



McGill



Second and third language acquisition in different language communities: implications for the identification and treatment of DLD

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Two main themes of this presentation

- Research on variables that impact bilingual acquisition
- Research in Montreal where 2 majority languages co-exist
- Effects of amount and timing of exposure
- Assessment methods derived from these
- Research on the impact of specific linguistic contexts
- Research on L1 and L2 learners of Icelandic who learn in a complex bilingual and trilingual context created by incidental English
- Bilingual outcomes in adolescence
- Time course of early L2 acquisition by immigrants





- The Montreal context makes it possible to isolate the effect of AMOUNT OF EXPOSURE:
- Vary amount of exposure to French and English
 - 0 to 100%
- Equate children on SES, language status, age
- 3 year olds (n=56)
- 5 year olds (n=84)
- Grade 1 (7 year-olds, n= 68)
- Grade 3 (9-year-olds, n=64)
- N=272

Vocabulary:

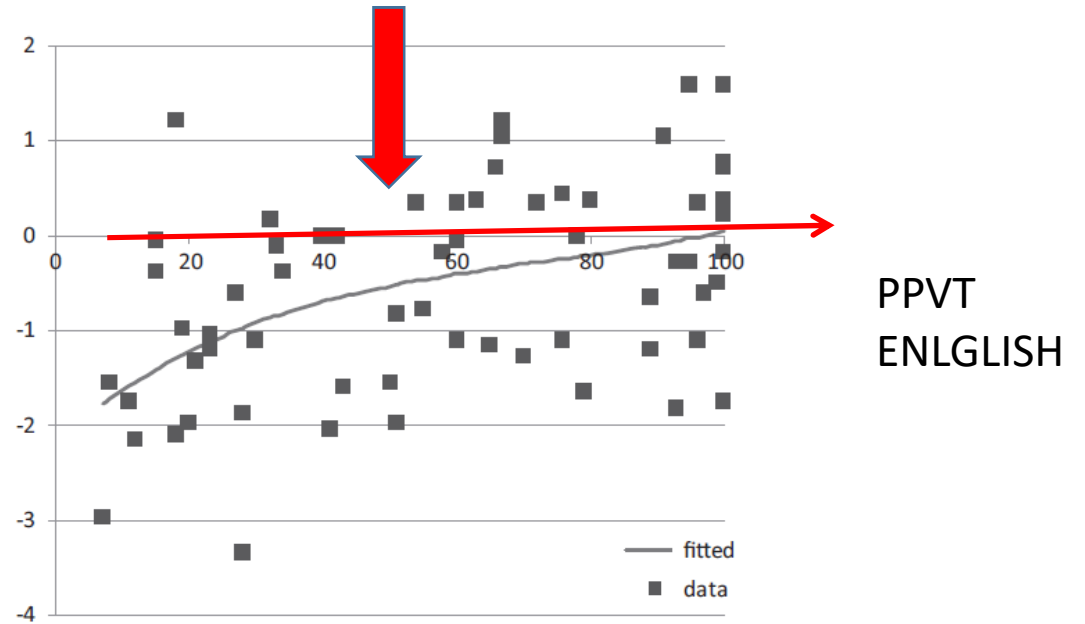
- Strong effect of amount of input
- At age 3 years and age 5 years:
 - 50% exposure or greater exposure yields scores that do not differ significantly from those of monolinguals in either language
- Simultaneously bilingual preschool children should score within or close to the normal monolingual range in **at least one language**, or in both
- Also means that below normal scores in BOTH languages is a **strong sign of DLD**
- Elin Thordardottir, 2011, IJB; Brandeker & Elin Thordardottir, 2015, AJSLP

5-year-olds

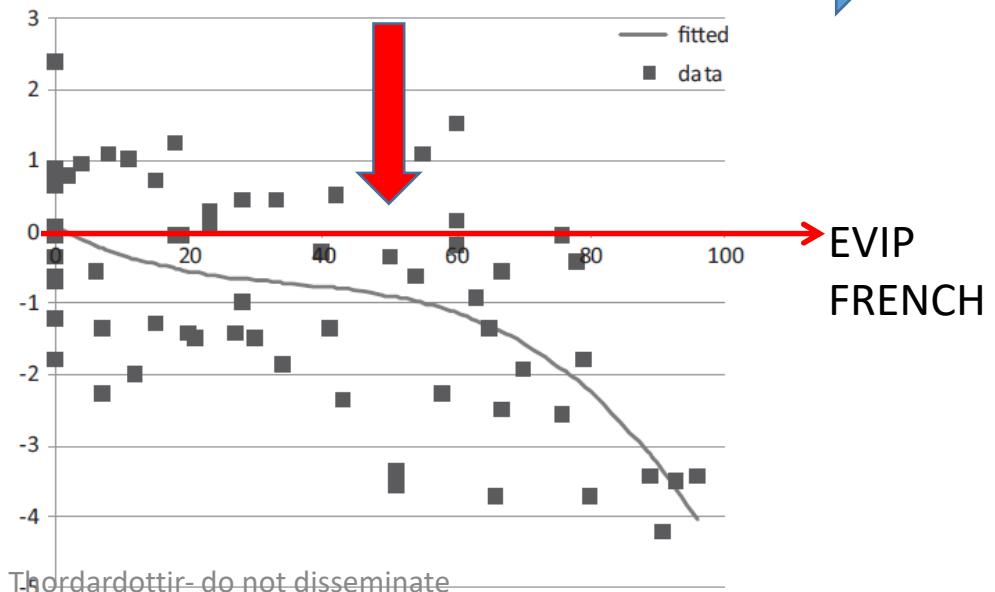
Receptive vocabulary
(PPVT – EVIP)

Elin Thordardottir,
2011, *International
Journal of Bilingualism*

→ MEAN OF MONOL,

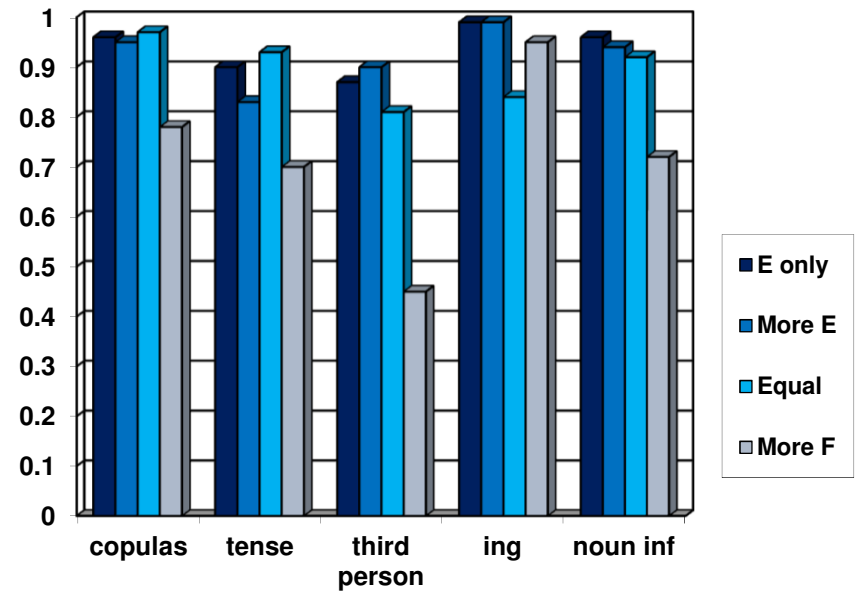
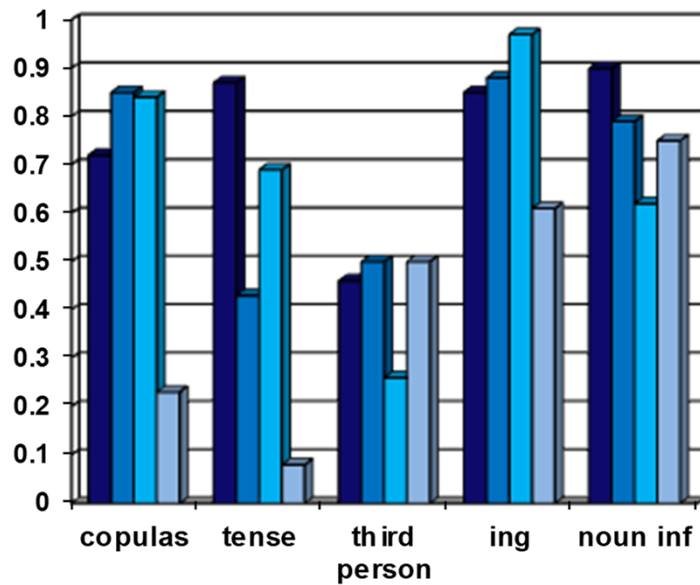


% ENGLISH OVER LIFETIME

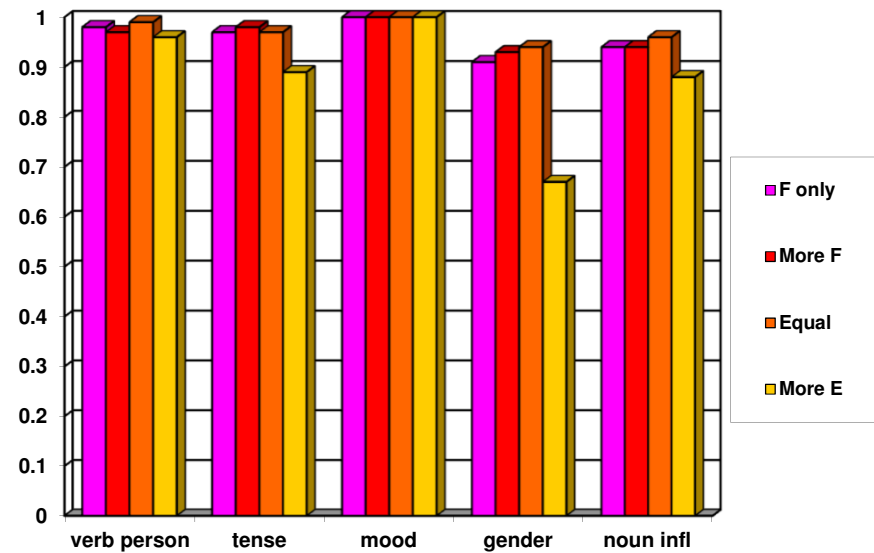
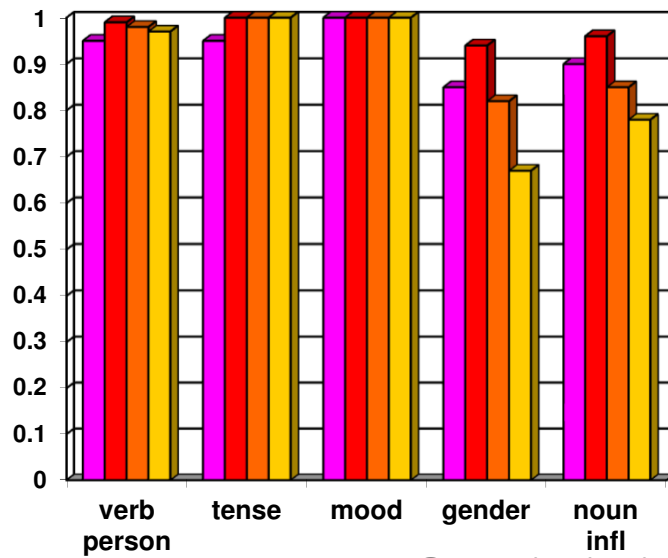


