

A comparative analysis of measures of language proficiency in EB and national surveys

Pádraig Ó Riagáin
Trinity College Dublin, Ireland

1. Introduction

Measures of Language Proficiency (LP) index cultural capital and/or ethnic affiliation.

While many national and multi-national surveys include an LP measure, there is no internationally accepted standard.

In practice, 'researchers use their own *ad hoc* measures (...)' (Heath & Martin 1997).

Although a large corpus of empirical data is available, to date the differences in LP survey measures have not been evaluated.

This study compares the effect of differences in LP question design on survey findings in selected EB and national surveys.

The analysis highlights defects in EB measures of LP, and proposes some changes.

2. Data sources

Irish was chosen as the target language because relevant data is available across a range of international, national and census surveys. These include:

- Eurobarometer: EB54LAN (2000), EB 63.4 (2005a), EB 64.3 (2005b) & EB77.1 (2012) (Ireland sample)
- ISSP (National Identity module) 2003-4 (Ireland sample)
- Ireland: *Census of Population* (2002, 2011)
- Foras na Gaeilge (FnaG): *National Language Surveys* (2001 & 2013).

3. The Eurobarometer Surveys

(a) The Question

The question concerns just one language skill – speaking. The LP question is, effectively, a filter question with 3 parts. The question concludes with a 3-level ordinal scale. The EB question was changed twice.

Table 1: LP Questions in EB Surveys 2000-2012.

EB 54LAN(2000)	EB 63.4 & EB 64.3(2005)	EB 77.1 (2012)
What is your Mother Tongue?	As 2000	Thinking about the languages that you speak, which language is your mother tongue?
What other languages do you speak?	Which languages do you speak well enough in order to be able to have a conversation, excluding your mother tongue?	And which other languages, if any, do you speak well enough in order to be able to have a conversation?
Is your (other language) very good, good, or basic?	As 2000	As 2000

(b) The Results

The structure of the question implies that composite results form a scale.

Table 2: EB Surveys: Summary of responses re Irish.

Proficiency Levels in Irish	2000	2005a	2005b	2012
	%	%	%	%
Irish is 'Mother Tongue'	15	9	11	3
Irish is an 'Other' language				
Very Good	5	3	1	3
Good	9	7	4	8
Basic	25	11	4	11
Unable to 'hold conversation' in Irish	46	70	80	75
Total	100	100	100	100

Table shows % of mother tongue speakers in sharp decline. But % at lowest point has greatly increased.

Question: Do these trends represent real change or methodological artifacts?

4. The Problem with Filter Questions in EB Surveys

(a) LP in Mother Tongue

The term 'mother tongue' is ambiguous (Davies & Bentahila 1989). Responses prior to EB 77.1 are erratic and out of line with national surveys.

Thus, around 10% of respondents screened out in error. Question change in EB 77.1 (2012) is a clear improvement.

Table 3: Estimates of Native & Early Childhood Speakers of Irish.

Source	Measure	%
Census 1946-90	Average % pre-school Irish-speakers (3-4 yr. cohort)	5
FnaG 2001	(% 'native-speaker')	2
FnaG 2013	(% 'native-speaker')	3

(b) LP in Other Languages

This filter question is dichotomous.

The EB series, and other surveys/censuses offer a variety of dichotomous questions.

Table 4: EB and Other Dichotomous Measures of LP in Irish.

Source	Question	%
ISSP (2003)	Languages spoken 'well'?	16
EB (2012)	Other language spoken 'well enough' to converse?	22
Census (2011)	Can 'x' speak Irish?	37
EB (2000)	Other languages spoken?	39
Census (2002)	Can 'x' speak Irish?	41
FnaG (2013)	Speak at least 'few simple sentences'?	58

Respondents are clearly very sensitive to variations in question wording.

Also, research has shown that respondents with middling levels of LP find dichotomous questions difficult, and answers are inconsistent (Ó Riagáin 1997).

Thus, differences between EB survey findings (Table 2) are in large part due to changes in the question.

N.B. The stronger worded question (EB 63.4 and later) excludes nearly three quarters of the sample from the final ordinal question.

5. The Problem of Levels and Labels

The EB question concludes with a 3-point scale, labeled 'very good/good/basic.

While the upper end of the scale is divided (Very good/good) the lower end is not.

Current thinking would suggest that a longer scale, with more explicit labeling of response categories is preferable (Saris & Gallhofer 2014).

The FnaG national surveys use a 6-point scale.

The response labels are more explicit than the EB surveys, and reflect the 'can do' approach prominent in language testing (Jones & Saville 2008).

The question is not subject to any filters, so the question is put to the full sample.

Table 5: Example of 6-point Ordinal Measure of LP in Irish (FnaG National Survey 2013).

Q. How would you rate your own ability to speak Irish?	2001	2013
	%	%
1. Native Speaker	2	3
2. Most conversations	12	9
3. Parts of Conversations	24	22
4. Few Simple Sentences	23	24
5. The Odd Word	28	30
6. No Irish	10	12
Total	100	100

In total contrast to the EB surveys (Table 2), the FnaG surveys suggest a relatively stable situation across all LP levels.

5. Conclusions

This analysis was limited to data relating to Irish and conclusions are thus provisional.

With that proviso, the evidence indicates that the EB measure of LP is neither reliable nor valid.

Question changes in EBs had a substantial impact on survey findings. Current filters screen out 75% of sample, with a significant loss of information.

It is suggested that the EB measure of LP would be improved with an unfiltered question and a longer scale.

The issue when or where LP was acquired is a separate issue.

In the longer term, there is a compelling case to develop multi-item measures of LP (Heath & Martin 1997), perhaps drawing on developments in language testing (Bachman & Palmer 2010).

Acknowledgments

The financial support of Foras na Gaeilge, Dublin for this study is acknowledged. The data used in the research was accessed from GESIS, the Irish Data archive (ISSDA) and Foras na Gaeilge.

Further information

Prof. Pádraig Ó Riagáin, CLCS, Trinity College Dublin, Dublin 2
Email: oriap@tcd.ie

References

1. Bachman L., & A. Palmer (2010) *Language Assessment in Practice*. Oxford: Oxford University Press.
2. Davies, E., & A. Bentahila (1989) 'On Mother and Other Tongues: The Notion of Possession of a Language'. *Lingua*, 78(4), 267-293.
3. Heath, A., & Martin J. (1997) 'Why are there so few formal measuring instruments in Social and Political Research', in Lyberg L. et al. (eds.) *Survey Measurement and Process Quality*. New York: Wiley, 71-86.
4. Jones N., & N. Saville (2008) 'Scales and Frameworks', in Spolsky B. & F. Hult (eds.) *The Handbook of Educational Linguistics*. Oxford: Blackwell.
5. Ó Riagáin, P. (1997) *Language Policy and Social Reproduction: Ireland 1893-1993*. Oxford University Press: Oxford.
6. Saris, W., & I. Gallhofer (2014) *Design, Evaluation and Analysis of Questionnaires for Survey Analysis* (2nd Ed.). Hoboken, NJ: Wiley.