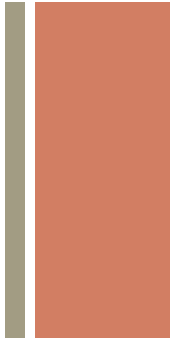# Reading anxiety: Its effects on reading strategy and reading comprehension

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The University of Texas at Austin

2014. 4. 5.

Contents

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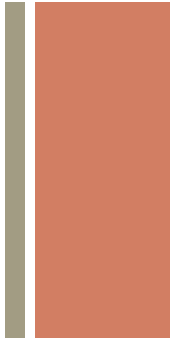
Anxious when reading?
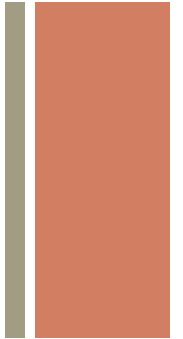
- Have you experienced?

Reading foreign language posts here and there and your heart starts racing and you have to step away from reading and calm down?

Anxious when reading?

■ Have you experienced?

Feeling so confused that you can't remember what you are reading?

Anxious when reading?

■ Have you experienced?

Feeling intimidated when you see a whole page written in a foreign/second language?
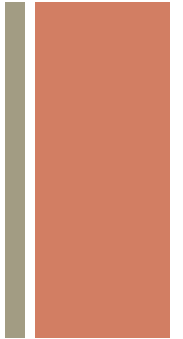
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Purpose of this study

■ **This study**

    - investigates the relationships among reading anxiety, cognitive interference, reading strategy use, and reading comprehension.

Introduction

- **Foreign Language Anxiety**
"a distinct complex of self-conceptions, beliefs, feelings and behaviors related to foreign language classroom language learning arising from the uniqueness of the language learning process" *(Horwitz, Horwitz, & Cope, 1986)*

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Effects of foreign language anxiety

Foreign Language Anxiety

Achievement
(Horwitz et al., 1986; Aida, 1994; MacIntyre et al., 1997)

Speaking
(Horwitz et al., 1986; Price, 1991; Young, 1990)

Listening, Writing
(Cheng et al., 1999; Kim 2000)

Reading ??

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Why foreign language reading anxious?

Unfamiliar cultural material

Different orthographic systems

Different textual organization

Reading Anxiety

Gaps in the literature

1. Relatively few studies
2. Studies focusing on the sources of anxiety or the relationship between anxiety and comprehension
3. Few studies on the interplay of reading anxiety, reading strategy, and reading comprehension

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Research Questions

- What is the relationship between foreign language reading anxiety and reading comprehension?

- What are the relationships among foreign language reading anxiety, reading strategy use, cognitive interference and reading comprehension?

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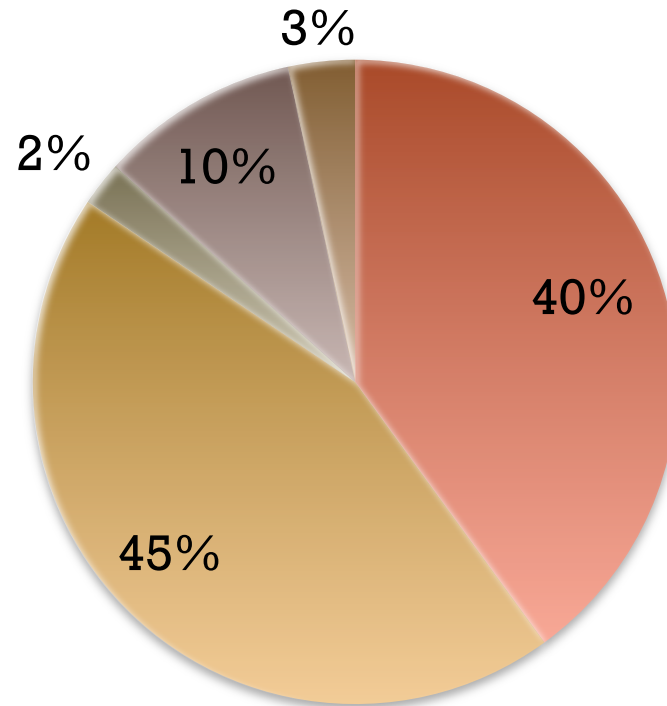
Participants