AGE 3 ACCURACY OF USE OF MORPHOLGY AGE 5

ENGLISH

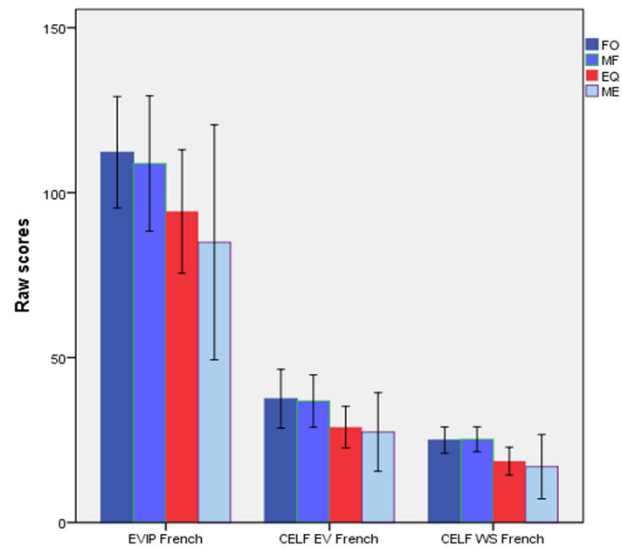


FRENCH



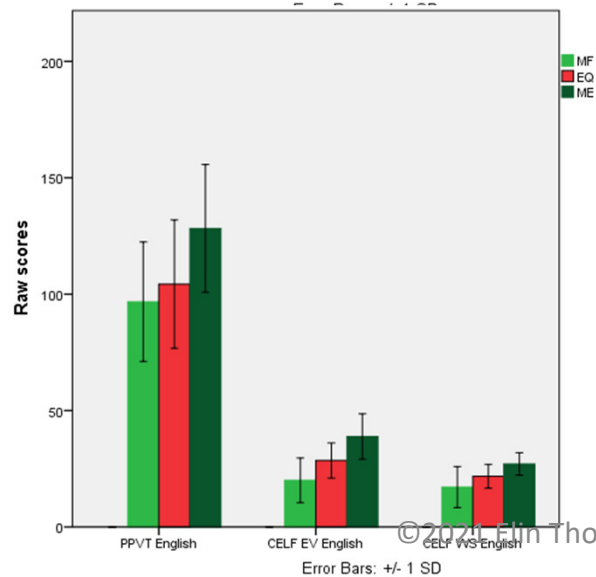
Schoolage: Performance in French and English

French



Bilinguals with equal exposure are in red
 A darker blue means more exposure tp French
 A darker green means more exposure to English

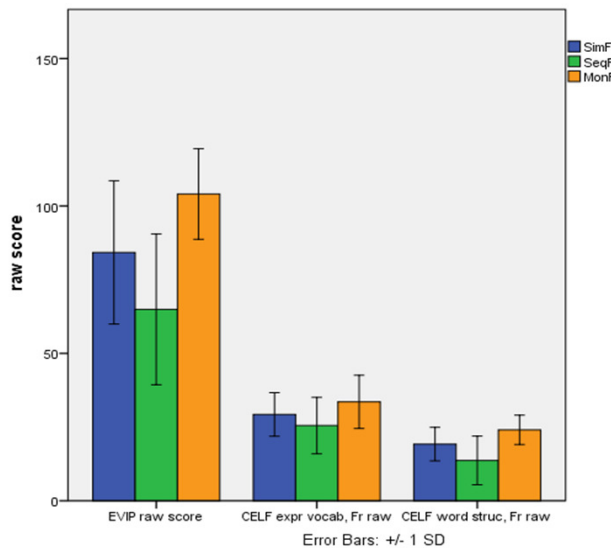
English



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Elin Thordardottir, 2019, *IJB*

Simultaneous and sequential bilinguals, a useful distinction?



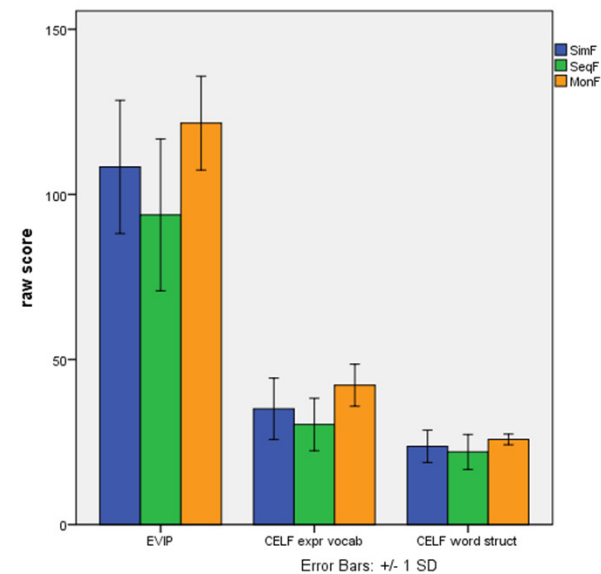
Grade 1

EVIP: all groups sign. diff.

CELF-EV: SeqF < Mon

SimF = Mon

CELF WS: all groups sign. diff



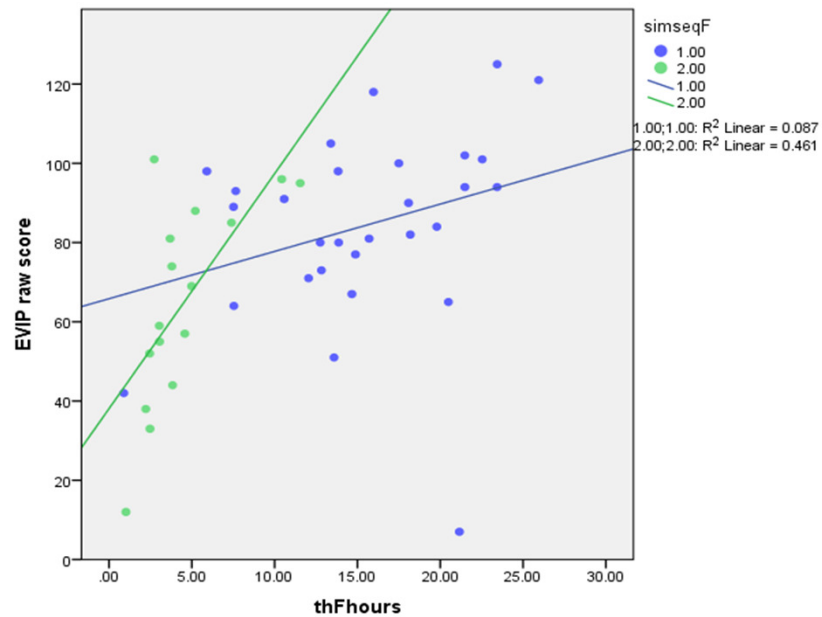
Grade 3

EVIP: all groups sign diff

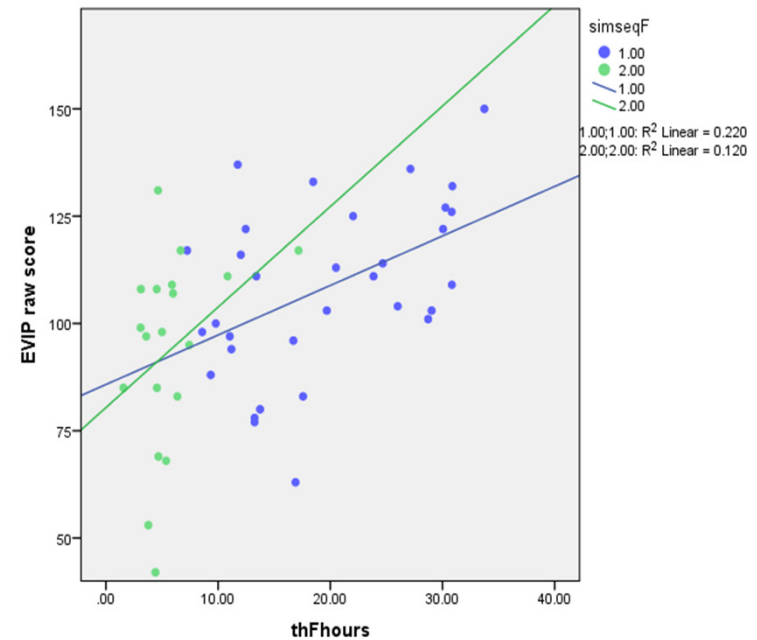
CELF EV: simF = seqF < Mon

CELF WS: no sign diff

RECEPTIVE VOCABULARY



Grade 1



Grade 3

Elin Thordardottir, 2019; *IJB*

Table 3. Raw regression coefficients (B) for the predictor variable thousands of hours of exposure for each of the language measures (EVIP, CELF-EV and CELF-WS) for SimF and SeqF groups of children, in grade 1 and grade 3.

	Grade 1				Grade 3			
	SimF	SeqF	<i>t</i>	<i>p</i>	SimF	SeqF	<i>t</i>	<i>p</i>
EVIP	1.19	5.93	2.269	.029	0.40	2.34	.831	.410
CELF EV	0.54	1.33	1.092	.281	0.48	0.24	-.237	.814
CELF WS	0.46	1.99	2.978	.005	0.37	0.29	-.128	.899

Main results from Montreal studies

- Preschool years:
- Amount of exposure to each language:
 - Has a strong influence on rate of acquisition
 - Has a much greater influence than AoA
 - Affects both vocabulary and grammar strongly
 - Kids need 40-60% exposure to perform similarly to monolinguals in a language (Elin Thordardottir, 2011, IJB)
 - Amount of exposure has little effect on nonword repetition (Elin Thordardottir & Brandeker, 2013)
- In the school years:
 - Amount continues to be a very important determinant of acquisition rate
 - Learning is fastest in the period immediately following first exposure to the L2
- Elin Thordardottir, 2011 IJB, 2015 IJSLP, 2019 IJB, 2014 TiLAR Series Book
- Elin Thordardottir & Brandeker, 2013 JCD, Brandeker & Elin Thordardottir, 2015 AJSLP

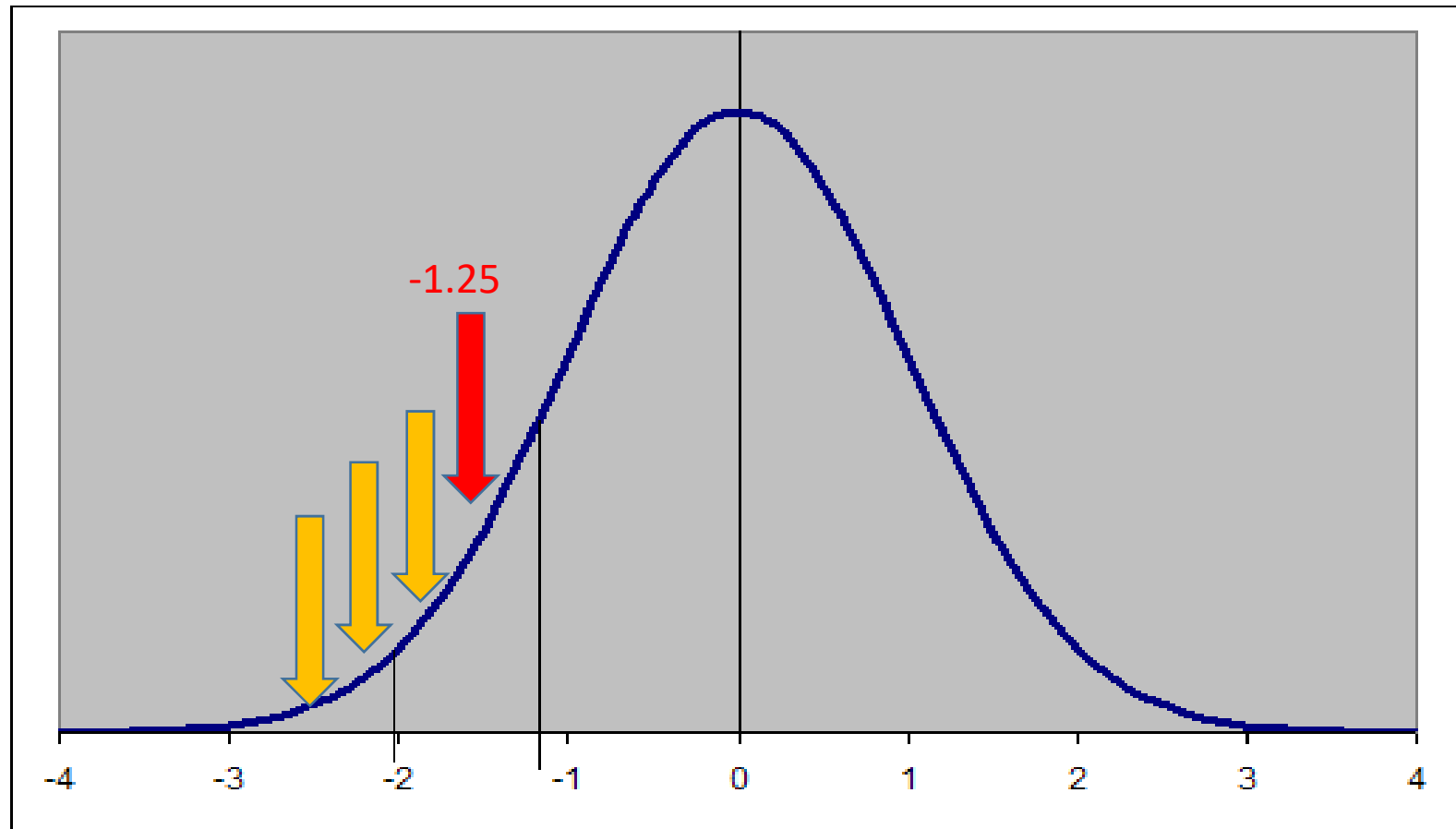
Implications for bilingual assessment

- The lawful relationship between amount of exposure can be used to:
- modify the interpretation of test outcomes based in individual exposure history
- Estimate the probability of the presence of a language impairment even when formal testing can only be done in one language
 - Testing of both languages remains the best practice when it can be accomplished
- Use of nonword repetition scores to assess the presence of DLD
 - NWR sensitive to DLD, not sensitive to

