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PSYCH > Vol.3 No.9A, September 2012

OPEN ACCESS

## Depression and Internet Use among Older Adolescents: An Experience Sampling Approach

PDF (Size: 74KB) PP. 743-748 DOI: 10.4236/psych.2012.329112

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### ABSTRACT

**Background:** Depression is common and consequential among adolescents. Previous work has found varied relationships between depression and internet use. The purpose of this study was to examine internet use and depression by applying a rigorous assessment tool: experience sampling method (ESM). **Methods:** Older adolescents between the ages of 18 and 23 years were recruited from a large state university. Participants received 6 text message surveys randomly each day during a 7-day ESM campaign. Survey questions assessed whether they were currently online and for how long. Participants also completed the PHQ-9 depression survey. Calculation of internet use time included multilevel modeling and probability modeling. Analysis of covariance (ANCOVA) assessed the association between internet use and depression. **Results:** Among our 189 participants, the mean age was 18.9 (SD = .9), 58.8% were female and most were Caucasian (90.5%). Total daily internet use time was calculated as 66 minutes by ESM summary, 55 minutes by ESM modeling and 65 minutes by probability modeling. We found a difference in PHQ-9 scores when comparing low daily internet use (<30 minutes), regular use (30 minutes to 3 hours) and high use (>3 hours) ( $p = .01$ ) with a significant U-shaped association ( $p = .004$ ). The high use group had a mean PHQ-9 score of 7.3 (SD = 5.1) compared to the regular use group score of 4.9 (SD = 3.9) ( $p = .02$ ). **Conclusions:** Results suggest a U shaped association between internet use and depression. These findings may present statistical differences that lack clinical significance.

### KEYWORDS

Adolescent; Internet Use; Depression; Experience Sampling Approach; College Student

### Cite this paper

Moreno, M. , Jelenchick, L. , Koff, R. & Eickhoff, J. (2012). Depression and Internet Use among Older Adolescents: An Experience Sampling Approach. *Psychology*, 3, 743-748. doi: 10.4236/psych.2012.329112.

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