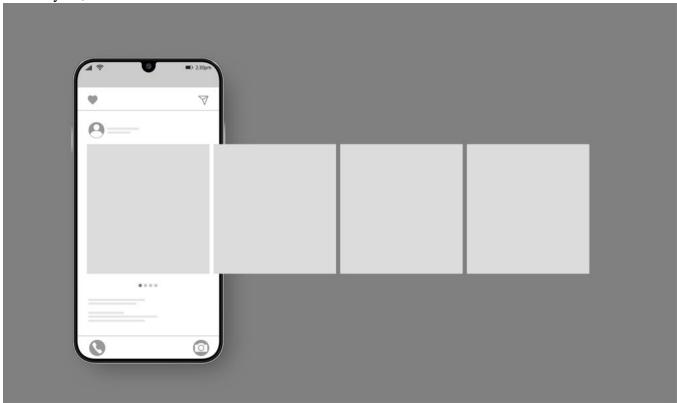
Teaching Current Directions in Psychological Science

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Aimed at integrating cutting-edge psychological science into the classroom, Teaching Current Directions in Psychological Science offers advice and how-to guidance about teaching a particular area of research or topic in psychological science that has been the focus of an article in the APS journal Current Directions in Psychological Science.

When Does Social Networking Uplift Us—And Dispirit—Us?

By David G. Myers, Hope College

Verduyn, P., Gugushvili, N., & Kross, E. (2022). Do social networking sites influence well-being? The extended active-passive model. *Current Directions in Psychological Science*, 31(1), 62–68.

Student Activity: Mood Tracking

For one week, have students track their social media use (both iPhones and Android phones provide social media use data in their settings apps) and rate their daily mood before bed each night without disclosing their social media use. The next week, have them commit to some degree of social media reduction, such as one hour less per day, and again track their mood. Finally, have students bring their data to class and discuss their findings. (For other discussion possibilities, see the article text.)

With people spending hours daily on social media, it's no surprise other activities are being displaced: face-to-face conversations, reading, sleeping, and working (Kemp, 2020; Livingston, 2019; Twenge, 2019). Time spent networking can be time spent not-working.

More troublingly, as smartphone use quadrupled between 2010 and 2019, anxiety, depression, and self-harm dramatically increased among teen girls (Duffy et al., 2019; SAMHSA, 2019)—a reality reportedly well known to Facebook and Instagram (Haidt, 2021; Wells et al., 2021). Was this simultaneous rise in online networking and emotional struggles a mere coincidence?

In quest of an answer, Jonathan Haidt and Jean Twenge (2022) accumulate the available evidence from:

- *Correlational studies* that explore associations between social media use and teen mental health. They report a small correlation between social media screen time and mental disorder risk, linking heavy—but not light—use to harm.
- *Longitudinal studies* that ask whether extended social media use at Time 1 predicts worse mental health at Time 2. In 10 of 17 studies, the answer is yes.
- *Experiments* that ask whether volunteers randomly assigned to a reduced "social media diet" become less lonely or depressed, compared with other volunteers. Generally, yes, but with mixed results.

In their review of social networking and well-being, Philippe Verduyn, Nino Gugushvili, and Ethan Kross (2022) offer a more nuanced view. They make a distinction between *active* social networking—interacting with others—and *passive* networking—merely reading or watching content posted by others. Initial studies suggested that active social networking is beneficial, whereas passive networking diminishes well-being (Verduyn et al., 2017).

Instructors might ask students to ponder why (in their experience or that of their friends) active networking tends to lift spirits if passive networking depresses them.

Possible answers: Active engagement not only connects people but is often informative and supportive, with more "likes" and encouraging words. Passive engagement entails more social comparison: With others mostly presenting themselves having fun, looking great, and doing well, one's own social life may seem impoverished. Small wonder that most people today perceive that others' social lives are more active than their own (Deri et al., 2017).

Verduyn and colleagues stress, however, that there's more to the story than active = good and passive = bad. A teen may be depressed by an active engagement with cyberbullies, and a grandparent may find joy in passively viewing photos of their grandchildren. As these examples indicate, the active/passive distinction alone is too coarse.

So, another question for students: What sorts of active networking might be beneficial? What factors might influence whether active social networking uplifts or dispirits us?

Can your students anticipate the researchers' evidence-based answers? First, regarding active engagement with social media:

- 1. Is one's engagement *reciprocated?* Posting something that elicits no response does not lift one's spirits. Reciprocal self-disclosure and support become more likely when communications are *targeted*, such as comments to small groups or direct messages.
- 2. Does one's engagement enhance social *communion?* Is it warm and agreeable (as most networking comments are), or cold and quarrelsome?

Second, regarding passive engagement:

- 1. Are others' posts *relevant to one's self-esteem?* Teens may respond with a twinge of envy to posts that display others' good looks. A graduate student may respond similarly when a fellow student announces a publication—but not when that peer posts about winning a swimming race.
- 2. Are others sharing their *successes or failures?* People disproportionately share news of their accomplishments—which may lead passive networkers to feel deflated by the social comparison. But sometimes friends share their disappointments, which may trigger a mix of empathy for them and reassurance about one's own greater success.

