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Table 1. Descriptive information of the study variables.

Variables	Total sample			Estonia			Finland		
	N	Min	Max	*n*	*M*	*SD*	*n*	*M*	*SD*
Students' measures									
Word reading fluency, Grade 1 autumn	548	0	41	397	12.42	7.266	154	8.04	5.998
Word reading fluency, Grade 1 spring	566	5	50	415	17.78	7.809	154	19.44	8.594
Reading comprehension, Grade 1 spring	566	0	12	412	6.09	2.904	154	5.66	3.279
Instructional contents, Grade 1 spring									
Non-Instructional	33	12.05	48.22	21	26.17	9.230	12	26.06	9.118
Phonological Awareness[1]	5	2.62	26.53	3	13.96	11.634	2	5.70	4.357
Morpheme Awareness[2]	4	1.54	58.57	3	2.86	1.152	1	58.57	
Word Identification / Decoding[1]	9	.99	14.67	5	3.71	3.227	4	6.20	6.261
Word Identification / Encoding[1]	16	.96	44.06	8	10.75	8.902	8	16.44	13.537
Grapheme-Phoneme Correspondence[1]	2	2.10	13.77	2	7.93	8.250	0		
Fluency[1]	17	.53	15.63	9	7.27	4.464	8	10.21	5.382
Print and Text Concepts[2]	15	.36	19.32	9	2.15	2.051	6	5.35	7.179
Oral Language[2]	26	.47	44.92	15	9.21	10.918	11	8.61	11.448
Print Vocabulary[2]	24	.41	46.72	19	10.74	10.881	5	7.06	8.280
Listening and Reading Comprehension[2]	32	.58	43.64	21	20.73	11.704	11	9.92	9.111
Text Reading and Listening[2]	32	4.08	42.82	20	17.23	9.770	12	14.14	9.590
Writing[1,2]	13	3.02	53.81	7	26.57	19.834	6	21.45	15.399
Other Subjects[2]	9	.97	10.55	4	4.45	4.447	5	1.94	.976
Code-Focused (CF)	30	.96	56.44	18	19.91	16.145	12	25.39	14.910
Meaning-Focused (MF)	33	13.92	83.45	21	58.25	21.234	12	48.55	15.320
Individualised work	5	1.64	44.89	0			5	20.59	20.695

[1] Summed up under CF activities; [2] Summed up under MF activities.

Note! Writing activities included both CF activities (e.g., *Dictation* and *Copying* on sentence level cf. *Spelling* tasks in *Word Identification / Encoding*) and MF activities (e.g. *Writing process instruction* or *Student group writing*) and were summed up under the corresponding total sum.

Table 2. Intraclass correlations (ICC) of students' reading fluency and reading comprehension and correlations among them at within and between levels in the Estonian (above the diagonal) and Finnish (below the diagonal) samples.

Variable		ICC in the total sample (N = 569)	ICC in Estonia (n = 415)	ICC in Finland (n = 154)	1.	2.	3.	4.	5.
1. Reading fluency, Grade 1 autumn	Within				–	.80***	.48***		
	Between	0.17***	0.15**	0.00		.67***	.58**	-.01	-.04
2. Reading fluency, Grade 1 spring	Within				.68***	–	.47***		
	Between	0.15**	0.19*	0.04	.47		.57***	-.31	.20
3. Reading comprehension, Grade 1 spring	Within				.55***	.44***	–		
	Between	0.09***	0.09**	0.06	-.24	-.00		-.06	-.01
4. Amount of CF instruction, Grade 1 spring	Within							–	
	Between				.16	.71	.34		-.93***
5. Amount of MF instruction, Grade 1 spring	Within								–
	Between				.25	-.37	-.13	-.82	

*p < .05, **p < .01, ***p < .001

Note! CF = Code-focused, MF = Meaning-focused

Table 3. Estimates and standard errors of the CF and MF multilevel random regression models at the classroom (between) level.

