

Person- or situation-specific? Factors explaining convergent validity and discrepancy between self-report and digital trace of smartphone use

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Oral presentation

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Abstract

There is a consensus in the existing literature that self-reported measures provide an inaccurate picture of actual digital behavior. At the same time, there is a high level of heterogeneity in discrepancies between logged and self-reported media use. The prior research concerned with factors explaining this heterogeneity is limited to self-reported measures used in cross-sectional designs, leaving factors related to intraindividual variability in media use and to methodological aspects of repeated measures designs largely understudied. To address this gap, the current study examines the effects of several methodological (duration of the study), contextual (weekend versus weekday), and participant factors (smartphone use, phone controlling efficacy) on convergent validity and accuracy of self-reported measures of smartphone use in 14-day EMA study conducted on the sample 114 adolescents (13 to 17 years old, 57% boys, 825 observations). The accuracy of self-reported smartphone use was lower for adolescents who spend more time using smartphones and on days when participants' smartphone use was less fragmented. Convergent validity of self-report decreased with each day spent in the study. Obtained results support prior findings suggesting that the inaccuracy of self-reports is not solely due to random error but is related to key variables under investigation, such as time spent using smartphones and its characteristics, and this study extends them to repeated measures design. They also show that researchers should address the so-called fatigue effect when designing repeated measures studies to reduce systematic error.

Keywords

digital trace, daily diary, smartphone

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