

Social Media Use and Well-being: What We Do and Don't Know



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Prevalence of Social Media Use

As of April 2022, 4.65 billion individuals—nearly 59 percent of the world's population—were using social media. In the United States, 81 percent of the population are active social media users, averaging 2 hours and 17 minutes on social media each day. As social media use becomes more pervasive, there is growing interest and research into the role social media plays in wellness and mental health.

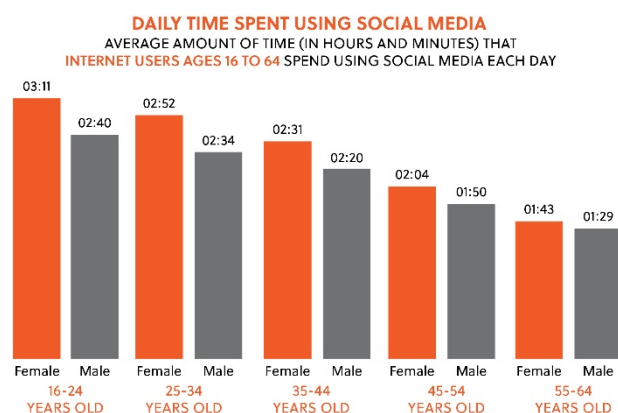
	# of SM users	% of population	Change from prior year	Average time on SM/Day
GLOBAL	4.65 billion	58.7%	+7.5%	2 hrs., 29 min.
UNITED STATES	270.1 million	80.9%	+12.0%	2 hrs., 17 min.

Source: DataReportal, 2022.

Social Media Use and Well-being

Social media can be a vehicle through which adolescents and adults can establish social networks and connections that can provide them with meaningful support. Yet numerous studies have found that social media use can have a negative impact on teens mental health and well-being (Course-choi & Hammond, 2021; Ivie et al, 2020; Odgers et al, 2020; Woods et al, 2015). Some studies found that teens who had frequent daily use of social media have an increased risk for mental health problems, including depression and anxiety (Riehm et al, 2019; Viner et al, 2019). The risk for mental health concerns such as depression, and lower self-esteem and life satisfaction may be greater for adolescent girls (Twenge et al., 2022; Twenge and Farley, 2021).

During the COVID-19 pandemic, social media and digital technology use among adolescents increased and, for many adolescents, was a way to stay connected to others in the midst of social distancing mandates. Yet, most studies examining adolescent social media use during the pandemic found that higher social media use was associated with higher rates of mental health concerns (Marciano et al, 2022).



Source: DataReportal, 2022. Global averages, not specific to U.S.

The majority of research on social media and well-being has focused on children and young adults. However, Perlis et al.(2021) found similar associations between depression and social media use among adults. Adults who used social media were more likely to report symptoms of depression. These same participants had not reported any depression symptoms when the study was initiated. Yet these findings, like many others, only establish an association, not causation, between social media use and well-being. This raises questions

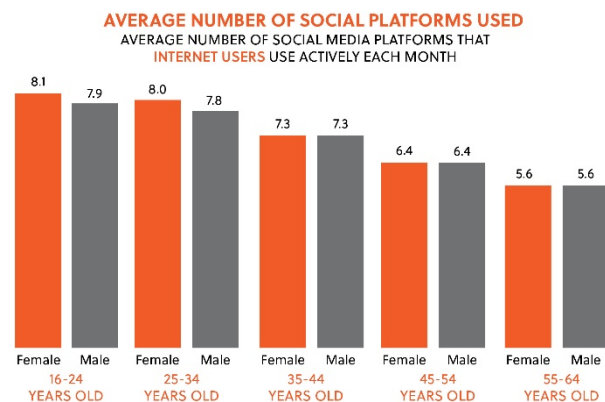
that require further inquiry such as whether individuals who experience depression or anxiety are more likely to use social media as a coping strategy and if some individuals or populations are more vulnerable to the harmful effects of social media use.

Several studies have suggested that how people use social media can have a greater impact on their mental health and well-being than their frequency or duration of use (Bekalu et al., 2019; Course-

Choi & Hammond, 2021; Marciano et al., 2022). While studies of social media use by adolescents during the pandemic generally found negative associations between social media and well-being, the researchers did find some uses of social media could contribute to improved well-being. “In particular, one-to-one communication, self-disclosure in the context of mutual online friendship, as well as positive and funny online experiences mitigated feelings of loneliness and stress (Marciano, et al, 2022).”

Scientists at the Harvard T. H. Chan School of Public Health examined three health related outcomes (social well-being, positive mental health, and self-rated health) and associations with social media use (Bekalu et al., 2019). This study found a positive association between the three health outcomes when people used social media as a part of a daily routine or to respond to what others share on social media. However, they found a negative association for the three health outcomes when people used social media for emotional connections—such as obsessively checking social media because they feared missing out or felt disconnected from friends when not on social media. There was also variance in the outcomes across demographics. “Specifically, while the benefits were generally associated with younger age, better education, and being white, the harms were associated with older age, less education, and being a racial minority. ... We know that education, income, race, and ethnicity influence people’s access to, and ability to act on, health information from media, including the Internet. The concern is that social media may perpetuate those differences (Roeder, 2020).”

