Digital Addiction

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Abstract:

Digital technologies such as smartphones and social media occupy a large and growing share of leisure time. While these technologies provide obvious benefits, it is often argued that they can be addictive and harmful. We lay out a model of digital addiction and estimate its parameters using a randomized experiment involving about 2000 smartphone users. We find that smartphone social media use is habit forming, and while people correctly predict habit formation, they consume as if they are inattentive to it. Functionality that allows people to set time limits on social media apps reduces use by about 15 percent, suggesting that people have self-control problems. People slightly but consistently underestimate future use, suggesting slight naivete about temptation. Our structural model predicts that in our sample, non-rational habit formation—projection bias, temptation, and naivete—increases social media use by 12–25 minutes per day and reduces long-run consumer surplus by \$50–\$100 per person each year.