

Emergent Bilingualism in Immigrant Communities

Ludo Verhoeven

Radboud University Nijmegen

The Netherlands

Robinson Crusoe

- R Hey, hey, hey, don't run away!
Hey man, can't you hear me?
- F Aba aba hoeboe!
- R Can't you speak to me?
- F Saga hieva hoe!

Robinson Crusoe

R Hey, hey, hey, don't run away!

Hey man, can't you hear me?

F Aba aba hoeboe!

R Can't you speak to me?

F Saga hieva hoe!

After some more trials Robinson gave up. Because it was a Friday, he called the man Friday. From now on, he started to teach him English, while the man taught Robinson how to milk the goats.

Emergent bilingualism

- Separate development hypothesis
 - L1 as home language
 - L2 via playmates and school
- Linguistic interdependency hypothesis
 - Residual asymmetries
 - Cognitive-academic domain

Linguistic transfer

- Competition model
 - Balanced competition between two emergent modules
 - Control mechanisms
 - Automatic ‘bottom-up’ processes
 - Intentional ‘top-down’ processes
- Bilingual memory
 - Partial overlap L1/L2
 - Non-selective access (‘spreading activation’)
 - Contextual constraints (episodic memory)

Predictors of bilingual development

- Child factors
 - Cognitive capacity
 - Language contact
 - Cultural orientation
- Home factors
 - Language use in the family
 - Parent acculturation
- Institutional factors
 - Target language(s)
 - Language of instruction

Effects of bilingualism

- Double language access
 - Interaction, mixing, switching
 - (Non)selectivity
- (Meta)cognitive strategies
 - Attention
 - Analysis
 - Control
- Metalinguistic awareness
 - Phonological awareness
 - Phonemic awareness

The present study

- Turkish children in the Netherlands
 - Largest immigrant community
 - Second/third generation
 - L1 highly valued
- Language development in kindergarten
 - L1 and L2
 - Sociocultural predictors
 - Cognitive consequences
- Interdisciplinary approach
 - Psycholinguistics
 - Sociolinguistics

Research questions

- How do patterns of L1 and L2 develop?
- Which factors predict bilingual development?
- Is there evidence of transfer from L_x to L_y ?
- Is bilingualism related to metalinguistic awareness?

Design of the present study

- 75 four-year-old Turkish children
 - Working-class background
 - Born in the Netherlands
- Language testing in L1/L2 at age 4, 5 and 6
- Assessment of child, home and school factors
- Phonological awareness assessment at age 6

Research question 1

How do L1 and L2 develop in kindergarten?

Linguistic tasks

- Auditory Discrimination: Minimal pairs (25)
- Receptive Vocabulary (60)
- Function Words: Linguistic universals
 - Color (15)
 - Form (15)
 - Quantity (15)
 - Space (10)
 - Connectors (10)
- Sentence Imitation (40)
- Text Comprehension (16)

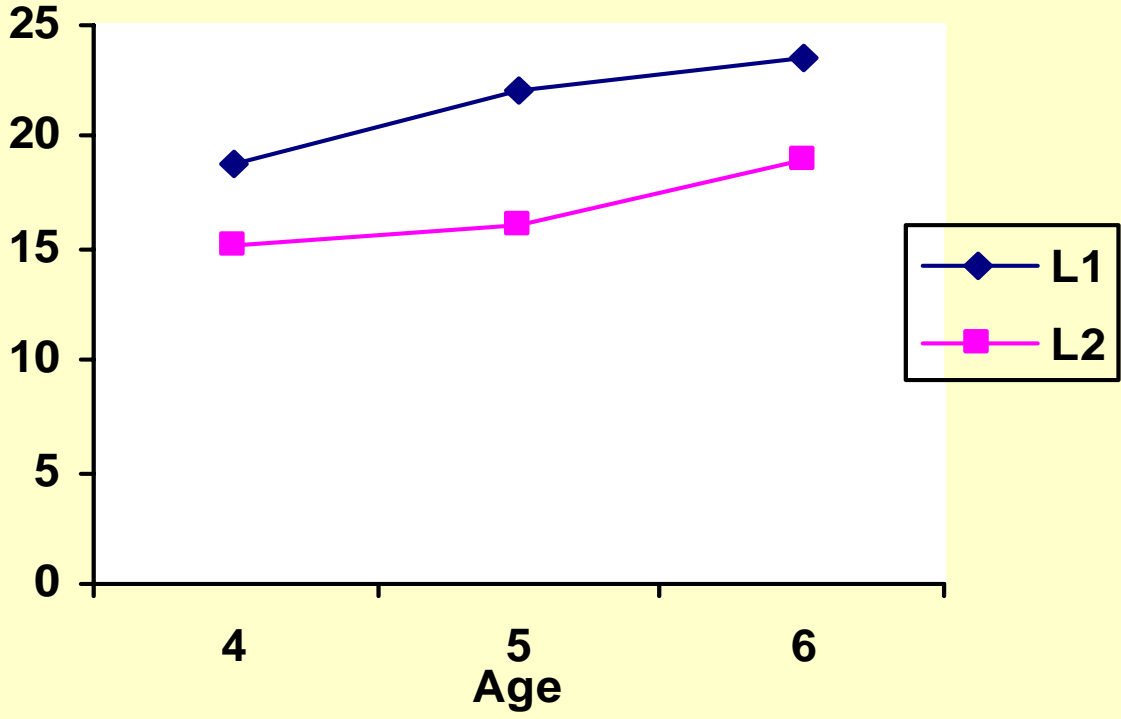
Example: basic color names

<i>English</i>	<i>Turkish</i>	<i>Dutch</i>
white	beyaz	wit
green	yeşil	groen
yellow	sarı	geel
black	siyah	zwart
red	kırmızı	rood
blue	mavi	blauw
grey	gri	grijs
brown	kahverengi	bruin
orange	turuncu	oranje
purple	mor	paars
pink	pembe	rose