In addition to being mindful about how social media is used, taking breaks from social media use may also support well-being. One recent study found that a one week break from social media led to significant improvements in well-being, depression, and anxiety (Lambert et al., 2022). The authors cited several other studies with similar findings that support the benefits of taking breaks from social media. These findings could help inform public health efforts and interventions.



Source: DataReportal, 2022. Global averages, not specific to U.S.

Harnessing Social Media Data

With such widespread adoption of social media globally and within the United States, there are massive amounts of data from users’ devices which can offer meaningful information for predicting or identifying mental health concerns (Kopel, 2021). Machine learning and language processing techniques can identify language patterns and images posted on social media that could reveal or predict mental health conditions such as depression, anxiety, or self-harm (Ignatiev, et al., 2022; Kopel, 2021; Skaik & Inkpen, 2020). “Thanks to advances in artificial intelligence, natural language processing and other data science tools, researchers, tech companies, government agencies and nongovernmental organizations can make use of these gargantuan databases to look for signs of mental health conditions, such as depression, anxiety and suicide risk (Kopel, 2021).”

Some social media platforms already incorporate strategies for identifying posts or images that could indicate a person at risk for self-harming, and provide them with relevant resources or content in response. Other platforms provide tailored information on wellness and mental health topics based on user searches (Kopel, 2021). These processing and predictive techniques could be used on a larger scale for quickly identifying population-based trends or hotspots to inform resource allocation or public health policy and decisions (Skaik, 2021). However, scaling up these types of strategies requires careful consideration of current research and knowledge gaps, as well as privacy and ethical implications when surveilling and utilizing social media user data.

Next Steps

Further investigations into the relationships between social media use and mental health are needed—particularly across different populations and platforms. So often, studies have focused on young adults and adolescents (Bekalu, 2019). Future studies should further examine how variables such as age, education, ethnicity, and socio-economic status moderate the associations between well-being and social media use, as well as focus on which individuals or populations are particularly vulnerable to the harmful effects of social media (Choi et al, 2020; Valkenburg & Beyens, 2022). As social media use is regularly evolving, updates to current research findings are necessary to ensure currency and relevance of research findings (Valkenburg et al., 2022). Accurate information on the effects of social media use can empower users to consider their own social media use habits as well as inform public health efforts that encourage healthy behaviors, reach vulnerable populations, and promote effective strategies and interventions to improve mental health and well-being.

Additional Resources

Bizzell US is poised to support federal, state, and local governments as well as assist other stakeholders navigate the growing demand for mental health and behavioral health care services. Bizzell’s Behavioral Health Advancement Resource Center (BHARC) is an ever-growing and trusted source for current behavioral health program development and research findings, examples of evidence-informed and promising practices, and emerging behavioral health policy and interventions. The BHARC Advisory Council consists of experts in substance use, mental health, clinical trials, pharmaceuticals, and healthcare standards and quality.

About Bizzell US (Bizzell)

Established in 2010, Bizzell is U.S. Small Business Administration (SBA) HUBZone certified strategy, consulting, and technology firm with a mission to improve lives and accelerate change. Bizzell develops innovative solutions to some of the most critical issues of our time such as health care services equity, global health, workforce innovation and other urgent needs facing the world. Under the leadership and vision of founder, Anton C. Bizzell, MD, the company has grown into a thriving firm headquartered in New Carrollton, Maryland with staff and offices in various regions around the country including California, Colorado, and Georgia, and globally in Africa, Asia, and Central America. To learn more about how we develop data-driven, research-informed, innovative solutions to complex-real-world challenges, Visit: [Bizzell US](https://www.bizzellus.com).