Assessment guidelines proposed within COST Action IS0804 when using existing standardized tests

- Elin Thordardottir (2016). Proposed diagnostic procedures and criteria for Cost Action Studies on Bilingual SLI. In Armon-Lotem, S., J. de Jong & N. Meir (Eds)., *Methods for assessing multilingual children: Disentangling bilingualism from language impairment*. Bristol, UK: Multilingual Matters.
- Proposed method for assessment of simultaneous bilingual preschool children
- Permits an estimation of the presence of DLD even when only one language can be assessed formally

Cut-off criteria for the identification of language impairment



Input matters:

Huttenlocher et al. , 1991

Hart & Risley, 1995

Pearson, 2006; Elin Thordardottir, 2011; 2015

Hoff, 2003,

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Child referred from a clinic, a school, identified by screening? Document the procedure you are using			
Case history and background information collected (interview and/or questionnaire) Assessment of level and type of handicap			
SELECT FROM THE OPTIONS BELOW THE ONE THAT APPLIES TO YOUR SITUATION:			
1. FORMAL TESTS AVAILABLE in dominant or weaker lang.	2. TRANSLATED TESTS with no norms for target language	3. NO FORMAL TESTS, but diagnostic tradition in place	4. NO DIAGNOSTIC TRADITION
<p>Cut-off criteria:</p> <p>Monol: - 1.25 SD Dom. Lang.: -1.5- 1.75 SD Balanced:- 1.75- 2.0SD Weaker lang: -2.25-2.5 SD In 2 areas of language</p> <p>Collect detailed descriptive information on language level and case history information</p>	<p>Treat the test as informal assessment and use for descriptive purposes only. Do not refer to norms for the original language of the test. Go to option 3.</p>	<p>Use the diagnostic decision of experienced professionals. Document the basis for the decision.</p> <p>Collect detailed descriptive information on language level and case history information</p>	<p>Use the concept of significant difficulty in language with no other formal diagnosis or significant difficulty.</p> <p>Collect detailed descriptive information on language level and case history information</p>
Collect language sample (in both languages if applicable)		Collect language sample (in both languages if applicable)	Collect language sample (in both languages if applicable)
Administer NWR (in	by any means	Administer NWR in	Administer NWR (in

SELECT FROM THE OPTIONS BELOW THE

1. FORMAL TESTS AVAILABLE in
dominant or weaker lang.

Cut-off criteria¹:

Monol: -1.25 SD

Dom. Lang.: -1.5 to -1.75 SD

Balanced: -1.75 to -2 SD

Weaker lang: -2.25 to -2.5 SD

In two areas of language

Collect and report detailed
descriptive information on language
level and case history information

Collect language sample (in both
languages if applicable)

Administer NWR (in both languages if
applicable)

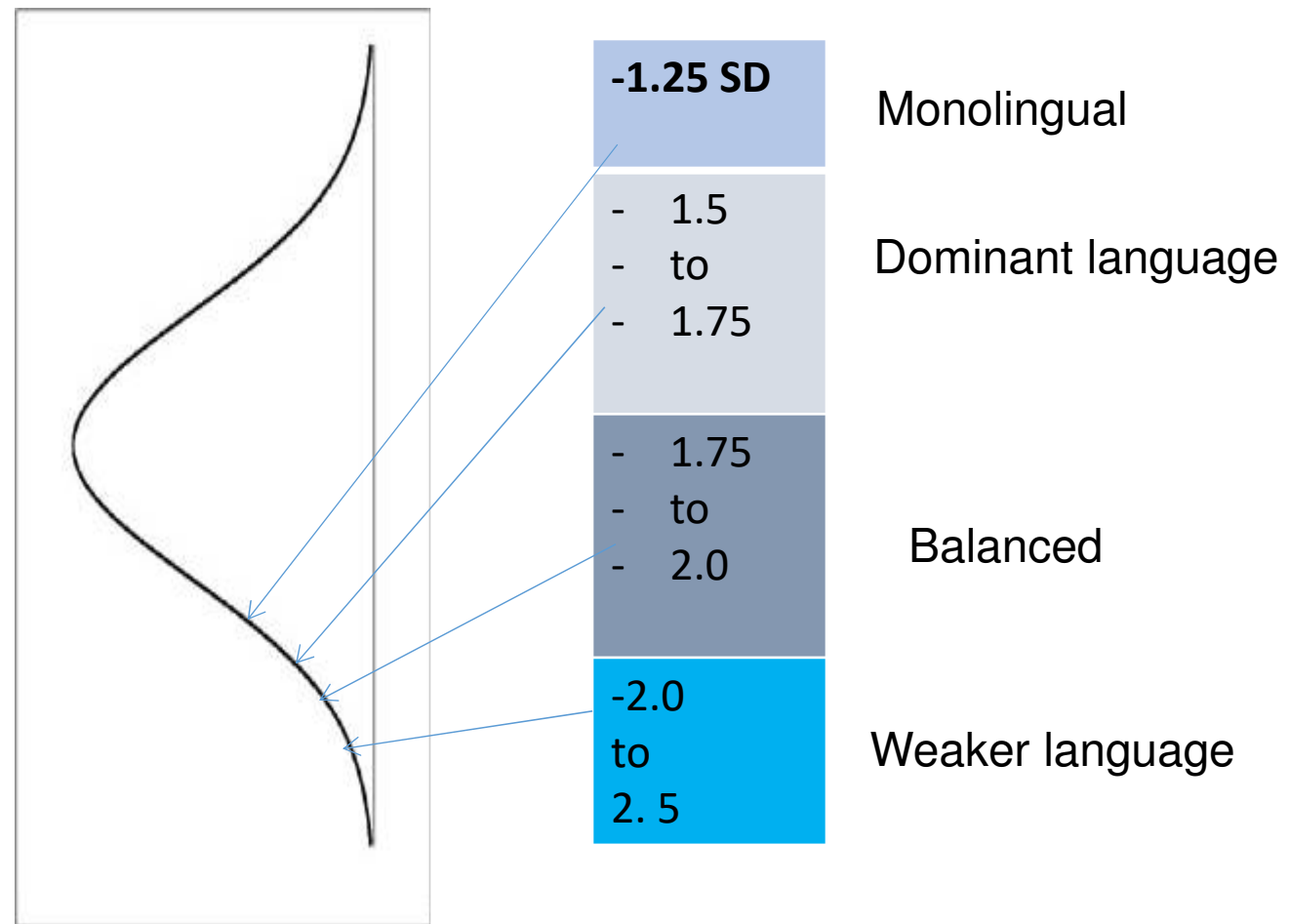
Hearing screening

Non-verbal cognition

Modified interpretation of test results

Bisli Cost Action Procedure

Elin Thordardottir, 2016



PRE TREATMENT Z SCORES RELATIVE TO MONOLINGUAL FRENCH SPEAKE

	EVIP rec voc	TACL rec	NWR	
2	-0.8	+.21	65	
3	-2.7	-0.7	73	
5	-1.33	-1.69	-	
7	-3.9	-3.46	61	
10	-3.55	-1.72	57	
11	-1.84	-0.45	68	
12	-2.19	-1.07	74	
14	-3.47	-3.7	68	
1	-1.39	-2.1	65	
4	-2.7	-3.3	38	
6	-1.9	-1.4	76	
8	-2.55	-1.58	43	
9	-4.57	-3.39	90	
13	-3.22	-2.87	65	
15	-0.52	+0.04	61	

Elin Thordardottir
& Eve-Julie Rioux
(2019, *Folia
Phoniatica et
Logopaedica*)

PRE TREATMENT Z SCORES RELATIVE TO MONOLINGUAL FRENCH SPEAKE

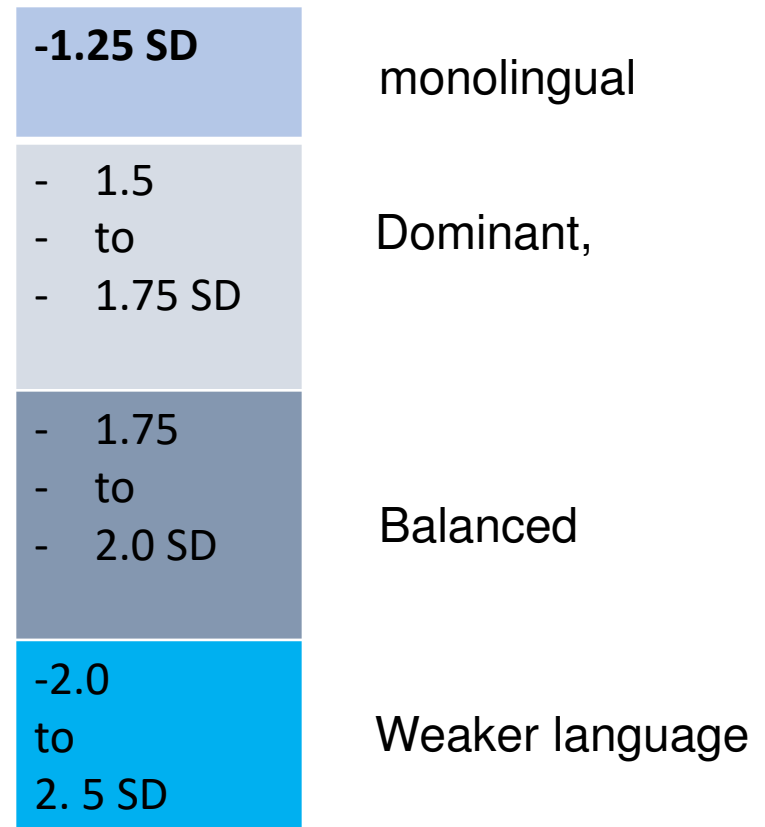
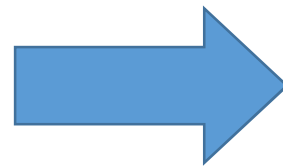
	EVIP rec voc	TACL rec	NWR	
2	-0.8	+.21	65	B
3	-2.7	-0.7	73	W
5	-1.33	-1.69	-	W
7	-3.9	-3.46	61	B
10	-3.55	-1.72	57	B
11	-1.84	-0.45	68	B
12	-2.19	-1.07	74	D
14	-3.47	-3.7	68	D
1	-1.39	-2.1	65	B
4	-2.7	-3.3	38	W
6	-1.9	-1.4	76	W
8	-2.55	-1.58	43	M
9	-4.57	-3.39	90	W
13	-3.22	-2.87	65	D
15	-0.52	+0.04	61	M

Elin Thordardottir
& Eve-Julie Riou
(submitted)

Participant 5

EVIP: -1.33
TACL – 1.69
NWR -

Exposure to
French: less
Than 40%
Weaker language

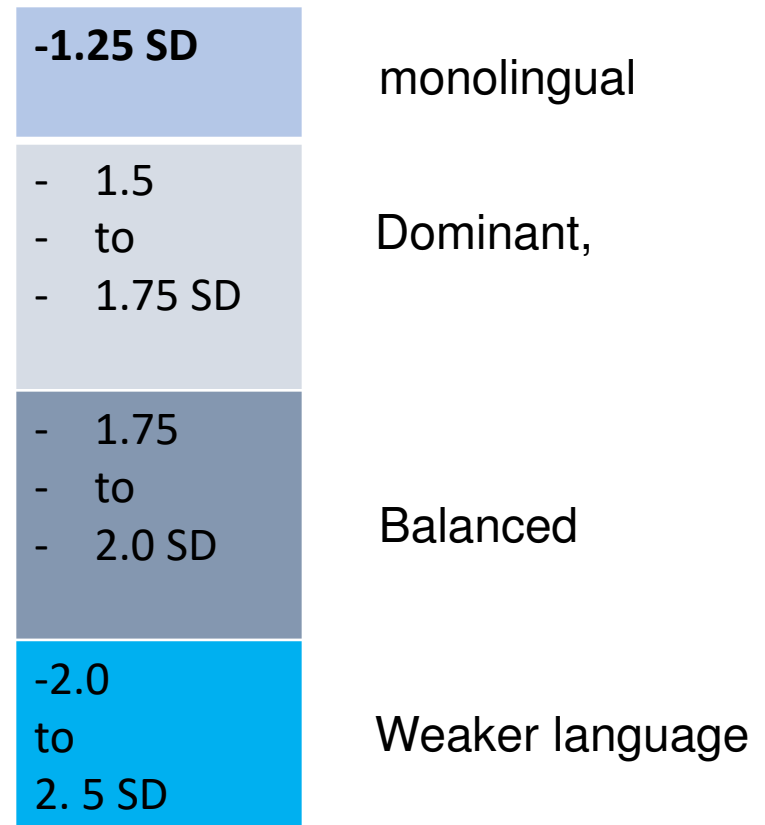
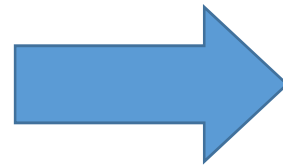