Participants	• 265 EFL students in a middle school in South Korea (Male: N=126 Female: N= 139) • 3rd grade (equivalent to 9th grade in the states) • L1 = Korean

Participants

English reading frequency

Never · 1-6/year · 1/year · 1/week · Everyday

Instruments

| Instruments			Time required
1. Background Questionnaire			5 mins.
2. Foreign Language Reading Anxiety Scale			10 mins.
3. Reading Comprehension Task			15 mins.
4.Strategy Inventory for Reading Comprehension		Accepting Ambiguity	10 mins.
		Local Strategies	
		Global Strategies	
		Using Background Knowledge	
5.Cognitive Interference Questionnaire			10 mins.
6.Interview			20 mins.

Foreign Language Reading Anxiety Scale

1. I get nervous when I'm not sure whether I understand what I am reading in English.
2. When reading English, I often understand the words but still I can't quite understand what the author is saying.
3. When I'm reading English, I get so confused that I can't remember what I'm reading.
4. I feel intimidated whenever I see a whole page of English in front of me.
5. I am nervous when I am reading a passage in English when I am not familiar with the topic.
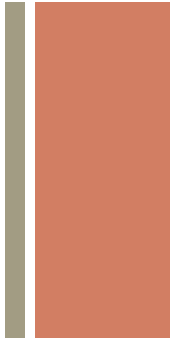
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The Reading Comprehension Task

- A sample text selected from iBT TOEFL sample reading comprehension task

- 688 words consisting of 6 multiple-choice reading comprehension questions
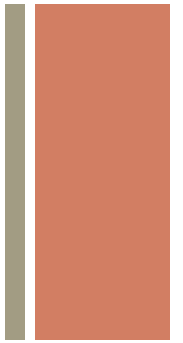
The Strategy Inventory for Reading Comprehension

1. I skipped portions of the text that I didn't understand.
2. I skipped unknown words.
3. I paid attention to the syntax of the sentences such as grammar or parts of speech.
4. I translated the meaning of a word, phrase, or sentence into Korean.
5. I made or confirmed a guess or inference about the passage content based on my own knowledge and information from the text.
6. I identified main ideas.
7. I used my background knowledge to understand the contents of the text.

Total	16

The Cognitive Interference Questionnaire (CIQ)

8. I thought about how poorly I was doing.

9. I thought about things not related to the task.

10. I thought about how much time I had left.

Data Analysis

- **Research question 1 :** What is the relationship between foreign language reading anxiety and reading comprehension?

-> Pearson correlation & Simple Regression

- **Research question 2 :** What are the relationships among foreign language reading anxiety, reading strategy use, cognitive interference and reading comprehension?

-> Pearson correlation & Multiple Regression

Results : What is the relationship between reading anxiety and reading comprehension?

	Min	Max	Mean	SD
Reading Anxiety	20	74	46	10.10
Reading Compre-hension	0	25	19	6.50

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Results : What is the relationship between reading anxiety and reading comprehension?

	Reading Comprehension
Reading Anxiety	-.36*

Criterion variable	Predictor variable	B(beta)	t	Total R^2	F
Reading Comprehension	Reading Anxiety	-.230 (-.36)	-6.22*	.13	38.65*

*p<.05

+ Results : What are the relationships among reading anxiety, cognitive interference, reading strategy use, and reading comprehension?
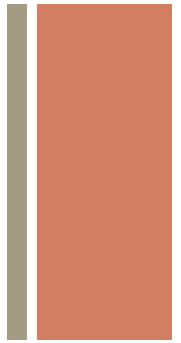
	RA	AA	LO	GLO	BG	CIQ	RC
Reading Anxiety	-						
Accepting Ambiguity	.36**	-					
Local Strategy	.22**	.38**	-				
Global Strategy	-.22**	.19	.49**	-			
Background Strategy	-.11	.01	.60**	.60**	-		
CIQ	.52**	.47**	.37**	.02	-.032	-	
RC	-.36**	-.23**	-.20**	.13*	.100	-.431**	-

*p<.05

+ Results cont.