References

- Bekalu, M.A., McCloud, R.F. & Viswanath, K. (2019). Association of social media use with social well-being, positive mental health, and self-rated health: Disentangling routine use from emotional connection to use. *Health Education & Behavior*. 46 (2_suppl):69-80.
<https://doi.org/10.1177%2F1090198119863768>
- Course-Choi, J., & Hammond, L. (2021). Social media use and adolescent well-being: A narrative review of longitudinal studies. *Cyberpsychology, Behavior, and Social Networking*, 24(4), 223-236. https://www.researchgate.net/profile/Jenna-Course-Choi/publication/345308668_Social_Media_Use_and_Adolescent_Well-Being_A_Narrative_Review_of_Longitudinal_Studies/links/6195226f61f0987720a7a9e9/Social-Media-Use-and-Adolescent-Well-Being-A-Narrative-Review
- DataReportal. (2022). Digital 2022 April Global Statshot Report. <https://datareportal.com/>
- Ignatiev, N., Smirnov, I. V., & Stankevich, M. (2022). Predicting depression with text, image, and profile data from social media. *Proceedings of the 11th International Conference on Pattern Recognition Applications and Methods (ICPRAM 2022)*, 753-760.
[6ae74b9439dff1dd891030a3c6fcec27e7fe.pdf \(semanticscholar.org\)](https://arxiv.org/abs/2204.00001)
- Ivie, E. J., Pettitt, A., Moses, L. J., & Allen, N. B. (2020). A meta-analysis of the association between adolescent social media use and depressive symptoms. *Journal of Affective Disorders*, 275, 165-174.
<https://www.sciencedirect.com/science/article/abs/pii/S0165032720323727>
- Kopel, R. (2021, September 14). Mining social media reveals mental health trends and helps prevent self-harm. *Scientific American*. <https://www.scientificamerican.com/article/mining-social-media-reveals-mental-health-trends-and-helps-prevent-self-harm/>
- Lambert, J., Barnstable, G., Minter, E., Cooper, J., & McEwain, D. (2022). Taking a one-week break from social media improves well-being, depression, and anxiety: A randomized controlled trial. *Cyberpsychology, Behavior, and Social Networking*. 25(5).
<https://doi.org/10.1089/cyber.2021.0324>
- Marciano, L., Ostroumova, M., Schulz, P. J., & Camerini, A. L. L. (2022). Digital media use and adolescents' mental health during the Covid-19 pandemic: A systematic review and meta-analysis. *Frontiers in Public Health*, 2208.
<https://www.frontiersin.org/articles/10.3389/fpubh.2021.793868/full>
- Odgers, C. L., Schueller, S. M., & Ito, M. (2020). Screen time, social media use, and adolescent development. *Annual Review of Developmental Psychology*, 2, 485-502.
- Perlis, R.H., Green, J., Simonson, M., Ognyanova, K., Santillana, M., Lin, J, Quintana, Al, Chwe, H., Druckman, J., Lazer, D., Baum, M.A., & Volpe, J. D. (2021). Association between social media use and self-reported symptoms of depression in U.S. adults. *JAMA Network Open*. 4(11):e2136113. doi:10.1001/jamanetworkopen.2021.36113
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2786464>

- Riehm, K. E., Feder, K. A., Tormohlen, K. N., Crum, R. M., Young, A. S., Green, K. M., Pacek, L. R., La Flair, L. N., & Mojtabai, R. (2019). Associations between time spent using social media and internalizing and externalizing problems among U.S. youth. *JAMA Psychiatry*, 76(12), 1266–1273. <https://doi.org/10.1001/jamapsychiatry.2019.2325>
- Roeder, A. (2020, January 6). Social media use can be a positive for mental health and well-being. *Harvard T.H. Chan School of Public Health News*. <https://www.hsph.harvard.edu/news/features/social-media-positive-mental-health/>
- Skaik, R. (2021). *Predicting Depression and Suicide Ideation in the Canadian Population Using Social Media Data* (Doctoral dissertation, Université d'Ottawa/University of Ottawa). <https://ruor.uottawa.ca/handle/10393/42346>
- Skaik, R., & Inkpen, D. (2020). Using social media for mental health surveillance: a review. *ACM Computing Surveys (CSUR)*, 53(6), 1-31. <https://dl.acm.org/doi/abs/10.1145/3422824>
- Twenge, J. M., & Farley, E. (2021). Not all screen time is created equal: associations with mental health vary by activity and gender. *Social Psychiatry and Psychiatric Epidemiology*, 56(2), 207–217. <https://doi.org/10.1007/s00127-020-01906-9>
- Twenge, J. M., Haidt, J., Lozano, J., & Cummins, K. M. (2022). Specification curve analysis shows that social media use is linked to poor mental health, especially among girls. *Acta Psychologica*, 224, 103512. <https://doi.org/10.1016/j.actpsy.2022.103512> <https://www.sciencedirect.com/science/article/pii/S0001691822000270?via%3Dihub>
- Valkenburg, P.M. Meier, A., & Beyens, I. (2022). Social media use and its impact on adolescent mental health: An umbrella review of the evidence. *Current Opinion in Psychology*. 44, 58-68. <https://www.sciencedirect.com/science/article/pii/S2352250X21001500>
- Viner, R. M., Gireesh, A., Stiglic, N., Hudson, L. D., Goddings, A. L., Ward, J. L., & Nicholls, D. E. (2019). Roles of cyberbullying, sleep, and physical activity in mediating the effects of social media use on mental health and wellbeing among young people in England: A secondary analysis of longitudinal data. *The Lancet: Child & Adolescent health*, 3(10), 685–696. [https://doi.org/10.1016/S2352-4642\(19\)30186-5](https://doi.org/10.1016/S2352-4642(19)30186-5)
- Woods, H.C. & Scott, H. (2016). #Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. *Journal of Adolescence*. 51, 41-49. doi:10.1016/j.adolescence.2016.05.008.