## Results of the alternative model without EHS & mental effort:

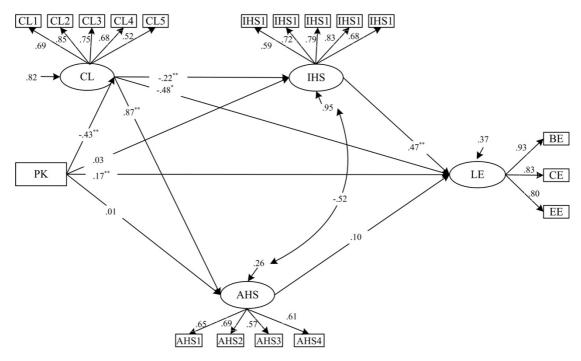


Fig. 2. SEM results of the structural model with standardized coefficients. (PK= prior knowledge, CL = cognitive load, IHS = instrumental help-seeking, AHS = avoidance of help-seeking, LE = learning engagement.)

Note: (1) p < .05, p < .01.

- (2) The five manifest variables of CL were items of mental load.
- (3) This model does not include EHS (executive help-seeking).

Table 3. Model fit indices.

Construct	$\chi^2$	df	$\chi^2/df$	CFI	TLI	RMSEA [90% CI]	p
CL	41.052	19	2.41	.968	.953	.058 [.034, .083]	.000
IHS	10.050	5	2.01	.988	.977	.054 [.000, .094]	.000
AHS	4.121	2	2.06	.985	956	.056 [.000, .133]	.000
LE	116.849	51	2.29	.964	.953	.061 [.047, .076]	.000
Structural model	246.839	138	1.79	.955	.945	.048 [.038, .058]	.000
Recommended values			<3	>.90	>.90	<.08	>.05

Table 4. Standardized coefficients for direct and indirect effects of PK on LE through CL, IHS, EHS and AHS

	β	p	95% CI
Direct path			
1. PK→LE	0.170**	0.001	[0.091, 0.248]
2. PK→IHS	0.025	0.699	[-0.080, 0.130]
4. PK→AHS	0.014	0.796	[-0.074, 0.102]
5. CL→LE	-0.457**	0.008	[-0.741, -0.173]
Indirect path			
1. PK→LE	0.249*	0.000	[.178, .320]
1a. PK→CL→LE	0.196*	0.011	[.069, .324]
1b. PK→IHS→LE	0.012	0.700	[038, .061]
1d. PK→AHS→LE	0.000	0.963	[005, .005]
1e. PK→CL→IHS→LE	0.045**	0.016	[.014, .075]
1g. PK→CL→AHS→LE	-0.004	0.962	[128, .121]
2. PK→CL→IHS	0.096**	0.011	[.033, .158]
4. PK→CL→AHS	-0.372**	0.000	[462,282]
5. CL→LE	-0.096	0.570	[373, 0.182]
5a. CL→IHS→LE	-0.104	0.011	[172,037]
5c. CL→AHS→LE	0.008	0.962	[281, .297]

Note: \*p < .05, \*\*p < .01