Scores are not in the range of language impairment

Participant 12

EVIP: -2.19
TACL – 1.07
NWR - 74

Exposure to
French: more
Than 50%
Dominant language



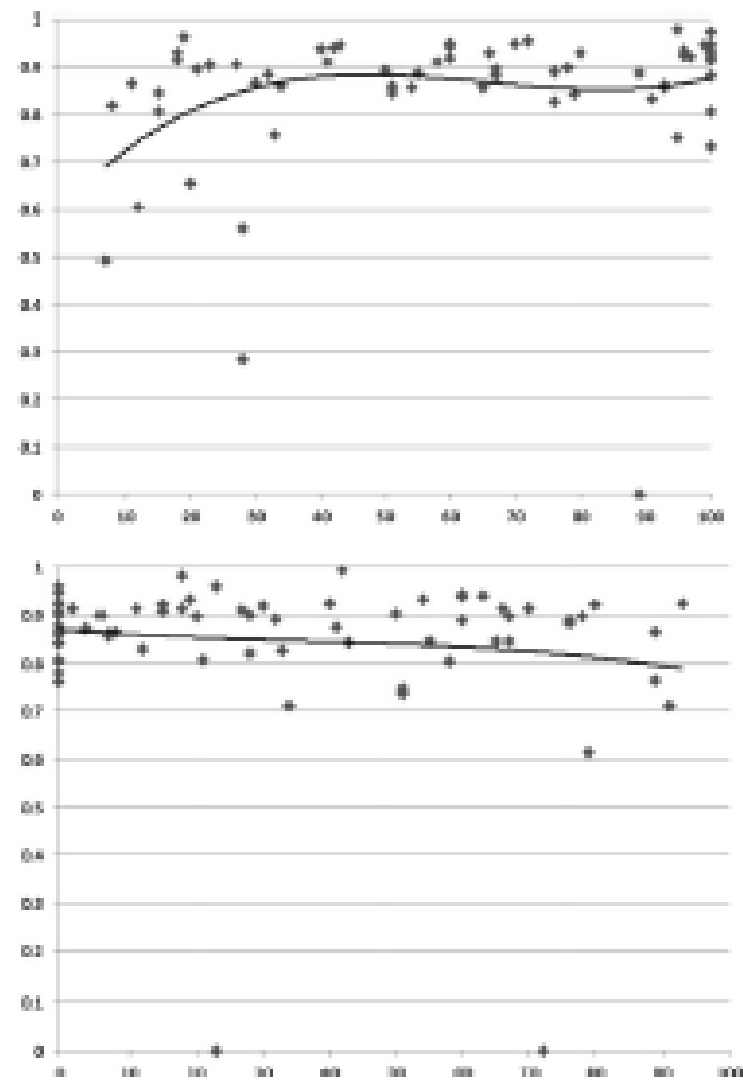
Scores are in the range of language impairment

Estimation of the appropriate cut- off point based on background factors

- Advantage: permits an estimation of the child's diagnostic status, even when formal assessment can only be done in the weaker language
- Assessment in both languages is of course still recommended for a full assessment

Nonword repetition by bilingual children

- Nonwords are not language-free
- They are shown to be affected by children's level of **bilingualism** (Thorne & Gathercole, 1999; Kohnert, Windsor & Yim, 2006; Gutierrez-Clellen & Simon-Cereijido, 2010) **in L2 learners**
- **BUT** other studies find nonword repetition to be less influenced by amount on input than language **knowledge tasks** (Elin Thordardottir & Anna Gudrun Juliusdottir, 2010; Elin Thordardottir, 2010, Elin Thordardottir & Brandeker, 2013; Elin Thordardottir, 2020; Boerma et al., 2016)

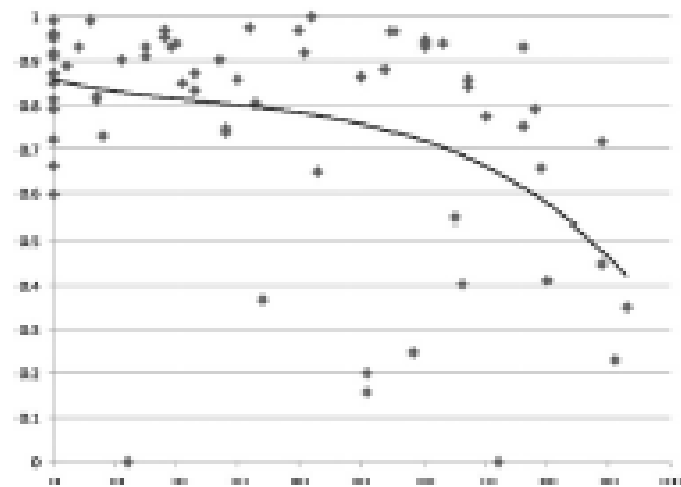
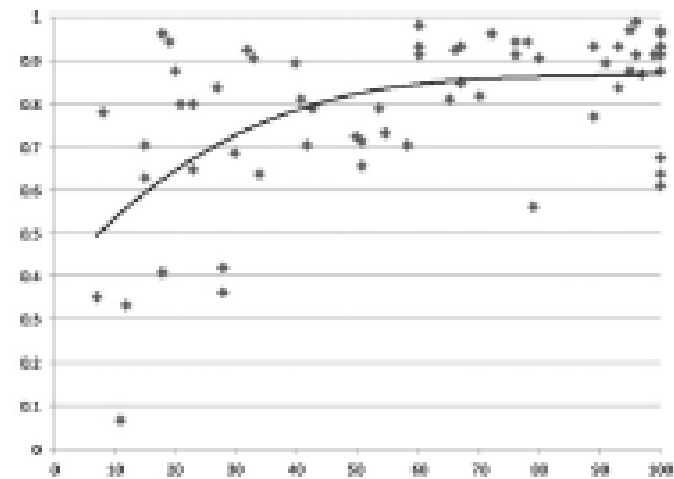


Word lengths in English (top panel) and in French (bottom panel) as a function of word frequency

Elin Thordardottir & Brandeker, 2013

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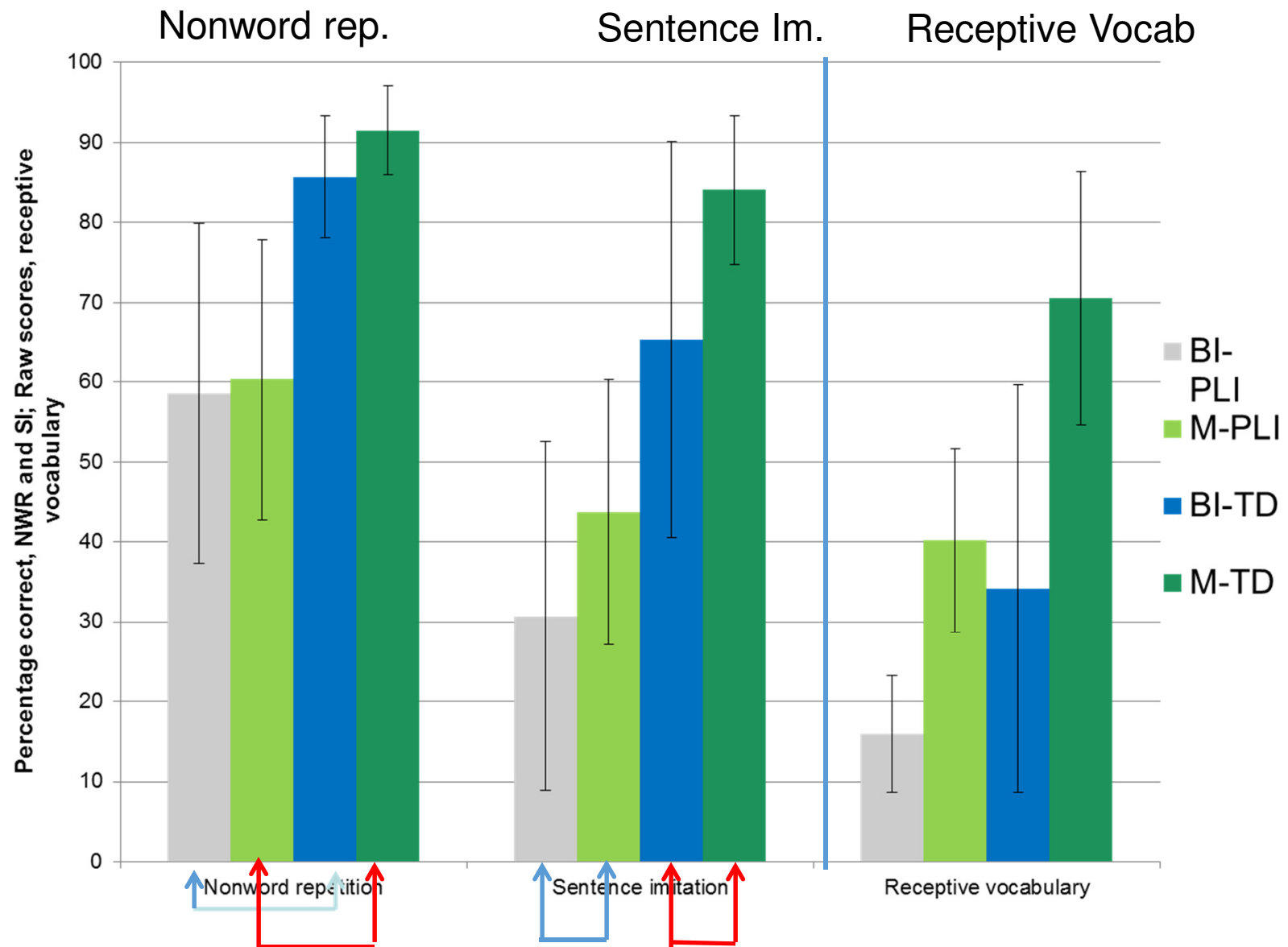
Elin Thordardottir, M. Branderker, *Journal of Communication Disorders* 46 (2013) 1–16



receptive vocabulary (Pawley, Garsen, & Branderker, 2013) and the word form (the receptive vocabulary) and the word form (the receptive vocabulary) and the word form (the receptive vocabulary)

Elin Thordardottir & Branderker, 2013

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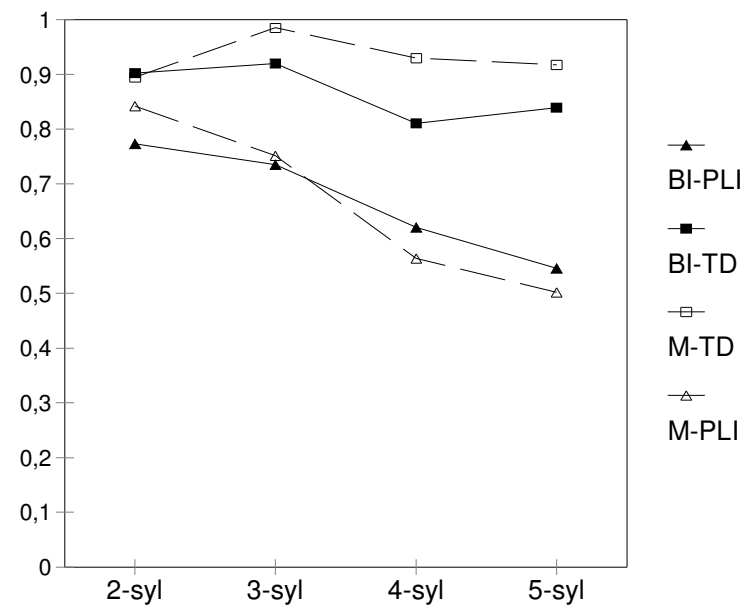


Effect of diagnosis

Effect of bilingualism

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Elin Thordardottir & Brandeker, 2013, *JCD*