Criterion variable	Predictor variable	B(beta)	t	Total R^2	Total F
Accepting Ambiguity	Reading Anxiety	.06(.167)	2.69*	.24	41.36*
	CIQ	.13(.384)	6.16*		
Local Strategy	RA	.008(.021)	.320	.14	20.92*
	CIQ	.127(.360)	5.43*		
Global Strategy	RA	-.148(-.305)	-4.433*	.07	9.89*
	CIQ	.081(.174)	2.524*		
Background Strategy	RA	-.026(.014)	-1.77	.013	1.73
	CIQ	.006(0.14)	.441		

*p<.05

Results : What are the relationships among reading anxiety, cognitive interference, reading strategy use, and reading comprehension?

Reading Anxiety
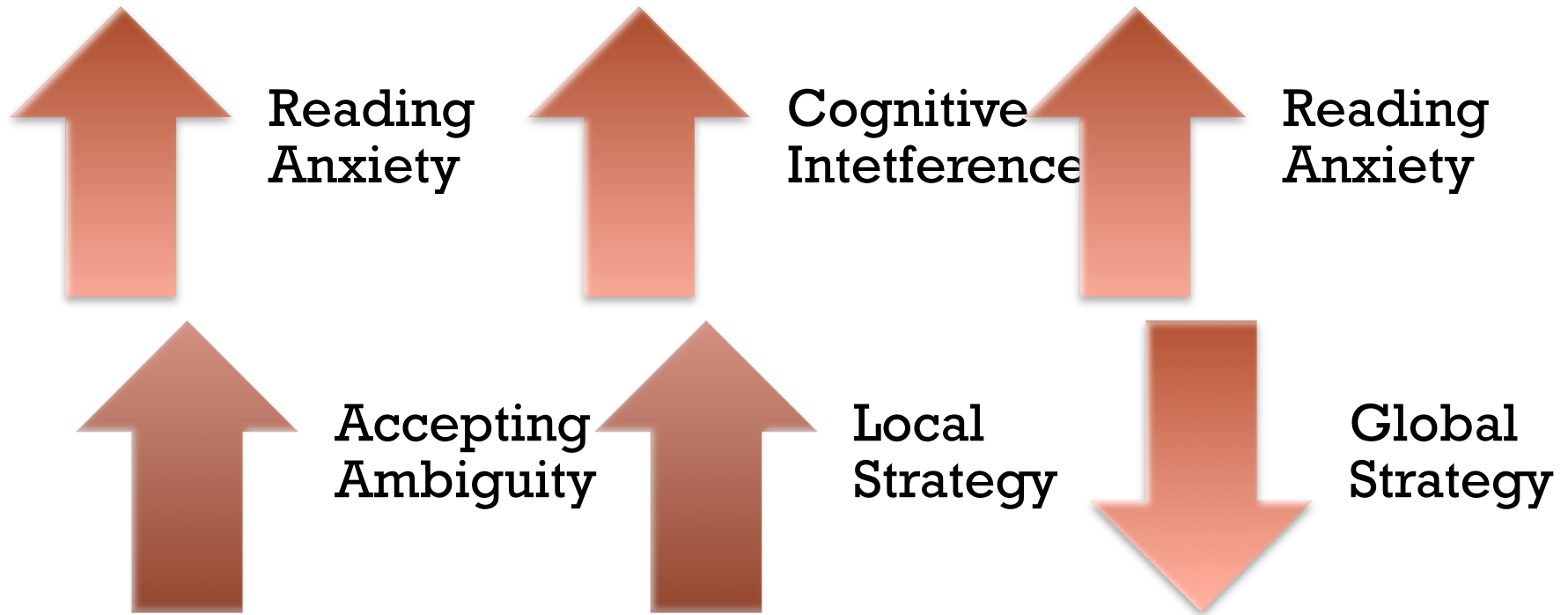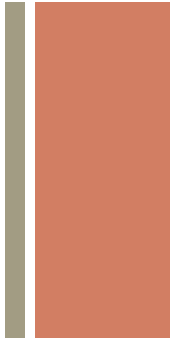
Cognitive Interference

Reading Anxiety

Reading comprehension

Results : What are the relationships among reading anxiety, cognitive interference, reading strategy use, and reading comprehension?

