Social media use intensity, social media use problems, and mental health among adolescents: Investigating directionality and mediating processes

# Details

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## Sample

"Data were obtained from the Digital Youth-project: a self-report
longitudinal study on online behaviors and mental health among
Dutch secondary school students (Van den Eijnden et al., 2018). We used
data from the second, third, and fourth wave, which took place in
February and March of 2016, 2017, and 2018, respectively. Data from
the first wave were excluded because depressive symptoms were not
measured in this wave. The waves that were included in the current
study are further referred to as T1, T2, and T3. In order to study developments of adolescents from a similar age category, we selected
students who were in the first two school years of secondary school at T1
(n = 2228). Students for whom data were missing on all study measures
were excluded from the sample, which yielded a final analysis sample of
2109 adolescents from 9 schools. From this sample, 77.9% participated
in T1, 75.0% participated in T2, and 40.5% participated in T3. The
nonresponse was mainly due to dropout of schools and classes, because
teachers were absent or not able to schedule the survey assessments at
participating schools. Hence, we considered the dropout as not selective.
At T1, participating students from the analysis sample were between
10 and 16 years old (M = 13.1, SD = 0.8) and 43.1% were first year
students. In addition, 43.1% were girls, 25.7% had an immigrant
background, and students were attending education at different levels
(65.3% pre-vocational, 24.2% intermediate, and 10.5% pre-university).
Girls and students with pre-university education were somewhat underrepresented compared to the Dutch adolescent population of the
same age category in 2017 (49.1% girl, 51.1% pre-vocational, 22.1%
intermediate, and 21.6% pre-university) (Statistics Netherlands, 2019).
Sample characteristics in T2 were approximately the same as in T1
(45.0% girls, 23.7% immigrant background, 62.5% pre-vocational,
26.2% intermediate, and 11.3% pre-university). In T3, two
pre-vocational level schools dropped out due to practical circumstances,
as well as several pre-vocational level classes from the other schools,
which yielded a different sample composition compared to T1 and T2
(43.9% girls, 17.6% immigrant background, 33.8% pre-vocational,
44.6% intermediate, and 21.6% pre-university).
Two weeks prior to the survey assessment, information letters were
sent to parents to provide information about the survey and to allow
parents to refuse participation of their child. One week prior to the
survey assessment, students were informed about the subject and purpose of the study, that participation was voluntary and anonymous, and
that they could resign participation at any moment. Students completed
the online survey during school hours. Research-assistants monitored
students’ survey completion and provided help where necessary. The
study procedures adhered to the Declaration of Helsinki and were
approved by the ethical board of the Faculty of Social Sciences at Utrecht
University (FETC16-076 Eijnden). " (Boer et al., 2021, p. 3)

## Implications For Policy Makers About

Other

## Other PolicyMaker Implication

Prevention and intervention programs

# Abstract

Social media have become increasingly integrated into the daily lives of adolescents. There are concerns about the potential detrimental effects of adolescents' social media use (SMU) on their mental health. Using a three-wave longitudinal study among 2109 secondary school adolescents (Mage = 13.1, SDage = 0.8), the present study examined whether high SMU intensity and addiction-like SMU problems were bidirectionally associated with low mental health, and whether these associations were mediated by increased levels of upward social comparisons, cybervictimization, decreased subjective school achievements, and less face-to-face contact with friends. In doing so, mental health was measured by depressive symptoms and life satisfaction. Findings from random intercept cross-lagged panel models showed a direct unidirectional association between SMU problems and mental health: SMU problems were associated with decreased mental health one year later, but not vice versa. SMU problems also predicted increased levels of upward social comparisons and cybervictimization one year later. Yet, these processes did not mediate the observed effect of SMU problems on decreased mental health. Over time, SMU intensity and mental health were not associated in any direction; neither directly, nor indirectly through any of the mediators. Findings of our study suggest that harmful effects of SMU intensity may be limited and highlight the potential risk of SMU problems to adolescent mental health.

# Outcome

"Findings showed that adolescents whose SMU
problems increased reported increased depressive symptoms and
decreased life satisfaction one year later. Also, SMU problems predicted
increases in upward social comparisons and cybervictimization over
time. Yet this, in turn, did not predict increases in depressive symptoms
or decreases in life satisfaction over time, suggesting that upward social
comparisons and cybervictimization did not mediate the observed effect
of SMU problems on mental health. Reversely, increased depressive
symptoms or decreased life satisfaction did not predict increased SMU
problems one year later, neither directly nor indirectly through any of
the mediators. We did not observe any direct or indirect associations
between SMU intensity and mental health over time: Adolescents whose
SMU intensity increased did not report increased depressive symptoms
or decreased life satisfaction one year later, and neither vice versa."(Boer et al., 2021, p. 8)