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Smartphones: The Digital Security Blanket For Temporary Relief of “Social Freeze”

That socially awkward meeting with new colleagues . . . a looming, dreaded high school reunion where you’ll face the (grown-up) cool classmates who always snubbed you . . . the must-attend cocktail party with intimidating strangers: Everyday scenarios abound where we may feel isolated and stressed. But bringing a smartphone along (and, surprisingly, not using it) will go a long way toward temporarily protecting your body from the harmful hits inflicted by stress, suggests a pioneering new study.

The phone seems to function like an adult pacifier or security blanket that eases people through social episodes where they feel like outsiders or even rejected, says John Hunter, M.A., a Ph.D. candidate in the Dept. of Psychology and Social Behavior at University of California, Irvine. His research with colleague Sarah Pressman, Ph.D., is the first to compare how the presence and use of smartphones influence biological responses. It was published ahead of print and will appear in a forthcoming issue of *Psychosomatic Medicine*, journal of the American Psychosomatic Society.

The researchers told 141 participants, all owners of smartphones, that this study would look at the link between personality and phone size. After randomly dividing the group into thirds, everyone provided a saliva sample, with samples also collected throughout the study. A third of participants weren’t allowed to have their phones, another third kept their phones but were told not to use them and the last one-third were encouraged to use phones “as they normally would.”

Then everyone got the same cold treatment from two confederates in the study who joined them at a small table. The confederates turned away from study participants and deliberately excluded them from an ongoing conversation. Naturally, participants reported feeling rejected and isolated. It’s perhaps surprising, though, that those who had their phones but didn’t use them felt no more isolated than others who used the phones. Both groups felt less distressed than people with no phones.

But the most surprising result was that people allowed access to phones but not allowed to use them fared better physically after stress—they recovered faster-- than participants free to use their phones. Those who had their “digital security blanket” nearby but couldn’t use it showed a significant drop in a key enzyme that quickly rises under stress; the enzyme is associated with increases in blood pressure and heart rate, and suppressed immune

function. Phone users showed little change, and those deprived of phones experienced a gradual rise in the enzyme, called salivary alpha-amylase (sAA).

“Just having a phone nearby could remind people that they have a social network, they have support,” says Hunter. On the other hand, phone users texted, which can spur stress, and passively browsed social media, which is known to provoke stress, he says. Why does the drop in sAA matter for health? Long-term lab studies find that blood pressure spikes under stress, for example, predict impaired health decades later. So buffering the body, even in periodic tough scenarios, could make a positive difference.

“I’m not advocating that people use their phones as a long-term strategy if they feel socially excluded or awkward,” Hunter says. There’s new evidence that just the presence of phones can lower cognitive performance and the quality of social interactions, he adds. “But for temporary social occasions where you might feel lonely or ostracized, just having your phone on you seems to really help.”

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