Does Performance in Digital Reading Relate to Computer Game Playing? A Study of Factor Structure and Gender Patterns in 15-Year-Olds' Reading Literacy Performance

# Details

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## Topics

## Sample

1,921 Swedish students taking both the traditional print test and the digital reading test (PISA 2009).

## Implications For Educators About

## Implications For Policy Makers About

Other

## Other PolicyMaker Implication

Factors determining digital reading achievement in school; gender differences in digital reading skills

## Implications For Stakeholders About

Researchers

# Abstract

Data from a Swedish PISA-sample were used (1) to identify a digital reading factor, (2) to investigate gender differences in this factor (if found), and (3) to explore how computer game playing might relate to digital reading performance and gender. The analyses were conducted with structural equation modeling techniques. In addition to an overall reading factor, the hypothesized digital reading factor was identified. When the overall reading performance was taken into account, a relative difference in favor of the boys for digital reading was indicated. This effect was mediated by a game-playing factor comprising the amount of time spent on playing computer games. Thus, the boys’ better performance in digital reading was explained by the computer game-playing factor.

# Outcome

"In our initial computations, the expected and frequently reported difference in favor of girls in overall reading performance was verified. However, when this overall performance was taken into account, there was a significant, relative difference in favor of boys for digital reading, which is in line with earlier studies on this data conducted with less elaborated techniques (OECD, 2011). When further investigating this latter effect, we found that it was perfectly mediated by the game-playing factor. This means that the boys' (relatively seen) better performance in digital reading was explained by the playing factor related to the amount of time spent on one-player games and collaborative games." (Authors, 704)