

The Coherence Principle

Theory

The coherence principle (also called *seductive details*¹⁾ effect) claims that extraneous material that may be interesting or motivating but is irrelevant for learning objectives generally wastes learning resources and **hinders learning of important material**. This assumption is grounded in the fact that human cognitive resources are limited. Still, [cognitive load theory](#) predicts this effect will only occur if the cognitive load imposed by important learning material is high enough.²⁾

Practice

Seductive details can appear in virtually any format, but often as

- text, or
- external links.

Research status

A number of studies on the effect of seductive details have demonstrated:

- negative effects on learning of important material³⁾
- lack of negative effects on learning of important material.⁴⁾

Surprisingly, a recent study even found an large increase in learning due to seductive details.⁵⁾ Possible explanations offered for this phenomenon are:

- low cognitive load imposed by instructional material in combination with
 - increase in motivation (and thereby increase in use of cognitive resources) caused by seductive details

¹⁾

[Garner, Ruth, Mark G. Gillingham, and C. Stephen White. Effects of 'Seductive Details' on Macroprocessing and Microprocessing in Adults and Children. Cognition and Instruction 6, no. 1: 41. 1989.](#)

²⁾ , ⁵⁾

[Park, Babette, Roxana Moreno, Tina Seufert, and Roland Brünken. Does cognitive load moderate the seductive details effect? A multimedia study. Computers in Human Behavior 27, no. 1: 5-10. January 2011.](#)

³⁾ , ⁴⁾

For details see: [Park, Babette, Roxana Moreno, Tina Seufert, and Roland Brünken. Does cognitive load moderate the seductive details effect? A multimedia study. Computers in Human Behavior 27, no. 1: 5-10. January 2011.](#)

Last update: 2023/06/19 15:49
research_results:coherence_principle https://learning-theories.org/doku.php?id=research_results:coherence_principle&rev=1307524754

From:
<https://learning-theories.org/> - **Learning Theories**

Permanent link:
https://learning-theories.org/doku.php?id=research_results:coherence_principle&rev=1307524754

Last update: **2023/06/19 15:49**