Elin Thordardottir & Brandeker, 2013, JCD

Nonword repetition scores of Icelandic L1 and L2 speakers in 3 age groups

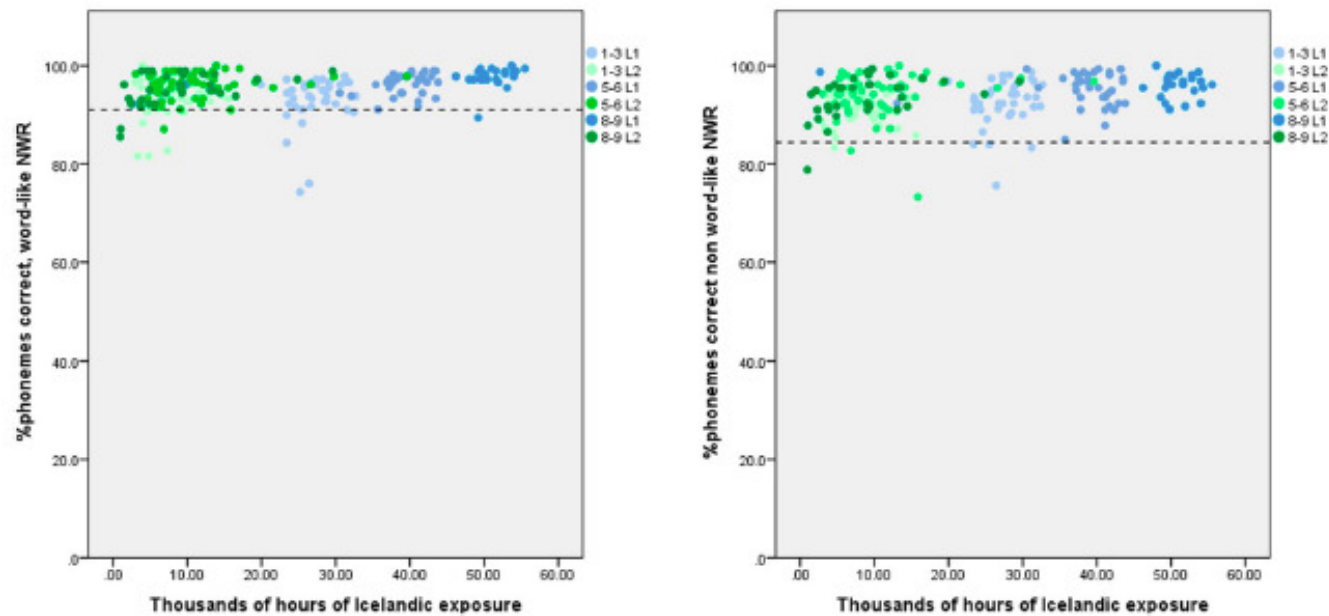


Figure 4. Percent correct scores on NWR for word-like nonwords (left panel) and non word-like nonwords (right panel) for L1 speakers and L2 speakers. Age groups are represented in progressively darker shades of blue for L1 speakers and green for L2 speakers. The horizontal lines indicate the mean NWR scores for each list obtained by native Icelandic 9-year olds (grade 3) with L1 (Elin Thordardottir 2008).

Elin Thordardottir, 2020, *IJBEB*

- Many tests of nonword repetition are available in English and French and in various other languages
- They are generally available in published articles
- Some nonword repetition tests are available that are developed to be used with a particular language combination (Gonzalez & Nadig).
- Within COST-Action IS0804 (Bi-SLI), in a series of LITMUS tests, a non-word repetition test designed to be quasi-universal was developed (Dos Santos & Ferré, 2018; Chiat, 2015; Boerma et al., 2015). The test still needs some adjustment for particular languages

To summarize

- For children that have had significant bilingual or multilingual exposure, this must be taken into account in assessment
- Always try to assess all the languages
- Attempt to estimate the amount and type of exposure received in each language
- Attempts to understand the types of difficulties encountered in each language
- These difficulties may differ because of structural differences between the languages, by different communicative needs in each language, different motivation and more

The effect of particular linguistic contexts

- The linguistic context of Montreal allows the natural isolation of the variables of AMOUNT and TIMING of bilingual exposure
- In most other linguistic contexts, bilingualism and multilingualism are confounded with a number of other variables, such as SES
- Even though these variables can be partialled out statistically, they remain a reality that impacts the language learning of children



L2 speakers of Icelandic

- Immigration is a recent phenomenon in Iceland (last 15 to 20 years)
- Currently, 10-15% of permanent residents of Iceland have an L1 other than Icelandic (Statistics Iceland)
- This has prompted school boards to quickly develop policies for assistance with Icelandic as L2 learning

Linguistic context of Iceland

- Official language: Icelandic
- Children are taught English and Danish starting elementary school
- Most Icelanders possess some fluency in one or more other languages (Danish or other Scandinavian language and English)
 - But without viewing themselves as “bilingual”
- The presence of English in the country has increased (TV, music, internet) Arnbjörnsdóttir & Ingvarsdóttir, 2018)



Cross-sectional group study

In collaboration with Reykjavik School Board
Skóla- og frístundasvið

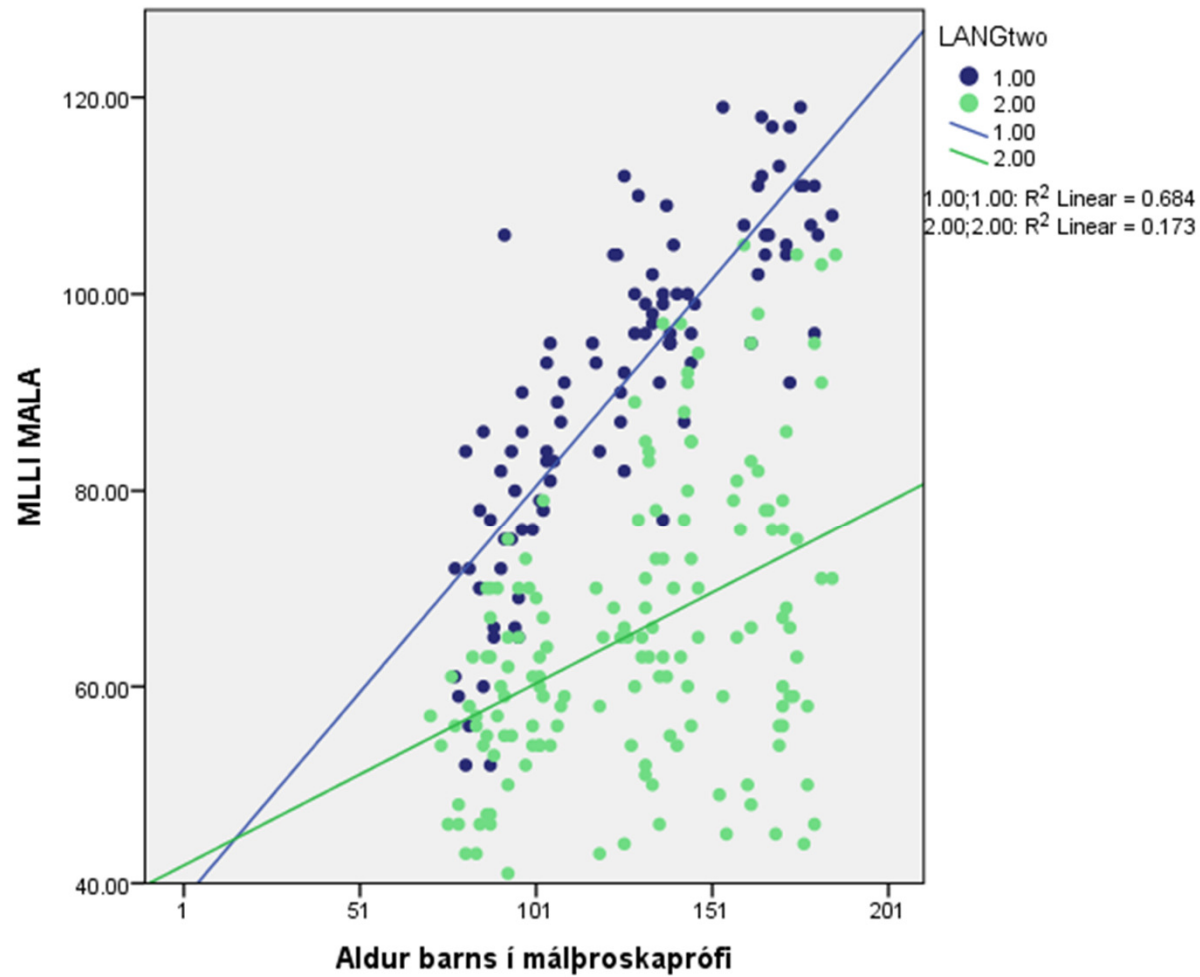


L1	Grades 1-3	Grades 5-6	Grades 8 -9
Icelandic	40	37	25
Tonal lang. Vietnamese, Chinese, Thai	18	21	18
Non-tonal Polish, Russian, Ukrainian, Slovenian, Tagalog, Cebuano	41	33	28

TEST OF ICELANDIC: **MILLI MÁLA** (Elin Thordardottir, 2011; 2018)

Elin Thordardottir, 2013; 2020 *IJBEB*

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Total Milli mál score as a function of age 6 to 16 years, Icelandic as L1 speakers (blue); Icelandic as L2 speakers (green)

Elin Thordardottir, 2020, *IJBEB* ©2021 Elin Thordardottir- do not disseminate by any means

Outcome in comparison to native speakers of Icelandic

	WNL	-1 SD Need help	-2SD Emergency!
Grades 1-3	34%	41%	24%
Grades 5-6	17%	11%	72%
Grades 8-9	38%	28%	34%
TOTAL	22%	22%	56%

Elin Thordardottir, 2013; 2020 *IJBEB*

See also findings of Sigríður Ólafsdóttir, Freyja Birgisdóttir, Hrafnhildur Ragnarsdóttir & Sigurgrímur Skúlason (2016) ©2021 Elin Thordardottir- do not disseminate by any means

How do school-age L2 speakers typically do?

- Many studies do not report the size of the difference between L1 and L2 speakers directly, but results indicate that 1 SD throughout the elementary grades in a common finding
 - Bialystok, Beets, Luk & Yang (2010)
 - Hammer, Jia & Uchikoshi (2011)
 - Hammer, Lawrence & Miccio (2008)
 - Simos, Siderikis, Mouzak & Chatzidaki (2014)
 - Smithson, Paradis & Nicoladis (2014)
 - Rydland, Grover & Lawrence (2014)
- A difference of 2 SD has been reported for children with multiple risk factors
 - Jackson, Schatschneider & Leacox, 2014)

See review in Elin Thordardottir, 2020, *IJBEB*

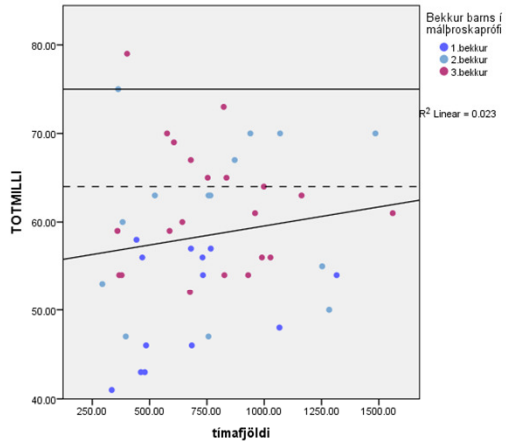
Why is Icelandic hard to pick up as an L2?