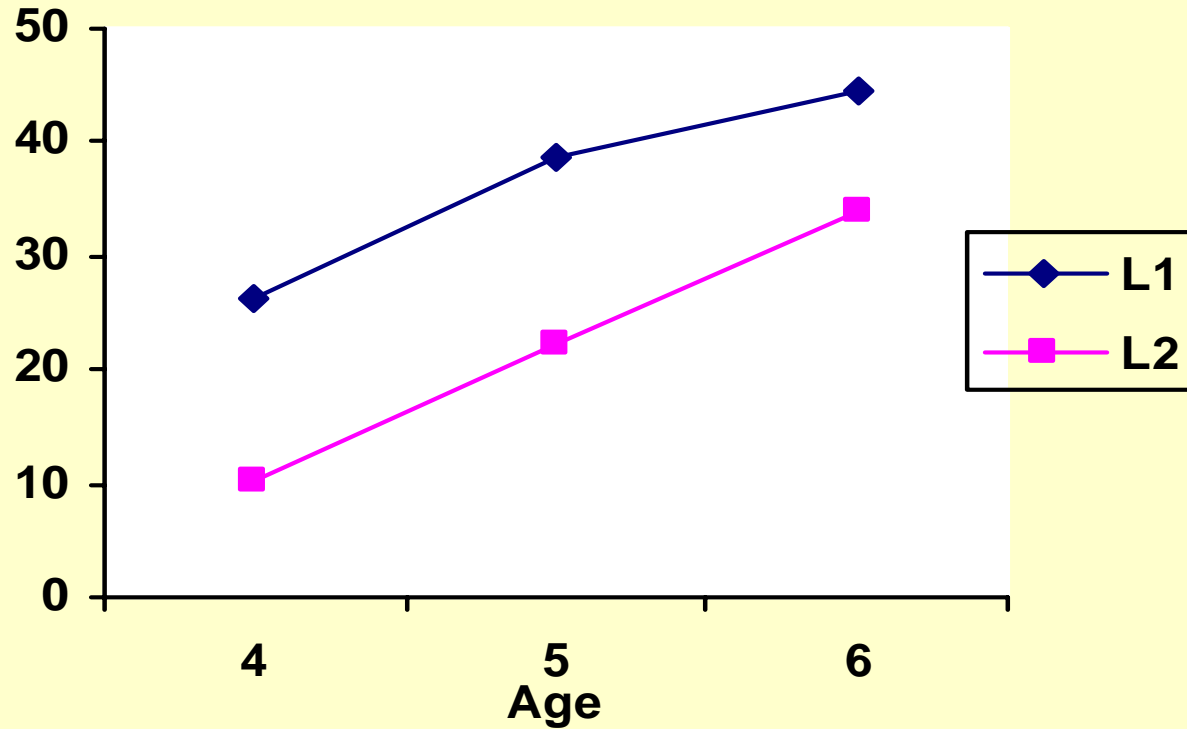
Test reliabilities

	L1 Turkish	L2 Dutch
Auditory discrimination	.90	.87
Receptive vocabulary	.90	.89
Function words	.85	.90
Sentence imitation	.95	.95
Text comprehension	.89	.91

