ADOLESCENTS’ SOCIO-DIGITAL ENGAGEMENT AND ITS RELATION TO ACADEMIC WELL-BEING, MOTIVATION, AND ACHIEVEMENT

Engl. transl.: ADOLESCENTS’ SOCIO-DIGITAL ENGAGEMENT AND ITS RELATION TO ACADEMIC WELL-BEING, MOTIVATION, AND ACHIEVEMENT

# Keywords

* digital engagement
* socio-digital participation
* connected learning
* school engagement
* school burnout
* academic motivation
* academic achievement

# Details

## Year

2019

## Issued

2019

## Language

English

## Start Page

## End Page

## Authors

Hietajärvi L.

## Type

PhD Thesis

## Publisher

Unigrafia

## Place

Helsinki

## Topics

Digital and socio-cultural environment

## Sample

Finnish pupils aged 13-18

# Abstract

This thesis examined how adolescents’ engagement with digital media is associated
with academic and emotional functioning and the continuities and discontinuities between
these two contexts. Towards that end, the gap hypothesis, that is, the hypothesis that
students who prefer learning with digital media outside of school are less engaged in
traditional school, was examined both cross-sectionally and longitudinally. Digital
engagement was conceptualized as both socio-digital participation (i.e. adolescents’
multidimensional practices of participating in digital contexts) and connected learning (i.e.
self-regulated learning extended across time, space, and various contexts). Academic and
emotional functioning was conceptualized as academic well-being (i.e. school
engagement and burnout: exhaustion, cynicism, and inadequacy), motivation (i.e.
achievement goal orientations), and academic achievement (i.e. grades). The first aim was
to determine the multidimensional structure of socio-digital participation orientations that
students’ different digital activities reflect. The second aim was to examine the extent to
which the orientations of socio-digital participation are related to academic and emotional
functioning cross-sectionally and in different educational levels. The third aim was to
examine the longitudinal relations of socio-digital engagement with academic well-being
and academic achievement, especially focusing on the direction of the effects. This thesis
consists of five original studies. In these studies, we used interview data, cross-sectional
and longitudinal questionnaire data, and grades drawn from the registry. Various
exploratory and confirmatory statistical methods, including both variable- and personoriented latent variable modeling approaches, were used.
Study I was aimed at theoretically and empirically conceptualizing the components of
socio-digital participation. In Study II, the hypothesized gap between adolescents’ digital
engagement, competencies, and academic motivation was evaluated. More precisely, we
examined how students’ profiles of achievement goal orientations are associated with
socio-digital participation and skills. The goal of Study III was to extend the investigation
of the differences in young peoples’ approaches to socio-digital participation. First, the
structure of the underlying orientations of socio-digital participation was examined across
three samples of Finnish students. Second, we analyzed how these different orientations
are associated with school engagement and burnout. In Study IV, the gap hypothesis was
tested with longitudinal data. Finally, the goal of Study V was to expand our knowledge
about how adolescents’ socio-digital participation is longitudinally related to school
burnout and academic achievement. More specifically, Study V focused on the directions
of effects among these constructs at the within-person level.
The first main finding was that the variation in digital activities can be explained with
a complex structure of socio-digital participation orientations, which appear to be
consistent across different age groups. Of all forms of digital participation, youths reported
spending the majority of their screen time engaging in friendship-driven digital social
networking. However, some adolescents reported socio-digital engagement that reached
out to a wider audience, including sharing their art, providing a game server to facilitate
other people’s gaming activities, or building an extended network of developing expertise
in the process. The second main finding was that there truly appeared to be a gap between
adolescents’ digital and academic engagement. The results revealed that motivationally
indifferent students were more likely to engage in social media and gaming. Students who
preferred digital learning but did not have the chance to digitally engage at school
experienced a decrease in school engagement over time. Moreover, cynicism towards
school and feelings of inadequacy predicted increased engagement with social media and
action gaming. The third main finding was that digital participation yields both demands
and resources and that these are tied together via multiple processes. Social media
engagement was cross-sectionally related to lower study engagement and/or to higher
symptoms of burnout, especially exhaustion. Longitudinally, social media engagement
and emotional exhaustion were reciprocally related at the within-person level; exhaustion
predicted an increase in social media engagement and vice versa. In turn, knowledgeoriented digital engagement was cross-sectionally related to higher study engagement, and
digital learning preference predicted higher schoolwork engagement over time.
To conclude, adolescents’ socio-digital engagement is fundamentally
multidimensional and should be treated as such. The results showed support to the gap
hypothesis, but the results also suggest that the manifestation of this gap is dependent on
multiple factors, both individual and contextual. The gap might emerge because of out-ofschool digital engagement that is not recognized in school or the gap might emerge due to
problems in school leading to increased time spent with digital media. Intensive sociodigital engagement may also increase the daily psychological demands to such an extent
that it hinders schoolwork, leading to symptoms of school burnout, but it can also increase
the psychological resources supporting schoolwork given that congruence with academic
practices is achieved.

# Outcome

The first: variation in digital activities can be explained with a complex structure of socio-digital participation orientations, which appear to be consistent across different age groups. Youths reported spending the majority of their screen time engaging in friendship-driven digital social networking.
The second: there truly appeared to be a gap between adolescents’ digital and academic engagement. Motivationally indifferent students were more likely to engage in social media and gaming. Students who
preferred digital learning but did not have the chance to digitally engage at school experienced a decrease in school engagement over time. Moreover, cynicism towards school and feelings of inadequacy predicted increased engagement with social media and action gaming.
The third: Social media engagement was cross-sectionally related to lower study engagement and/or to higher
symptoms of burnout, especially exhaustion. Longitudinally, social media engagement
and emotional exhaustion were reciprocally related at the within-person level; exhaustion
predicted an increase in social media engagement and vice versa. In turn, knowledgeoriented digital engagement was cross-sectionally related to higher study engagement, and
digital learning preference predicted higher schoolwork engagement over time.