Independent variables	Level 1 (L_1) reading fluency Grade 1 spring		Level 2 (L_2) reading comprehension Grade 1 spring		Slope1 (S_1) from reading fluency in Grade 1 autumn to reading fluency Grade 1 spring		Slope2 (S_2) from reading fluency in Grade 1 autumn to reading comprehension Grade 1 spring	
	β	*S.E.*	β	*S.E.*	β	*S.E.*	β	*S.E.*
CF	-.53	.44	-.14	.26	-.19	.28	**.23****	**.09**
Country	**3.73*****	**.75**	-.02	.46	-.00	.79	**.88****	**.23**
CF*Country interaction	**2.01****	**.53**	.57	.46	-.05	.76	**-.82*****	**.25**
MF	.35	.48	.05	.25	.19	.30	-.15	.11
Country	**3.68*****	**.73**	-.04	.52	.34	.67	**.97*****	**.26**
MF*Country interaction	**-1.81****	**.70**	-.48	.60	.86	.52	**.99*****	**.27**

Note. CF = code-focused; MF = meaning-focused.
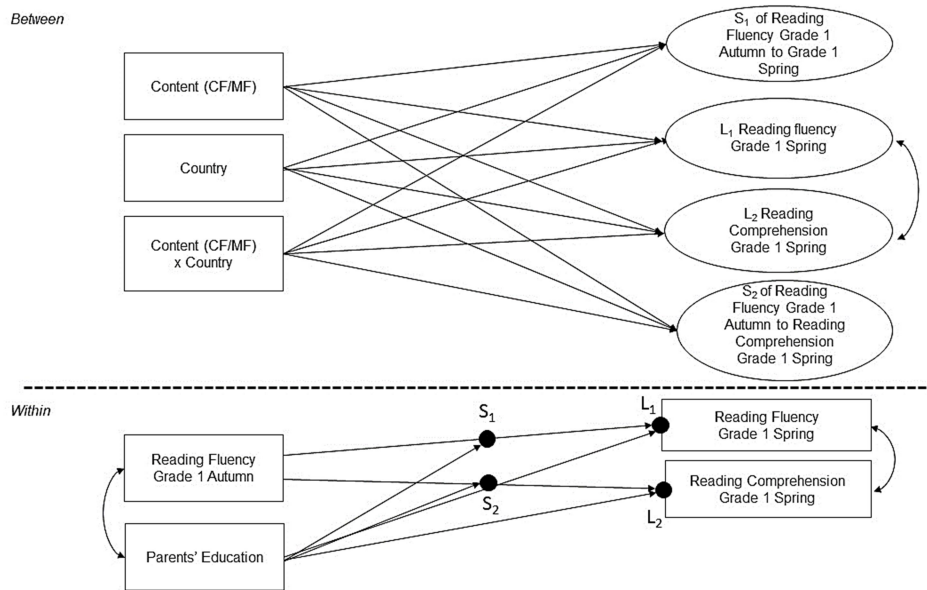* $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1. Hypothetical model of the associations of the literacy instruction activities in Estonia and Finland on reading fluency and reading comprehension at the end of first grade. Reading fluency at first grade autumn and parents' education were controlled for.
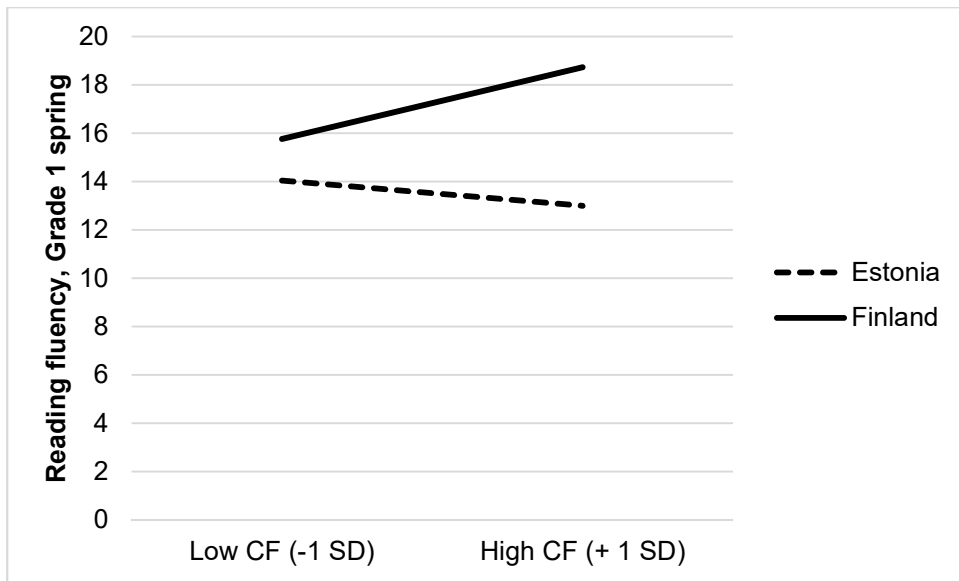
Figure 2. The strength of the association between CF instruction and country with level of reading fluency in Grade 1 spring. *Note.* CF = code-focused.
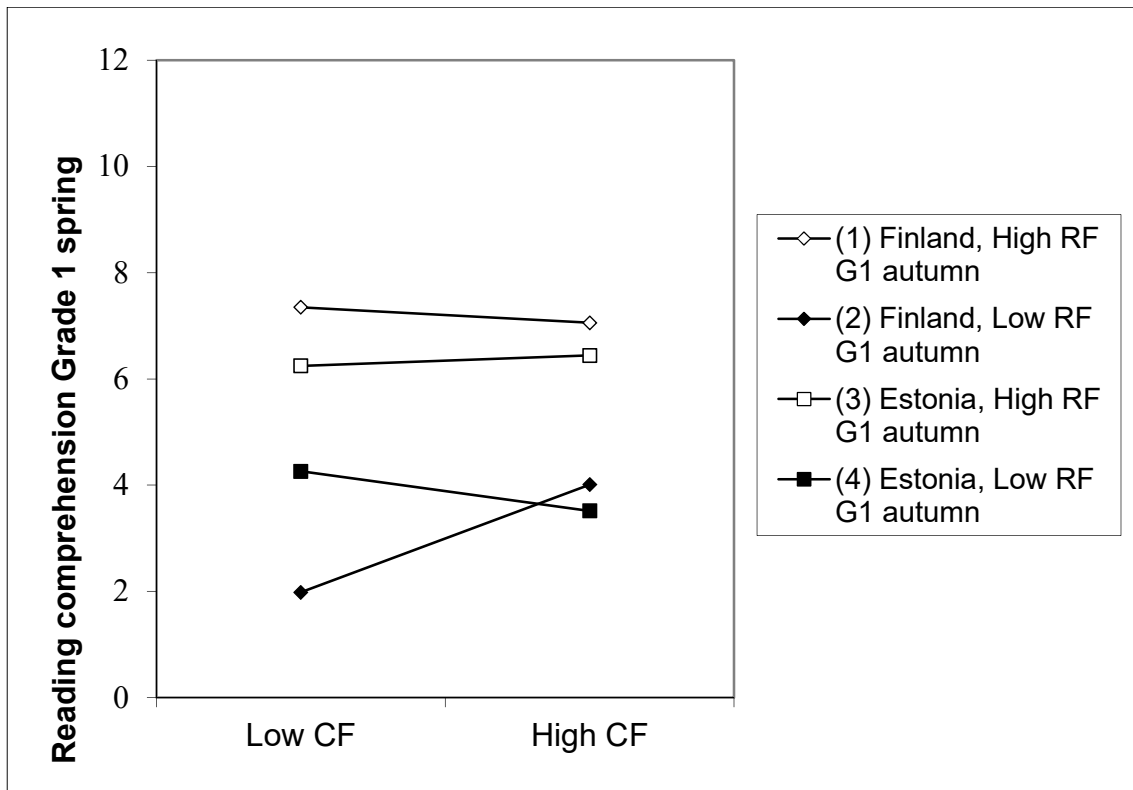
Figure 3. The differences in the strength of associations in CF model from reading fluency in Grade 1 autumn to reading comprehension in Grade 1 spring in Estonia and Finland. *Note.* CF = code-focused; RF = reading fluency.