Finally, the researchers note, individuals differ in their social-comparison focus. People who care a great deal about their standing relative to others, and about others' opinions, tend to be more emotionally responsive to social networking.

Many students *will* be socially attuned to their friends. Thus they might be advised to manage their social networking time, to monitor their feelings, to hide irritating friends, to practice restraint in their own posts, and—when focusing on important offline matters or face-to-face relationships—to disable alerts.

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Teaching Retrieval-Induced Forgetting

By Michael Scullin (Baylor University) and Cindi May (College of Charleston)

Bajo, M. T., Gómez-Ariza, C. J., & Marful, A. (2021). Inhibitory control of information in memory across domains. *Current Directions in Psychological Science*, 30(5), 444–453.

Student Activity: Memory Exercise

Begin your class with a memory exercise (accessible at tinyurl.com/TeachRIF). Have students study 20 category—exemplar pairs, such as FRUIT—banana and TOY—kite. Then prompt students to practice retrieval of some of the items (e.g., FRUIT—_____ba?). The critical manipulation is to practice only half the items from one category (FRUIT), thereby producing practiced items (FRUIT—banana) and unpracticed competitor items (FRUIT—apple). No items from the second category (TOY) will be practiced, allowing them to serve as control items (TOY—kite). Take a 1- to 2-minute break, and then have students recall as many of the original pairs as they can. Use a live polling system or simply have students write the pairs in their notebooks. Show the answer key and have students tally their results by practiced, competitor, and control items.

Results from previous research (Román et al., 2009) indicate that memory performance should be best for the practiced items (74%). No surprise there. But memory should be worse for unpracticed items

from the same category (48%) than for control items in the completely unpracticed category (62%). This is known as *retrieval-induced forgetting*.

If you want to make memories stick, you'd best practice retrieving those memories (Brown et al., 2014). That is why you should repeat people's names soon after meeting them, however awkward it may feel!

Paradoxically, psychological scientists have also shown that retrieving a memory can cause forgetting, or temporary inaccessibility, of related memories (Anderson et al., 1994). Imagine that you've been introduced to a couple of teachers, Nathan and Dave, at a party. You repeated Nathan's name, but not Dave's, shortly afterward. As you are leaving the party, you enter an elevator with both of them and can easily recall Nathan's name. Retrieval practice made it stick! Unfortunately, even though Dave's face is familiar, you are at a loss for his name. It strikes you as odd that you have a harder time recalling his name than the names of two journalists you also just met, whose names you never practiced retrieving. This *retrieval-induced forgetting* pattern would not surprise scientists who have found recall of face—name—profession associations to be susceptible to such effects (Ferreira et al., 2014). Too bad for Dave.

M. Teresa Bajo, Carlos J. Gómez-Ariza, and Alejandra Marful (2021) argue that retrieval-induced forgetting is explained by inhibitory control mechanisms. The general idea is that our knowledge is vast and interconnected, and we need some control over which memories come to mind at any given moment. When you retrieve specific information (TEACHER–Na____?), the relevant information becomes highly accessible (Nathan), in part because you reduce the accessibility of similar but irrelevant information (Dave). This allows your cognitive system to operate efficiently by maintaining focus on the most pertinent information. Yet it also has consequences: Inhibiting memories when they are not immediately needed makes them more difficult to access shortly thereafter.

Inhibitory mechanisms act quickly and often without intentional initiation, but they still require attentional control. In a series of studies, Bajo and colleagues found that adding cognitive load, such as with a divided-attention manipulation, eliminates the retrieval-induced forgetting effect (e.g., Román et al., 2009), possibly by reducing the resources available to implement inhibitory control. Furthermore, applying transcranial direct current stimulation to reduce activity in the right lateral prefrontal cortex—a region involved in attentional control—eliminates inhibition effects (Valle et al., 2020).

Broaden students' appreciation of inhibitory control by covering the concept of *task independence*. Put simply, retrieval-induced forgetting is not just about recalling category—exemplar pairs like FRUIT—banana. Such effects apply to creativity, decision making, and language—all abilities that integrate with memory functioning. Guide students in identifying the competitor item and retrieval-induced forgetting phenomenon in the following examples.

- When generating creative solutions to a problem, people are less likely to arrive at the correct answer if they dismissed that answer earlier in the process (Gómez-Ariza et al., 2017).
- When job candidates have both neutral and positive traits, evaluators who recall their neutral traits will be less likely to select them later (because recalling the neutral traits decreases the positive traits' accessibility; Iglesias-Parro & Gómez-Ariza, 2006).

• When students are immersed in a study-abroad experience, they have greater difficulty accessing words from their native language than they would in their home country, learning the second language in a classroom (because immersion in a second language has an inhibitory effect on one's native language; Linck et al., 2009).

We know you want this information to stick, so go ahead and practice retrieval. But it might be wise to practice retrieving *all* of the information covered on retrieval-induced forgetting. Otherwise, in light of the principles discussed here, your well-intentioned retrieval practice might have the unintended consequence of causing forgetting of the unpracticed content!

Feedback on this article? Email apsobserver@psychologicalscience.org or scroll down to comment.

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