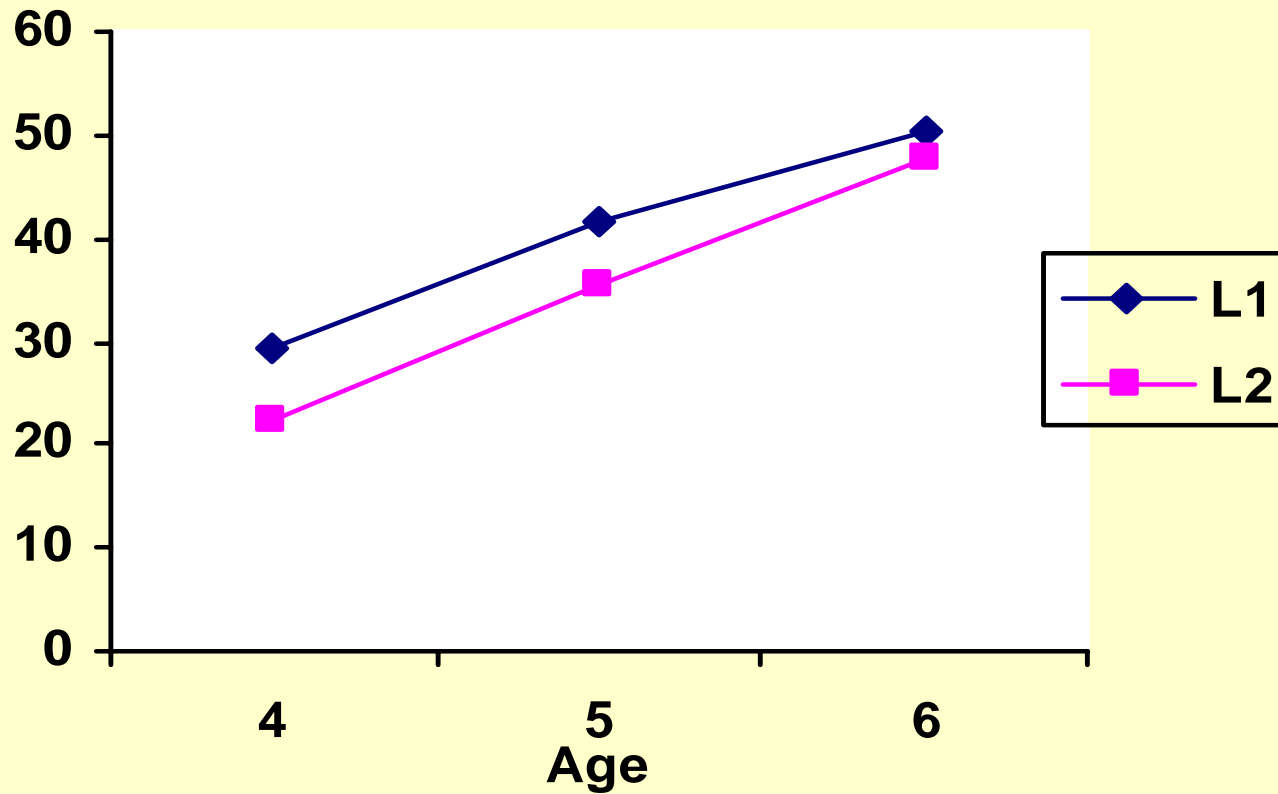
Development of Auditory Discrimination



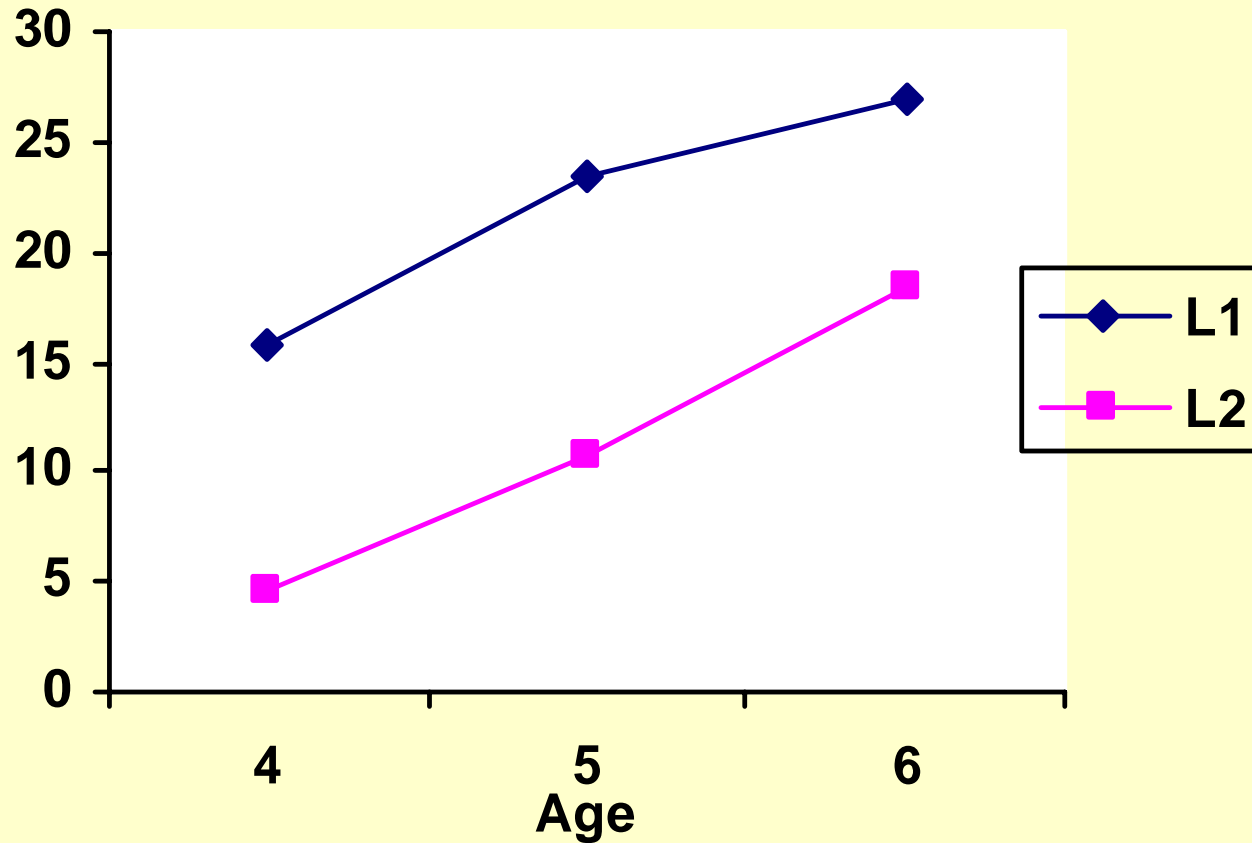
Development of Receptive Vocabulary



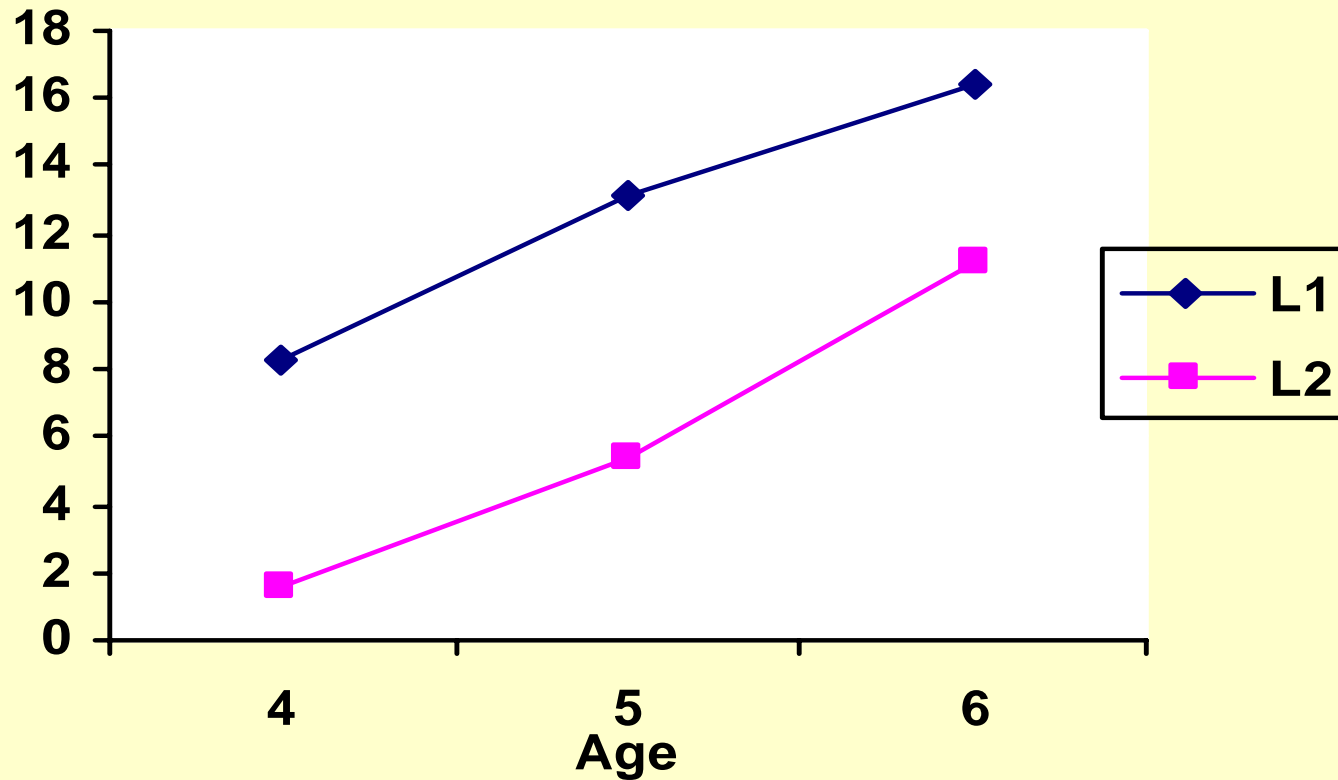
Development of Function Words



