Psychological perspectives from a media-use study
Are cell phones and technology changing college students?

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This presentation highlights the results of an innovative, interdisciplinary research project – which used surveys, diaries and interviews – to look closely at the psychological implications of the dramatic rise in the use of technology and media among college students.

This study hypothesized that increased use of technology and media would be associated with lower levels of emotional intelligence, ego control and ego resiliency.

- Significant negative correlations were indeed found between ego control and media use. Correlations between several forms of media use and ego control were found to be stronger among females.
- Media diaries showed TV-watching and texting were disproportionately high among participants, who also indicated frequent multitasking.
- Interviews with participants indicated high levels of anxiety, impatience, need for immediate gratification, and overall dependence on technology.

These findings suggest implications for how media use may affect students’ self-control, emotional regulation and social adeptness in interpersonal relationships; foster greater understanding of contemporary college students; and raise questions for further research.

Background

Contemporary college students use technology more than any previous generation and use it for social, entertainment and academic reasons (Lenhart, Madden, & Hitlin, 2005; Rideout, 2012). This has sparked research on the psychological well-being and social interaction of a generation of students increasingly exposed to media of all types, including Internet use, video games, and texting.

Some studies identify positive effects of some forms of technology – for example, the enhancement of social interaction that social networking websites offer or the benefits of access to information that the Internet provides. However, adverse effects of high levels of media exposure also have been found, including increased loneliness (Engelberg & Sjoberg, 2004), overstimulation, diminished interest in and ability for sustained attention required for tasks like reading and long-term planning, and diminished involvement in academic life (Lloyd, Dean, & Cooper, 2007).

Detrimental effects on interpersonal skills have been suggested, including poor emotional regulation, appraisal of emotion in others and assessment of appropriate boundaries, all of which are essential for healthy relationships. There is evidence that youth who engage in more time with media report lower grades and lower levels of personal contentment (Rideout, Foehr, & Roberts, 2010). Furthermore, increased internet use has been associated with lower social involvement, less communication.
within the family circle, and higher levels of stress and depression (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, & Scherlis, 1998).

To continue exploration of these questions, we developed an interdisciplinary study, which assessed technology and media use among 210 Wesley College undergraduate students. A questionnaire was formulated, as well as a media diary and follow-up interviews to gather more in-depth information.

**Method**

Participants included 210 undergraduate college students (129 female) attending Wesley College: 62 freshmen, 74 sophomores, 42 juniors and 32 seniors. Ages range from 18-33, although most were traditional college age students from 18-21. Twenty-one of these participants completed a detailed, hour-by-hour, week-long media use diary. Of those, eleven were interviewed further about their media use.

**Measures**

*Student Technology and Media Use Survey*: a 38-item self-report assessment designed to measure participants’ technology and media use, detailing the type and frequency of technology and media use and multitasking (e.g., social networking, listening to music, and texting) was given to participants (highest score possible 179, lowest score 38). The survey was modeled from The Student Technology Use Survey (Lloyd, Dean, & Cooper, 2007) and the 2010 Kaiser Family Foundation Study (Rideout, Foehr, & Roberts, 2010).

*Schutte Self-Report Emotional Intelligence Test (SSEIT)*: a self-report measure (5-point Likert scale) of emotional intelligence (EI) developed by Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim (1998). The test items relate to three facets of EI, including appraisal and expression of emotion, emotional regulation, and utilization of emotion in solving problems.

*Ego-control and Ego-resiliency Scale (ECER)*: a 51-item self-report measure assessing the constructs of ego control and ego resiliency, as used by Letzring, Block & Funder (2005). Ego control (EC) refers to impulse inhibition or expression, and ego resiliency (ER) refers to the ability to modify one’s level of control in varying contexts and in response to environmental demands. The measure used in the current study was a single, integrated measure: 37 EC items (highest score possible 148, lowest score 37) and 14 ER items (highest score possible 56, lowest score 14).

*Media Use Diary*: chronicled subjects’ use of media in 30-minute intervals, over 24 hours, for 1 week. These diaries collected detailed information about media and technology use and multitasking, including location and social interactions during media use.

*Individual Interviews*: consisted of 20 questions, dealing with subjects’ degree of emotional control and social interaction, perceptions of their technology and media use, and level of anxiety related to their use.
Results

As expected, students report spending a good portion of their day using various forms of media and technology. As found in other recent studies (e.g., Rideout, 2012), students prefer texting to talking on the phone and often engage in multiple forms of media at once, for example, listening to music, texting, using the internet, whether for homework or pleasure, all while on Facebook.

Findings did not reveal significant correlations between measures of ego resiliency and emotional intelligence and overall media use. However, several significant correlations were found between ego-control and media use and a number of the Media Use Survey subscales.

Specifically, it was found that subjects with less ego-control appear to engage in greater media and technology use, including cell phone, computer, music, DVD and videos, and engage in more multitasking, both while alone and in the company of others. Because of this, one may speculate about the nature of the relationship: Do students who have lower levels of control engage in more media use, or is the increased media use creating less control?

Negative correlations between the media use subscales and ego control were found in every case to be stronger for females than males. Perhaps those females who have lower ego control and more difficulty delaying gratification may tend to depend more on access to media and technology as a way to meet their needs for social connection and affiliation than females with greater ego control.

Students who spent more time reading books had significantly higher GPAs and SAT scores. Students who spent more time using the phone and listening to music tended to have lower GPAs and SAT scores. These findings raise questions about the impact of students’ behavior and the possible effects of daily habits on achievement and performance.

According to data from the media diaries, participants’ most frequent activity was watching TV, followed by texting. Media use overall tends to be consistent and high throughout the day, as compared with early morning and late night. Interviews supported and emphasized students anxiously relying on cellphones.

While individual interviews suggested that social interaction was enhanced by technology, students also talked about their increased levels of social anxiety during both its use (e.g., texting) and absence (e.g., misplacing or losing the cellphone). They consciously wonder whether media use has altered their personal interactions with others, as well as given them less time to do what they think they should be doing, including reading and studying.

Consistent with the correlations found, interviews showed that media use may be creating more anxiety and impatience. Most students reported that they have their cell phone with them at all times and feel anxiety when they misplace or forget it. Interestingly, most students reported that it is rude to use technology (like texting) while interacting with others and they become annoyed when others do it. However, they more often than not admit to doing it themselves. Some students said they could not imagine life without cellphones. Many guessed that while they would be less anxious, they would also be less involved in others’ lives.
References


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