- Low levels of exposure?
 - Relatively short school day
- Competition with English in leisure time
- Complexity of the language?
 - Highly inflected
- Low economic value?
 - Leading to negative attitudes and/or low motivation

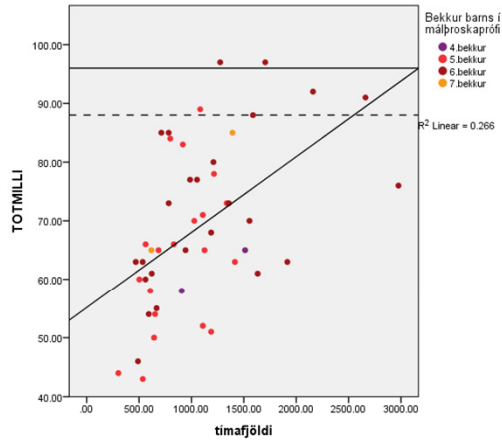
	L2 gr 1-3	L2 gr 5-6	L2 gr 8-9	All L2	All L1
% Ice birth	.115	.497**	.767**	.340**	
% Ice8 years	.125	.495**	.750**	.477**	
% Ice 4 years	.219	.239	.537**	.274**	
AoE	-.019	-.475**	-.613**	-.197*	
Hours Ice	.184	.516**	.764**	.586**	
Age	.329*	.180	.144	.391**	.705**
Maternal ed.	.042	.077	---	-.061	-.031

Elin Thordardottir, 2020, *IJBEB*

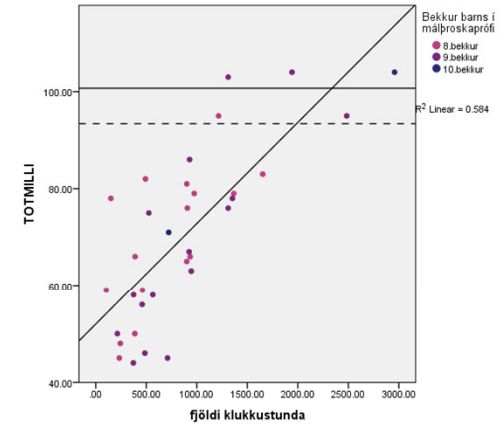
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Grades 1-3



Grades 5-6



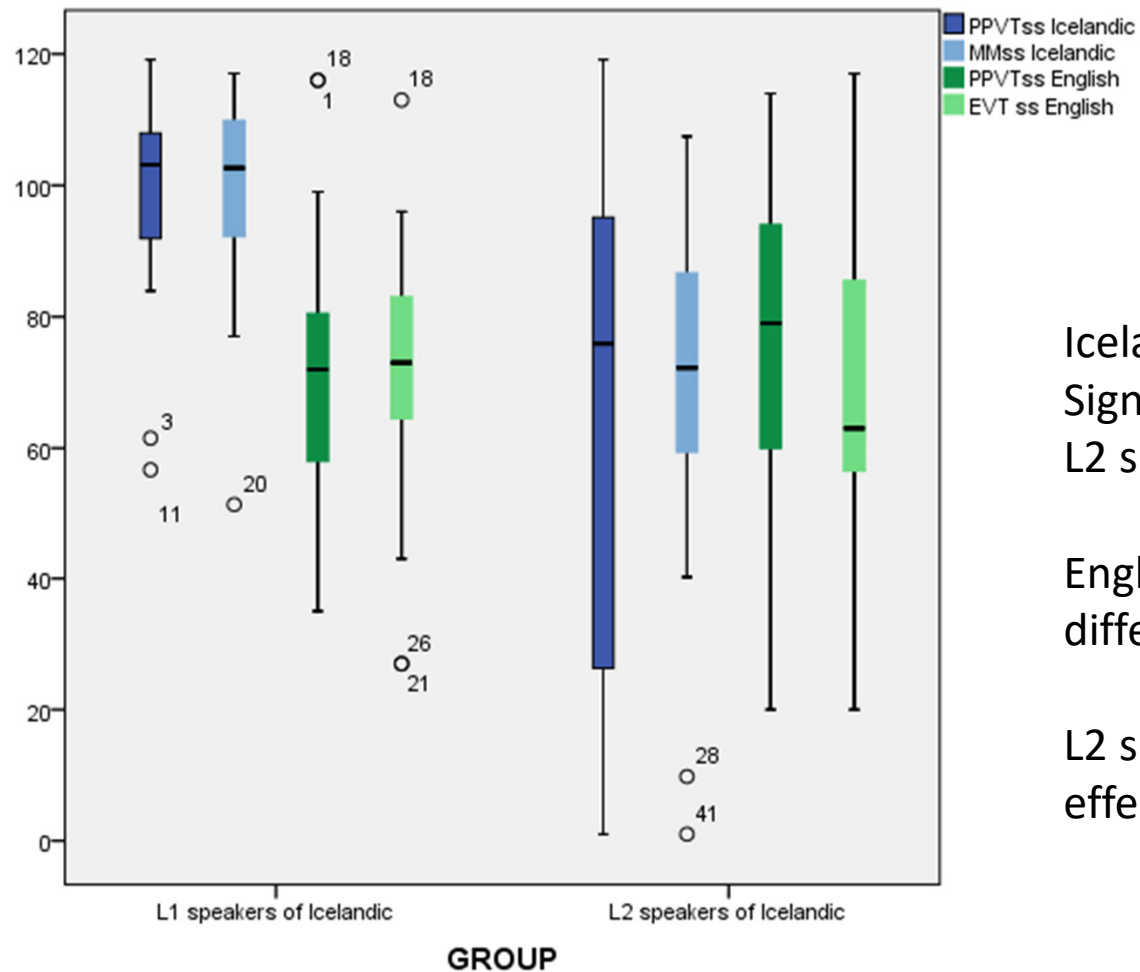
Grades 8-9

Elin Thordardottir, 2020, *IJBEB*

Long term outcomes in Iceland – acquisition of Icelandic as L1 and L2 in a background of incidental English

- In Icelandic
 - In English
 - In home languages
-
- Icelandic and English measured by standardized tests and language sampling
 - Home languages assessed through self assessment

Standard scores relative to natives on formal tests In Icelandic and English



Icelandic: L1 speakers
Significantly better than
L2 speakers

English: no sign. Group
difference

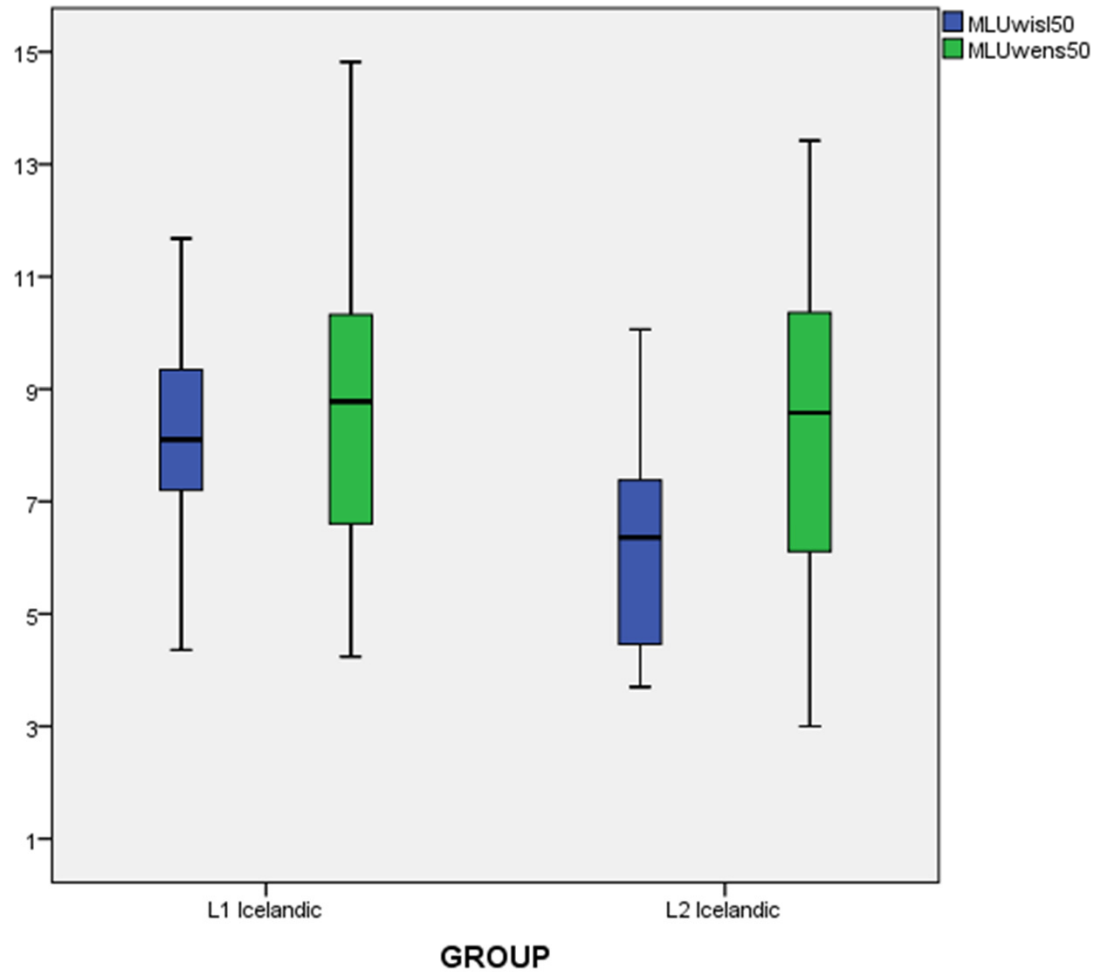
L2 speakers: no sign
effect of language

Elín Thordardottir, 2021, JCD open access

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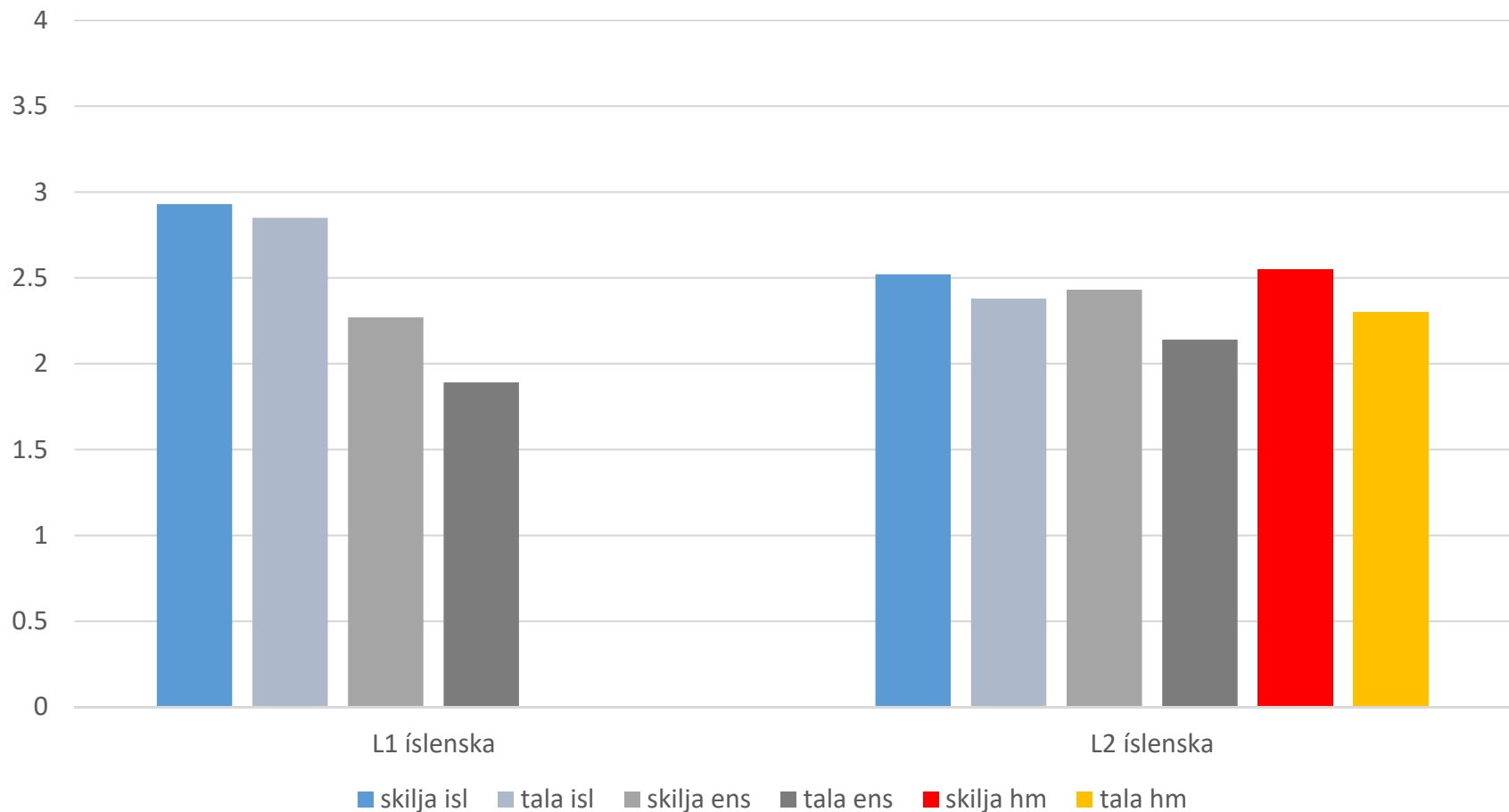
Conversational Mean Length of Utterance in Icelandic and English