Development of Sentence Imitation



Development of Text Comprehension



Research question 2

Which sociocultural factors predict
L1 and L2 development?

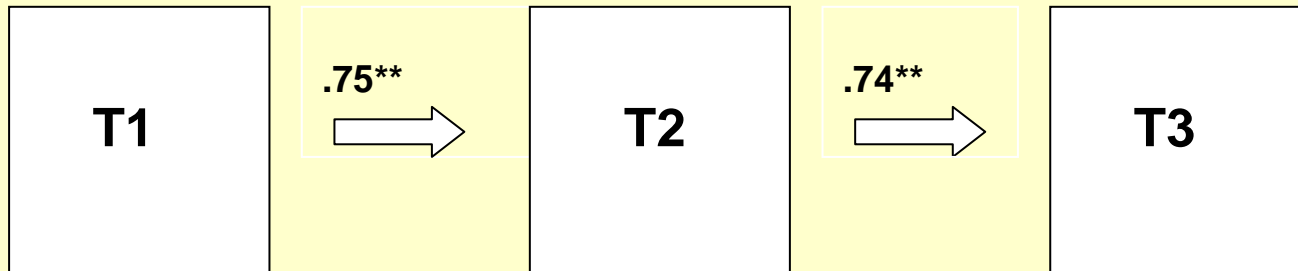
Percentage of explained variance: Dimensions of L1 and L2