Reading Anxiety

Cognitive Intetference

Reading Anxiety

Accepting Ambiguity

Local Strategy

Global Strategy
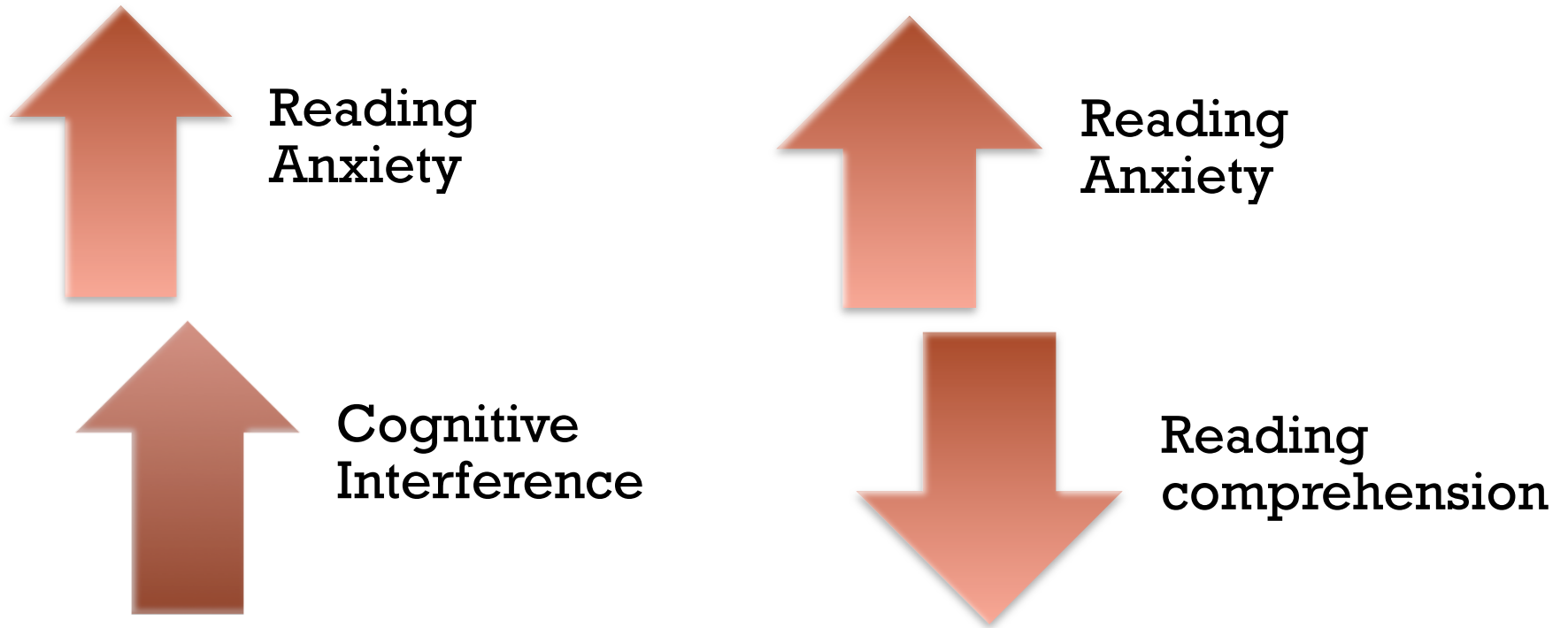
Results cont.

Model	Predictor Variable	B(beta)	t	$\triangle R^2$	R^2	F.
1	RA	-.23(-.36)	-6.22*	.128	.128	38.65*
2	RA	-.12(-.19)	-2.99*	.084	.213	35.36*
	CIQ	-.21(-.34)	-5.3*			
3	RA	-.11(-.73)	-2.71*	0.07	.219	24.47*
	CIQ	-.18(-.30)	-.44*			
	AA	-.17(-.10)	-.10			
4	RA	-.112(-.17)	-2.70*	0.00	.220	18.30*
	CIQ	-.18(-.30)	-4.24*			
	AA	-.16(-.10)	-1.40			
	LO	-.30(-.16)	-.26			

Dependent variable: Reading Comprehension

Model	Predictor Variable	B(beta)	t	$\triangle R^2$	R^2	F
5	RA	-.08(-.12)	-1.73	0.21	.241	16.42*
	CIQ	-.18(-.29)	-4.20*			
	AA	-.17(-.10)	-1.51			
	LO	-.20(-.12)	-1.62			
	GLO	.23(.18)	2.67*			
6	RA	-.08(-.12)	-.173	0.00	.241	13.63*
	CIQ	-.18(-4.16)	-4.16*			
	AA	-.17(-.96)	-1.48			
	LO	-.20(-.12)	-1.63			
	GLO	.23(.17)	2.20*			
	BG	.04(.01)	.176			