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Self-reported performance in Icelandic, English and home language

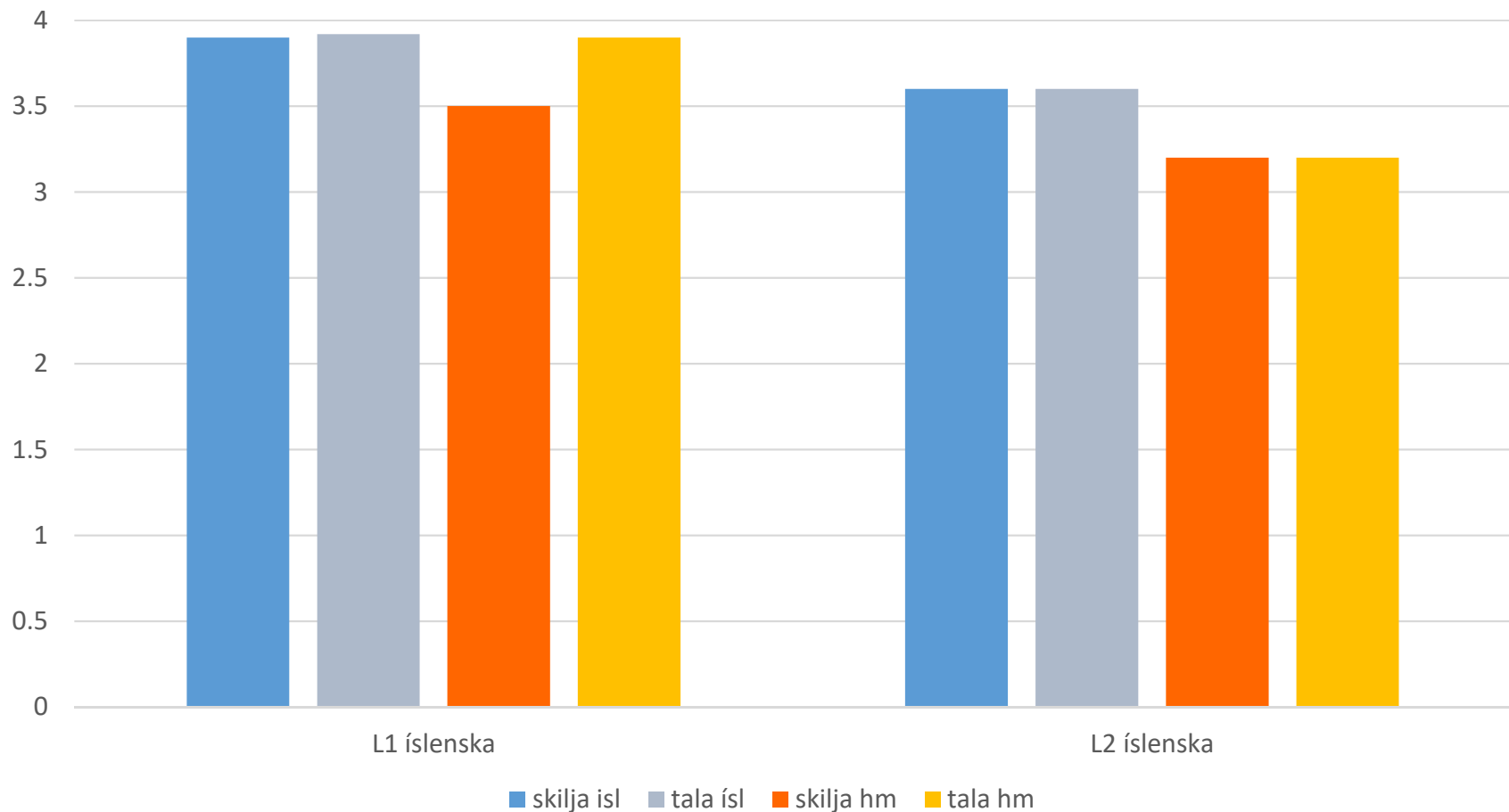


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Parent report of performance in Icelandic and home language



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Individual profiles among the L2 adolescents

Table 6

Language ability groups in terms of performance relative to monolingual norms in Icelandic and English, and per parent rating in home languages.

	n	LOR	LOE	% Icelandic exposure life	% Icelandic use in home	Years of 40% exposure to Icelandic
High in all languages	5	160.2 (27.5)	157.6 (32.1)	51.8 (33.3)	32.5 (45.7)	10.0 (6.9)
High in Icelandic only	2	170.5 (33.2)	163.5 (43.1)	65.5 (10.6)	30.0 (42.4)	14.0 (1.4)
High in Icelandic and home language	5	175.4 (8.1)	164.6 (21.7)	39.6 (16.6)	3.0 (6.7)	9.4 (5.63)
High in home language and English	3	84.3 (70.3)	76.3 (57.2)	31.5 (40.3)	23.7 (24.7)	5.7 (6.0)
High in home language only	7	110.0 (60.3)	103.7 (56.1)	22.9 (10.9)	0.71 (1.9)	3.3 (3.9)
High in English only	1	81.0	81.0	26.5	0	

n: number of participants in group

LOR: Length of residence in Iceland in years.

LOE: Length of systematic exposure to Icelandic in years.

% Icelandic exposure life: percent of waking hours since birth spent in Icelandic –speaking environments.

% Icelandic use in home: current percentage of home conversations taking place in Icelandic.

Years of 40% exposure to Icelandic: number of years since birth that total exposure to Icelandic was 40% or more of waking hours.

In general, high Icelandic performance is associated with high exposure to Icelandic. However, many of the L2 speakers do not get high exposure to Icelandic, in spite of Icelandic residence and schooling, The dominance in the community language typical of L2 speakers (Grosjean, 2010) is not seen.

Long attainment in Quebec adolescents

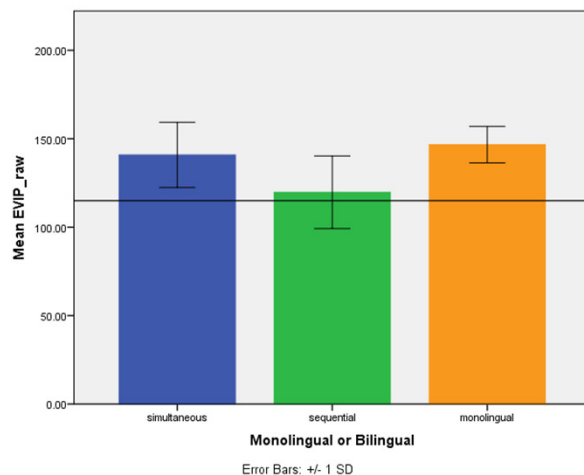


- In Quebec, the main language is French, however, a fairly large population has English as their L1 and many people speak both
- Schooling is obligatorily in French, except for people of English descent
- French is the only official language. All clients in all businesses must obligatorily be addressed in French

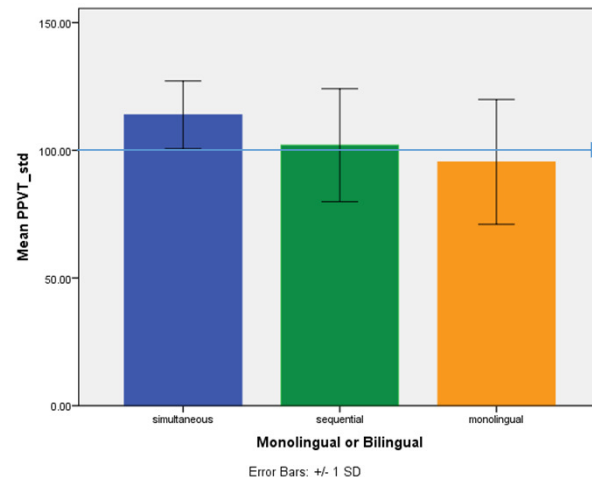
French native, simultaneous and sequential learners of French, adolescence



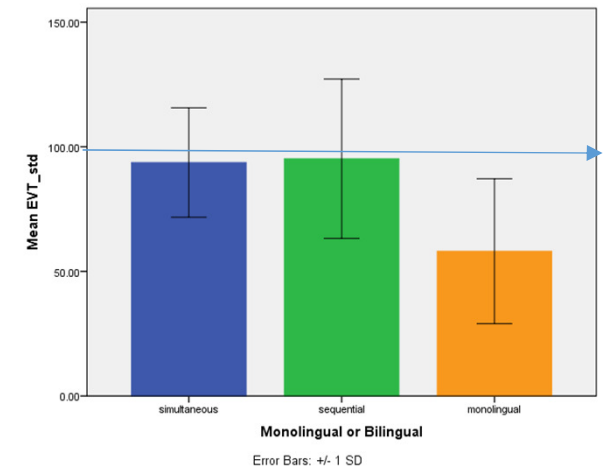
French receptive vocabulary



English receptive vocabulary



English expressive vocabulary



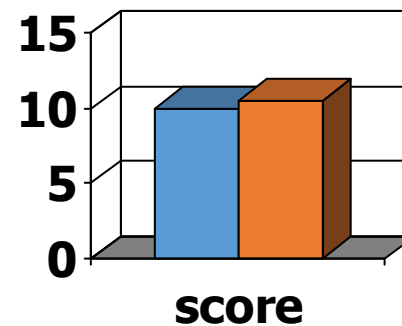
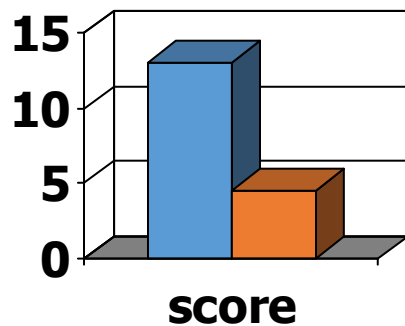
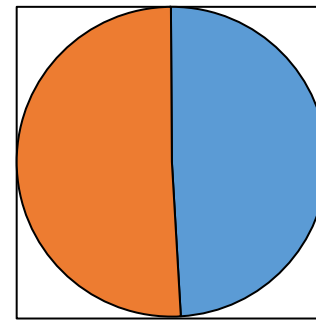
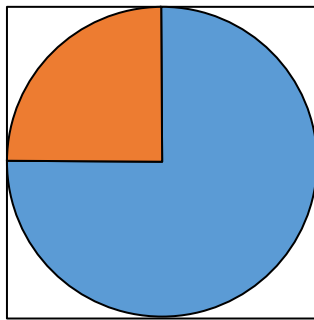
Orange: speak french at home