	L1 Turkish	L2 Dutch
4-year-olds	54	56
5-year-olds	57	52
6-year-olds	53	53

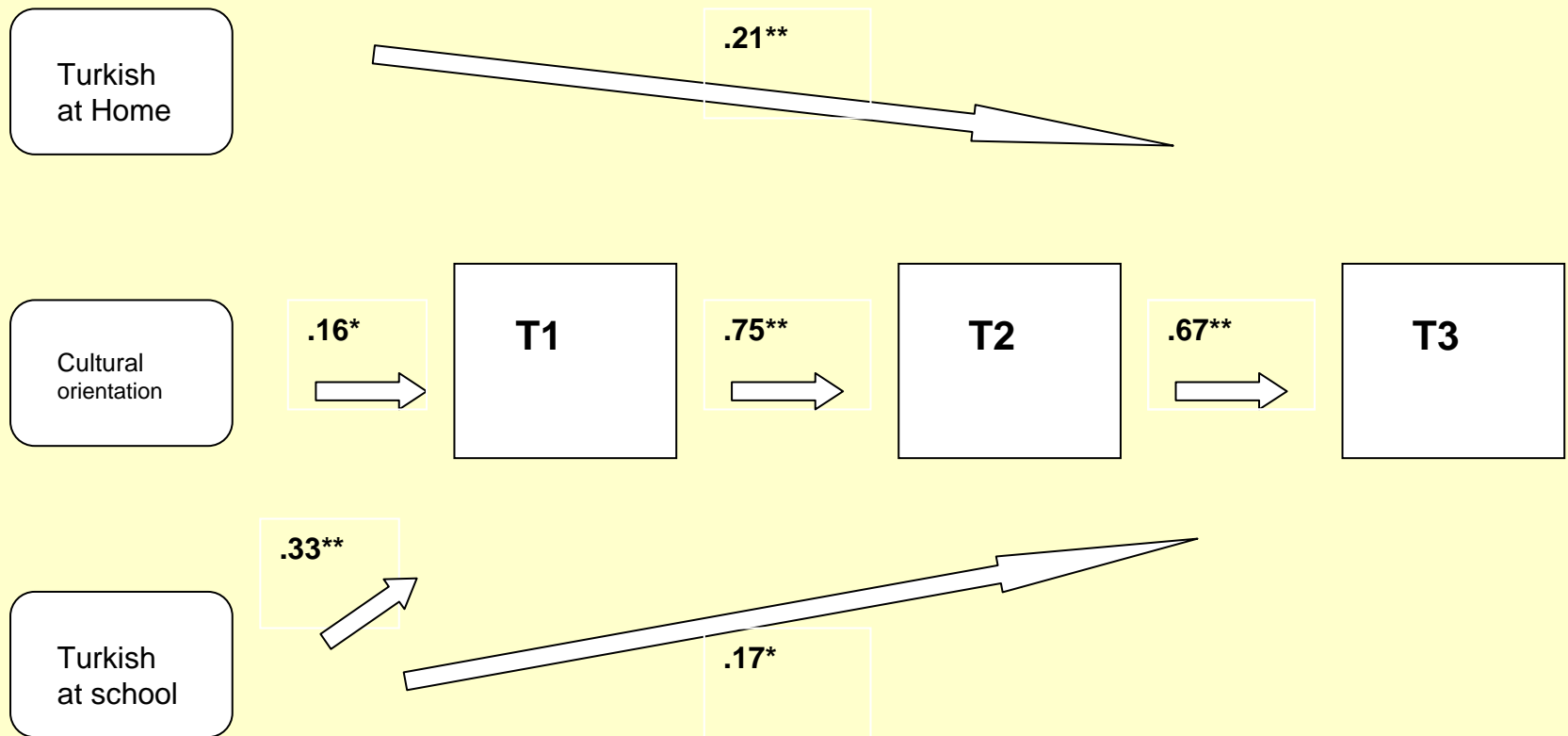
Predictor measures

- Child
 - Language contact at home
 - Language contact at school
 - Child cultural orientation
- Family
 - Family language use
 - Parent cultural orientation
 - Parent cultural behavior
 - Media use
- School
 - Preschool
 - L1 instruction
 - Extra L2 instruction