Dependent variable: Reading Comprehension
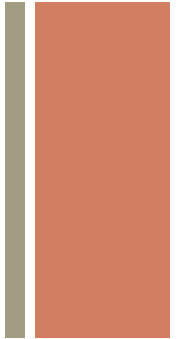
Discussion

- Medium Reading Anxiety

 -> Contextual factor

- Anxious students' low reading comprehension

(Argaman & Abu-Rabia, 2002; Oh, 1990; Sellers, 2000)

Discussion

- Anxious students' greater use of Accepting Ambiguity strategies:

" I just gave up when I encountered the words I don't know."

"I just wanted to give up so I just skipped the words."

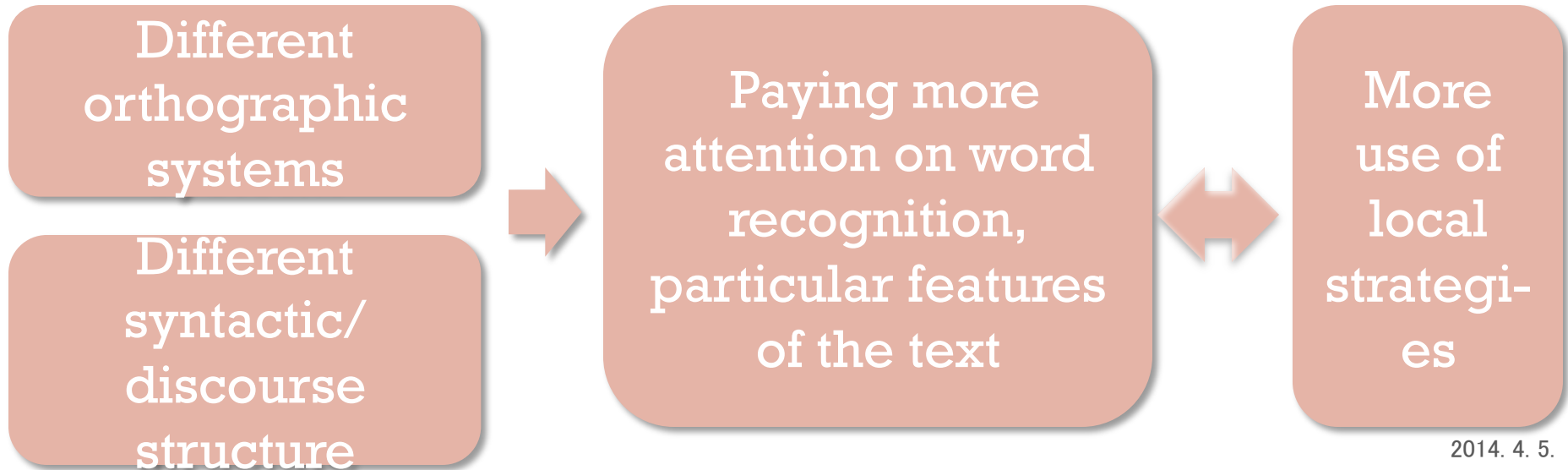- Anxiety and Motivation

(Nakata, 2006)

Discussion

- Anxious students' greater use of local strategies:

Congruent with *Saito et al.(1999), Seller's (2000)* study

- Source of anxiety

Different orthographic systems	→	Paying more attention on word recognition, particular features of the text	↔	More use of local strategi-es
Different syntactic/ discourse structure				

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Discussion

- Anxious students' lower use of global strategies (guessing, inferencing, and summarizing)

Anxiety and cognitive interference
(Tobias, 1986; Sarason, 1988; Oh, 1990; Eysenck, 1992; Eysenck & Calvo, 1992; Sellers, 2000)