Blue: speak English and French at home

Green: speak English at home

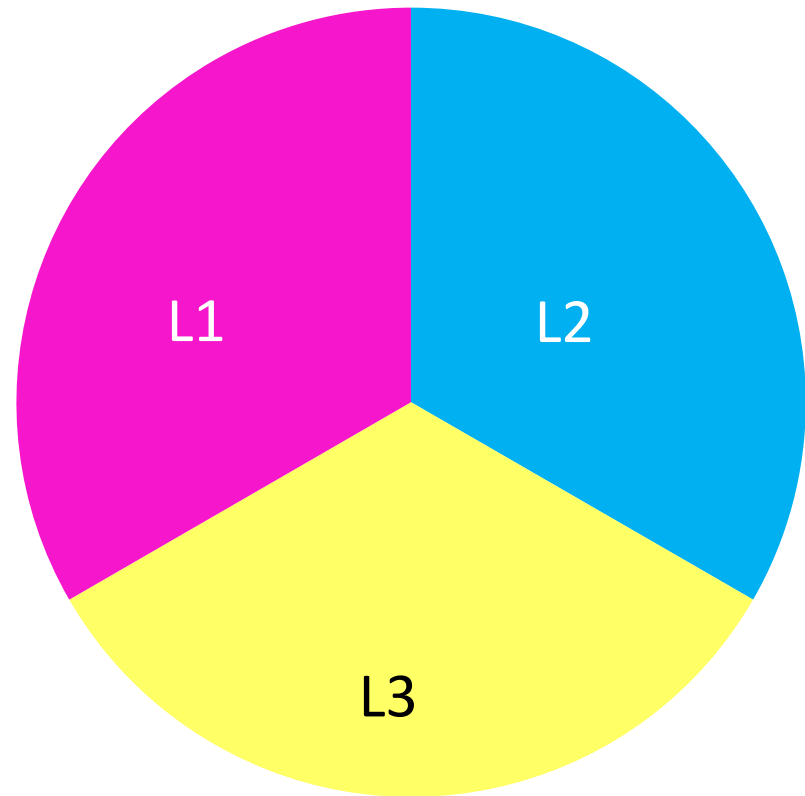
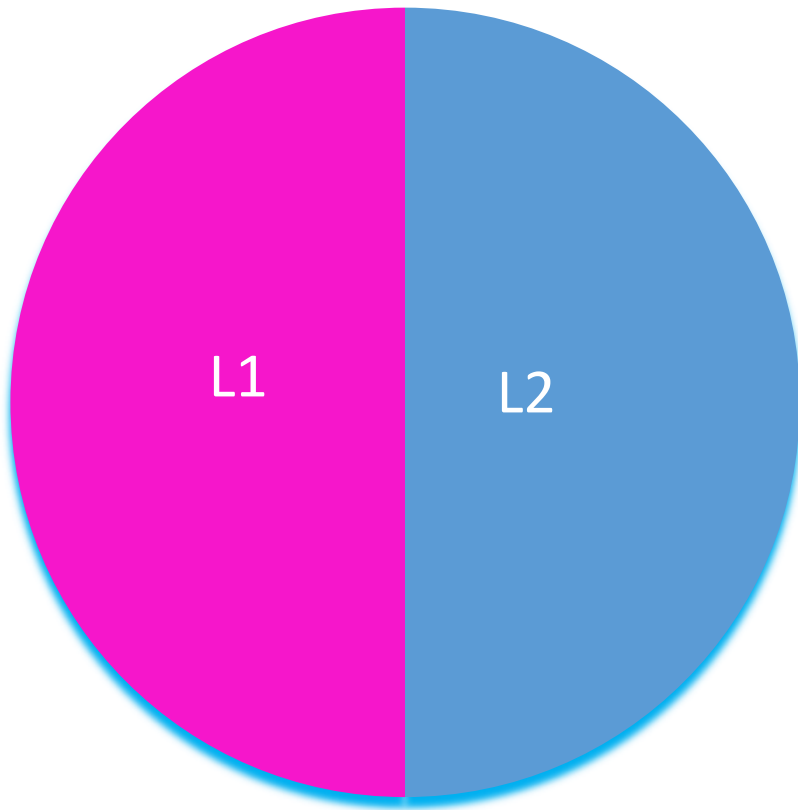
Study in progress, Elin Thordardottir et al. to appear

Amount of exposure and proficiency

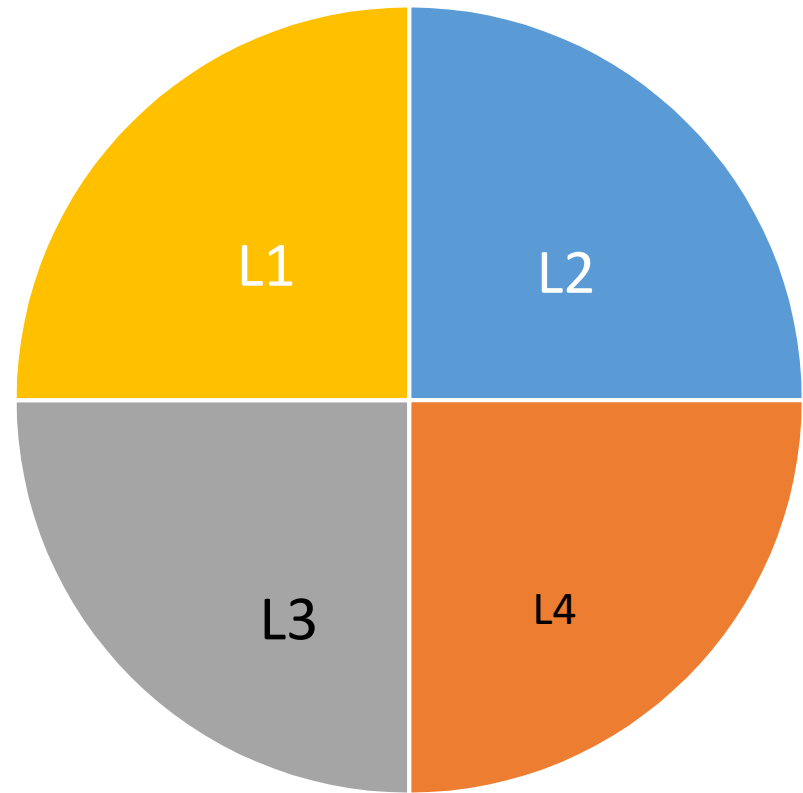
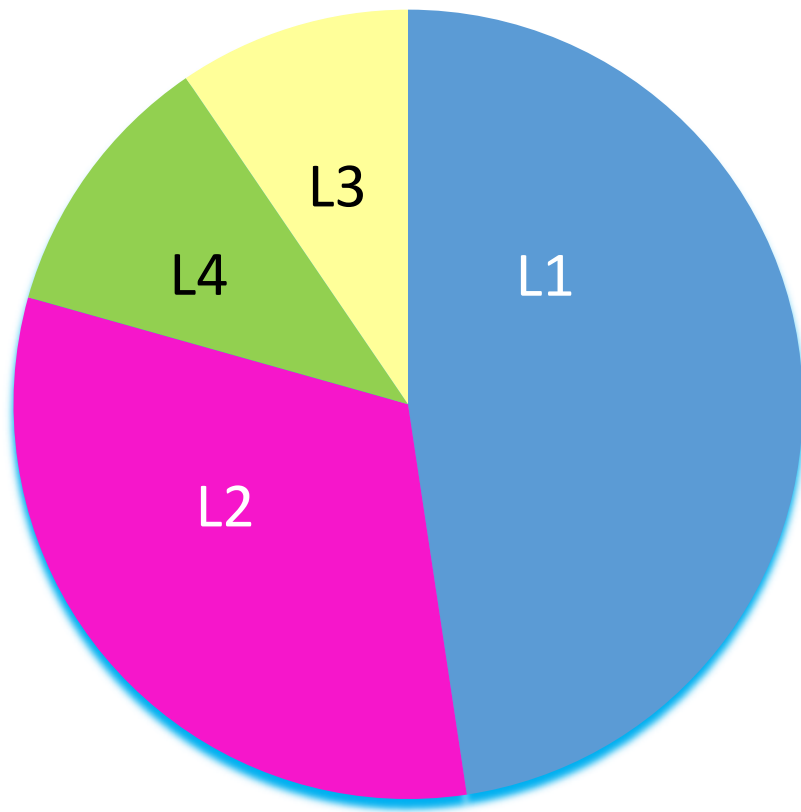


Elin Thordardottir, 2011

Performance is tightly linked to the experiences lives in the language in questions (quantity and quality).
The quantity necessary to be at a similar level as monolinguals is 40 to 60% (Elin Thordardottir, 2011; 2015)



If exposure to any language is lower than 40%, performance in that language will be expected to be significantly lower than that of monolingual norms (unless that 40% is used in a VERY efficient manner)



Educational Linguistics

Birna Arnbjörnsdóttir
Hafþís Ingvarsdóttir *Editors*

Language Development across the Life Span

The Impact of English on Education and
Work in Iceland

 Springer

The effect of motivation

- Semi-structured interviews on:
 - Whether knowing Icelandic is important
 - Whether knowing English is important
 - Whether it is hard to learn Icelandic
 - What are future plans

Elin Thordardottir, 2021, JMMD

The effect of motivation

- Semi-structured interviews on:
 - Whether knowing Icelandic is important
 - Whether knowing English is important
 - Whether it is hard to learn Icelandic
 - What are future plans
- Icelandic has low economic value world wide
- Icelandic is itself undergoing some language shift
- Icelandic has often been considered to be hard to learn
- How do these factors impact L2 learners?

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Table 1. Reasons given for why learning Icelandic as L2 is hard or easy (Question 1).

Reason	Number of meaning items by L1 group	Number of L1 participants	Number of meaning items by L2 group	Number of L2 participants
Easy linguistic elements (words, speaking, spelling, reading, verbs, many things, everything)	3	3 (12%)	14	10 (48%)
Hard linguistic elements (grammar, letters, written assignments, case marking, accent, understanding, reading comprehension, complicated, nothing is easy)	27	20 (84%)	17	11 (52%)
Influencing factors (Icelandic a rare (unusual) language, most difficult at first, most difficult at more advanced stage, depends on country/language of origin, difficult to change your habits)	22	15 (62.5%)	9	4 (19%)
Negative associated feelings (not nice to be corrected, difficult to enter into games or conversations, difficult to adjust, difficult to speak 2 languages)	1	1 (4%)	3	3 (14.3%)
Positive associated feelings (learning Icelandic is fun)	0	0	3	3 (14.3%)

L1 speakers thought Icelandic was very hard to learn; L2 speakers did not

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Table 2. Reasons given for why it is or is not important to know Icelandic (Question 2).

	Number of meaning items by L1 group	Number of L1 participants	Number of meaning items by L2 group	Number of L2 participants
POSITIVE VIEWS				
Utility of Icelandic (live in Iceland, communication, attend Icelandic school, work in Icelandic)	28	18 (75%)	19	16 (76.2%)
Language preservation/culture (speaking Icelandic part of being Icelandic, Icelandic in danger)	13	11 (45.8%)	2	2 (9.5%)
Image (important to speak correctly)	7	7 (29.2)	1	1 (4.7%)
LUKEWARM VIEWS				
Bare necessity (important to speak, not to write, not necessary to know Icelandic perfectly, enough to be understood)	6	6 (25.0%)	5	5 (23.8%)
NEGATIVE VIEWS				
Icelandic not necessary (more languages in Iceland, no value elsewhere, will move, obsolete language)	3	3 (12.5)	5	5 (23.8%)
IMPORTANCE OF HOME LANGUAGE				
(Important for teenagers to know their home language, home language important to learn other languages)	2	2 (8.3%)	0	0

Both groups thought it is very important to know Icelandic
Main reason: utility. In Iceland, people communicate in Icelandic
Only L1 speakers associated cultural value with Icelandic

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Table 3. Reasons given for why it is or is not important to know English (Question 3).

	Number of meaning items by L1 group	Number of L1 participants	Number of meaning items by L2 group	Number of L2 participants
Utility of English (all over the world, on internet, to speak to tourists, for school materials in English, to seek information, to get a good job, to speak to all people in Iceland)	30	19 (79.2%)	17	16 (80.1%)
Move to other countries (English not needed in Iceland, needed if you plan to move, needed to attend school abroad, needed to work in another country)	2	2 (8.3%)	6	4 (19.0%)
Culture (English a diverse language, knowing English enriches world view/allows you to know people, good to learn other languages)	4	3 (12.5%)	1	1 (4.7%)

English was viewed as important by both groups but not for the same reason as Icelandic

English was seen as useful for looking for information on the internet, for travelling and studying or living abroad for awhile

To summarize....

- Amount of exposure has been shown to be the strongest determinant of rate of L2 growth
- Other factors do impact this process also
 - Q-BEX Delphi Study (Cecile deCat , PI): many factors considered with lack of uniform agreement
 - This reflects in part the unexplained impact of factors inherent in different populations and contexts
- My current research focuses not only on which factors matter the most, but HOW TO ENSURE that children get adequate/optimal access to learning what they need to learn to succeed

Other ways to assess languages you do not know..

(Elin Thordardottir, 2021; in prep, Dubé & Elin Thordardottir, in prep.)

- Self assessment
- In our 2021 study, we used a 4 point assessment scale:
- Rate your proficiency in _____:
- How well would you say you can
- Speak Icelandic: not all all, fairly well, well, very well
- Understand Icelandic not all all, fairly well, well, very well
- Write Icelandic not all all, fairly well, well, very well
- Read Icelandic not all all, fairly well, well, very well

Table 3

Correlations between proficiency ratings and measured test performance in Icelandic and English, for the entire group of participants.

	Self Rating Icelandic	Self Rating English	Parent Rating Icelandic
MMss	.649**	.087	.684**
PPVTIcess	.627**	.100	.600**
EVTss	-.129	.696**	-.079
PPVTEngss	-.180	.622**	-.165
MLU50Ice	.289*	-.162	.365*
MLU50Eng	.205	.539**	-.092

MMss: standard score on the Milli mála test.

PPVTIcess: standard score on the Icelandic PPVT (receptive vocabulary).

EVTss standard score on the EVT (English expressive vocabulary).

PPVTEngss: standard score on the English PPVT (receptive vocabulary).

MLU50ice: Mean length of utterance in words in Icelandic sample of 50 utterances.

MLU50eng: Mean length of utterance in words in English sample of 50 utterances.

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Elin Thordardottir, 2021, JCD



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