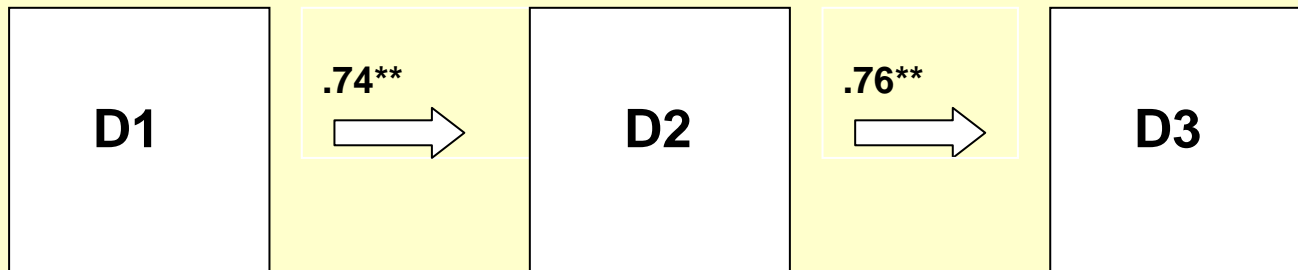
Development of L1 Turkish



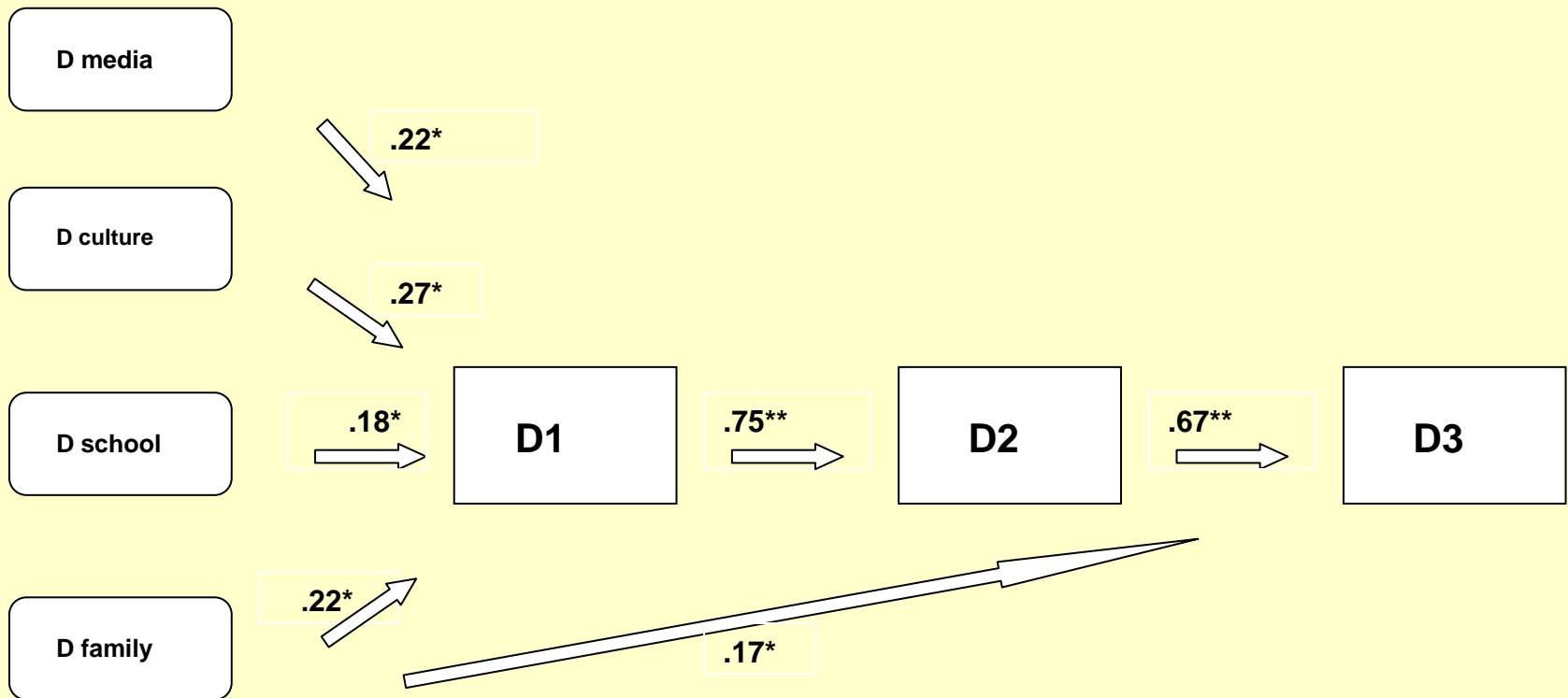
Predictors of L1 development



Development of L2 Dutch



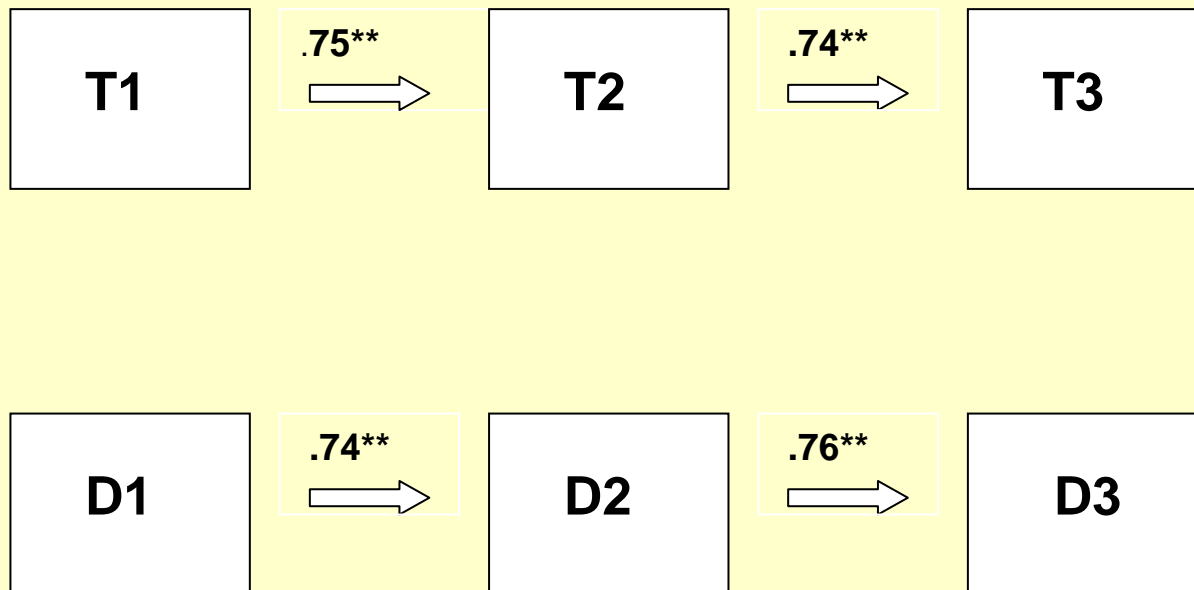
Predictors of L2 development



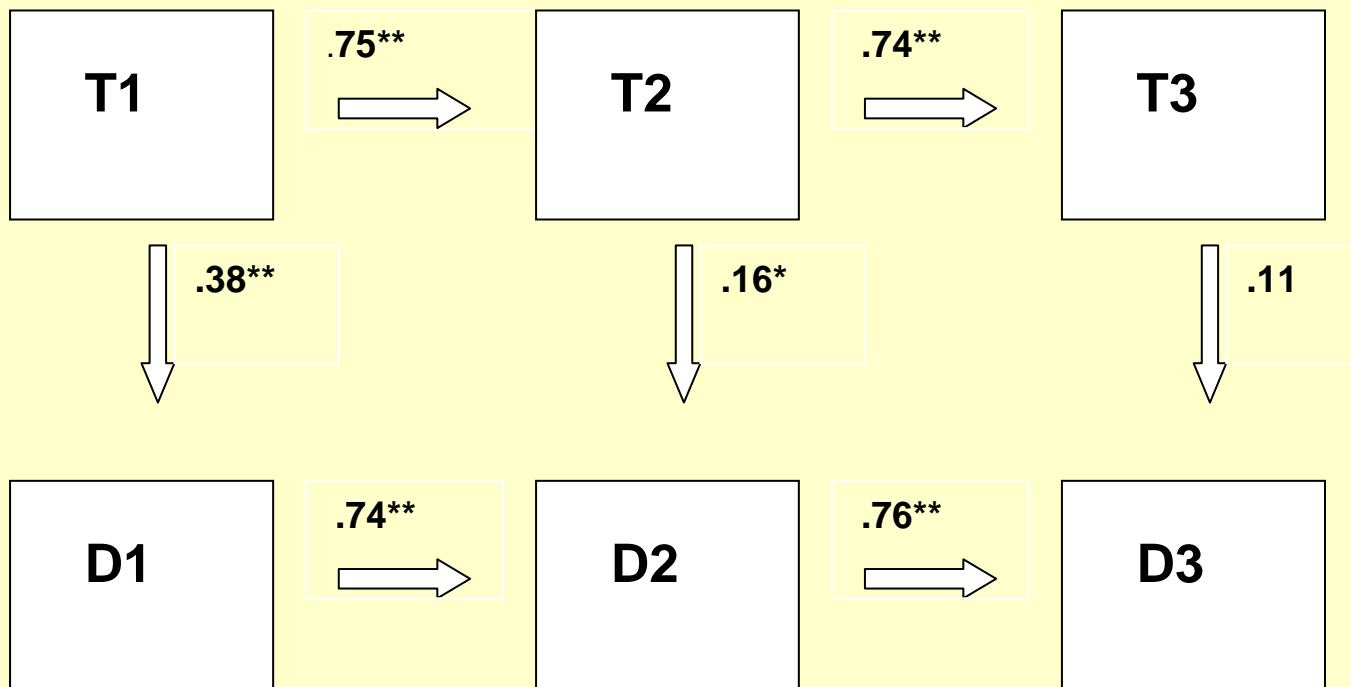
Research question 3

Is there evidence of language transfer?