Anxiety and risk-taking
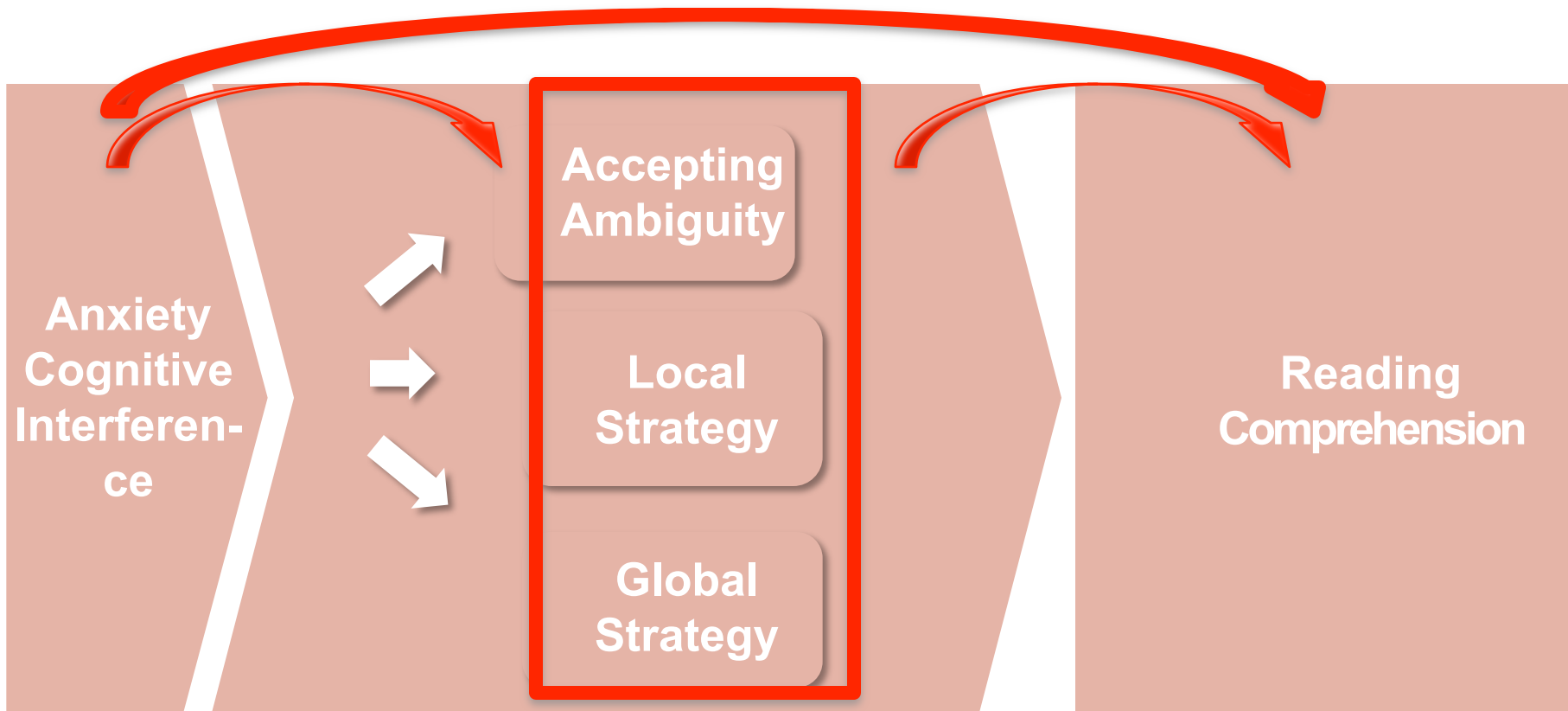*(Ely, 1986; MacIntyre & Gardner, 1994)*

Less use of global strategies

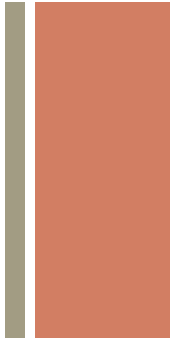2014. 4. 5.

Discussion

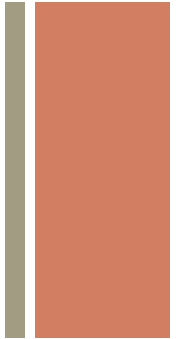- Anxious students' lower comprehension :

Limitations

- The self-report measures

  (FLRAS, CIQ, Strategy Use)

- The reading comprehension measurement

  (A sample text from IBT TOEFL, multiple choices)

- Participants' actual reading performance

Implications

- Raising awareness for reading-related anxiety

- Incorporating strategy instruction for anxious students

- Considering sources of reading anxiety

- Exposing foreign language texts to students gradually

- Implementing less anxious reading tasks

- Creating a warm atmosphere

- Increasing reading time for anxious students ??

+ Questions