities to write Welsh and their confidence in Welsh.

The vocabulary scores thus appear to reliably measure the abilities of these parents in relation to the two languages.

Adult Categories

The Welsh vocabulary scores also correlate highly for both mothers and fathers with the Adult Categories of the interviewees. The English vocabulary scores correlate positively with the Adult Category for the mothers only. The mean vocabulary scores are shown in Figures 7.1 and 7.2 for Welsh and English, respectively.

Follow-up analyses reveal that in the case of the Welsh vocabulary, the parents who performed best were those who grew up in Welsh-only homes and have Welsh-only-origin partners (Mothers: W-W vs. E-E, $t = 2.38$, $df = 19$, $p < .028$; W-W vs. E-W, $t = 4.11$, $df = 24$, $p < .000$; W-W vs. BIL, $t = 3.75$, $df = 29$, $p < .001$; Fathers: W-W vs. E-E, $t = 3.88$, $df = 16$, $p < .001$; W-W vs. BIL, $t = 2.32$, $df = 13$, $p < .037$; W-W vs. W-E, $t = 2.92$, $df = 23$, $p < .008$). In addition, for mothers, W-E mothers performed better than BIL mothers ($t = 2.05$, $df = 31$, $p < .049$) and for fathers, E-W fathers tended to perform better than E-E fathers, although this was only near-significant ($t = 1.85$, $df = 12$, $p < .089$). If vocabulary ability is indicative of language ability in general, these findings are consistent with the claim that speakers growing up in Welsh-only homes have higher abilities in Welsh, especially if they have Welsh-origin partners. (The latter result is surprising, and suggests that a person's vocabulary abilities are maintained even in adulthood in proportion to the interaction they have with others in that language.)

In the case of English vocabulary, mothers who grew up in Welsh-only homes generally had significantly (or near-significantly) lower performance than those who grew up in English-only homes and were partnered with English-only-origin partners (E-E vs. W-W, $t = 1.93$, $df = 19$, $p < .069$; E-E vs. W-E, $t = 2.18$, $df = 21$,

$p < .041$). Again, the home language of the parent when s/he was growing up significantly predicts vocabulary ability in English. But in this case, performance across groups in English is generally more comparable. The only significant differences entailed parents who grew up in only-Welsh homes versus parents who grew up in only-English homes, and only in the case when the latter were paired with English-only-origin partners. Again, as in the case of the Welsh vocabulary, this last result suggests that the maintenance of a vocabulary continues through adulthood in proportion to the interaction with others in English.

Language(s) Spoken by the Children

There are also significant correlations between the mothers' Welsh and English vocabulary scores and the language(s) the target child speaks and between the fathers' Welsh scores and the child's language(s). The mean vocabulary scores for Welsh and English are broken down by the language(s) spoken by the child and the mother and father interviewees in Figures 7.3 and 7.4.

Follow-up tests reveal that children who speak only Welsh have mothers with lower English vocabularies and fathers with higher Welsh vocabularies than children who speak only English or both Welsh and English (all pair-wise t 's > 2.44 , p 's $< .024$)⁴, and they have mothers with higher Welsh vocabularies than children who speak both Welsh and English, $t = 2.74$, $df = 54$, $p < .008$.

Again, these results confirm a relationship between the parent's abilities in the two languages, especially Welsh, and the language(s) the child is learning to speak.

Language(s) spoken by the Mother and Father to the Child

The correlations in Tables 7.1 and 7.2 also show a significant correlation between Welsh vocabulary scores and the language(s) spoken by the mother and father to the child. (There is no comparable correlation for the English vocabulary score.) Parents' mean vocabulary scores for Welsh and English are shown according to the language(s) they speak to their children in Figures 7.5 and 7.6. Follow-up tests reveal a significant difference in the Welsh scores of mothers who speak always Welsh and mostly English, $t = 4.48$, $df = 52$, $p < .000$, and those of fathers who speak always Welsh and either mostly English or Welsh and English, $t = 2.31$, $df = 30$, $p < .028$, and $t = 2.97$, $df = 29$, $p < .006$. [It should be noted that t tests could not be conducted comparing the 'always English' groups with the others, because there was only 1 mother and only 1 father who spoke 'always English' to their children. Similarly, there were only 2 fathers who spoke 'mostly Welsh' to their children.]

⁴ Mothers' English: W child $<$ E child, $t = 2.44$, $df = 19$, $p < .024$; W child $<$ W&E child, $t = 2.59$, $df = 54$, $p < .012$; fathers' Welsh: W child $>$ E child, $t = 2.76$, $df = 12$, $p < .017$; W child $>$ W&E child, $t = 2.64$, $df = 34$, $p < .012$.

SUMMARY AND IMPLICATIONS

These data provide independent evidence for the validity of the results and inferences drawn from the Interviews and the Written Questionnaires. Namely,

- (1) These data provide an independent measure of parents' abilities with Welsh and English, and they correlate highly with parents' own assessments of their abilities in these two languages. This means, first, that the parents' judgments in the interviews and questionnaires provide a valid reflection of their real abilities. Secondly, they indicate that correlations involving parents' language abilities reflected in the interview and questionnaire analyses have valid bases.
- (2) These data also provide independent corroboration for the correlations between parents' abilities in their two languages and (a) the languages they experienced in their homes when they were growing up as children (i.e., their 'Adult Categories'), (b) the language(s) spoken by their children, and (c) the languages they speak to their children. They suggest further that it is abilities in Welsh that are most important in determining the last of these--i.e., the language(s) they speak to their children.

Beyond corroborating the findings of the previous chapters, these data provide one other enticing window into language abilities in adulthood: That is, that language abilities in adulthood are maintained through continual use of the languages in question. The parents with the highest scores for Welsh were parents not only with Welsh-only backgrounds, but ones with Welsh-only background partners; those with the highest scores for English were parents with English-only backgrounds with English-only-background partners. These results are interesting in their own right and are worthy of further study.

POLICY RECOMMENDATIONS

In general there are no additional policy recommendations arising from these data, as they are intended to support the findings of previous chapters. However, we can add one recommendation arising specifically from these data:

PR 23. Language maintenance in the individual may well be a life-long process. The Welsh Language Board should design and encourage programmes in which Welsh-speaking adults--particularly those with limited contacts with other Welsh-speaking adults--can interact with other Welsh speakers. Again, the ideal would be programmes encouraging informal contacts based on, e.g., the pursuit of pleasurable activities and recreation.