Bilingual development



Transfer in bilingual development



Research question 4

Is bilingual development related to metalinguistic awareness?

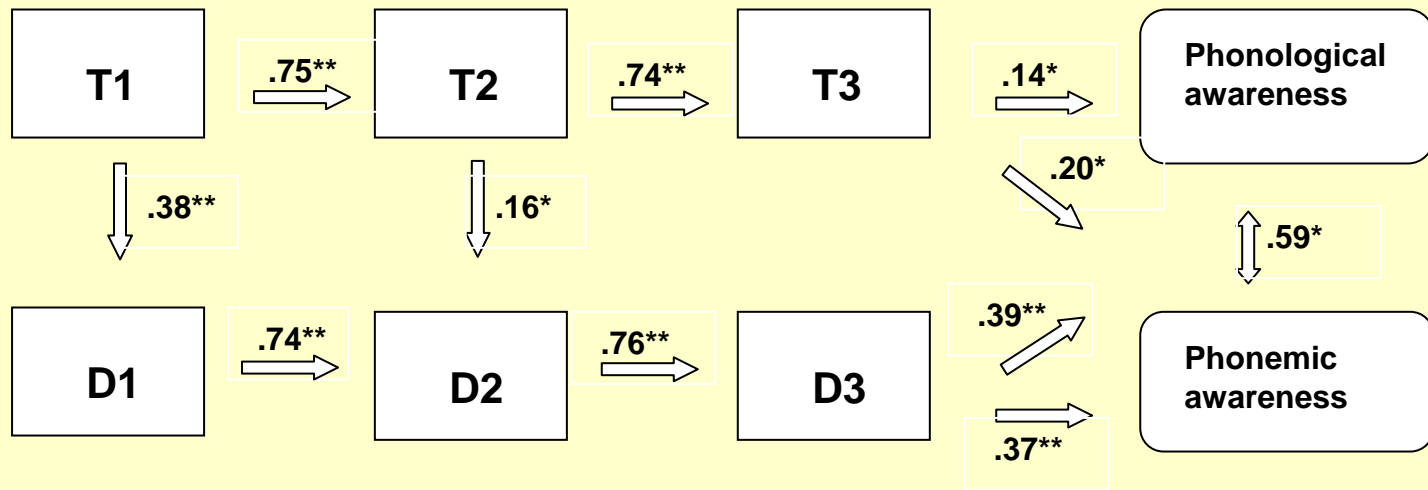
Phonological awareness tests

- Word objectivation (10)
 - cat - caterpillar
- Rhyme (10)
 - kat - rat
- Word blending (20)
 - k-a-t > kat
- Phoneme segmentation (20)
 - rat > r-a-t

Bilingualism and phonological awareness

	Phonological awareness	Phoneme awareness
Word objectivation	.71	.30
Rhyme	.86	.09
Phoneme segmentation	.20	.84
Word blending	.34	.79

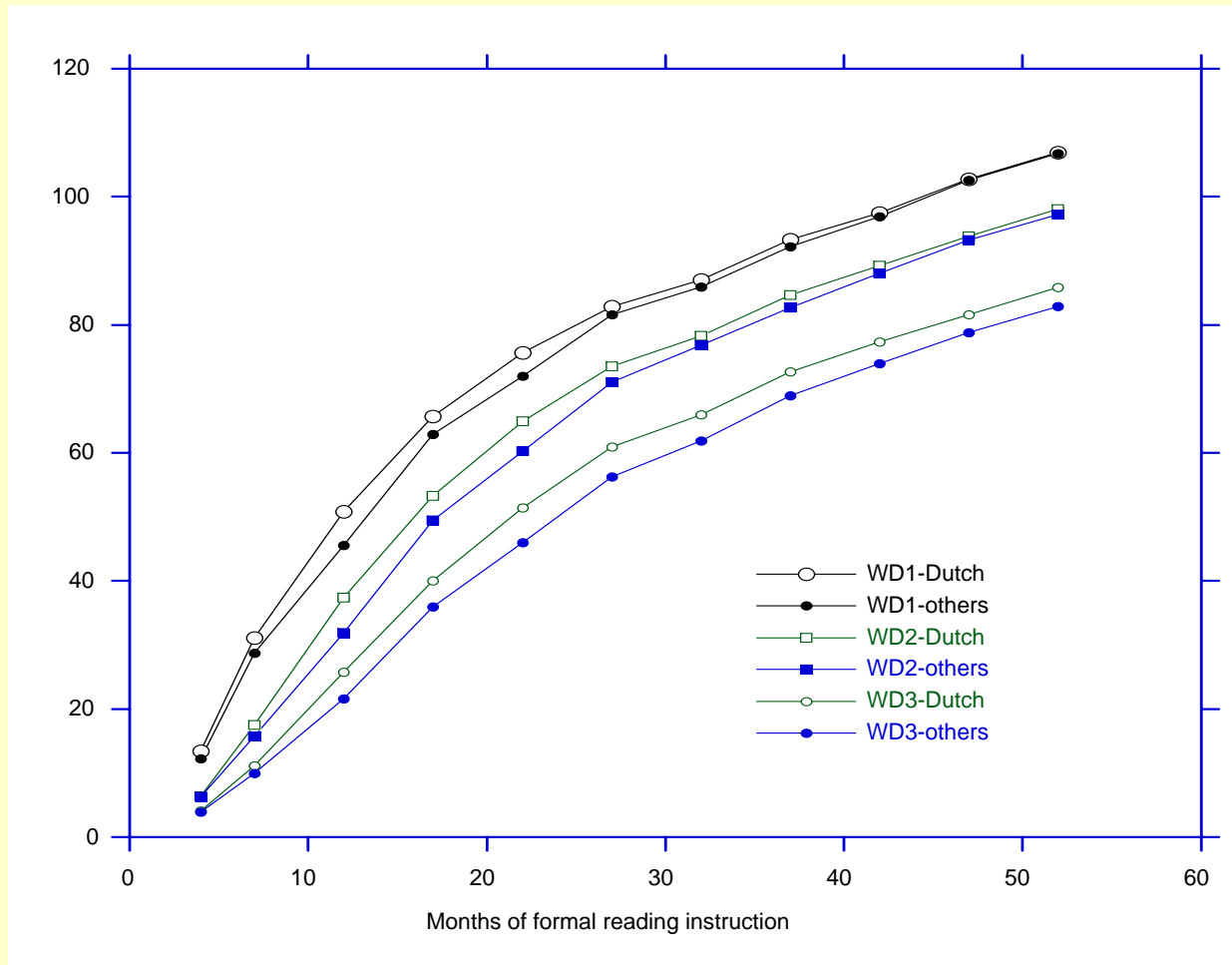
Bilingualism and phonological awareness



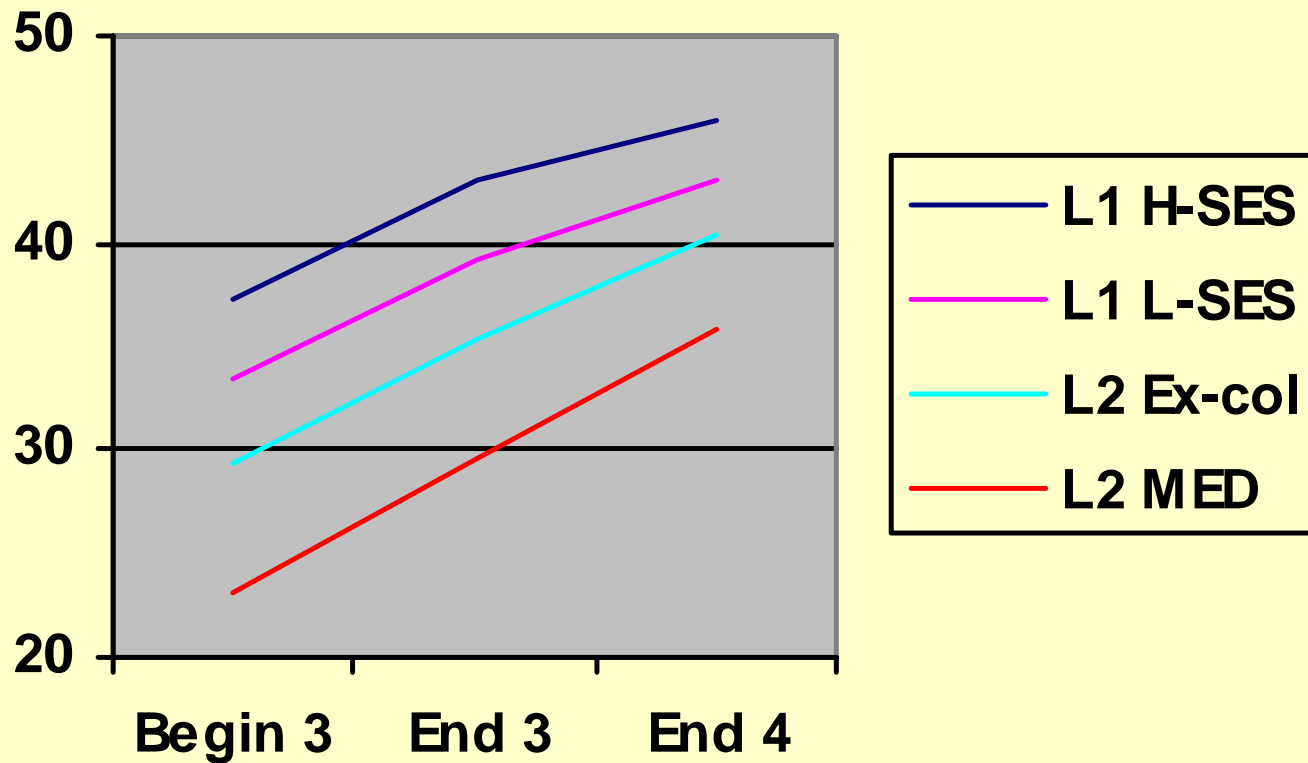
Perspective on L2 literacy

Word Decoding vs Reading Comprehension

Development of L2 word decoding



Reading comprehension in grade 3 and 4



Conclusions

- **Language growth in L1 and L2**
- **L1 is the dominant language during kindergarten**
- **Language contact and cultural orientation predict L1**
- **Language contact and acculturation predict L2**
- **Transfer from L1 to L2 development**
- **Bilingual development predicts phonological awareness**

Discussion

- Factors in language maintenance
- Educational implications of L1 dominance
- Early bilingual input can be seen as crucial
- Acculturation and bilingual development
- Bilingualism and literacy development

Collaborators

- Ömer Konak
- Jan van Leeuwe
- 75 Turkish school children
- Their parents and their teachers

Thank you!

Merci!